Remedial Investigation Phase 1 Report

135 Kent Avenue
Brooklyn, NY 11249
NYSDEC BCP No. C224177

Prepared for
135 Kent LLC
135 Kent Avenue
Brooklyn, NY 11249-3154

Prepared by

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

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Affiliated with Integral Consulting Inc.

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ACRONYMS AND ABBREVIATIONS

AST	aboveground storage tank
AGV	air guideline value
AWQS	Ambient Water Quality Standard
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	below ground surface
DER-10	Division of Environmental Remediation *Technical Guidance for Site Investigation and Remediation*
DNAPL	dense non-aqueous phase liquid
DUSR	data usability summary report
EPA	U.S. Environmental Protection Agency
GPR	ground penetrating radar
HPT	hydraulic profiling tool
Integral	Integral Engineering, P. C.
IRM	interim remedial measure
MIP	membrane interface probe
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OM&M	operation, maintenance, and monitoring
PCE	tetrachloroethylene
RI Phase 1	Remedial Investigation Phase 1
RIWP	Remedial Investigation Work Plan
S2C2	S2C2 Inc.
SCG	standards, criteria, and guidance
SCO	Soil Cleanup Objective
SSDS	sub-slab depressurization system
TCE	trichloroethylene
TOGS	Technical & Operational Guidance Series

UST	underground storage tank
VOC	volatile organic compound
XSD	halogen-specific detector

CERTIFICATION

I, Keith P. Brodock, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Phase 1 Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the NYSDEC Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER 10).

Date: 2022.10.21 16:01:14 -04'00'

Signature Date

1 INTRODUCTION

Integral Engineering, P.C. (Integral) has prepared this remedial investigation phase 1 report (RI Phase 1 Report) on behalf of 135 Kent LLC (Owner) for the Former Cleaner Sales and Equipment Corp. Site (New York State Department of Environmental Conservation [NYSDEC] Site No. C224177), located at 135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York, New York (Site) (Figure 1).

Integral issued the final remedial investigation work plan (RIWP) for the Site on September 19, 2017; NYSDEC provided approval on September 20, 2017. The RIWP proposed a two-phased approach to the investigation because of drilling access limitations within the Site building. An initial round of screening and sample collection as Phase 1 of the remedial investigation (hereafter referred to as "RI Phase 1") was performed in 2018 and 2019 to assist in locating potential source areas and contaminant storage and transport zones. A second phase, to include soil and groundwater sampling, was proposed in the RIWP to fully characterize the nature and extent of contamination onsite and offsite to satisfy the requirements of the Brownfield Cleanup Program (BCP). RI Phase 1 consisted of membrane interface probe (MIP) and hydraulic profile tool (HPT) testing in conjunction with sampling of soil vapor, building slab concrete chips, and indoor/ambient air. This report presents the data collected in the RI Phase 1 and recommendations that will aid in the development of the second phase of the remedial investigation.

1.1 SITE DESCRIPTION

The Site is located in a mixed-use area of the Williamsburg section of the Borough of Brooklyn (Figure 1). The Site is bounded to the northeast by North 6th Street, to the southeast and to the southwest by mixed commercial/residential buildings, and to the northwest by Kent Avenue (Figure 2). The adjoining property to the south, located at 149 Kent Avenue, Brooklyn, New York, received a Certificate of Completion under the NYSDEC BCP (Site No. C224159).

The Site comprises one tax lot identified on New York City tax maps as Block 2333, Lot 5 and is currently zoned as M1-2/R6A (mixed use residential). The entire lot is developed with a two-story commercial/residential building (measuring approximately 125 ft by 100 ft). Figure 2 presents a Site plan with the building layout as it was constructed during the RI Phase 1. The first floor of the building is divided into individual commercial tenant spaces and storage areas. An elevator is located in the southeastern portion of the building. A small cellar utility room measuring approximately 20 ft by 10 ft exists beneath the northernmost corner of the first floor, beneath the former coffee shop. The second floor consists of nine residential apartments.

1.2 SITE HISTORY

A Certificate of Occupancy from November 28, 1927, listed the Site as a new warehouse building. Circa 1958, Cleaner Sales & Equipment Corp. (Cleaner Sales), a dry cleaning fluid (i.e. tetrachloroethylene [PCE]) and laundry supply distribution facility, began operating at the Site. From approximately 1958 to 1976, drums of PCE were delivered to the Site and stored prior to local distribution. Drums were delivered sealed and were not opened prior to transport. Subsequently, from approximately 1976 to 1995, empty drums were filled with PCE via a tanker truck utilizing a dispenser nozzle with an automatic shut-off.

From 1995 through 2002, the final 7 years of Cleaner Sales' operation, PCE was stored onsite in a 5,000-gallon aboveground storage tank (AST) located next to the former loading bay area in the northeastern portion of the first floor (Figure 2). PCE was delivered via tanker truck, and was pumped to the AST through two 4-in. steel pipes from the fill connections located on the outside wall of the loading bay. One pipe transferred solvent into the tank and one pipe returned the vapors to the tanker truck. PCE was transferred from the AST to 15-gallon containers, via a fill station purchased from Dow Chemical, for distribution to local dry cleaners. The fill station was located in a contained area next to the AST.

The PCE AST was fully contained within a 10- by 20-ft welded steel containment that had a 7-ft extension for containment of the fill pumps, valves, and controls. Cleaner Sales' PCE distribution business ceased operations in October 2002, and the AST was removed. Prior to removal of the AST, ultrasonic testing was performed on the AST walls, and the AST reportedly passed inspection.[1]

Redevelopment of the Site commenced circa 2003 with commercial areas on the first floor and residential apartments on the second floor.

1.3 REGULATORY INTERACTION

Cleaner Sales has an U.S. Environmental Protection Agency (EPA) ID No. NYR000113480 for hazardous waste generation of PCE. The Site is a listed in the NYSDEC database as an "unregulated" Chemical Bulk Storage Facility (CBS No. 2-000353 for the former 5,000-gallon PCE AST).

A soil vapor sample collected from the sidewalk in front of the building on North 6th Street in April 2013 as part of the investigation of the southern-adjacent BCP site, 149 Kent Avenue, contained 15.4 g/m^3 of PCE (Roux 2013). This result led NYSDEC to retain a consultant to perform a subsurface investigation in the North 6th Street sidewalks adjacent to and across from

[1] Records of this testing were not available.

the Site (EnviroTrac 2013). Data from the Roux and EnviroTrac investigations are discussed in Section 2.2 of this report.

The previous owner of the Site, 135 Kent Avenue Management Corp., entered into the BCP as a Participant on October 30, 2013, via the execution of a Brownfield Cleanup Agreement (BCA) with NYSDEC. 135 Kent Avenue Management Corp. was the building owner at the time of the RI Phase 1. The work performed under the RIWP was performed in accordance with the requirements set forth in the BCA. The prior environmental actions and investigations associated with the procedural mandates of the BCP are summarized in Section 2.2 of this report.

1.4 PURPOSE

This RI Phase 1 report provides a summary of Site environmental conditions and the RI Phase 1 results, as follows:

- Technical overview and relevant findings from previous environmental reports, as presented in the RIWP (Section 2)
- Development of the RIWP (Section 2)
- RI Phase 1 results (including ground penetrating radar [GPR] survey, MIP/HPT, soil vapor, concrete chip, and indoor air investigations) (Section 3)
- Site base mapping and supporting figures presenting RI Phase 1 sampling locations and results (Sections 2 and 3)
- Summary tables presenting RI Phase 1 analytical results (Section 3)
- Appendices containing analytical laboratory reports (Appendix A), data usability summary reports (DUSRs) (Appendix B), subcontractors' reports (Appendices C and D), manufacturers' specifications for air filtration units (Appendix E), correspondence with offsite properties (Appendix F), and 60 North 6th Street SSDS data (Appendix G).

Documents and sources used in the assessment of this Site and for development of this RI Phase 1 report are identified in the References section at the end of this document.

2 BACKGROUND

The following presents the physical setting, summary of prior environmental investigations, and potential areas of concern that were considered in the development of the RIWP (Integral 2017); these sections are largely excerpted from Section 2 of the RIWP. In addition, this section presents an overview of the RIWP objectives, the scoping process for the investigation, and the standards, criteria, and guidance identified in the RIWP to be used in the review of RI Phase 1 results.

2.1 PHYSICAL SETTING

The Site incorporates approximately 12,500 ft^2 of fairly level land located in the Williamsburg section of the Borough of Brooklyn, City of New York, New York County, New York. The Site is mapped on the Brooklyn Quadrant 7.5 Minute Topographic Map published by the United States Geological Survey (USGS) (Figure 1). Review of the topographic map indicates that the Site is located approximately 15 ft above sea level with a gentle slope west-southwest towards the East River. The entire area surrounding the Site is urban land that has been developed and manually contoured to be level with street grade.

2.1.1 Site Geology and Hydrogeology

Environmental investigations performed on the Site and the southern-adjoining property, 149 Kent Avenue (Figure 2), identified soils up to approximately 10 ft below ground surface (bgs) as consisting of medium-grained sand and fill (EnviroTrac 2013; Roux 2013). Reporting for 149 Kent Avenue described soils from approximately 10–70 ft bgs as silty sand with clay lenses; a clay/silt confining layer was encountered approximately 70 ft bgs (Roux 2013). According to reporting for 149 Kent Avenue, groundwater most likely flows in the west-southwest direction toward the East River, located 500 ft from the Site (Figure 1) (Roux 2013). The depth to groundwater was expected to be approximately 8–10 ft bgs.

MIP/HPT testing performed as part of the RI Phase 1 provided information regarding subsurface lithology. Groundwater depth as observed in MIP/HPT boring locations ranged from 4.8 to 18.6 ft bgs. Transmissivity in the Site subsurface was observed to be highly variable. Low transmissivity zones may be acting as areas of contaminant storage beneath the North 6th Street sidewalk and front hallway; whereas highly transmissive subsurface zones observed in Kent Avenue sidewalk boring locations may be acting as areas of contaminant transport.

2.1.2 Subsurface Features

The Site contains several subsurface features, including one closed-in-place 3,000-gallon underground storage tank (UST) and a utility room. The utility room is located in the

northwestern corner of the Site, beneath the former coffee shop.[2] The utility room previously contained one sump and two cleanout access areas (Figure 2); however, these were filled with concrete prior to remedial investigation activities. A boiler historically operated in the utility room.

The former UST stored heating oil and was decommissioned and closed-in-place in April 2003. Prior to decommissioning, a tank tightness was performed by Dry as a Bone, Inc. on March 31, 2003. Subsequent to passing the tightness test, the UST was pumped of remaining oil, cleaned, and filled with foam by Windmill Oil Tank Services.

2.2 PRIOR ENVIRONMENTAL INVESTIGATIONS

In accordance with DER-10, the RIWP incorporated a summary of relevant environmental Site investigations that provided the basis for identifying the potential areas of concern and the principal constituents of concern on the Site. The adjoining property to the south, 149 Kent Avenue, underwent investigations associated with subsurface contamination and data from this property were reviewed in preparation of the RIWP. Findings from these previous investigations are discussed in the following sections, and include:

1. Remedial Investigation Report, 149 Kent Avenue, Site Number C224159, prepared by Roux Associates, Inc. on behalf of Kent & Wythe Owners LLC, August 2013.
2. Sampling and Analysis Report, Former Cleaners Sales & Equipment Corp., 135 Kent Avenue, Brooklyn, prepared by EnviroTrac Ltd. on behalf of NYSDEC, September 2013.
3. Former Cleaners Sales & Equipment Corp., Site No. C224177, Soil Vapor Intrusion Report, prepared by John V. Soderberg, P.E. on behalf of 135 Kent Avenue Management Corp., February 2014.

Sample locations from these investigations are shown in Figure 3. Copies of the reports listed above were included in their entirety, as received, in Appendix A of the RIWP.

2.2.1 Remedial Investigation Report, 149 Kent Avenue, Site Number C224159, prepared by Roux Associates, Inc. on behalf of Kent & Wythe Owners LLC, August 2013

A remedial investigation was performed in anticipation of the redevelopment of 149 Kent Avenue, the property south adjacent to the Site (Figure 2) (Roux 2013). A railyard was formerly operated at 149 Kent Avenue for approximately 100 years before a warehouse for carpet and

[2] Note that areas of the Site are referenced as they existed during the investigation; certain commercial tenant operations have changed since 2018/2019.

flooring was constructed on the property in 1988. At the time of the 2013 investigation, the warehouse at 149 Kent Avenue was vacant.

During the 149 Kent Avenue remedial investigation, soil borings were installed at the property and in the sidewalks surrounding the block, and groundwater, soil, and soil vapor samples were collected. One soil vapor monitoring point, SV-1, was installed in the North 6th Street sidewalk adjacent to the eastern corner of the Site (Figure 3). Soil vapor samples collected from this location contained PCE concentrations as high as 25,300,000 $\mu g/m^3$ and were indicative of the presence of PCE dense nonaqueous-phase liquid (DNAPL).

PCE was identified as a constituent of concern on the 149 Kent Avenue property as well, with impacts to soil and groundwater detected in the vicinity of the property line near the elevator shaft at the Site (Figure 2). PCE concentrations from 149 Kent Avenue monitoring wells exceeded the Ambient Water Quality Standard (AWQS) Technical & Operational Guidance Series (TOGS) 1.1.1 (NYSDEC 1998) of 5 µg/L and were greatest in wells located near the Site elevator shaft (Roux 2013). PCE groundwater exceedances were observed in shallow samples as well as at depths as much as 70 ft bgs.

2.2.2 Sampling and Analysis Report, Former Cleaners Sales & Equipment Corp., 135 Kent Avenue, Brooklyn, EnviroTrac Ltd. on behalf of NYSDEC, September 2013

EnviroTrac, on behalf of NYSDEC, performed groundwater, soil, and soil vapor sampling in May and June 2013 to characterize subsurface conditions in the sidewalks adjacent to the Site (EnviroTrac 2013). Following a geophysical survey of the sidewalks on the north and south side of North 6th Street adjacent to the Site, four soil vapor monitoring points and one groundwater sample location were installed in May 2013 (Figure 3). Location VP-3, located in the sidewalk adjacent to the Site near the corner of North 6th Street and Kent Avenue, was drilled to 35 ft bgs. Soil beneath the initial sand layer at VP-3 was described as a sand and clay mix and groundwater was observed at 17 ft bgs. Refusal was encountered at 8–10 ft bgs at the remaining four locations, and the intended drilling depth of 35 ft bgs was not achieved. The groundwater table was not encountered prior to refusal at the proposed groundwater sample location, GP-1, and groundwater samples were instead collected from location VP-3. No odor or free product were observed during advancement of the soil borings.

Five soil samples were collected from boring locations located in the North 6th Street sidewalk adjacent to the Site. Soil samples were analyzed for volatile organic compounds (VOCs) via EPA Method 8260B. Soil sample analytical results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives (SCOs), Restricted Residential SCOs, and Protection of Groundwater SCOs (NYSDEC 2006). The following summarizes soil sample exceedances of SCOs:

- PCE was detected in all five soil samples and ranged from 3.9 to 1,600 mg/kg. The maximum detected PCE soil result value, 1,600 µg/kg, exceeded the PCE Unrestricted Use and Protection of Groundwater SCOs (1,300 µg/kg). There were no exceedances of the PCE Restricted Residential SCO (19,000 µg/kg).

- Vinyl chloride was detected in one of the five soil samples. The detected vinyl chloride result value, 64 µg/kg, exceeded the vinyl chloride Unrestricted Use and Protection of Groundwater SCOs (20 µg/kg) but did not exceed the Restricted Residential SCO (900 µg/kg).

- The maximum detected results for PCE and vinyl chloride were observed in the 15 to 20 ft bgs depth interval collected from soil sample location VP-3, located in the North 6th Street sidewalk at the corner where it intersects with Kent Avenue (Figure 3).

Two groundwater samples, both from location VP-3, were collected during the advancement of soil borings and analyzed for VOCs via EPA Method 8260B. Groundwater data were compared to AWQS TOGS (NYSDEC 1998) and the following exceedances were identified:

- cis-1,2-dichloroethylene was detected in both groundwater samples and ranged from 17 to 120 µg/L; each of these values exceeded the AWQS (5 µg/L).

- PCE was detected in both groundwater samples and ranged from 0.75 to 870 µg/L. The maximum detected PCE concentration, 870 µg/L, exceeded the AWQS (5 µg/L).

- Trichloroethene (TCE) was detected in both groundwater samples and ranged from 0.34 to 33 µg/L; the maximum detected PCE concentration, 33 µg/L, exceeded the AWQS (5 µg/L).

Four soil vapor sample points were installed and screens were set between 7.5–8 ft bgs. Four soil vapor samples and one ambient outdoor air sample were collected on June 5, 2013 and analyzed for VOCs via EPA Method TO-15. Elevated concentrations of PCE and TCE were identified in all soil vapor monitoring points, with maximum concentrations of 21,000,000 and 160,000 µg/m^3, respectively, detected at VP-4, in the sidewalk adjacent to the Site commercial space HigherDOSE (Figure 3).

2.2.3 Former Cleaners Sales & Equipment Corp., Site No. C224177, Soil Vapor Intrusion Report, prepared by John V. Soderberg, P.E. on behalf of 135 Kent Avenue Management Corp., February 2014

Sampling was performed in November 2013 under the BCP on behalf of 135 Kent Avenue Management Corp. to evaluate indoor air and subsurface soil vapor conditions at the Site (Soderberg 2014a). Sub-slab soil vapor samples were collected from seven temporary sub-slab vapor locations located throughout the first floor of the Site building. Indoor air samples were

collected from seven locations on the first floor and two locations on the second floor. One outdoor (ambient) air sample was collected from the sidewalk adjacent to the garage bays of the former loading area (Figure 3).

Samples were collected over an 8-hour sampling event using six-liter SUMMA canisters and were submitted for VOC analysis by EPA Method TO-15. Sub-slab soil vapor PCE concentrations ranged from 102 μg/m^3 in the sample collected in the former loading area, to 108,000 μg/m^3 in the sample collected from where the former AST was located (currently HigherDOSE). The sub-slab soil vapor ample collected from the cellar had a PCE concentration of 127 μg/m^3.

Indoor air samples were collected in the breathing zone, approximately five ft above the ground surface, over an 8-hour sampling period using six-liter SUMMA canisters that were submitted for VOC analysis by EPA Method TO-15. All first-floor and second floor indoor air samples exceeded the New York State Department of Health (NYSDOH) guidance value for PCE (30 μg/m^3). First floor PCE concentrations ranged from 210 to 1,810 μg/m^3. Indoor air samples collected in the second floor hallways, IA-8 and IA-9 had PCE concentrations of 573 and 385 μg/m^3, respectively. The indoor air sample collected in the cellar, IA-7, had a PCE concentration of 3.87 μg/m^3.

2.3 SITE INTERIM REMEDIAL MEASURES

The findings of the Soil Vapor Intrusion Report (Soderberg 2014a) indicated that soil vapor intrusion of PCE was occurring at the Site. Several interim remedial measures (IRMs) were put in place at the Site to mitigate PCE intrusion: a sub-slab depressurization system (SSDS) was installed, and air filtration units were placed in all commercial and residential spaces (Soderberg 2014b). IRM monitoring, maintenance procedures, and reporting are performed on a monthly basis in accordance with BCP requirements.

2.3.1 Air Filtration Units

Air filtration units were installed on the first and second floors between January and April 2014 as a temporary solution to address indoor soil vapor intrusion prior to installation of the SSDS (Soderberg 2016). The air filtration units, Airpura model R600, contain high-efficiency particulate air (HEPA) and carbon filters. The units continued to operate after installation of the SSDS in June 2014 to assist in treatment of potentially-contaminated vapors in indoor air. Air filtration units were installed on the first floor of the Site building in the commercial spaces and by the elevator shaft. Two air filtration units were installed in each second-floor apartment unit, as well as one at each end of the second floor hallways. Since installation, the air filtration units have been maintained in accordance with the manufacturers' recommendations and have been replaced, as needed, with new units (including both Airpura R600 and C600 units, and

Austin Air Healthmate HM400), as approved. Appendix E contains manufacturers' specifications for the air filtration units.

2.3.2 Sub-Slab Depressurization System

The Site SSDS was installed on June 20, 2014. Pilot testing to identify the zone of influence was first performed using a radon fan and then with a 3-horsepower Rotron vacuum motor (March 2014 and June 2014, respectively) (Soderberg 2015). Six vertical vacuum wells were installed to a depth of 5 ft below the existing concrete floor. The wells are connected via PVC and steel piping for flow to two carbon, vapor-phase treatment units in the SSDS treatment room, located near the back hallway on the first floor. Effluent and blower exhaust are routed from the treatment room to an exhaust stack on the roof.

The final Operation, Maintenance, and Monitoring (OM&M) Plan for the SSDS was submitted to NYSDEC in March 2015 (Soderberg 2015). The OM&M Plan provides details regarding replacement of SSDS carbon filter units as well as monitoring and maintenance procedures. Monthly monitoring and maintenance activities are documented in progress reports for submittal to NYSDEC per BCP requirements. Monthly reports submitted through November 2016 were compiled by Soderberg. Integral has performed monthly monitoring and reporting of the SSDS and air filtration units since December 2016, and as of the submittal of this RI Phase 1 report, the SSDS is operating according to its design.

The SSDS is considered a permanent engineering control. The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS is no longer required, a proposal to discontinue the SSDS will be submitted by the property owner to the NYSDEC and NYSDOH.

2.4 POTENTIAL AREAS OF CONCERN

Based on previous investigations that have been performed for the Site and the adjacent property to the south (149 Kent Avenue), Integral identified in the RIWP the following potential areas of concern:

- Former PCE AST and associated filling station;
- Former loading bay area (Blossom, Mobile Spa, and ramped hallway), including the adjacent sidewalk; and
- Former unused loading area adjacent to the elevator shaft.

These areas are shown on Figure 2.

2.5 REMEDIAL INVESTIGATION WORK PLAN

The RIWP was developed in general accordance with the NYSDEC's DER-10, dated May 2010 (NYSDEC 2010). The RIWP proposed a step-wise approach that was designed to generate high resolution, semi-quantitative information (Phase 1, results presented herein) prior to typical BCP soil and groundwater sampling (Phase 2). The purpose of the investigations proposed in the RIWP were to define the nature and extent of contamination onsite; to evaluate whether contamination is present onsite that warrants remedial action; to evaluate if onsite contamination is migrating offsite; and to provide data of sufficient quantity and quality to support development of a Remedial Action Alternatives Analysis, if remedial action is warranted for the Site.

2.5.1 Remedial Investigation Objectives

The RIWP proposed investigations that were developed to meet the following Site-specific objectives:

- Describe the lithology at the site to identify storage zones[3] and transport[4] zones for DNAPL, if present, and dissolved-phase plume
- Assess if DNAPL is present, and if so, delineate its distribution
- Map the contaminant distribution in the presumed soil source area, dissolved-phase groundwater, and vapor phase in or around adjacent buildings (to evaluate soil vapor intrusion risk)
- Delineate the horizontal and vertical extent of contaminants (if present) in soil and groundwater beneath the Site
- Evaluate potential sources of contamination, the migration pathways, and actual or potential receptors of contaminants on or through soil, groundwater and soil vapor
- Evaluate potential offsite impacts to groundwater from contamination, if present
- Evaluate the potential for soil vapor to migrate offsite via preferred pathways, if present
- Assess potential impacts to human health and the environment as a result of the release of contaminants at the Site, if applicable.

[3] Lithologic units with predominantly silt and clay that have low transmissivity and store contamination and act as a secondary source to groundwater (dissolved-phase).

[4] Lithologic units with predominantly sand or gravel that have higher transmissivity and transport dissolved-phase contamination.

2.5.2 Scoping Process and Drilling Access Limitations

The scoping process, for the purpose of identifying and defining the investigations proposed in the RIWP, included a review of previous Site reports and data, Site visits, and an evaluation of DER-10 requirements and relevant State and Federal guidance documents. Investigations commenced after NYSDEC approval of the RIWP and after the 30-day public comment period is satisfied.

The stepwise investigation approach proposed in the RIWP was predicated on limited drilling access within the Site building. A Site visit was performed in January 2017, prior to the submittal of the RIWP, to investigate access for various drilling rigs. During these Site visits, representatives from two drilling companies indicated that drilling access for subsurface sampling inside the building would be extremely limited. The Kent Avenue door (to the southern hallway) and the ramp hallway doors, located in the former loading bay area, were measured to assess options for equipment access in the Site building (Figure 2). The drillers both estimated that a Geoprobe 6610 would be able to enter the ramp hallway doors, and locations within that hallway should be able to be drilled to depths of 70 ft bgs barring significant obstructions, however, as discussed in the results below, refusal depths in the ramp hallway were much shallower. The Kent Avenue door is not as wide, and access to the southern hallway and other portions of the Site building interior would be limited to a hand truck drill rig unit, such as a Geoprobe 420M, with a likely maximum depth of 10 ft bgs. Given the access limitations, drilling within the Site building was proposed for only the ramp hallway.

2.5.3 Standards, Criteria, and Guidance

The RIWP identified standards, criteria, and guidance (SCGs) for the Site that pertain to meeting applicable regulations and remedial investigation objectives.

The SCGs identified in the RIWP for Site soils are based upon the selection of applicable values from 6 NYCRR 375-6.8 Remedial Program Soil Cleanup Objectives (SCOs) (NYSDEC 2006), and included the protection of public health Restricted Residential Use SCOs. Restricted Residential SCOs are use-based criteria that are compatible with the surrounding area and take into account the current and potential future usage of the Site combined with the potential implementation of engineering controls. Soil data collected as part of the remedial investigation will also be compared to Unrestricted Use SCOs and Protection of Groundwater SCOs (NYSDEC 2006). Soil was not collected as part of the RI Phase 1, however, concrete chip samples were compared to Restricted Residential Use SCOs in consideration of its potential to act as a source of VOCs to indoor air.

No SCGs currently exist for soil vapor. However, NYSDOH has developed soil vapor/indoor air decision matrices that are used for evaluating human health risk and are based on the relationship between sub-slab soil vapor concentrations and corresponding indoor air

concentrations. Therefore, where applicable, soil vapor data, in conjunction with indoor air, were compared to the May 2017 update of the NYSDOH Soil Vapor/Indoor Air matrices that were first presented in the *Guidance for Evaluating Soil Vapor Intrusion in New York State* (NYSDOH 2006). These matrices are risk management tools, developed by the NYSDOH in conjunction with other agencies, to provide guidance on case-by-case basis regarding actions that should be taken to address current and potential exposures related to soil vapor intrusion.

Indoor air data were compared to NYSDOH air guideline values (AGVs). NYSDOH presented the development of AGVs in the 2006 guidance; NYSDOH issued an updated AGV for PCE in September 2013 and for TCE in August 2015.[5]

[5] NYSDOH provides updates to soil vapor intrusion guidance and AGVs at https://www.health.ny.gov/environmental/indoors/vapor_intrusion/update.htm

3 REMEDIAL INVESTIGATION PHASE 1

This section describes the methodologies used during the field investigations of the Site and surrounding areas. These field activities were conducted in accordance with the methods and procedures specified in the approved RIWP (Integral 2017), 6 NYCRR Part 375 Brownfield Cleanup Regulations, and in conformance with NYSDEC DER-10. Samples were collected in accordance with the approved quality assurance project plan provided as an appendix to the RIWP.

Given the limited access available at the Site, and the depths to which contamination was expected, the RIWP proposed an initial phase of screening tools (RI Phase 1) to assist in locating potential source areas and contaminant storage/transport zones. The RI Phase 1 generated high-resolution, semiquantitative information from the following activities:

- GPR, utility markout, and land survey
- MIP and HPT analysis
- Soil vapor sampling
- Concrete chip sampling
- Indoor and ambient air sampling at the Site and southeastern-adjacent property, 58 North 6th Street.

The section below provides reporting and analysis of the RI Phase 1 data.

3.1 DATA ANALYSIS AND VALIDATION

RI Phase 1 samples were collected in accordance with the RIWP and associated quality assurance project plan (Appendix B to the RIWP). Samples for laboratory analysis were sent to Alpha Analytical, an analytical laboratory certified by NYSDOH under the Environmental Laboratory Accreditation Program. RI Phase 1 laboratory reports for the soil vapor, concrete chip, and air sampling events from Alpha Analytical are provided in Appendix A.

Data usability summary reports (DUSRs) for data collected by Integral were prepared and are attached as Appendix B. Data validation was conducted by Integral chemists not otherwise involved with the project. Data validation findings are summarized in the sections below. The analytical results summary tables referenced below include the validation findings.

3.2 GPR SURVEY AND UTILITY MARKOUT

An Integral subcontractor performed the GPR survey on August 9, 2018, to evaluate the potential presence of utilities, piping, and unidentified and/or unconfirmed USTs prior to the

start of intrusive remedial investigation activities. GPR was performed at the proposed soil vapor sampling locations and MIP/HPT locations identified in the RIWP (Integral 2017). Utility markout was performed on the sidewalks adjacent to the Site, as well as the North 6th Street sidewalk opposite of the Site.

Utility lines identified by GPR and utility markout, including water, gas, electric, and sewer service, are shown on Figure 4. Sewer lines were identified in both the Site building and 58 North 6th Street building. The GPR subcontractor did not identify subsurface anomalies consistent with USTs during the survey. The GPR survey report is provided as Appendix C.

Several RI Phase 1 locations proposed in the RIWP were adjusted based on the results of the GPR survey and utility markout. Proposed MIP/HPT locations on the sidewalks adjacent to the Site, as well as those on the North 6th Street sidewalk opposite the Site, were shifted away from the building to about 2.5 ft from the curb due to the presence of utility lines beneath the sidewalks. In addition, MIP/HPT location MIP-04 was shifted 15 ft west due to multiple utility lines beneath that portion of the sidewalk. Soil vapor sample SVG-14 was shifted 20 ft from the proposed location due to the location of utilities.

3.3 MEMBRANE INTERFACE PROBE/HYDRAULIC PROFILING TOOL INVESTIGATION

Integral and S2C2 Inc. (S2C2) performed an MIP/HPT investigation from September 24 to October 2, 2018. Drill rigs were outfitted with MIP/HPT probes to profile soil in the unsaturated zone, and soil and groundwater in the saturated zones. HPT testing was performed to provide hydraulic data for characterization of Site lithology. MIP testing was performed to provide a semiquantitative assessment of chlorinated compounds using a halogen-specific detector (XSD), among other probes. Appendix D presents the S2C2 MIP/HPT report. The following sections provide a summary of drilling conditions and the MIP/HPT results.

3.3.1 Drilling Conditions

The driller utilized Geoprobe track-mounted direct-push units to advance the MIP/HPT probe equipment. MIP/HPT borings performed in the sidewalks were advanced by a direct push Geoprobe 7800 series drill rig. Drilling within the Site building was limited due to access and overhead clearance, and only the front hallway entrance on North 6th Street was identified as being wide enough for a drill rig. Borings performed in the front hallway were advanced by a direct push Geoprobe 6610.

The RIWP proposed 20 MIP/HPT locations with a targeted depth of 70 ft bgs; in total, 26 locations were attempted during the RI Phase 1, with a maximum refusal depth of 41 ft bgs. Due to what S2C2 described as “difficult subsurface conditions” (Appendix D) and to avoid damaging the MIP/HPT probes, most locations were pre-drilled (i.e., no sensor was attached) to

a minimum depth of 10 ft bgs using a 1.5-in. rod. Table 1 presents a summary of the RI Phase 1 MIP/HPT drilling locations and refusal depths. At several locations, refusal was met at less than 20 ft bgs when the location was pre-drilled. Typically, if refusal was met prematurely with the 1.5-in. rod, S2C2 did not attempt to probe with MIP/HPT, and another boring several feet away was attempted. A surveyor collected coordinates for those locations where MIP/HPT equipment was advanced; Figure 5 and Table 1 present the surveyed locations.

Refusal depths across the investigation area were highly variable (Table 1). Sidewalk boring refusal depths ranged from 3.6 to 41 ft bgs. Stone and/or glacial till were indicated as the cause of refusal for 22 of the 26 attempted locations. The deepest borings were achieved at Kent Avenue sidewalk locations MIP-19C and MIP-20 (41 and 37 ft bgs, respectively), where S2C2 noted a clay layer at refusal. Consistent with what was encountered by drillers during the EnviroTrac 2013 investigation, refusal was encountered at less than 10 ft bgs at most North 6th Street sidewalk locations adjacent to the Site building.

The RIWP proposed four locations within the front hallway of the Site building, accessed via the North 6th Street entrance. Locations MIP-13 and MIP-14, located nearest to the North 6th Street entrance, were drilled to 30 and 26 ft bgs, respectively. The drillers were not able to attempt MIP-16, the most interior location, due to overhead clearance issues. Location MIP-15b was performed immediately south of MIP-15 to attempt additional data collection; however, refusal was met at 8.6 ft bgs.

3.3.2 HPT Results

HPT testing was performed at 19 boring locations (Figure 5) to collect hydraulic pressure data for the characterization of soil lithology. The S2C2 data report (Appendix D) presents HPT pressure values from each boring. In addition, S2C2 provided a 3-dimensional model showing the HPT data from each boring. Figure 6 presents a profile view from the S2C2 model that shows HPT pressure values in each boring, from west to east.

Lower HPT pressure values correlate with areas of higher transmissivity, such as sand and/or gravel. These areas may indicate groundwater flow and can act as a potential transport zone for dissolved-phase contamination. Areas of lower HPT pressure were observed in the shallow subsurface of each boring (Figure 6). S2C2 characterized the shallow subsurface material at location MIP-19C as a potential sandy clay layer. Low pressure values indicative of a highly transmissive zone were also observed from 15 to 25 ft bgs in the locations drilled in the Kent Avenue sidewalk (MIP-17 through MIP-20), and intermittently in the locations drilled in the Site front hallway and North 6th Street sidewalk adjacent to the Site.

Areas with higher HPT pressure values correlate with less transmissive subsurface zones and may indicate potential peat or clay layers. These less transmissive subsurface zones may store contamination and act as a secondary source to groundwater. Areas of higher HPT pressure

(low transmissivity) were observed in each soil boring. Locations drilled in the North 6th Street sidewalk where refusal occurred at less than 20 ft bgs tended to have elevated HPT pressure values near the ground surface. HPT pressure values indicative of a potential peat layer were observed from 25 to 30 ft bgs in the Kent Avenue sidewalk location, MIP-19C and slightly shallower in location MIP-20. Pressure values near 100 pounds per square inch were observed at the point of refusal in these locations and may indicate clay.

The high degree of variability and observed in subsurface conditions beneath the Site and in the adjacent sidewalks is not directly comparable to the lithology noted in the remedial investigation for the southern-adjacent property, 149 Kent Avenue: surficial layers consisted of till and then sand or silty/sand, shifting to silt, and then resulted in refusal at 70 ft bgs due to the presence of a clay layer (Roux 2013). Additional information on lithology will be developed during the second RI phase.

3.3.3 Depth to Water

Once the HPT probe was advanced below the water table, dissipation testing was performed to estimate the static water level and provide an estimate of hydraulic conductivity. A dissipation test measures the pore pressure relative to atmospheric pressure; the depth below the surface where pore pressure equals atmospheric pressure is the water table elevation. The depth to water ranged from 5 to 19 ft bgs at each of the locations where S2C2 performed dissipation tests (Table 1). In comparison, groundwater was noted as 8–10 ft bgs during investigations performed at the southern-adjacent property, 149 Kent Avenue (Roux 2013). Dissipation tests were not performed at some MIP/HPT locations either because the boring did not advance below the water table, or because S2C2 could not locate a transmissive zone to perform the test.

3.3.4 MIP-XSD Results

S2C2 performed MIP testing at 19 locations to identify subsurface areas potentially impacted by VOCs (Table 1; Figure 5). MIP sensors detect VOCs in the gaseous, sorbed, dissolved, or free phases. The results discussion herein focuses on the MIP-XSD data because this detector is the most sensitive to chlorinated compounds, such as PCE and TCE. The MIP sensors also included other probes, such as a flame-ionization detector and photoionization detector; these data are discussed in the S2C2 data report (Appendix D).

The highest MIP-XSD responses, correlating with the areas of chlorinated compound impacts and potential DNAPL, were observed in and adjacent to the Site's former loading bay and PCE AST areas (Appendix D). MIP-XSD response is measured in microvolts (μV). Prior to and following each MIP probing location, S2C2 recorded the MIP-XSD sensor response to a solution containing 2 parts per million (ppm) PCE (Appendix D). During the field event, S2C2 noted MIP-XSD responses exceeding 1×10^5 μV indicated the likely presence of DNAPL. The following is a summary of the locations where a strong MIP-XSD response was recorded:

- North 6th Street sidewalk adjacent to the Site—throughout boring MIP-07, between 7–16 ft bgs in MIP-09,[6] and throughout MIP-10. MIP-XSD responses indicative of potential DNAPL were recorded at 15 and 18 ft bgs in MIP-07 and at 5 ft bgs in MIP-09.
- Front hallway of the Site—a very strong MIP-XSD response was recorded in areas of low transmissivity (i.e., area that may be acting as a subsurface contaminant storage area) in borings MIP-13 and MIP-14. MIP-XSD responses indicative of potential DNAPL were recorded in these locations between 16–18 ft bgs.
- Kent Avenue sidewalk—a strong MIP-XSD response was noted in a low transmissive zone at approximately 20 ft bgs in borings MIP-19C and MIP-20.

Elevated MIP-XSD responses were not observed in the borings performed on the North 6th Street sidewalk opposite the Site (MIP-01 through MIP-05), or in Kent Avenue sidewalk borings MIP-17 and MIP-18 (Appendix D).

S2C2 interpolated the MIP-XSD response data to generate a 3-dimensional model (Appendix D). Figure 7 presents plan view screenshots of the 3-dimensional modeled MIP-XSD response at various depth increments:

- MIP-XSD response at 2 ft bgs: chlorinated compound impacts beneath North 6th Street sidewalk adjacent to the Site former PCE AST and loading bay areas
- MIP-XSD response at 7 ft bgs: chlorinated compound impacts extend from the North 6th sidewalk to the north, west, and east, with the interpolated response extending beneath the building footprint beneath the 48 N 6th Deli, Blossom, Mobile Spa, HigherDOSE, and Meg Shops areas
- MIP-XSD response at 12 ft bgs: chlorinated compound impacts extend farther north beneath North 6th Street sidewalk adjacent to the Site
- MIP-XSD response at 17 ft bgs (groundwater interface): chlorinated compound impacts extend northwest to Kent Avenue boring MIP-20.

There are portions of the interpolated and extrapolated MIP-XSD model that are not bounded with actual data points (Figure 7). For example, the model extrapolates data from the hallway and North 6th Street sidewalk boring locations to show chlorinated impacts extending to the southeast beneath 58 North 6th Street, where no MIP-XSD probing was performed. However, the model provides a visual aid to understand the potential horizontal and vertical distribution of chlorinated compound impacts at the Site, and these data will inform future Site characterization efforts.

[6] Drilling refusal for MIP-08 was less than 10 ft bgs and a MIP-XSD response was not noted.

3.4 SOIL VAPOR SAMPLING

Integral performed RI Phase 1 soil vapor grab sampling on October 16 and 17, 2018, to identify potential PCE release points and to obtain quantitative measurements of PCE and TCE in soil and groundwater. Soil vapor samples were collected from the Site's first floor and basement, from the Kent Avenue sidewalk adjacent to the Site, from the North 6th Street sidewalks adjacent to and across the street from the Site, and from the basement of the southeastern-adjacent building at 58 North 6th Street. Table 2 contains coordinates for the soil vapor sample locations; Figures 8 and 9 present the soil vapor sample locations and PCE and TCE results, respectively. Soil vapor sample results will be used to identify soil and groundwater sampling locations as well as to assist in evaluating future engineering controls.

3.4.1 Soil Vapor Sampling Deviations from the RIWP

Deviations from the RIWP occurred during the RI Phase 1 soil vapor sampling event. Nine soil vapor sample locations were adjusted from what was proposed in the RIWP:

- SVG-01, SVG-02, and SVG-03 were performed as grab samples in the North 6th Street sidewalk due to offsite property access issues and the demolition of the buildings prior to the sampling event. The RIWP proposed these locations as indoor 24-hour samples SVS-01, SVS-02, and SVS-03 to be collected within the buildings located on offsite properties 133 Kent Avenue and 51 North 6th Street; however, the offsite property owners did not respond to requests for access, and the buildings on these properties were demolished prior to RI Phase 1 soil vapor sampling. Samples SVG-01, SVG-02, and SVG-03 were changed from indoor 24-hour to grab samples to be performed in the sidewalks adjacent to these properties.
- Site building slab samples SVG-09, SVG-10, SVG-16, and SVG-17 were adjusted by less than 15 ft due to Site tenant access issues.
- SVG-14 was adjusted approximately 20 ft north due to the location of utilities.
- Sample SVG-15 was collected in the hallway to the south of Mobile Spa, approximately 15 ft from the location specified in the RIWP; the RIWP-proposed location was in the back room of Mobile Spa up a flight of stairs, and it is not clear if that portion of the Site building slab is in direct contact with the subsurface.

Though many of the proposed locations were adjusted in the field, the actual soil vapor sample locations provided good coverage of the Site, 58 North 6th Street basement, Kent Avenue sidewalk, and North 6th Street sidewalks (Figure 8). Samples were not collected from the offsite properties 133 Kent Avenue and 51 North 6th Street, located across North 6th Street from the Site,

because access was not granted and the buildings on these properties were demolished prior to RI Phase 1 sampling in October 2018.[7]

An additional deviation from the RIWP occurred for soil vapor sample SVS-18, located in the basement of the 58 North 6th Street building. Integral found during the retrieval of the soil vapor sample canister that the canister tubing for the sample had been disconnected from the sub-slab point. The SVS-18 sample did not, therefore, represent sub-slab conditions, and the data for that sample have been rejected.

3.4.2 Soil Vapor Sample Results

Per the RIWP, soil vapor samples were collected from locations installed approximately 2 in. below each building or sidewalk slab and submitted for analysis of VOCs by EPA Method TO-15. Table 3 presents the soil vapor sample results. Figure 8 presents PCE soil vapor results, and Figure 9 presents TCE soil vapor results. The Alpha Analytical laboratory report is provided in Appendix A; the DUSR is included in Appendix B. No results were rejected by the laboratory, however, the results for soil vapor sample SVS-18 were identified as not representative of sub-slab conditions, given the sample canister tubing was disconnected from the sub-slab point. All other RI Phase 1 soil vapor results were found to be acceptable for their intended use. The results and analytical laboratory report were sent to NYSDEC and NYSDOH on November 5, 2018.

3.4.2.1 Site and Adjacent Sidewalks Soil Vapor

Soil vapor PCE concentrations beneath the Site and adjacent sidewalks ranged from 6.14 to 8,410,000 μg/m^3 (Table 3). The Site areas with the highest soil vapor PCE concentrations included the areas of concern identified in the RIWP: the former PCE AST and associated filling station at the front of Meg Shops, the former loading bay area at the front of Blossom, and the North 6th Street sidewalk adjacent to the Site (Figure 8). The PCE highest concentrations was collected from North 6th Street sidewalk sample SVG-06, located adjacent to the HigherDOSE storefront. RI Phase 1 soil vapor PCE results were within the same range of concentrations collected during previous Site investigations: PCE was detected at 21,000,000 μg/m^3 in the June 2013 sidewalk soil vapor sample near HigherDOSE (EnviroTrac 2013); PCE concentrations ranged from 102 to 108,000 μg/m^3 in the November 2013 soil vapor samples collected by Soderberg (2014a).

Detected TCE concentrations in soil vapor collected beneath the Site and adjacent sidewalks ranged from 1.33 to 119,000 μg/m^3. The highest soil vapor TCE concentrations were from the

[7] Google Earth aerial imagery review shows the 133 Kent Avenue and 51 North 6th Street buildings were in place at the time the RIWP was finalized, in September 2017. However, the buildings were removed from these properties by November 2017. These properties are undeveloped as of the preparation of this report.

North 6th Street sidewalk samples SVG-04 and SVG-05, adjacent to the former coffee shop and Blossom. TCE concentrations in Meg Shops were low compared to the rest of the Site (Figure 8).

The PCE and TCE soil vapor concentrations collected beneath the Site exceed NYSDOH guidance values and require active mitigation per the NYSDOH 2017 decision matrix for PCE. Active mitigation via the SSDS and air filtration units is occurring at the Site, and indoor air results for occupied spaces met or were below NYSDOH guidance values, as discussed further below.

3.4.2.2 58 North 6th Building Soil Vapor

Integral collected three soil vapor samples from the front basement of 58 North 6th Street during the RI Phase 1 October 2018 sampling event: grab samples from locations SVG-12 and SVG-20, and a 24-hour sample from location SVS-18. As discussed in Section 3.4.1, sample SVS-18 was compromised and the results were rejected. Soil vapor PCE concentrations in SVG-12 and SVG-20 were 19,300 and 1,380,000 $\mu g/m^3$, respectively; TCE concentrations were 172 and 5,270 $\mu g/m^3$, respectively (Table 3). These concentrations exceed NYSDOH guidance values and require active mitigation per the NYSDOH 2017 decision matrices for PCE and TCE. Per discussions with NYSDEC and NYSDOH, and after delays in obtaining a response from 58 North 6th Street building management, Integral installed air filtration units throughout the 58 North 6th Street building in July 2020. Integral is coordinating access for SSDS pilot testing and installation.

3.4.2.3 Offsite Sidewalk Soil Vapor Sample Results

Integral collected three soil vapor grab samples from the sidewalk across the street from the Site: SVG-01 and SVG-02, and SVG-03 (Figure 8). PCE concentrations from these locations ranged from 47.2 to 2,850 $\mu g/m^3$; these concentrations exceed the NYSDOH guidance values that would require active mitigation within a building per the NYSDOH 2017 decision matrix for PCE.

3.4.3 Offsite Property Access Requests and Environmental Data

Per NYSDEC direction following review of preliminary RI Phase 1 soil vapor results, Integral pursued access agreements and permission to sample soil vapor and indoor air from within the occupied residential building at 53 North 6th Street and the vacant commercial building located at 60 North 6th Street. Integral did not continue to pursue access from the property owners of 133 Kent Avenue or 51 North 6th Street; the structures on these properties were demolished prior to RI Phase 1 soil vapor sampling in October 2018. A summary of access request correspondence with 53 North 6th Street and 60 North 6th Street is provided below.

3.4.3.1 53 North 6th Street Access Requests for Soil Vapor and Indoor Air Sampling

The 53 North 6th Street property owner did not respond to the following requests for access in 2019:

- January 22, 2019 letter from Integral
- February 11, 2019 letter from Integral
- April 15, 2019 letter from NYSDEC
- June 26, 2019 letter from Periconi, LLC (legal counsel for 135 Kent Avenue Management Corp.)

Appendix F provides the correspondence sent to the 53 North 6th Street property owner. No response or denial letter was received to any of these communications. A review of available information indicates L3 N 6 Assemblage LLC is the current owner of 53 North 6th Street;[8] the property was sold in October 2020 and may be under redevelopment.[9]

3.4.3.2 60 North 6th Street Access Requests for Soil Vapor and Indoor Air Sampling and Environmental Data Collection

Integral, NYSDEC, and Periconi, LLC exchanged several communications with representatives for the property owner for 60 North 6th Street, a vacant commercial property, in 2019:

- January 22, 2019 letter from Integral to property owner and management group, requesting access for soil vapor and indoor air sampling
- February 12, 2019 e-mail communication to Integral from Kevin Gallagher, representative for L3 Capital (property owner for 60 North 6th Street), indicating preference for direct communication from NYSDEC
- February 15, 2019 letter from NYSDEC to Kevin Gallagher requesting access for Integral to perform soil vapor and indoor air sampling, in response to February 15, 2019 telephone conversation between NYSDEC and Kevin Gallagher
- June 26, 2019 letter from Periconi, LLC to property owner and legal counsel for property owner, requesting environmental data, and if not available, access for Integral to perform soil vapor and indoor air sampling

Appendix F provides the 60 North 6th Street correspondence listed above.

In September 2020, the legal counsel and environmental consultant for 60 North 6th Street property owner indicated that a passive SSDS was installed in the building in spring 2019. Per

[9] Information obtained from https://www.realtor.com/realestateandhomes-detail/53-N-6th-St_Brooklyn_NY_11249_M38261-21903

NYSDEC direction, Integral collected monitoring data from the passive SSDS at 60 North 6th Street in January, February, March, and July 2021; these data are presented in Appendix G. Pressure readings from the passive system's two monitoring points were inconsistent across the four monitoring events. Upon review of these monitoring data, NYSDEC and NYSDOH indicated the passive SSDS is required to be upgraded to an active system. As of the preparation of this report in August 2022, the property owner for 60 North 6th Street has plans to convert the passive SSDS to an active system as part of a larger construction project at the property. Integral provided NYSDEC with the preliminary plans for the SSDS upgrade on June 24, 2022, included in Appendix G to this document. Integral continues to communicate with representatives for 60 North 6th Street regarding this upgrade and will relay to NYSDEC any additional information as it is made available.

3.5 CONCRETE CHIP SAMPLING

Concrete chip sampling was performed to assess whether the concrete slab in the Site's former PCE AST and associated filling station area on the first floor (i.e., Meg Shops and HigherDOSE commercial spaces, Figure 2) is acting as a source of indoor air VOC contamination. Integral performed RI Phase 1 concrete chip sampling on October 16 and 17, 2018. Figure 10 presents the three concrete chip sample locations: two in the former Meg Shops clothing store, and one from HigherDOSE. Per the RIWP, concrete chip samples were collected at the surface of the building slab, below any paint or obvious sealant, using a chisel on a hammer drill. Skim coat concrete and other flooring had been installed in the two commercial spaces where concrete chip samples were collected; concrete chip samples were biased below these layers at the top of the presumed original slab, approximately 1 in. below the skim coat layer.

Per the RIWP, concrete chip samples were submitted for VOC analysis by EPA Method 8260C. The Alpha Analytical laboratory report is provided in Appendix A; the DUSR is included in Appendix B. All results were found to be acceptable for their intended use with the exception of one rejected result for CON-01-18: 1,1,2,2-tetrachloroethane was not recovered in the matrix spike, and the result was qualified as rejected.

Table 4 presents the concrete chip sample results. Nearly all VOCs were not detected, with two exceptions: acetone was detected in all three samples (results ranged from 0.0088 to 0.13 mg/kg), and PCE was detected in two of the three samples (results ranged from 0.0052 to 0.030 mg/kg). The detected values for acetone and PCE were more than 2 magnitudes lower than the Restricted Residential SCOs for acetone (100 mg/kg) and PCE (19 mg/kg) and below the Unrestricted Use and Protection of Groundwater SCOs for acetone (0.050 mg/kg) and PCE (1.3 mg/kg) (NYSDEC 2006). The concrete chip sample analytical laboratory report and a summary table presenting the results were sent to NYSDEC and NYSDOH on November 5, 2018. The results of the concrete chip sample data indicate the concrete slab likely does not act as a source

of indoor air VOC contamination, and especially with additional concrete and coating atop the original slab.

3.6 INDOOR AIR SAMPLING

Integral conducted indoor air sampling to evaluate potential impacts to human health and assess the potential need for future onsite and offsite engineering controls. Indoor air data were collected per the RIWP in March 2018; follow-up indoor air sampling throughout the 58 North 6th Street building was performed in October 2019. Additional indoor air sampling was performed at 135 Kent Avenue in March 2022. The indoor air data from the RI Phase 1 and subsequent air monitoring events will be incorporated into a qualitative human health exposure assessment once the remedial investigation is complete.

3.6.1 March 2018 RI Phase 1 Indoor Air Sampling

Per the RIWP, Integral collected indoor air samples in March 2018 from the Site and from the southeastern-adjacent property, 58 North 6th Street, as well as two ambient air samples.[10] The following samples were collected:

- One indoor air sample from the Site cellar (8-hour duration)
- Nine indoor air samples from Site first floor commercial spaces (8-hour duration)
- Eleven indoor air samples from Site second floor residential spaces (24-hour duration)
- One indoor air sample from the first floor commercial space of 58 North 6th Street (8-hour duration)
- Two outdoor (ambient) air samples (one 8-hour duration and one 24-hour duration).

Figures 11 and 12 present the first floor and second floor air sample locations, respectively. Sample IDs were assigned the prefix "IA18" to indicate indoor air collection in 2018. Samples were sent to Alpha Analytical and analyzed for VOCs via EPA Method TO-15. The Alpha Analytical laboratory report is provided in Appendix A; the DUSR is included in Appendix B. No results were rejected, and all results were found to be acceptable for their intended use.

Table 5 presents the March 2018 air sample analytical data. The NYSDOH air guideline values (AGVs) for PCE and TCE are 30 and 2 $\mu g/m^3$, respectively. Two samples from the March 2018 sampling event exceeded the PCE AGV (30 $\mu g/m^3$):

[10] Additional indoor air sampling was performed in 58 North 6th Street in October 2019 (results provided via email communication to NYSDEC and NYSDOH in December 2019), and from the Site building in March 2022 (results to be provided under separate cover).

- PCE concentration of 73.2 μg/m^3 in IA18-01, collected from the Site cellar
- PCE concentration of 51.9 μg/m^3 in IA18-58, on the 1st floor of 58 North 6th Street.

One sample from the March 2018 event exceeded the TCE AGV (2 μg/m^3): IA18-03, collected in the Site cellar (TCE concentration of 3.06 μg/m^3).

3.6.2 October 2019 Indoor Air Sampling at 58 North 6th Street

Following review of the March 2018 RI Phase 1 indoor air data collected in the southeastern-adjacent property, 58 North 6th Street, NYSDEC required indoor air sampling be performed throughout that building. Integral collected the following 8-hour duration air samples from 58 North 6th Street on October 17, 2019:

- One indoor air sample from the front cellar (IA19-58-01)
- One indoor air sample from the back cellar (IA19-58-02)
- One indoor air sample and one duplicate indoor air sample from the first floor lobby (IA19-58-03 and IA19-58-DUP)
- One indoor air sample from the second floor office space (IA19-58-04)
- One indoor air sample from the third floor office space (IA19-58-05)
- One outdoor (ambient) air sample from the second-floor front patio (OA19-58-01).

Sample IDs were assigned the prefix "IA19-58" to indicate indoor air collection in 2019 at 58 North 6th Street. Samples were sent to Alpha Analytical and analyzed for VOCs via EPA Method TO-15. Seven compounds were analyzed by EPA Method TO-15 SIM to meet a laboratory reporting limit of 0.20 μg/m^3 or less: 1,1,1-trichloroethane, 1,1-dichloroethene, carbon tetrachloride, cis-1,2-DCE, PCE, TCE, and vinyl chloride. The Alpha Analytical laboratory report is provided in Appendix A; the DUSR is included in Appendix B. No results were rejected, and all results were found to be acceptable for their intended use.

Table 6 presents the October 2019 air sample analytical data collected from 58 North 6th Street. Results from one March 2018 sample exceeded the NYSDOH AGV for PCE (30 μg/m^3) and TCE (2 μg/m^3): sample IA19-58-01, collected from the front basement (PCE result of 216 μg/m^3 and TCE result of 2.3 μg/m^3). As noted above, air filtration units are installed in 58 North 6th Street, and Integral is taking steps to install an active remedial system in this building.

3.6.3 March 2022 Indoor Air Sampling at 135 Kent Avenue

Integral prepared an August 2021 work plan in response to a May 11, 2021, communication from NYSDEC requiring indoor air sampling at the Site during the 2021/2022 heating season. Per the approved work plan, Integral collected the following air samples March 23-24, 2022:

- One indoor air sample from the Site cellar (8-hour duration)
- Nine indoor air samples from Site first floor commercial spaces (8-hour duration)
- Two indoor air samples from the second floor hallway (8-hour duration)
- Eight indoor air samples from Site second floor residential spaces (24-hour duration)
- Two outdoor (ambient) air samples (one 8-hour duration and one 24-hour duration).

One deviation from the August 2021 work plan occurred: Integral was not able to access apartment C-6 to retrieve sample canister IA22-17, and this sample was not submitted for analysis. Figures 11 and 12 present the first floor and second floor air sample locations, respectively. Sample IDs were assigned the prefix "IA22" to indicate collection in 2022.

Samples were sent to Alpha Analytical and analyzed for VOCs via EPA Method TO-15. Seven compounds were analyzed by EPA Method TO-15 SIM to meet a laboratory reporting limit of 0.20 $\mu g/m^3$ or less: 1,1,1-trichloroethane, 1,1-dichloroethene, carbon tetrachloride, cis-1,2-DCE, PCE, TCE, and vinyl chloride. The Alpha Analytical laboratory report is provided in Appendix A. As of the preparation of this report, the March 2022 air sampling event data are in the process of being validated, and are considered preliminary.

Table 7 presents the preliminary air sample analytical data collected from 135 Kent Avenue in March 2022. Four samples from the March 2022 sampling event exceeded an NYSDOH AGV:

- Methylene chloride was detected at 72 $\mu g/m^3$ in sample IA22-01, collected from the wellness spa HigherDOSE on the first floor. This result is inconsistent with previously collected Site data, and it exceeds the methylene chloride AGV (60 $\mu g/m^3$). Integral is reviewing chemical inventory information and materials used in ongoing building renovations with the property owner to better understand the source of this result.
- PCE concentrations exceeded the AGV (30 $\mu g/m^3$) in three samples: cellar sample IA22-10 (47.7 $\mu g/m^3$), occupied apartment C-3 sample IA22-14 (32.4 $\mu g/m^3$), and vacant apartment C-7 sample IA-18 (34.2 $\mu g/m^3$). AGV exceedances have occurred in the cellar during previous sampling events, including the March 2018 event (Table 5); second floor apartment AGV exceedances have been infrequently observed since the SSDS was installed in 2014. Integral is reviewing the chemical inventories for the apartments with exceedances and is providing additional air filtration units to those spaces.

Integral will provide draft tenant notification letters to NYSDOH and NYSDEC for review.

3.7 DISCUSSION

The data collected as part of the RI Phase 1 were used to locate potential source areas and contaminant storage and transport zones as well as to assess the need for future engineering

controls at the Site and at adjacent properties. RI Phase 1 soil vapor, concrete chip, and indoor air data provided information to assess the need for future engineering controls at the Site and adjacent properties. Site soil vapor data indicated the continued need for the maintenance and monitoring of the Site active SSDS. Following review of soil vapor and indoor air results collected from the southeastern-adjacent property, 58 North 6th Street, air filtration units were installed and access to perform pilot testing for the design of an active SSDS is in discussion with their building management. Concrete chip sample data collected from the Site in the area of the former PCE AST and associated filling station, identified as an area of concern in the RIWP, provided evidence that the concrete slab does not act as a source of VOC vapor to indoor air.

The RI Phase 1 soil vapor sampling event provided quantitative and semiquantitative data to identify potential PCE release points that will be used to identify soil and groundwater sampling locations. PCE and TCE data were mapped (Figures 8 and 9) to understand contaminant distribution in vapor phase. The forming loading bay area, former AST area, and adjacent North 6th Street sidewalk represented areas with the highest PCE soil vapor concentrations and may be potential PCE source areas. VOC concentrations in soil vapor are generally understood to decrease as a function of distance from the source area (ITRC 2003). Though soil vapor does not necessarily follow the same fate and transport as groundwater gradients, PCE results generally decreased from east to west, aligning with the assumed groundwater flow direction.

The stepwise investigation approach described in the RIWP was based on problematic, limited drilling access with the building in place. Drilling within the building footprint was limited to the front hallway. Because of refusal with direct-push drilling equipment, Integral proposes using rotary sonic drilling technology for further Site characterization to the extent that adequate overhead clearance is available.

Despite drilling challenges, the MIP-HPT testing provided valuable information regarding the subsurface lithology and potential areas of source material. S2C2 observed groundwater depth in MIP/HPT boring locations from 4.8 to 18.6 ft bgs. As evidenced by HPT pressure values, transmissivity in the Site subsurface is highly variable. Low transmissivity zones may be acting as areas of contaminant storage beneath the North 6th Street sidewalk and front hallway; S2C2 noted these areas also showed elevated MIP-XSD responses. Highly transmissive subsurface zones were observed in the Kent Avenue boring locations between 15 and 25 ft bgs and in more limited intervals in the North 6th Street boring locations.

MIP-XSD data were used to generate a model of chlorinated compound distribution at the Site and adjacent areas. Shallow subsurface impacts (less than 5 ft bgs) correlated with the highest RI Phase 1 soil vapor PCE results, collected beneath the North 6th Street sidewalk. It is possible that the less transmissive zones beneath this sidewalk and the front hallway are trapping vapors and leading to elevated VOC concentrations in soil gas (ITRC 2003).

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Figures

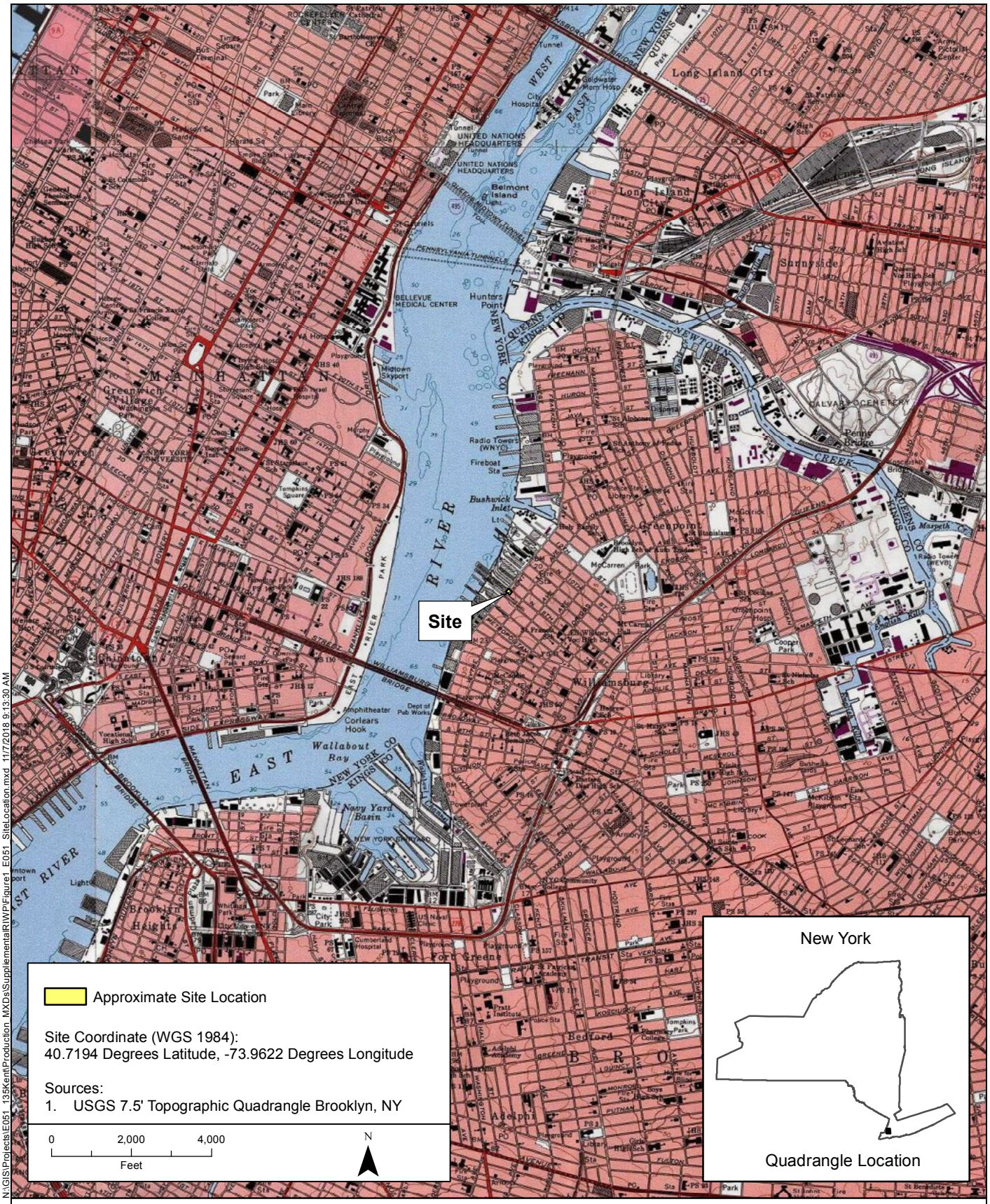

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Figure 1.
Site Location
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

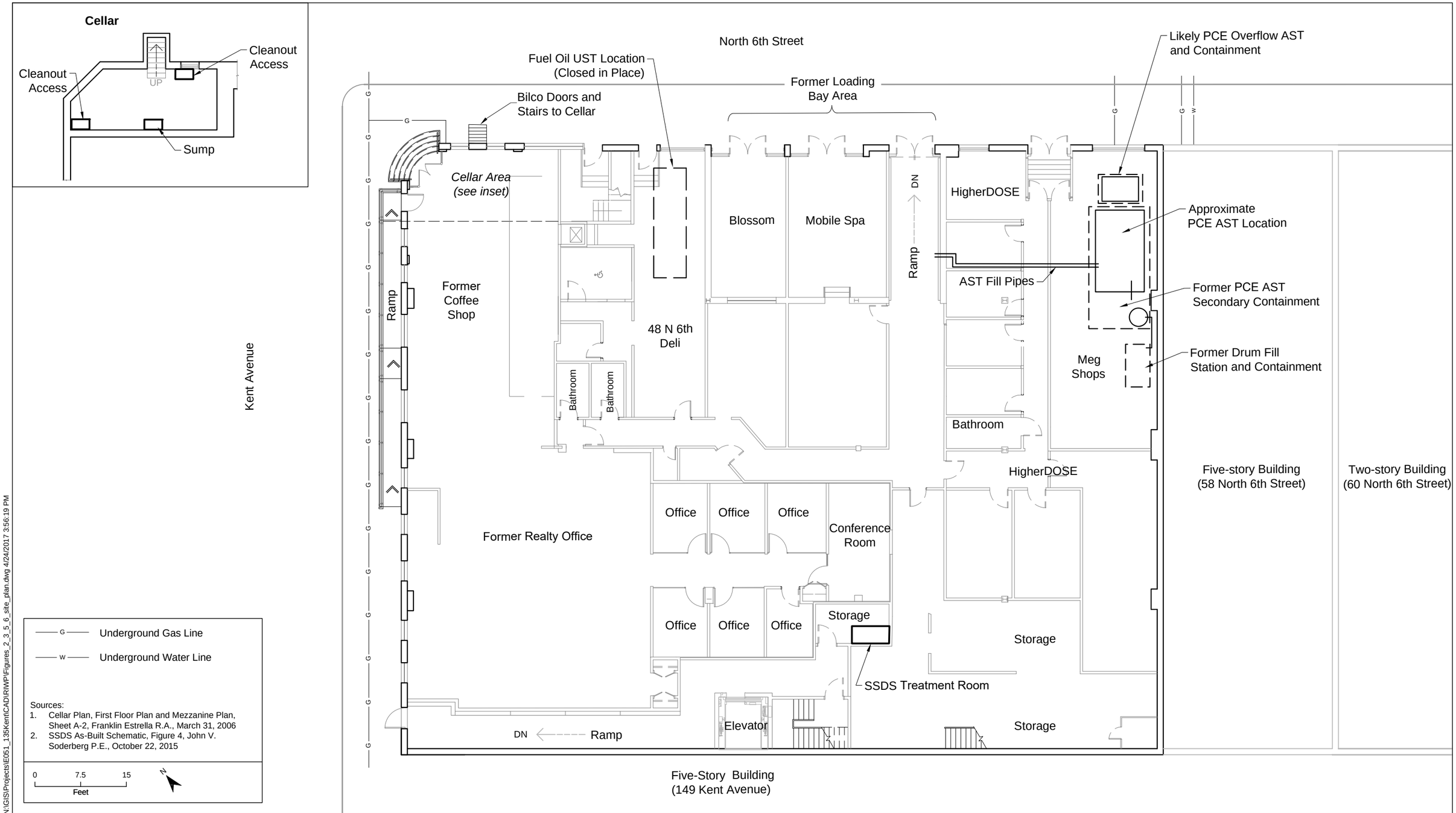

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Figure 2.
Site Plan
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

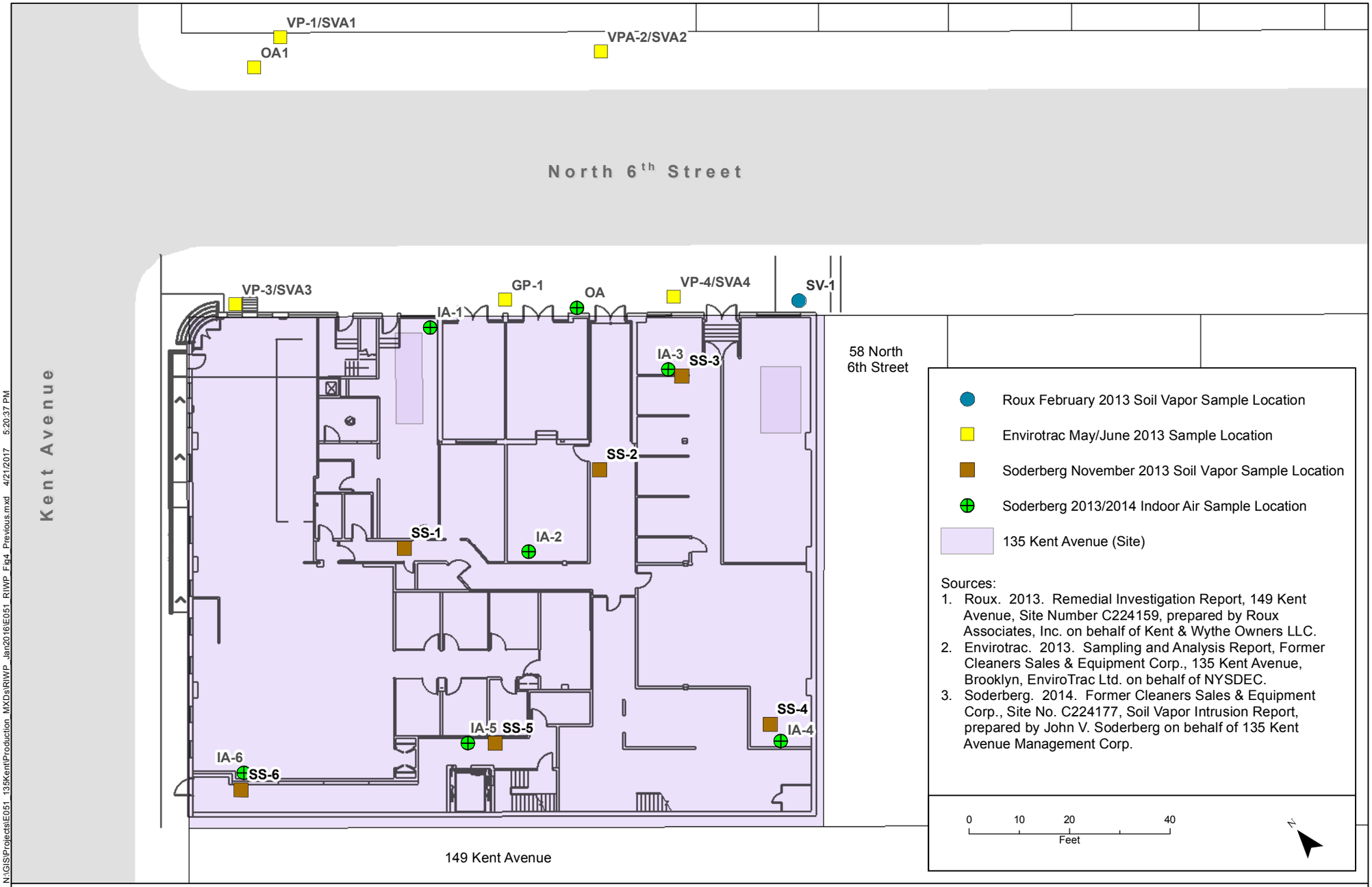

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Figure 3.
Previous Investigation Sample Locations
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

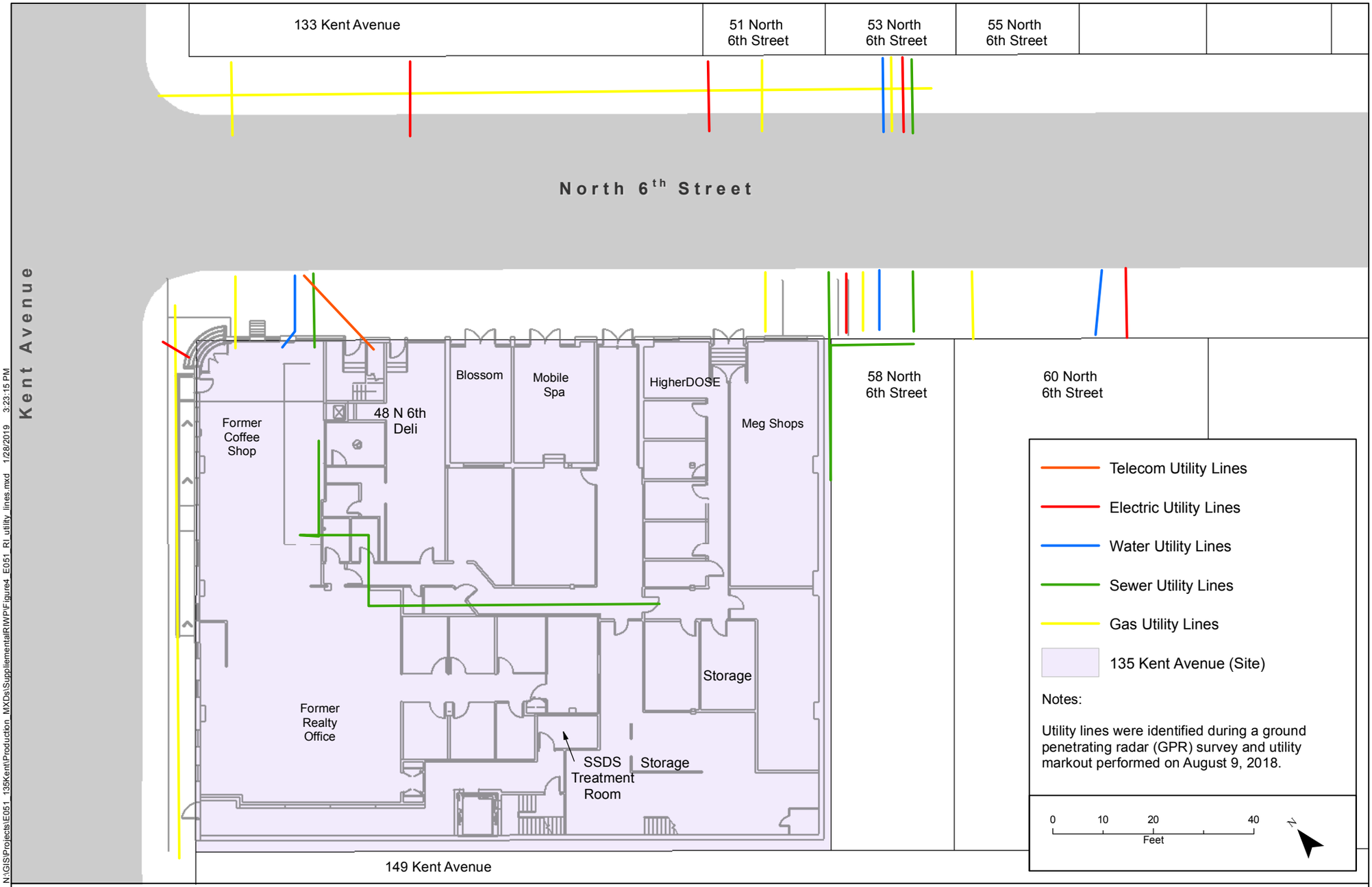

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Figure 4.
GPR and Utility Markout Results
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

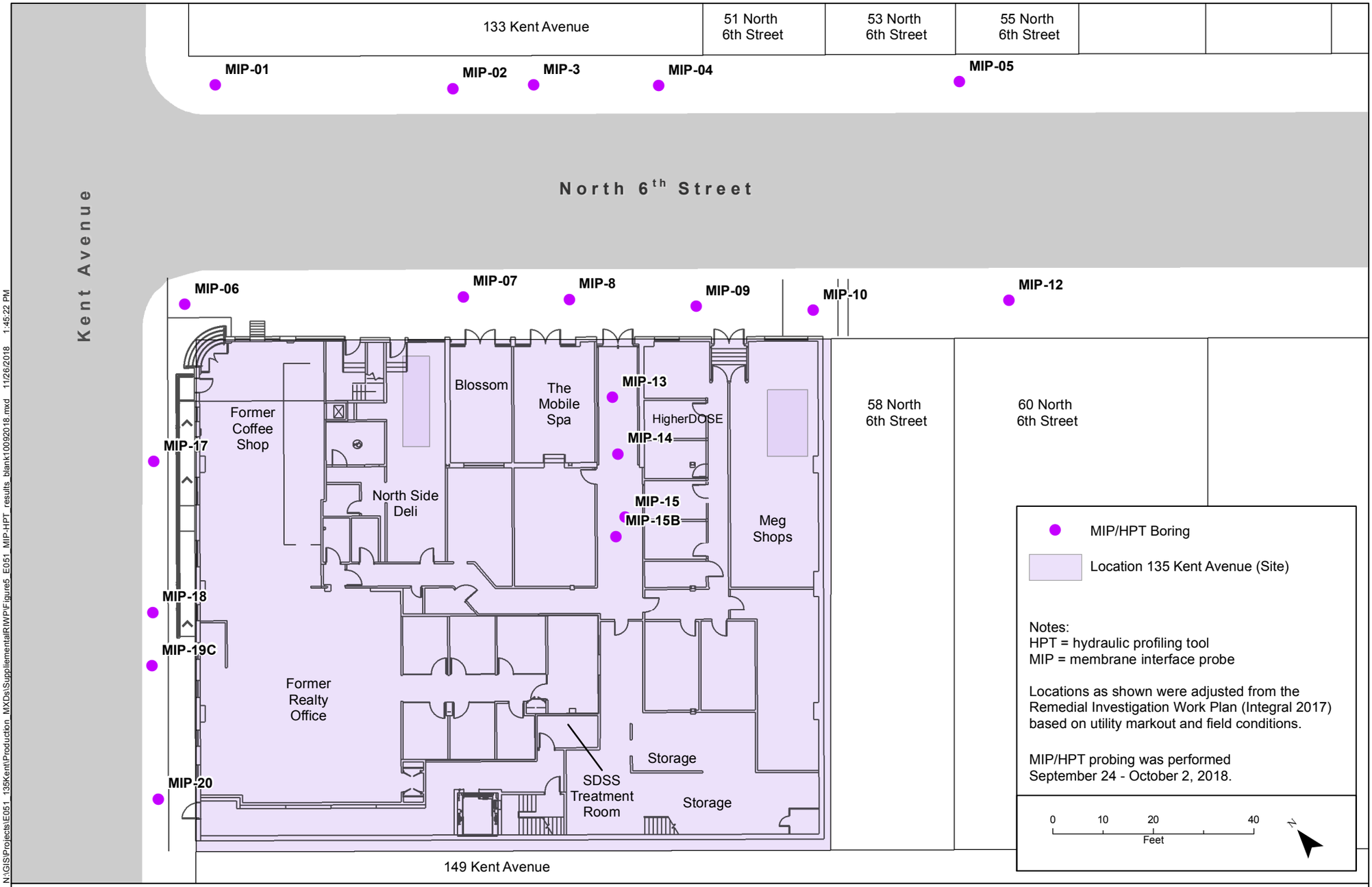

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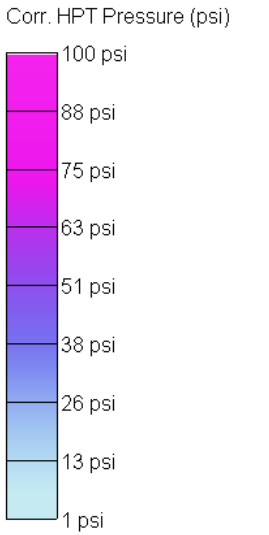
Figure 5.
MIP/HPT Boring Locations
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY



Notes:
bgs = below ground surface
HPT = hydraulic profiling tool
msl = mean sea level
psi = pounds per square inch

Figure 4 presents a plan view of MIP/HPT probing locations.

Full HPT model is discussed in S2C2 report, provided as Appendix D.

Ground surface correlates with approximately 17 ft msl.

Vertical exaggeration is 2.5 times.

HPT probing was performed September 24-October 2, 2018.

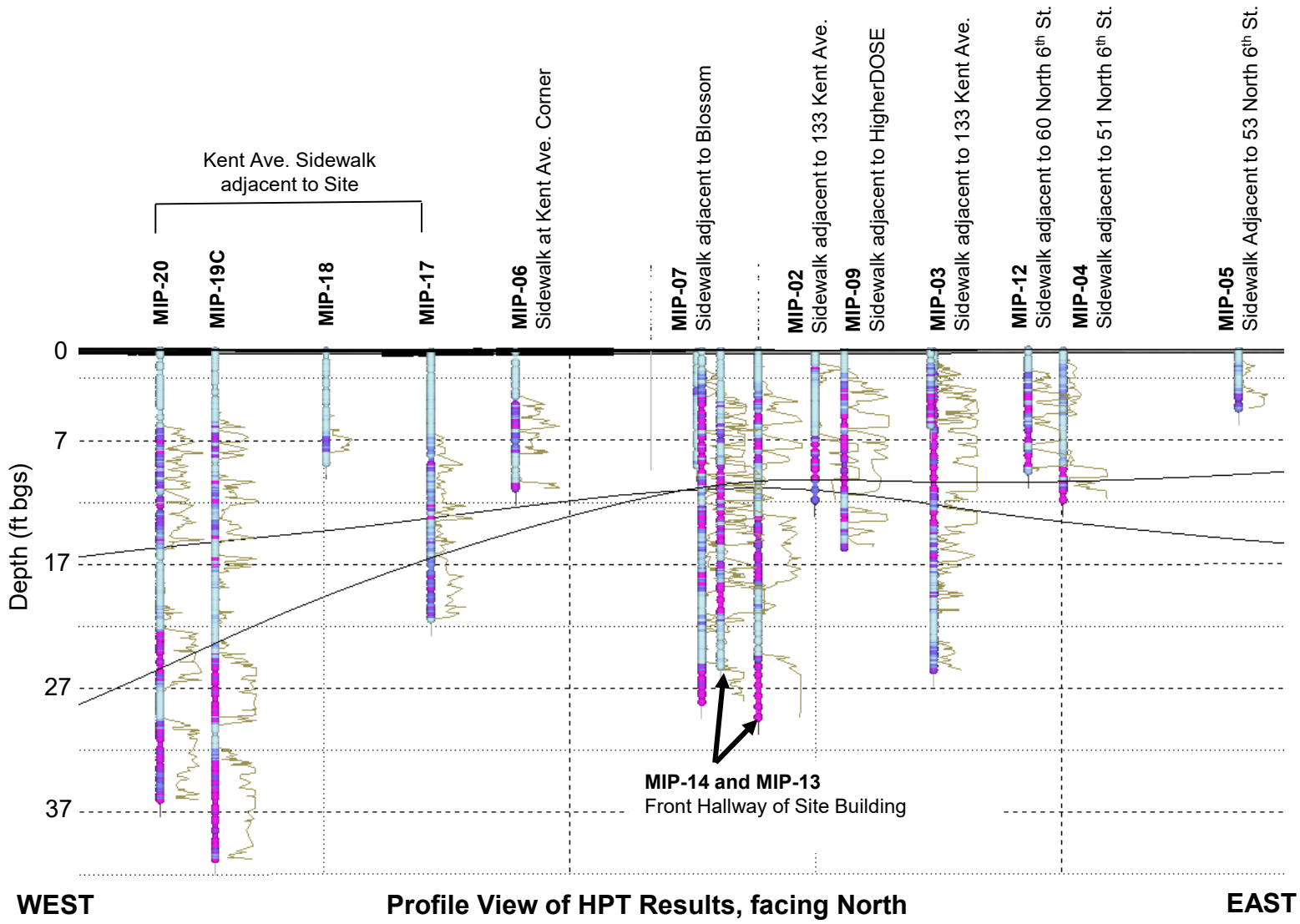
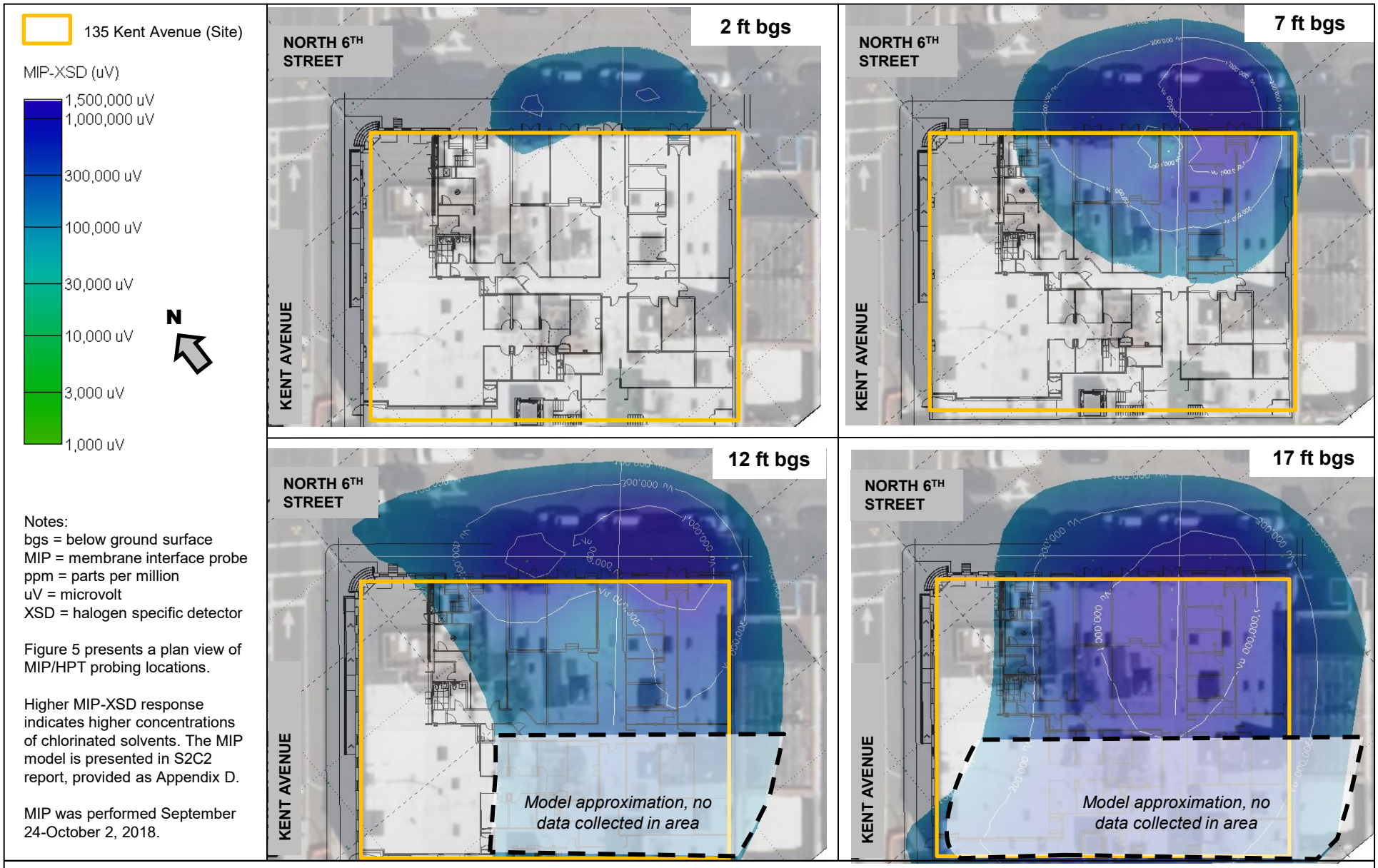


Figure 6.
Profile View of HPT Results
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY



Notes:
bgs = below ground surface
MIP = membrane interface probe
ppm = parts per million
uV = microvolt
XSD = halogen specific detector

Figure 5 presents a plan view of MIP/HPT probing locations.

Higher MIP-XSD response indicates higher concentrations of chlorinated solvents. The MIP model is presented in S2C2 report, provided as Appendix D.

MIP was performed September 24-October 2, 2018.

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Figure 7.
Modeled MIP-XSD Response at 2, 7, 12, and 17 ft bgs
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

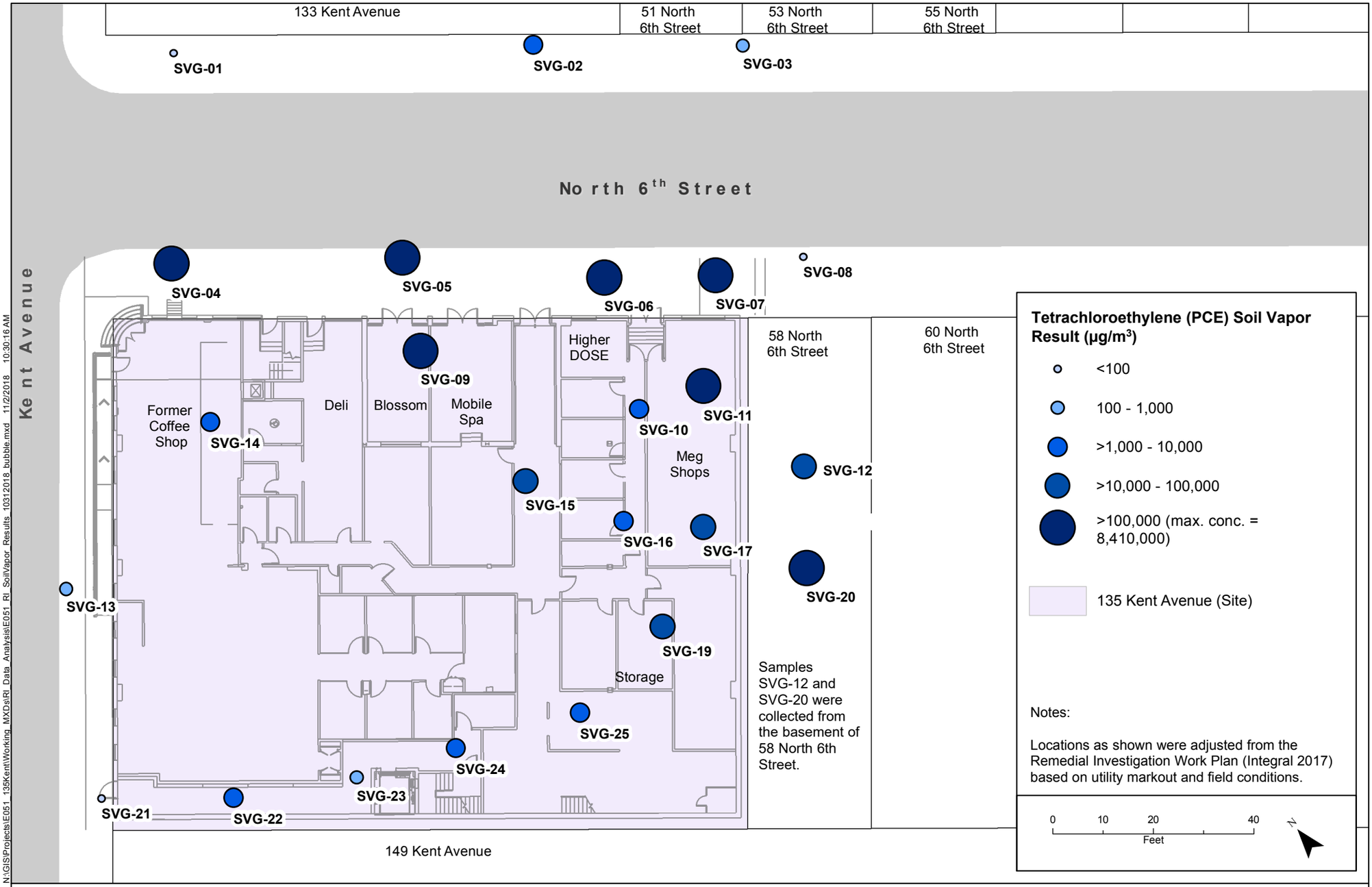

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Figure 8.
Soil Vapor Tetrachloroethylene Results
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

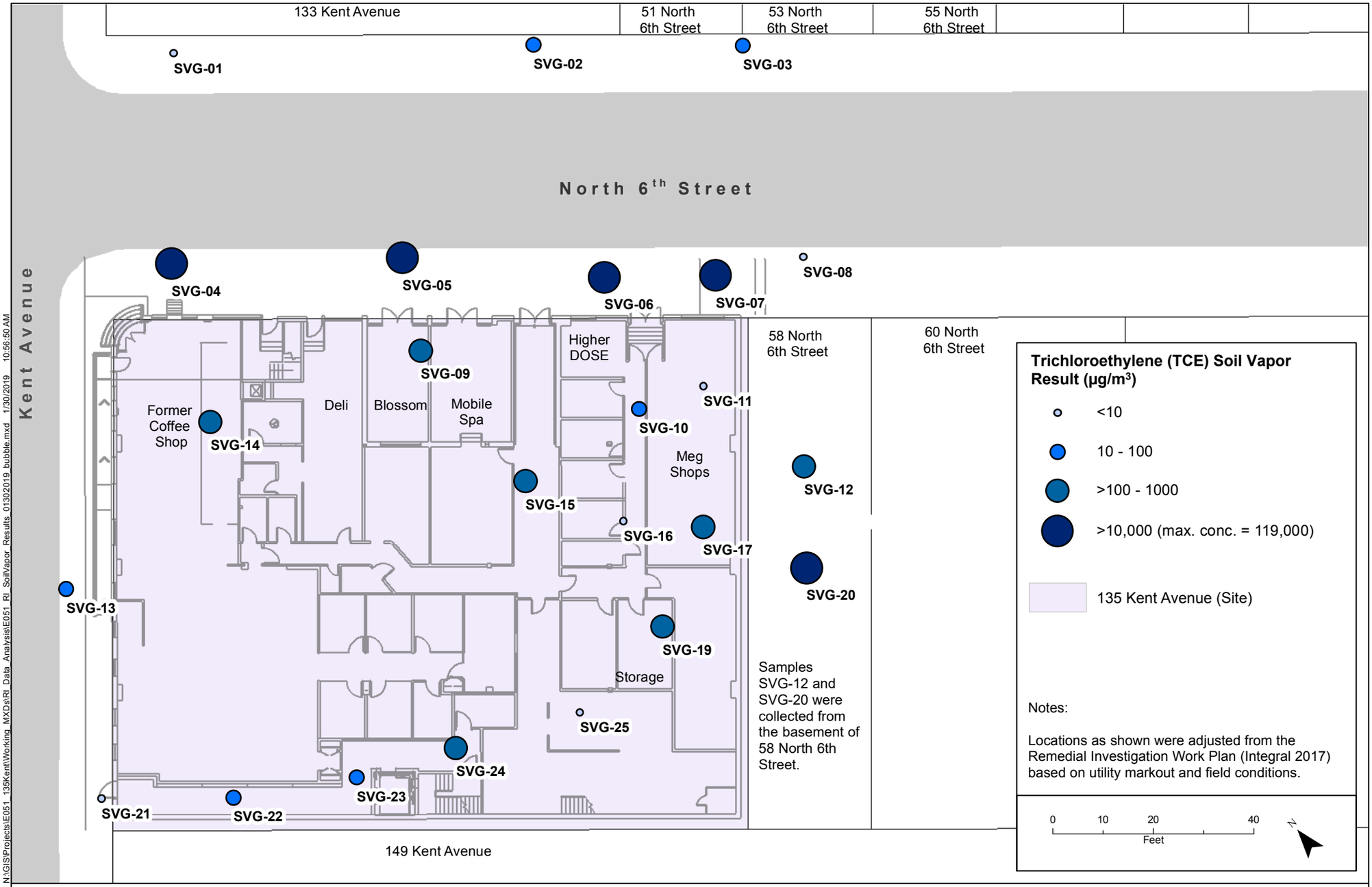

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Figure 9.
Soil Vapor Trichloroethylene Results
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135 Kent Avenue, Brooklyn, NY

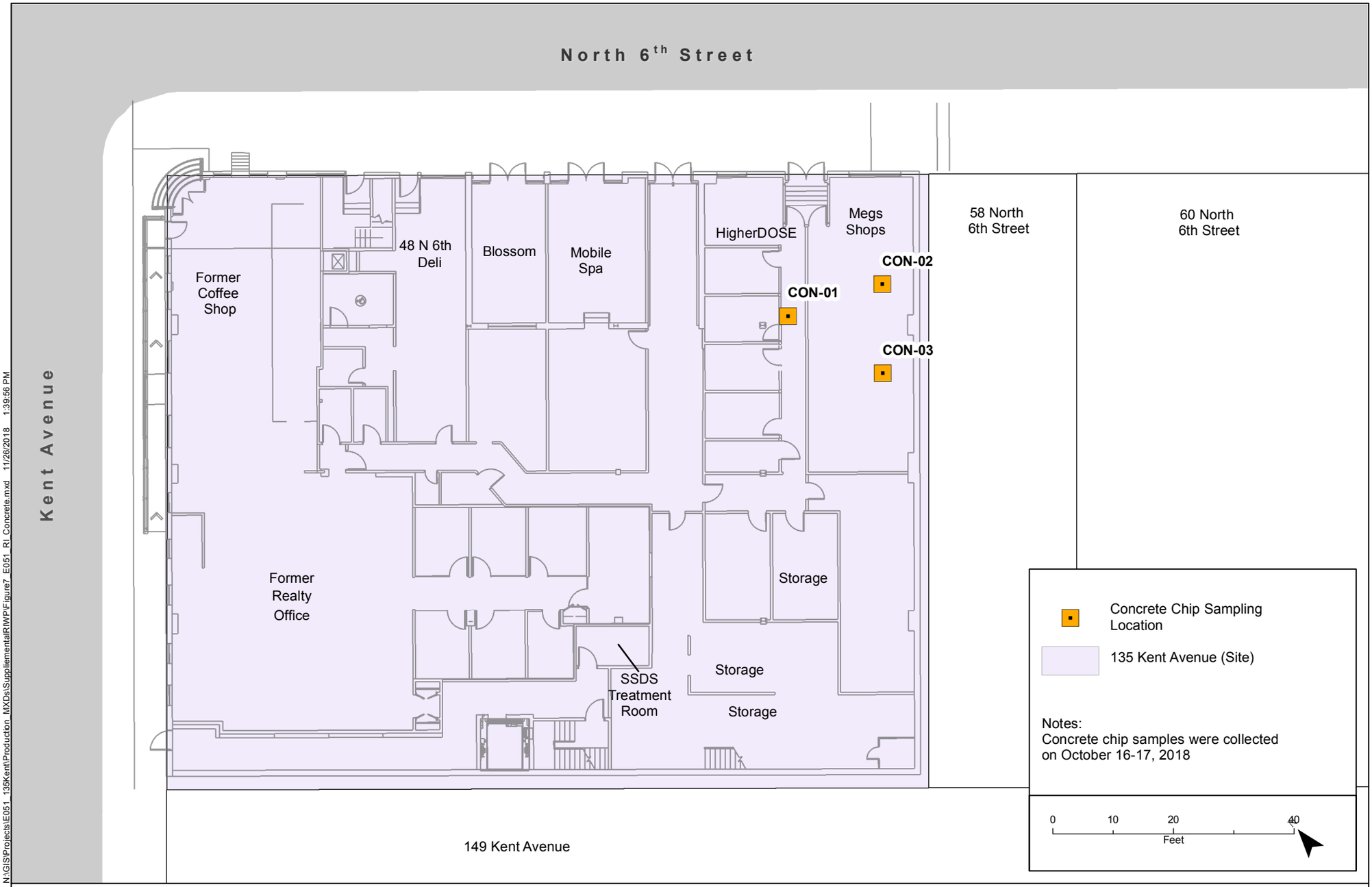

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Figure 10.
Concrete Chip Sample Locations
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

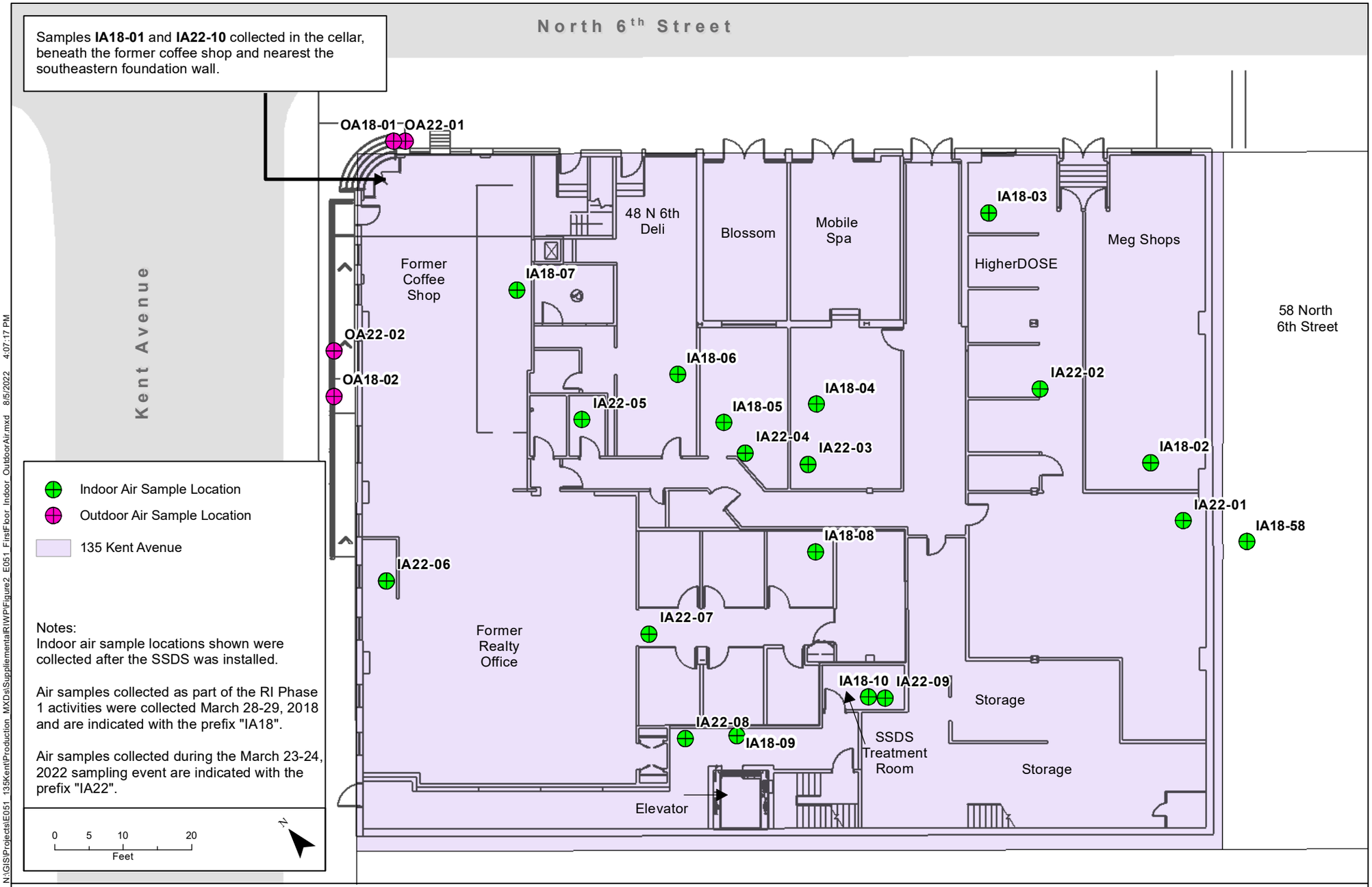

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Figure 11.
Air Sample Locations, First Floor
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

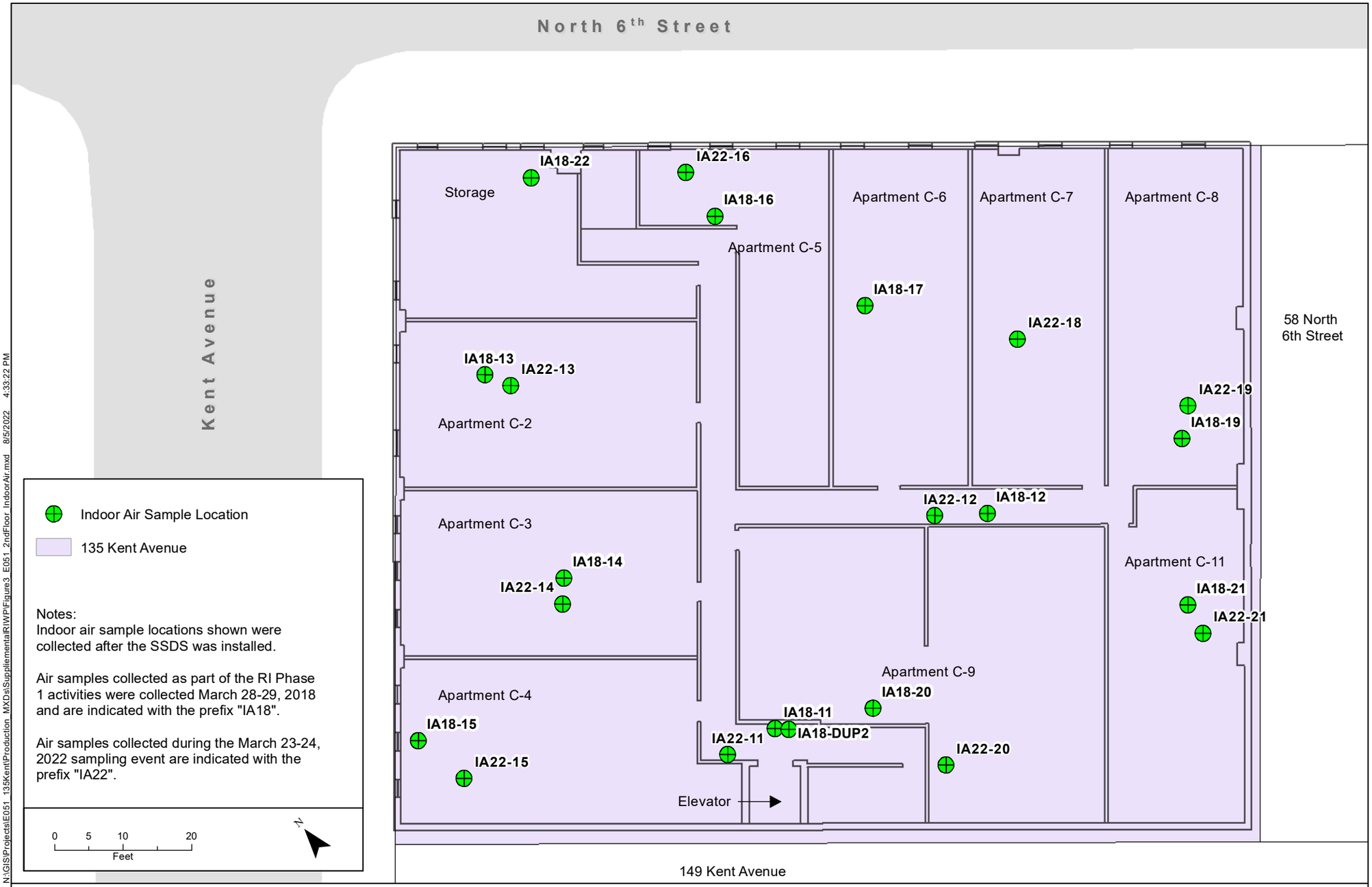

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Figure 12.
Air Sample Locations, Second Floor
Remedial Investigation Phase 1 Report
135 Kent Avenue, Brooklyn, NY

Tables

Table 1. RI Phase 1 Membrane Interface Probe/Hydraulic Profile Tool (MIP/HPT) Drilling Locations

Location	Description	Location ID	Date	Northing (ft)	Easting (ft)	Ground Surface Elevation (ft)	Pre-Drilling 1.5-in. Rod Refusal Depth (ft bgs)	MIP/HPT Refusal Depth (ft bgs)	Refusal Notes	Depth to Water (Estimated) (ft bgs)
North 6th Street Sidewalk	Opposite from Site Building (progressing from northwest to northeast)	MIP-01	9/26/2018	687559.96	641197.40	17.4		9.4	Stone/till	ND
		MIP-02-alt	10/2/2018		not surveyed		10		Stone/till	
		MIP-02	10/2/2018	687529.91	641233.37	18.1		11.1	Stone/till	ND
		MIP-03-alt1	10/2/2018		not surveyed		9		Stone/till	
		MIP-03-alt2	10/2/2018		not surveyed		9		Stone/till	
		MIP-03	10/1/2018	687520.23	641246.27	18.4		25.8	Till	14.7
		MIP-04	10/1/2018	687503.73	641266.37	18.5		12.3	Till	ND
		MIP-05	9/26/2018	687467.22	641312.31	19.5		4.9	Till	ND
	Adjacent to Site building (progressing from northwest to northeast)	MIP-06	9/25/2018	687525.61	641168.92	16.8		11.3	Till	ND
		MIP-07	9/28/2018	687492.55	641212.31	17.6		28.6	Till	16.1
		MIP-08	9/27/2018	687482.58	641224.60	17.8		6.5	Till	ND
		MIP-09	9/27/2018	687465.47	641243.33	18.2		15.9	Till	10.5
		MIP-10	9/27/2018	687450.37	641260.20	18.6		3.6	Till	ND
	Adjacent to 58 North 6th	MIP-12-alt	9/28/2018		not surveyed		12		Till	
		MIP-12	9/28/2018	687427.09	641290.99	19.4		10.0	Stone/till	ND
Site Building	Front hallway (progressing from sidewalk to interior)	MIP-13	10/1/2018	687460.91	641220.83	18.9		29.9	Till	18.6
		MIP-14-alt	9/28/2018		not surveyed		9		Till	
		MIP-14	9/28/2018	687451.90	641211.38	20.0		25.7	Till	ND
		MIP-15	10/2/2018	687441.85	641205.29	20.3		8.7	Till	ND
		MIP-15b	10/2/2018	687438.505	641203.87	20.2		8.6	Till	ND
		MIP-16	Not attempted - overhead clearance issue							
Site Sidewalk	Adjacent to Site building (progressing from north to south)	MIP-17	9/25/2018	687509.36	641140.98	16.0		21.8	Till	4.8
		MIP-18	9/25/2018	687486.26	641121.84	15.7		9.5	Till	ND
		MIP-19	9/24/2018		not surveyed		16		Clay	
		MIP-19-alt	9/24/2018		not surveyed		18		Silty clay	
		MIP-19C	9/25/2018	687478.01	641115.39	15.4		41.0	Silty clay	13.6
		MIP-20	9/24/2018	687452.31	641101.88	15.4		36.5	Clay	16.0

Notes:
bgs = below ground surface
MIP-XSD = membrane interface probe halogen specific detector
ND = not determined: refusal encountered prior to water table or S2C2 was not able to locate a zone to perform the dissipation test

Shaded locations indicate refusal was met with driller probe at less than 20-ft bgs and MIP/HPT was not attempted or data were not included in conceptual site model.
Survey was performed October 26, 2018 and did not include locations where MIP/HPT was not performed.
Coordinates presented in New York State Plane, NAD83, feet, North American Vertical Datum 1988.

Table 2. RI Phase 1 Soil Vapor Sample Locations

Sample Type	Location ID	Sample ID	Location	Description	Date	Northing (ft)	Easting (ft)
Soil Vapor	SVG-01	SVG-01-18	North 6th Street Sidewalk	Across from Site	10/16/2018	687551.46	641207.69
Soil Vapor	SVG-02	SVG-02-18	North 6th St Sidewalk	Across from Site	10/16/2018	687521.28	641245.61
Soil Vapor	SVG-03	SVG-03-18	North 6th St Sidewalk	Across from Site	10/16/2018	687505.33	641265.86
Soil Vapor	SVG-04	SVG-04-18	North 6th St Sidewalk	Adjacent to Site	10/16/2018	687521.78	641174.46
Soil Vapor	SVG-05	SVG-05-18	North 6th St Sidewalk	Adjacent to Site	10/16/2018	687491.93	641215.23
Soil Vapor	SVG-06	SVG-06-18	North 6th St Sidewalk	Adjacent to Site	10/16/2018	687466.61	641244.41
Soil Vapor	SVG-07	SVG-07-18	North 6th St Sidewalk	Adjacent to Site	10/16/2018	687451.96	641260.33
Soil Vapor	SVG-08	SVG-08-18	North 6th St Sidewalk	Adjacent to Site	10/16/2018	687443.95	641273.82
Soil Vapor	SVG-09	SVG-09-18	Site Building	Blossom	10/17/2018	687476.86	641204.46
Soil Vapor	SVG-10	SVG-10-18	Site Building	HigherDOSE	10/16/2018	687441.35	641229.25
Soil Vapor	SVG-11	SVG-11-18	Site Building	Meg Shops, front	10/16/2018	687437.22	641241.35
Soil Vapor	SVG-12	SVG-12-18	58 North 6th Street Building	Basement	10/16/2018	687426.46	641257.11
Soil Vapor	SVG-13	SVG-13-18	Kent Avenue Sidewalk	Adjacent to Site	10/17/2018	687486.43	641122.15
Soil Vapor	SVG-14	SVG-14-18	Site Building	Former Coffee Shop	10/16/2018	687484.45	641155.54
Soil Vapor	SVG-15	SVG-15-18	Site Building	Front Hallway	10/16/2018	687442.02	641205.92
Soil Vapor	SVG-16	SVG-16-18	Site Building	HigherDOSE	10/16/2018	687429.46	641219.63
Soil Vapor	SVG-17	SVG-17-18	Site Building	Meg Shops, back	10/16/2018	687414.68	641223.11
Soil Vapor	SVS-18	SVS-18-18[a]	58 North 6th Street Building	Basement	10/17/2018	687417.66	641250.01
Soil Vapor	SVG-19	SVG-19-18	Site Building	Rear Storage Area	10/16/2018	687411.66	641204.74
Soil Vapor	SVG-20	SVG-20-18	58 North 6th Street Building	Basement	10/16/2018	687405.18	641240.97
Soil Vapor	SVG-21	SVG-21-18	Kent Avenue Sidewalk	Adjacent to Site	10/17/2018	687448.76	641101.27
Soil Vapor	SVG-23	SVG-23-18	Site Building	Rear Hallway	10/16/2018	687416.05	641139.08
Soil Vapor	SVG-25	SVG-25-18	Site Building	Rear Storage Area	10/16/2018	687405.25	641188.63

Notes:

[a] Sample disturbed, results rejected.

Coordinates presented in New York State Plane, NAD83, feet.

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-01-18	SVG-02-18	SVG-03-18	SVG-04-18	SVG-05-18	SVG-06-18	SVG-07-18
	Integral Location ID:	SVG-01	SVG-02	SVG-03	SVG-04	SVG-05	SVG-06	SVG-07
	Location:	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk
	Description:	North 6th St., across from Site	North 6th St., across from Site	North 6th St., across from Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site
	Sample Date:	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-01	L1842348-02	L1842348-03	L1842348-08	L1842348-09	L1842348-18	L1842348-19
Parameter	Units							
1,1,1-Trichloroethane	µg/m^3	0.201 U	5.33	0.334 U	157 U	157 U	1250 U	109 U
1,1,2,2-Tetrachloroethane	µg/m^3	0.391 U	1.3 U	0.652 U	306 U	306 U	2440 U	213 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/m^3	0.313 U	1.04 U	0.523 U	245 U	245 U	1960 U	170 U
1,1,2-Trichloroethane	µg/m^3	0.396 U	1.32 U	0.66 U	309 U	309 U	2480 U	215 U
1,1-Dichloroethane	µg/m^3	0.196 U	0.652 U	0.327 U	153 U	153 U	1220 U	106 U
1,1-Dichloroethene	µg/m^3	0.111 U	0.369 U	0.184 U	86.4 U	86.4 U	690 U	60.3 U
1,2,4-Trichlorobenzene	µg/m^3	0.375 U	1.25 U	0.625 U	292 U	292 U	2350 UJ	203 UJ
1,2,4-Trimethylbenzene	µg/m^3	4.16	3.51	4.51	225 U	225 U	1800 U	157 U
1,2-Dibromoethane	µg/m^3	0.421 U	1.41 U	0.702 U	329 U	329 U	2630 U	229 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m^3	0.291 U	0.972 U	0.486 U	228 U	228 U	1820 U	159 U
1,2-Dichlorobenzene	µg/m^3	0.426 U	1.42 U	0.709 U	332 U	332 U	2660 U	231 U
1,2-Dichloroethane	µg/m^3	0.18 U	0.599 U	0.3 U	140 U	140 U	1130 U	97.5 U
1,2-Dichloropropane	µg/m^3	0.301 U	1 U	0.499 U	235 U	235 U	1880 U	164 U
1,3,5-Trimethylbenzene	µg/m^3	1.01	1.02 U	0.511 U	239 U	239 U	1920 U	167 U
1,3-Butadiene	µg/m^3	0.108 U	0.361 U	0.18 U	84.3 U	84.3 U	675 U	58.6 U
1,3-Dichlorobenzene	µg/m^3	0.427 U	1.42 U	0.709 U	334 U	334 U	2670 U	232 U
1,4-Dichlorobenzene	µg/m^3	0.448 U	1.49 U	0.746 U	350 U	350 U	2800 U	243 U
1,4-Dioxane	µg/m^3	0.382 U	1.27 U	0.638 U	298 U	298 U	2390 U	208 U
2,2,4-Trimethylpentane	µg/m^3	0.231 U	0.771 U	0.384 U	180 U	180 U	1440 U	125 U
2-Butanone	µg/m^3	47.5	0.628 U	34.2	147 U	147 U	1180 U	102 U
2-Hexanone	µg/m^3	35	1.19 U	11.4	279 U	279 U	2230 U	194 U
3-Chloropropene	µg/m^3	0.111 U	0.369 U	0.185 U	86.4 U	86.4 U	692 U	60.1 U
4-Ethyltoluene	µg/m^3	0.988	0.909 U	0.454 U	213 U	213 U	1700 U	148 U
4-Methyl-2-pentanone	µg/m^3	3.33	0.885 U	0.443 U	207 U	207 U	1660 U	144 U
Acetone	µg/m^3	546	32.1	416	1280 U	1280 U	10200 U	888 U
Benzene	µg/m^3	0.173 U	0.575 U	1.23	135 U	135 U	1080 U	93.6 U
Benzyl chloride	µg/m^3	0.265 U	0.885 U	0.442 U	207 U	207 U	1660 UJ	144 UJ
Bromodichloromethane	µg/m^3	0.285 U	0.951 U	0.476 U	223 U	223 U	1780 U	155 U
Bromoform	µg/m^3	0.566 U	1.88 U	0.943 U	441 U	441 U	3540 U	307 U
Bromomethane	µg/m^3	0.181 U	0.602 U	0.301 U	141 U	141 U	1130 U	98.2 U
Carbon disulfide	µg/m^3	0.11 U	2.91	0.184 U	85.9 U	85.9 U	688 U	59.8 U
Carbon tetrachloride	µg/m^3	0.31 U	1540	0.517 U	242 U	1820	1940 U	169 U
Chlorobenzene	µg/m^3	0.267 U	0.889 U	0.444 U	208 U	208 U	1670 U	145 U
Chloroethane	µg/m^3	0.244 U	0.813 U	0.406 U	190 U	190 U	1520 U	132 U
Chloroform	µg/m^3	0.245 U	43.6	4.48	191 U	191 U	1530 U	133 U
Chloromethane	µg/m^3	0.105 U	0.349 U	0.174 U	81.8 U	81.8 U	655 U	57 U

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-08-18	SVG-09-18	SVG-10-18	SVG-11-18	SVG-12-18	SVG-13-18	SVG-14-18
	Integral Location ID:	SVG-08	SVG-09	SVG-10	SVG-11	SVG-12	SVG-13	SVG-14
	Location:	Sidewalk	Site	Site	Site	58 North 6th St.	Sidewalk	Site
	Description:	North 6th St., adjacent to Site	Blossom	HigherDOSE	Meg Shops, Front	Basement	Kent Ave., adjacent to Site	Former Coffee Shop
	Sample Date:	16-Oct-18	17-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	17-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-20	L1842348-26	L1842348-21	L1842348-04	L1842348-06	L1842348-24	L1842348-14
Parameter	Units							
1,1,1-Trichloroethane	µg/m^3	0.201 U	111 U	4.02 U	27.9 U	5.78 U	5.19	9.11
1,1,2,2-Tetrachloroethane	µg/m^3	0.391 U	218 U	7.83 U	54.4 U	11.3 U	0.489 U	1.3 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/m^3	0.313 U	174 U	6.27 U	43.5 U	9.04 U	0.392 U	1.04 U
1,1,2-Trichloroethane	µg/m^3	0.396 U	220 U	7.91 U	55.1 U	11.4 U	0.495 U	1.32 U
1,1-Dichloroethane	µg/m^3	0.196 U	109 U	3.92 U	27.2 U	5.67 U	0.245 U	0.652 U
1,1-Dichloroethene	µg/m^3	0.111 U	61.5 U	2.21 U	15.4 U	3.19 U	0.138 U	0.369 U
1,2,4-Trichlorobenzene	µg/m^3	0.375 UJ	208 UJ	7.5 UJ	52 U	10.8 U	0.468 UJ	1.25 UJ
1,2,4-Trimethylbenzene	µg/m^3	2.12	160 U	5.75 U	40.1 U	8.31 U	1.33	0.964 U
1,2-Dibromoethane	µg/m^3	0.421 U	234 U	8.45 U	58.5 U	12.1 U	0.526 U	1.41 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m^3	0.291 U	162 U	5.83 U	40.5 U	8.39 U	0.364 U	0.972 U
1,2-Dichlorobenzene	µg/m^3	0.426 U	236 U	8.54 U	59.1 U	12.3 U	0.532 U	1.42 U
1,2-Dichloroethane	µg/m^3	0.18 U	100 U	3.59 U	25 U	5.18 U	0.225 U	0.599 U
1,2-Dichloropropane	µg/m^3	0.301 U	167 U	6.01 U	41.8 U	8.69 U	0.376 U	1 U
1,3,5-Trimethylbenzene	µg/m^3	0.307 U	171 U	6.15 U	42.6 U	8.85 U	0.383 U	1.02 U
1,3-Butadiene	µg/m^3	0.108 U	60 U	2.16 U	15 U	3.12 U	0.135 U	0.361 U
1,3-Dichlorobenzene	µg/m^3	0.427 U	237 U	8.54 U	59.4 U	12.3 U	0.534 U	1.42 U
1,4-Dichlorobenzene	µg/m^3	0.448 U	249 U	8.96 U	61.9 U	12.9 U	0.56 U	1.49 U
1,4-Dioxane	µg/m^3	0.382 U	212 U	7.64 U	53 U	11 U	0.476 U	1.27 U
2,2,4-Trimethylpentane	µg/m^3	0.231 U	128 U	4.61 U	32 U	6.63 U	0.289 U	0.771 U
2-Butanone	µg/m^3	2.13	104 U	3.78 U	26.1 U	5.43 U	0.235 U	0.628 U
2-Hexanone	µg/m^3	0.357 U	198 U	7.13 U	49.6 U	10.3 U	0.447 U	1.19 U
3-Chloropropene	µg/m^3	0.111 U	61.7 U	2.22 U	15.4 U	3.19 U	0.138 U	0.369 U
4-Ethyltoluene	µg/m^3	0.272 U	151 U	5.46 U	37.9 U	7.87 U	0.34 U	0.909 U
4-Methyl-2-pentanone	µg/m^3	0.266 U	148 U	5.33 U	36.9 U	7.66 U	0.332 U	0.885 U
Acetone	µg/m^3	14.7	1530	143 J	227 U	463	5.01 J	34.9
Benzene	µg/m^3	0.173 U	95.8 U	3.45 U	24 U	4.98 U	0.216 U	0.575 U
Benzyl chloride	µg/m^3	0.265 UJ	147 UJ	5.28 UJ	36.8 U	7.66 U	0.331 UJ	0.885 UJ
Bromodichloromethane	µg/m^3	0.285 U	159 U	5.71 U	39.7 U	8.24 U	2.91	0.951 U
Bromoform	µg/m^3	0.566 U	314 U	11.3 U	78.6 U	16.3 U	0.707 U	1.88 U
Bromomethane	µg/m^3	0.181 U	100 U	3.61 U	25.1 U	5.2 U	0.226 U	0.602 U
Carbon disulfide	µg/m^3	0.11 U	61.3 U	2.2 U	15.3 U	3.18 U	0.138 U	0.367 U
Carbon tetrachloride	µg/m^3	0.31 U	172 U	6.2 U	43.1 U	8.93 U	0.387 U	1.03 U
Chlorobenzene	µg/m^3	0.267 U	148 U	5.34 U	37 U	7.69 U	0.333 U	0.889 U
Chloroethane	µg/m^3	0.244 U	135 U	4.88 U	33.8 U	7.02 U	0.303 U	0.813 U
Chloroform	µg/m^3	0.245 U	136 U	20.5	34 U	7.08 U	98.6	4.82
Chloromethane	µg/m^3	0.425	58.2 U	2.09 U	14.5 U	3.01 U	0.131 U	0.349 U

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-15-18	SVG-DUP01-18	SVG-16-18	SVG-17-18	SVG-19-18	SVG-20-18	SVG-21-18	SVG-DUP2-18
	Integral Location ID:	SVG-15	SVG-15	SVG-16	SVG-17	SVG-19	SVG-20	SVG-21	SVG-21
	Location:	Site	Site	Site	Site	Site	58 North 6th St.	Sidewalk	Sidewalk
	Description:	Front Hallway	Front Hallway	HigherDOSE	Meg Shops, Back	Rear Storage Area	Basement	Kent Ave., adjacent to Site	Kent Ave., adjacent to Site
	Sample Date:	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	17-Oct-18	17-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-11	L1842348-23	L1842348-22	L1842348-05	L1842348-12	L1842348-07	L1842348-25	L1842348-27
Parameter	Units								
1,1,1-Trichloroethane	µg/m^3	39.8 U	218 U	5.25	11.1 U	124	40.5 U	0.201 U	1.09 U
1,1,2,2-Tetrachloroethane	µg/m^3	77.6 U	426 U	0.975 U	21.8 U	13.5 U	79 U	0.391 U	0.391 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/m^3	62.2 U	340 U	0.782 U	17.4 U	10.8 U	63.2 U	0.313 U	0.313 U
1,1,2-Trichloroethane	µg/m^3	78.6 U	430 U	0.993 U	22 U	13.6 U	79.7 U	0.396 U	0.396 U
1,1-Dichloroethane	µg/m^3	38.9 U	213 U	0.49 U	10.9 U	6.72 U	39.5 U	0.196 U	0.196 U
1,1-Dichloroethene	µg/m^3	22 U	120 U	0.277 U	6.15 U	3.8 U	22.3 U	0.111 U	0.111 U
1,2,4-Trichlorobenzene	µg/m^3	74.2 U	408 UJ	0.935 UJ	20.8 U	12.9 UJ	75.7 U	0.375 UJ	0.375 UJ
1,2,4-Trimethylbenzene	µg/m^3	57 U	314 U	5.41	16 U	9.93 U	58 U	9.78 J	1.52 J
1,2-Dibromoethane	µg/m^3	83.8 U	458 U	1.05 U	23.4 U	14.4 U	84.5 U	0.421 U	0.421 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m^3	57.8 U	317 U	0.727 U	16.2 U	10 U	58.8 U	0.291 U	0.291 U
1,2-Dichlorobenzene	µg/m^3	84.2 U	463 U	1.06 U	23.6 U	14.6 U	86 U	0.426 U	0.426 U
1,2-Dichloroethane	µg/m^3	35.7 U	195 U	0.449 U	10 U	6.19 U	36.2 U	0.18 U	0.18 U
1,2-Dichloropropane	µg/m^3	59.6 U	327 U	0.753 U	16.7 U	10.4 U	60.5 U	0.301 U	0.301 U
1,3,5-Trimethylbenzene	µg/m^3	61 U	333 U	0.767 U	17.1 U	10.5 U	61.9 U	2.65 J	0.307 UJ
1,3-Butadiene	µg/m^3	21.4 U	117 U	0.27 U	6 U	3.72 U	21.8 U	0.108 U	0.108 U
1,3-Dichlorobenzene	µg/m^3	84.8 U	465 U	1.07 U	23.7 U	14.7 U	86 U	0.427 U	0.427 U
1,4-Dichlorobenzene	µg/m^3	89 U	487 U	1.12 U	24.9 U	15.4 U	90.2 U	0.448 U	0.448 U
1,4-Dioxane	µg/m^3	75.7 U	414 U	0.955 U	21.2 U	13.1 U	77.1 U	0.382 U	0.382 U
2,2,4-Trimethylpentane	µg/m^3	45.8 U	251 U	0.579 U	12.8 U	7.94 U	46.5 U	0.231 U	0.231 U
2-Butanone	µg/m^3	37.2 U	205 U	14.7	10.4 U	6.46 U	38 U	0.188 U	0.188 U
2-Hexanone	µg/m^3	70.9 U	388 U	0.893 U	19.8 U	12.3 U	71.7 U	0.357 U	0.357 U
3-Chloropropene	µg/m^3	22 U	121 U	0.277 U	6.17 U	3.82 U	22.3 U	0.111 U	0.111 U
4-Ethyltoluene	µg/m^3	54.1 U	296 U	0.678 U	15.1 U	9.34 U	55.1 U	1.98 J	0.272 UJ
4-Methyl-2-pentanone	µg/m^3	52.5 U	289 U	0.664 U	14.8 U	9.14 U	53.7 U	0.266 U	0.266 U
Acetone	µg/m^3	325 U	1780 U	197	91 U	56.3 U	330 U	4.94 J	5.34
Benzene	µg/m^3	34.2 U	188 U	0.431 U	9.58 U	5.94 U	34.8 U	0.754	0.173 U
Benzyl chloride	µg/m^3	52.8 U	288 UJ	0.663 UJ	14.7 U	9.11 UJ	53.3 U	0.265 UJ	0.265 UJ
Bromodichloromethane	µg/m^3	56.6 U	310 U	0.71 U	15.9 U	9.78 U	57.5 U	0.285 U	0.285 U
Bromoform	µg/m^3	112 U	614 U	1.42 U	31.4 U	19.4 U	114 U	0.566 U	0.566 U
Bromomethane	µg/m^3	35.8 U	196 U	0.45 U	10 U	6.21 U	36.4 U	0.181 U	0.181 U
Carbon disulfide	µg/m^3	21.9 U	120 U	0.276 U	6.13 U	3.8 U	22.2 U	0.11 U	0.11 U
Carbon tetrachloride	µg/m^3	61.5 U	337 U	0.774 U	17.2 U	10.7 U	62.5 U	0.31 U	0.31 U
Chlorobenzene	µg/m^3	53 U	290 U	0.668 U	14.8 U	9.16 U	53.9 U	0.267 U	0.267 U
Chloroethane	µg/m^3	48.3 U	264 U	0.61 U	13.5 U	8.37 U	49.1 U	0.244 U	0.244 U
Chloroform	µg/m^3	48.6 U	267 U	4.35	80.1	159	355	2.85 J	4.77 J
Chloromethane	µg/m^3	20.7 U	114 U	0.262 U	5.82 U	3.59 U	21.1 U	0.105 U	0.105 U

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-22-18	SVG-23-18	SVG-24-18	SVG-25-18
	Integral Location ID:	SVG-22	SVG-23	SVG-24	SVG-25
	Location:	Site	Site	Site	Site
	Description:	Rear Hallway	Rear Hallway	Rear Hallway	Rear Storage Area
	Sample Date:	17-Oct-18	16-Oct-18	17-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-17	L1842348-16	L1842348-15	L1842348-13
Parameter	Units				
1,1,1-Trichloroethane	µg/m^3	16.3	0.201 U	3 U	78
1,1,2,2-Tetrachloroethane	µg/m^3	0.783 U	0.391 U	5.86 U	15.7 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/m^3	0.627 U	0.313 U	4.69 U	12.6 U
1,1,2-Trichloroethane	µg/m^3	0.791 U	0.396 U	5.95 U	15.9 U
1,1-Dichloroethane	µg/m^3	0.392 U	0.196 U	2.93 U	7.85 U
1,1-Dichloroethene	µg/m^3	0.221 U	0.111 U	1.65 U	4.44 U
1,2,4-Trichlorobenzene	µg/m^3	0.75 UJ	0.375 UJ	5.6 UJ	15.1 UJ
1,2,4-Trimethylbenzene	µg/m^3	3.08	4.44	4.32 U	11.6 U
1,2-Dibromoethane	µg/m^3	0.845 U	0.421 U	6.3 U	16.9 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	µg/m^3	0.583 U	0.291 U	4.36 U	11.7 U
1,2-Dichlorobenzene	µg/m^3	0.854 U	0.426 U	6.37 U	17.1 U
1,2-Dichloroethane	µg/m^3	0.359 U	0.18 U	2.69 U	7.2 U
1,2-Dichloropropane	µg/m^3	0.601 U	0.301 U	4.5 U	12.1 U
1,3,5-Trimethylbenzene	µg/m^3	0.615 U	1.03	4.59 U	12.3 U
1,3-Butadiene	µg/m^3	0.216 U	0.108 U	1.61 U	4.34 U
1,3-Dichlorobenzene	µg/m^3	0.854 U	0.427 U	6.37 U	17.2 U
1,4-Dichlorobenzene	µg/m^3	0.896 U	0.448 U	6.67 U	18 U
1,4-Dioxane	µg/m^3	0.764 U	0.382 U	5.69 U	15.4 U
2,2,4-Trimethylpentane	µg/m^3	0.461 U	0.231 U	3.45 U	9.25 U
2-Butanone	µg/m^3	17.2	22.9	2.81 U	7.55 U
2-Hexanone	µg/m^3	0.713 U	9.51	5.33 U	14.3 U
3-Chloropropene	µg/m^3	0.222 U	0.111 U	1.66 U	4.44 U
4-Ethyltoluene	µg/m^3	0.546 U	0.272 U	4.08 U	11 U
4-Methyl-2-pentanone	µg/m^3	0.533 U	0.266 U	3.97 U	10.7 U
Acetone	µg/m^3	387	271	24.5 U	104
Benzene	µg/m^3	0.345 U	1.46	2.58 U	6.93 U
Benzyl chloride	µg/m^3	0.528 UJ	0.265 UJ	3.97 UJ	10.7 UJ
Bromodichloromethane	µg/m^3	0.571 U	0.285 U	4.27 U	11.5 U
Bromoform	µg/m^3	1.13 U	0.566 U	8.46 U	22.7 U
Bromomethane	µg/m^3	0.361 U	0.181 U	2.7 U	7.26 U
Carbon disulfide	µg/m^3	1.5	0.11 U	1.65 U	4.42 U
Carbon tetrachloride	µg/m^3	3.95	0.31 U	4.64 U	12.5 U
Chlorobenzene	µg/m^3	0.534 U	0.267 U	3.99 U	10.7 U
Chloroethane	µg/m^3	0.488 U	0.244 U	3.64 U	9.79 U
Chloroform	µg/m^3	9.86	1.52	135	236
Chloromethane	µg/m^3	0.209 U	0.105 U	1.57 U	4.21 U

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-01-18	SVG-02-18	SVG-03-18	SVG-04-18	SVG-05-18	SVG-06-18	SVG-07-18
	Integral Location ID:	SVG-01	SVG-02	SVG-03	SVG-04	SVG-05	SVG-06	SVG-07
	Location:	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk
	Description:	North 6th St., across from Site	North 6th St., across from Site	North 6th St., across from Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site	North 6th St., adjacent to Site
	Sample Date:	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-01	L1842348-02	L1842348-03	L1842348-08	L1842348-09	L1842348-18	L1842348-19
Parameter	Units							
cis-1,2-Dichloroethene	µg/m^3	0.547 U	1.82 U	8.21	168000	18200	8800	1420
cis-1,3-Dichloropropene	µg/m^3	0.282 U	0.94 U	0.472 U	221 U	221 U	1770 U	153 U
Cyclohexane	µg/m^3	0.17 U	0.568 U	0.284 U	133 U	133 U	1060 U	92.6 U
Dibromochloromethane	µg/m^3	0.56 U	1.87 U	0.937 U	437 U	437 U	3500 U	304 U
Dichlorodifluoromethane	µg/m^3	2.29	0.623 U	2.22	145 U	145 U	1170 U	101 U
Ethyl Acetate	µg/m^3	0.696 U	2.32 U	1.16 U	544 U	544 U	4360 U	378 U
Ethyl Alcohol	µg/m^3	13.4	3.34 U	1.67 U	782 U	782 U	6260 U	543 U
Ethylbenzene	µg/m^3	0.982	0.825 U	0.413 U	193 U	193 U	1550 U	135 U
Heptane	µg/m^3	0.288 U	0.959 U	0.479 U	225 U	225 U	1800 U	157 U
Hexachlorobutadiene	µg/m^3	0.661 U	2.21 U	1.1 U	516 U	516 U	4140 U	359 U
iso-Propyl Alcohol	µg/m^3	13.4	3.91 U	1.96 U	917 U	917 U	7350 U	639 U
Methyl tert butyl ether	µg/m^3	0.269 U	0.898 U	0.447 U	211 U	211 U	1680 U	146 U
Methylene chloride	µg/m^3	0.466 U	1.55 U	0.775 U	365 U	365 U	2910 U	253 U
n-Hexane	µg/m^3	0.183 U	0.61 U	0.305 U	143 U	143 U	1140 U	99.4 U
o-Xylene	µg/m^3	1.76	0.995 U	2.08	233 U	233 U	1870 U	162 U
p/m-Xylene	µg/m^3	4.39	1.81 U	4.91	424 U	424 U	3390 U	295 U
Styrene	µg/m^3	0.272 U	0.907 U	0.451 U	212 U	212 U	1700 U	148 U
tert-Butyl Alcohol	µg/m^3	29.5	0.558 U	5.64	131 U	131 U	1050 U	90.9 U
Tetrachloroethene	µg/m^3	47.2	2850	983	6330000	5660000	8410000	180000
Tetrahydrofuran	µg/m^3	0.244 U	0.814 U	0.407 U	191 U	191 U	1530 U	133 U
Toluene	µg/m^3	1.81	0.675 U	3.61	158 U	158 U	1270 U	110 U
trans-1,2-Dichloroethene	µg/m^3	0.253 U	0.845 U	0.42 U	1400	197 U	1580 U	138 U
trans-1,3-Dichloropropene	µg/m^3	0.29 UJ	0.967 UJ	0.481 UJ	227 UJ	227 UJ	1810 U	158 U
Trichloroethene	µg/m^3	0.29 U	29.4	41.5	119000	39600	14800	2000
Trichlorofluoromethane	µg/m^3	1.28	4.85	0.388 U	182 U	182 U	1460 U	126 U
Vinyl bromide	µg/m^3	0.251 U	0.835 U	0.418 U	196 U	196 U	1570 U	136 U
Vinyl chloride	µg/m^3	0.1 U	0.335 U	0.167 U	1090	78.2 U	626 U	54.4 U

Notes:
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-08-18	SVG-09-18	SVG-10-18	SVG-11-18	SVG-12-18	SVG-13-18	SVG-14-18
	Integral Location ID:	SVG-08	SVG-09	SVG-10	SVG-11	SVG-12	SVG-13	SVG-14
	Location:	Sidewalk	Site	Site	Site	58 North 6th St.	Sidewalk	Site
	Description:	North 6th St., adjacent to Site	Blossom	HigherDOSE	Meg Shops, Front	Basement	Kent Ave., adjacent to Site	Former Coffee Shop
	Sample Date:	16-Oct-18	17-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	17-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-20	L1842348-26	L1842348-21	L1842348-04	L1842348-06	L1842348-24	L1842348-14
Parameter	Units							
cis-1,2-Dichloroethene	µg/m^3	0.547 U	304 U	10.9 U	76.1 U	15.8 U	0.682 U	1.82 U
cis-1,3-Dichloropropene	µg/m^3	0.282 U	157 U	5.63 U	39.2 U	8.13 U	0.353 U	0.94 U
Cyclohexane	µg/m^3	0.17 U	94.7 U	3.41 U	23.7 U	4.92 U	0.213 U	0.568 U
Dibromochloromethane	µg/m^3	0.56 U	311 U	11.2 U	77.7 U	16.1 U	0.699 U	1.87 U
Dichlorodifluoromethane	µg/m^3	2.29	103 U	3.73 U	25.9 U	5.39 U	2.54	0.623 U
Ethyl Acetate	µg/m^3	0.696 U	386 U	13.9 U	96.6 U	20.1 U	0.868 U	2.32 U
Ethyl Alcohol	µg/m^3	1 U	556 U	20 U	139 U	28.8 U	1.25 U	3.34 U
Ethylbenzene	µg/m^3	0.248 U	138 U	4.95 U	34.4 U	7.12 U	0.309 U	0.825 U
Heptane	µg/m^3	0.288 U	1520	5.74 U	40 U	8.28 U	0.36 U	0.959 U
Hexachlorobutadiene	µg/m^3	0.661 U	367 U	13.2 U	91.8 U	19.1 U	0.827 U	2.21 U
iso-Propyl Alcohol	µg/m^3	1.17 U	654 U	23.5 U	163 U	33.9 U	1.47 U	4.62
Methyl tert butyl ether	µg/m^3	0.269 U	150 U	5.37 U	37.5 U	7.75 U	0.337 U	0.898 U
Methylene chloride	µg/m^3	0.466 U	258 U	9.31 U	64.6 U	13.4 U	0.584 U	1.55 U
n-Hexane	µg/m^3	0.183 U	102 U	3.67 U	25.4 U	5.29 U	0.229 U	0.61 U
o-Xylene	µg/m^3	0.299 U	166 U	5.99 U	41.5 U	8.6 U	0.374 U	0.995 U
p/m-Xylene	µg/m^3	1.82	301 U	10.9 U	75.6 U	15.6 U	0.678 U	1.81 U
Styrene	µg/m^3	0.272 U	151 U	5.45 U	37.8 U	7.83 U	0.34 U	0.907 U
tert-Butyl Alcohol	µg/m^3	0.167 U	93.1 U	3.33 U	23.3 U	4.82 U	0.209 U	0.558 U
Tetrachloroethene	µg/m^3	6.14	143000	7800	212000	19300	562	1650
Tetrahydrofuran	µg/m^3	0.244 U	136 U	4.9 U	33.9 U	7.05 U	0.307 U	0.814 U
Toluene	µg/m^3	0.882	113 U	4.07 U	28.2 U	5.84 U	0.253 U	0.675 U
trans-1,2-Dichloroethene	µg/m^3	0.253 U	140 U	5.07 U	35.1 U	7.3 U	0.316 U	0.845 U
trans-1,3-Dichloropropene	µg/m^3	0.29 U	161 U	5.81 U	40.3 UJ	8.35 UJ	0.363 U	0.967 U
Trichloroethene	µg/m^3	1.33	822	45.7	40.3 U	172	10.7	0.967 U
Trichlorofluoromethane	µg/m^3	0.233 U	129 U	4.65 U	32.3 U	6.69 U	1.69	0.776 U
Vinyl bromide	µg/m^3	0.251 U	139 U	5.03 U	34.8 U	7.21 U	0.313 U	0.835 U
Vinyl chloride	µg/m^3	0.1 U	55.7 U	2 U	13.9 U	2.89 U	0.125 U	0.335 U

Notes:
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-15-18	SVG-DUP01-18	SVG-16-18	SVG-17-18	SVG-19-18	SVG-20-18	SVG-21-18	SVG-DUP2-18
	Integral Location ID:	SVG-15	SVG-15	SVG-16	SVG-17	SVG-19	SVG-20	SVG-21	SVG-21
	Location:	Site	Site	Site	Site	Site	58 North 6th St.	Sidewalk	Sidewalk
	Description:	Front Hallway	Front Hallway	HigherDOSE	Meg Shops, Back	Rear Storage Area	Basement	Kent Ave., adjacent to Site	Kent Ave., adjacent to Site
	Sample Date:	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	16-Oct-18	17-Oct-18	17-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-11	L1842348-23	L1842348-22	L1842348-05	L1842348-12	L1842348-07	L1842348-25	L1842348-27
Parameter	Units								
cis-1,2-Dichloroethene	µg/m^3	176	595 U	1.37 U	30.4 U	18.8 U	975	0.547 U	0.547 U
cis-1,3-Dichloropropene	µg/m^3	55.8 U	307 U	0.708 U	15.7 U	9.72 U	56.7 U	0.282 U	0.282 U
Cyclohexane	µg/m^3	33.8 U	185 U	0.427 U	9.47 U	5.85 U	34.4 U	0.17 U	0.17 U
Dibromochloromethane	µg/m^3	111 U	608 U	1.4 U	31.1 U	19.3 U	112 U	0.56 U	0.56 U
Dichlorodifluoromethane	µg/m^3	37 U	203 U	0.466 U	10.3 U	6.43 U	37.6 U	2.28	2.39
Ethyl Acetate	µg/m^3	138 U	757 U	1.74 U	38.6 U	23.9 U	140 U	0.696 U	0.696 U
Ethyl Alcohol	µg/m^3	198 U	1090 U	2.51 U	55.6 U	34.5 U	202 U	1 U	1 U
Ethylbenzene	µg/m^3	49.1 U	269 U	0.617 U	13.8 U	8.51 U	50 U	2.77 J	0.248 UJ
Heptane	µg/m^3	57 U	313 U	0.721 U	16 U	9.88 U	58.2 U	0.288 U	0.288 U
Hexachlorobutadiene	µg/m^3	131 U	719 U	1.65 U	36.7 U	22.7 U	133 U	0.661 U	0.661 U
iso-Propyl Alcohol	µg/m^3	233 U	1280 U	3.64	65.4 U	40.3 U	237 U	2.07	1.83
Methyl tert butyl ether	µg/m^3	53.4 U	293 U	0.674 U	15 U	9.27 U	54.1 U	0.269 U	0.269 U
Methylene chloride	µg/m^3	92.4 U	507 U	1.16 U	25.8 U	16 U	93.8 U	0.466 U	0.466 U
n-Hexane	µg/m^3	36.3 U	199 U	0.458 U	10.2 U	6.27 U	37 U	0.183 U	0.183 U
o-Xylene	µg/m^3	59.1 U	325 U	2.29	16.6 U	10.3 U	60.4 U	4.78 J	0.299 UJ
p/m-Xylene	µg/m^3	108 U	591 U	6.52	30.1 U	18.7 U	109 U	11.6 J	1.83 J
Styrene	µg/m^3	54.1 U	295 U	0.681 U	15.1 U	9.37 U	54.9 U	0.272 U	0.272 U
tert-Butyl Alcohol	µg/m^3	33.3 U	182 U	0.418 U	9.31 U	5.76 U	33.6 U	0.167 U	0.167 U
Tetrachloroethene	µg/m^3	457000 J	472000 J	1170	53200	16200	1380000	12.3 J	18.8 J
Tetrahydrofuran	µg/m^3	48.4 U	266 U	0.611 U	13.6 U	8.41 U	49.3 U	0.244 U	2.13
Toluene	µg/m^3	40.3 U	220 U	3.35	11.3 U	6.97 U	40.7 U	7.05 J	1.81 J
trans-1,2-Dichloroethene	µg/m^3	50 U	275 U	0.634 U	14 U	8.68 U	51.1 U	0.253 U	0.253 U
trans-1,3-Dichloropropene	µg/m^3	57.7 UJ	315 U	0.726 U	16.1 UJ	9.99 U	58.6 UJ	0.29 U	0.29 U
Trichloroethene	µg/m^3	496 J	1300 J	8.06	131	176	5270	0.29 U	1.4
Trichlorofluoromethane	µg/m^3	46.1 U	253 U	0.584 U	12.9 U	7.98 U	46.9 U	1.14	1.32
Vinyl bromide	µg/m^3	49.8 U	272 U	0.625 U	13.9 U	8.61 U	50.7 U	0.251 U	0.251 U
Vinyl chloride	µg/m^3	19.9 U	109 U	0.251 U	5.57 U	3.45 U	20.2 U	0.1 U	0.1 U

Notes:
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Table 3. RI Phase 1 Soil Vapor Sample Results

	Integral Sample ID:	SVG-22-18	SVG-23-18	SVG-24-18	SVG-25-18
	Integral Location ID:	SVG-22	SVG-23	SVG-24	SVG-25
	Location:	Site	Site	Site	Site
	Description:	Rear Hallway	Rear Hallway	Rear Hallway	Rear Storage Area
	Sample Date:	17-Oct-18	16-Oct-18	17-Oct-18	16-Oct-18
	Sample Type:	15-minute	15-minute	15-minute	15-minute
	Lab Sample ID:	L1842348-17	L1842348-16	L1842348-15	L1842348-13
Parameter	Units				
cis-1,2-Dichloroethene	µg/m^3	1.09 U	0.547 U	8.17 U	22 U
cis-1,3-Dichloropropene	µg/m^3	0.563 U	0.282 U	4.22 U	11.3 U
Cyclohexane	µg/m^3	0.341 U	0.978	2.55 U	6.85 U
Dibromochloromethane	µg/m^3	1.12 U	0.56 U	8.37 U	22.5 U
Dichlorodifluoromethane	µg/m^3	3.01	2.27	2.79 U	7.52 U
Ethyl Acetate	µg/m^3	1.39 U	0.696 U	10.4 U	28 U
Ethyl Alcohol	µg/m^3	2 U	1 U	15 U	40.1 U
Ethylbenzene	µg/m^3	0.495 U	2.02	3.71 U	9.95 U
Heptane	µg/m^3	0.574 U	0.288 U	4.3 U	11.6 U
Hexachlorobutadiene	µg/m^3	1.32 U	0.661 U	9.9 U	26.6 U
iso-Propyl Alcohol	µg/m^3	5.68	2.01	17.6 U	47.2 U
Methyl tert butyl ether	µg/m^3	0.537 U	0.269 U	4.04 U	10.8 U
Methylene chloride	µg/m^3	0.931 U	0.466 U	6.95 U	18.7 U
n-Hexane	µg/m^3	0.367 U	0.183 U	2.73 U	7.33 U
o-Xylene	µg/m^3	0.599 U	2.61	4.47 U	12 U
p/m-Xylene	µg/m^3	1.09 U	7.25	8.12 U	21.8 U
Styrene	µg/m^3	0.545 U	0.272 U	4.07 U	10.9 U
tert-Butyl Alcohol	µg/m^3	12.2	5	2.5 U	6.73 U
Tetrachloroethene	µg/m^3	1280	208	8210	25200
Tetrahydrofuran	µg/m^3	0.49 U	0.244 U	3.66 U	9.82 U
Toluene	µg/m^3	1.75	7.84	3.03 U	8.14 U
trans-1,2-Dichloroethene	µg/m^3	0.507 U	0.253 U	3.78 U	10.1 U
trans-1,3-Dichloropropene	µg/m^3	0.581 U	0.29 U	4.34 U	11.7 U
Trichloroethene	µg/m^3	69.9	10.2	161	319
Trichlorofluoromethane	µg/m^3	0.465 U	1.36	3.48 U	9.33 U
Vinyl bromide	µg/m^3	0.503 U	0.251 U	3.75 U	10.1 U
Vinyl chloride	µg/m^3	0.2 U	0.1 U	1.5 U	4.04 U

Notes:
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Table 4. RI Phase 1 Concrete Chip Sample Results

		Sample Number:	CON-01-18		CON-02-18		CON-03-18	
		Sample Location:	HigherDOSE		Meg Shops		Meg Shops	
		Sample End Date:	10/16/2018		10/16/2018		10/16/2018	
		Lab Sample ID:	L1842205-01		L1842205-02		L1842205-03	
Parameter	Restricted Residential Use SCO	Units						
1,1,1,2-Tetrachloroethane	NS	mg/kg	0.00012	UJ	0.00013	UJ	0.00013	UJ
1,1,1-Trichloroethane	100	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
1,1,2,2-Tetrachloroethane	NS	mg/kg		R	0.00017	UJ	0.00016	UJ
1,1,2-Trichloroethane	NS	mg/kg	0.00025	UJ	0.00027	UJ	0.00026	UJ
1,1-Dichloroethane	26	mg/kg	0.00014	UJ	0.00015	UJ	0.00014	UJ
1,1-Dichloroethene	100	mg/kg	0.00023	UJ	0.00024	UJ	0.00023	UJ
1,1-Dichloropropene	NS	mg/kg	0.00015	UJ	0.00016	UJ	0.00015	UJ
1,2,3-Trichlorobenzene	NS	mg/kg	0.00031	UJ	0.00033	UJ	0.00031	UJ
1,2,3-Trichloropropane	NS	mg/kg	0.00012	UJ	0.00013	UJ	0.00012	UJ
1,2,4,5-Tetramethylbenzene	NS	mg/kg	0.00018	UJ	0.00019	UJ	0.00018	UJ
1,2,4-Trichlorobenzene	NS	mg/kg	0.00026	UJ	0.00028	UJ	0.00026	UJ
1,2,4-Trimethylbenzene	52	mg/kg	0.00032	UJ	0.00034	UJ	0.00032	UJ
1,2-Dibromo-3-chloropropane	NS	mg/kg	0.00095	UJ	0.001	UJ	0.00095	UJ
1,2-Dibromoethane	NS	mg/kg	0.00026	UJ	0.00028	UJ	0.00027	UJ
1,2-Dichlorobenzene	100	mg/kg	0.00014	UJ	0.00014	UJ	0.00014	UJ
1,2-Dichloroethane	3.1	mg/kg	0.00024	UJ	0.00026	UJ	0.00024	UJ
1,2-Dichloroethene, Total	100	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
1,2-Dichloropropane	NS	mg/kg	0.00012	UJ	0.00013	UJ	0.00012	UJ
1,3,5-Trimethylbenzene	52	mg/kg	0.00018	UJ	0.0002	UJ	0.00018	UJ
1,3-Dichlorobenzene	49	mg/kg	0.00014	UJ	0.00015	UJ	0.00014	UJ
1,3-Dichloropropane	NS	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
1,3-Dichloropropene, Total	NS	mg/kg	0.00015	UJ	0.00016	UJ	0.00015	UJ
1,4-Dichlorobenzene	13	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
1,4-Dioxane	13	mg/kg	0.033	UJ	0.036	UJ	0.034	UJ
2,2-Dichloropropane	NS	mg/kg	0.00019	UJ	0.0002	UJ	0.00019	UJ
2-Butanone	100	mg/kg	0.0021	UJ	0.0022	UJ	0.0021	UJ
2-Hexanone	NS	mg/kg	0.0011	UJ	0.0012	UJ	0.0011	UJ
4-Methyl-2-pentanone	NS	mg/kg	0.0012	UJ	0.0013	UJ	0.0012	UJ
Acetone	100	mg/kg	0.029	J	0.13	J	0.0088	J
Acrylonitrile	NS	mg/kg	0.0011	UJ	0.0012	UJ	0.0011	UJ
Benzene	4.8	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
Bromobenzene	NS	mg/kg	0.00014	UJ	0.00015	UJ	0.00014	UJ
Bromochloromethane	NS	mg/kg	0.00019	UJ	0.00021	UJ	0.0002	UJ
Bromodichloromethane	NS	mg/kg	0.0001	UJ	0.00011	UJ	0.0001	UJ
Bromoform	NS	mg/kg	0.00023	UJ	0.00025	UJ	0.00024	UJ
Bromomethane	NS	mg/kg	0.00055	UJ	0.00059	UJ	0.00056	UJ
Carbon disulfide	NS	mg/kg	0.0043	UJ	0.0046	UJ	0.0044	UJ
Carbon tetrachloride	2.4	mg/kg	0.00022	UJ	0.00023	UJ	0.00022	UJ
Chlorobenzene	100	mg/kg	0.00012	UJ	0.00013	UJ	0.00012	UJ
Chloroethane	NS	mg/kg	0.00043	UJ	0.00046	UJ	0.00043	UJ
Chloroform	49	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
Chloromethane	NS	mg/kg	0.00089	UJ	0.00094	UJ	0.00089	UJ
cis-1,2-Dichloroethene	100	mg/kg	0.00017	UJ	0.00018	UJ	0.00017	UJ
cis-1,3-Dichloropropene	NS	mg/kg	0.00015	UJ	0.00016	UJ	0.00015	UJ

Table 4. RI Phase 1 Concrete Chip Sample Results

		Sample Number:	CON-01-18		CON-02-18		CON-03-18	
		Sample Location:	HigherDOSE		Meg Shops		Meg Shops	
		Sample End Date:	10/16/2018		10/16/2018		10/16/2018	
		Lab Sample ID:	L1842205-01		L1842205-02		L1842205-03	
Parameter	Restricted Residential Use SCO	Units						
Dibromochloromethane	NS	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
Dibromomethane	NS	mg/kg	0.00023	UJ	0.00024	UJ	0.00023	UJ
Dichlorodifluoromethane	NS	mg/kg	0.00087	UJ	0.00093	UJ	0.00088	UJ
Ethyl ether	NS	mg/kg	0.00032	UJ	0.00034	UJ	0.00033	UJ
Ethylbenzene	41	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
Hexachlorobutadiene	NS	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
Isopropylbenzene	NS	mg/kg	0.0001	UJ	0.00011	UJ	0.0001	UJ
Methyl tert butyl ether	100	mg/kg	0.00019	UJ	0.0002	UJ	0.00019	UJ
Methylene chloride	100	mg/kg	0.0022	UJ	0.0023	UJ	0.0022	UJ
Naphthalene	100	mg/kg	0.00062	UJ	0.00066	UJ	0.00062	UJ
n-Butylbenzene	100	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
n-Propylbenzene	100	mg/kg	0.00016	UJ	0.00017	UJ	0.00016	UJ
o-Chlorotoluene	NS	mg/kg	0.00018	UJ	0.00019	UJ	0.00018	UJ
o-Xylene	NS	mg/kg	0.00028	UJ	0.00029	UJ	0.00028	UJ
p/m-Xylene	NS	mg/kg	0.00053	UJ	0.00057	UJ	0.00054	UJ
p-Chlorotoluene	NS	mg/kg	0.0001	UJ	0.00011	UJ	0.0001	UJ
p-Diethylbenzene	NS	mg/kg	0.00017	UJ	0.00018	UJ	0.00017	UJ
p-Ethyltoluene	NS	mg/kg	0.00036	UJ	0.00039	UJ	0.00037	UJ
p-Isopropyltoluene	NS	mg/kg	0.0001	UJ	0.00011	UJ	0.0001	UJ
sec-Butylbenzene	100	mg/kg	0.00014	UJ	0.00015	UJ	0.00014	UJ
Styrene	NS	mg/kg	0.00019	UJ	0.0002	UJ	0.00019	UJ
tert-Butylbenzene	100	mg/kg	0.00011	UJ	0.00012	UJ	0.00011	UJ
Tetrachloroethene	19	mg/kg	0.00019	UJ	0.030	J	0.0052	J
Toluene	100	mg/kg	0.00052	UJ	0.00055	UJ	0.00052	UJ
trans-1,2-Dichloroethene	100	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
trans-1,3-Dichloropropene	NS	mg/kg	0.00026	UJ	0.00028	UJ	0.00026	UJ
trans-1,4-Dichloro-2-butene	NS	mg/kg	0.0014	UJ	0.0014	UJ	0.0014	UJ
Trichloroethene	21	mg/kg	0.00013	UJ	0.00014	UJ	0.00013	UJ
Trichlorofluoromethane	NS	mg/kg	0.00066	UJ	0.0007	UJ	0.00066	UJ
Vinyl acetate	NS	mg/kg	0.002	UJ	0.0022	UJ	0.002	UJ
Vinyl chloride	0.9	mg/kg	0.00032	UJ	0.00034	UJ	0.00032	UJ
Xylenes, Total	100	mg/kg	0.00028	UJ	0.00029	UJ	0.00028	UJ

Notes:
J = estimated value
NS = no standard
R = rejected result
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Concrete chip samples are compared to Restricted Residential Use Soil Cleanup Objectives (SCOs) in consideration of its potential to act as a source of volatile organic compounds to indoor air.

One rejected result was identified during data validation: 1,1,2,2-tetrachloroethane was not recovered in the matrix spike, and the result for CON-01-18 was qualified as rejected.

Table 5. RI Phase 1 Air Sample Results

			Sample Number:	OA18-01	OA18-02	IA18-01	IA18-02	IA18-03	IA18-04	IA18-05	IA18-06	IA18-07
			Sample Location:	North 6th Street Sidewalk	Kent Avenue Sidewalk	Cellar	Meg Shops	HigherDOSE	Mobile Spa	Blossom	48 N Deli	Former Coffee Shop
			Floor:	1st	1st	Basement	1st	1st	1st	1st	1st	1st
			Collection Period:	8-hour	24-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour
			Sample End Date:	3/28/2018	3/29/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018
			Lab Sample ID:	L1810844-21	L1810844-22	L1810844-01	L1810844-02	L1810844-03	L1810844-04	L1810844-05	L1810844-06	L1810844-07
Parameter	Analytical Method	NYSDOH AGV	Units									
1,1,2,2-Tetrachloroethane	TO-15	NS	$\mu g/m^3$	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	TO-15	NS	$\mu g/m^3$	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
1,1,2-Trichloroethane	TO-15	NS	$\mu g/m^3$	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
1,1-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2,4-Trichlorobenzene	TO-15	NS	$\mu g/m^3$	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	0.983 U	0.983 U	0.983 U	1.06	0.983 U	1.06	0.983 U	0.983 U	0.983 U
1,2-Dibromoethane	TO-15	NS	$\mu g/m^3$	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	TO-15	NS	$\mu g/m^3$	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,2-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2-Dichloropropane	TO-15	NS	$\mu g/m^3$	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
1,3,5-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,3-Butadiene	TO-15	NS	$\mu g/m^3$	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	TO-15	NS	$\mu g/m^3$	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
2,2,4-Trimethylpentane	TO-15	NS	$\mu g/m^3$	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	3.11	0.934 U	0.934 U	0.934 U
2-Butanone	TO-15	NS	$\mu g/m^3$	1.47 U	1.47 U	1.47 U	3.3	4.01	3.13	2.22	1.47 U	1.47 U
2-Hexanone	TO-15	NS	$\mu g/m^3$	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
3-Chloropropene	TO-15	NS	$\mu g/m^3$	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U
4-Ethyltoluene	TO-15	NS	$\mu g/m^3$	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
4-Methyl-2-pentanone	TO-15	NS	$\mu g/m^3$	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
Acetone	TO-15	NS	$\mu g/m^3$	5.75 J	6.63 J	9.64 J	30.9 J	17.9 J	39 J	37.3 J	42.3 J	10.9 J
Benzene	TO-15	NS	$\mu g/m^3$	0.837	0.994	1.12	1.43	1.4	1.67	1.24	0.895	0.99
Benzyl chloride	TO-15	NS	$\mu g/m^3$	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
Bromodichloromethane	TO-15	NS	$\mu g/m^3$	1.34 U	1.34 U	4.09	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U
Bromoform	TO-15	NS	$\mu g/m^3$	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
Bromomethane	TO-15	NS	$\mu g/m^3$	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U
Carbon disulfide	TO-15	NS	$\mu g/m^3$	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Chlorobenzene	TO-15	NS	$\mu g/m^3$	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Chloroethane	TO-15	NS	$\mu g/m^3$	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Chloroform	TO-15	NS	$\mu g/m^3$	0.977 U	0.977 U	43.8	0.977 U	0.977 U	1.94	3.01	1.12	5.27
Chloromethane	TO-15	NS	$\mu g/m^3$	1.14	1.22	1.12	1.25	1.14	1.19	1.24	1.21	1.03
cis-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
Cyclohexane	TO-15	NS	$\mu g/m^3$	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane	TO-15	NS	$\mu g/m^3$	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	TO-15	NS	$\mu g/m^3$	2.12	1.94	2.36	2.17	2.26	2.21	2.08	1.9	2.17
Ethyl Acetate	TO-15	NS	$\mu g/m^3$	1.8 U	1.8 U	1.8 U	4.14	1.98	9.51	10.1	1.8 U	1.8 U

Table 5. RI Phase 1 Air Sample Results

			Sample Number:	OA18-01	OA18-02	IA18-01	IA18-02	IA18-03	IA18-04	IA18-05	IA18-06	IA18-07
			Sample Location:	North 6th Street Sidewalk	Kent Avenue Sidewalk	Cellar	Meg Shops	HigherDOSE	Mobile Spa	Blossom	48 N Deli	Former Coffee Shop
			Floor:	1st	1st	Basement	1st	1st	1st	1st	1st	1st
			Collection Period:	8-hour	24-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour
			Sample End Date:	3/28/2018	3/29/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018
			Lab Sample ID:	L1810844-21	L1810844-22	L1810844-01	L1810844-02	L1810844-03	L1810844-04	L1810844-05	L1810844-06	L1810844-07
Parameter	Analytical Method	NYSDOH AGV	Units									
Ethyl Alcohol	TO-15	NS	µg/m^3	14.4	21.3	22	562	222	501	631	243	65.9
Ethylbenzene	TO-15	NS	µg/m^3	0.869 U	0.869 U	1.67	0.873	0.869 U	1.32	1.21	0.869 U	0.869 U
Heptane	TO-15	NS	µg/m^3	0.82 U	0.82 U	0.82 U	1.44	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Hexachlorobutadiene	TO-15	NS	µg/m^3	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
iso-Propyl Alcohol	TO-15	NS	µg/m^3	1.23 UJ	2.12 J	1.4 J	25.8 J	55.3 J	885 J	487 J	90.2 J	6.93 J
Methyl tert butyl ether	TO-15	NS	µg/m^3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Methylene chloride	TO-15	60	µg/m^3	1.74 U	2.21	2.05	1.74 U	6.11	1.74 U	1.74 U	1.74 U	1.74 U
n-Hexane	TO-15	NS	µg/m^3	0.705 U	0.744	0.86	0.997	1.37	1.72	0.853	1.77	0.86
o-Xylene	TO-15	NS	µg/m^3	0.869 U	0.869 U	2.56	0.973	0.93	1.39	1.14	0.869 U	0.869 U
p/m-Xylene	TO-15	NS	µg/m^3	1.74 U	1.74 U	7.99	3.03	2.98	4.6	4.07	1.77	2.87
Styrene	TO-15	NS	µg/m^3	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U
tert-Butyl Alcohol	TO-15	NS	µg/m^3	1.52 U	1.52 U	1.52 UJ	1.52 UJ	1.52 UJ	1.52 UJ	1.52 UJ	1.52 U	1.52 UJ
Tetrahydrofuran	TO-15	NS	µg/m^3	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U
Toluene	TO-15	NS	µg/m^3	1.52	1.76	3.22	8.55	3.44	8.82	3.2	1.9	1.97
trans-1,2-Dichloroethene	TO-15	NS	µg/m^3	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
trans-1,3-Dichloropropene	TO-15	NS	µg/m^3	0.908 U	0.908 U	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 U	0.908 UJ
Trichlorofluoromethane	TO-15	NS	µg/m^3	1.12 U	1.12 U	1.32	1.36	1.42	1.85	3	1.34	1.21
Vinyl bromide	TO-15	NS	µg/m^3	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U
1,1,1-Trichloroethane	TO-15-SIM	NS	µg/m^3	0.109 U	0.109 U	0.638	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	1.15	0.079 U	0.079 U	0.079 U
Carbon tetrachloride	TO-15-SIM	NS	µg/m^3	0.434	0.428	0.893	0.585	0.604	0.547	0.541	0.421	0.579
cis-1,2-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.079 U	0.079 U	6.38 J	0.079 U	0.079 U	0.079 U	0.079 U	0.107	0.658 J
Tetrachloroethene	TO-15-SIM	30	µg/m^3	0.237	0.488	***73.2***	6.92	5.97	13.3	29.8	3.36	11.6
Trichloroethene	TO-15-SIM	2	µg/m^3	0.107 U	0.107 U	***3.06***	0.107 U	0.15	0.14	0.231	0.107 U	0.398
Vinyl chloride	TO-15-SIM	NS	µg/m^3	0.051 U	0.051 U	0.056	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U

Notes:

J = estimated value
NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Results exceeding NYSDOH AGVs are in bold and italicized.

Table 5. RI Phase 1 Air Sample Results

			Sample Number:	IA18-08	IA18-09	IA18-10	IA18-11	IA18-DUP2	IA18-12	IA18-13	IA18-14	IA18-15
			Sample Location:	Former Realty Office	Hallway near Elevator	SSDS Treatment Room	Hallway near Elevator	Hallway near Elevator	Hallway between Apartments C-2 & C-5	Apartment C-2	Apartment C-3	Apartment C-4
			Floor:	1st	1st	1st	2nd	2nd	2nd	2nd	2nd	2nd
			Collection Period:	8-hour	8-hour	8-hour	24-hour	24-hour	24-hour	24-hour	24-hour	24-hour
			Sample End Date:	3/28/2018	3/28/2018	3/28/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018
			Lab Sample ID:	L1810844-08	L1810844-09	L1810844-10	L1810844-11	L1810844-23	L1810844-12	L1810844-13	L1810844-14	L1810844-15
Parameter	Analytical Method	NYSDOH AGV	Units									
1,1,2,2-Tetrachloroethane	TO-15	NS	µg/m^3	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	2.57 UJ	1.37 U	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	TO-15	NS	µg/m^3	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	2.87 UJ	1.53 U	1.53 U
1,1,2-Trichloroethane	TO-15	NS	µg/m^3	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	2.04 UJ	1.09 U	1.09 U
1,1-Dichloroethane	TO-15	NS	µg/m^3	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	1.51 UJ	0.809 U	0.809 U
1,2,4-Trichlorobenzene	TO-15	NS	µg/m^3	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	2.78 UJ	1.48 U	1.48 U
1,2,4-Trimethylbenzene	TO-15	NS	µg/m^3	0.983 U	0.983 U	0.983 U	2.2	1.38	2.39	3.46 J	5.85	2.89
1,2-Dibromoethane	TO-15	NS	µg/m^3	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	2.87 UJ	1.54 U	1.54 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	TO-15	NS	µg/m^3	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.61 UJ	1.4 U	1.4 U
1,2-Dichlorobenzene	TO-15	NS	µg/m^3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.25 UJ	1.2 U	1.2 U
1,2-Dichloroethane	TO-15	NS	µg/m^3	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	1.51 UJ	0.809 U	0.809 U
1,2-Dichloropropane	TO-15	NS	µg/m^3	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	1.73 UJ	0.924 U	0.924 U
1,3,5-Trimethylbenzene	TO-15	NS	µg/m^3	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	1.84 UJ	2.55	1.23
1,3-Butadiene	TO-15	NS	µg/m^3	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.827 UJ	0.442 U	0.708
1,3-Dichlorobenzene	TO-15	NS	µg/m^3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.25 UJ	1.2 U	1.2 U
1,4-Dichlorobenzene	TO-15	NS	µg/m^3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.25 UJ	1.2 U	1.2 U
1,4-Dioxane	TO-15	NS	µg/m^3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	1.35 UJ	0.721 U	0.721 U
2,2,4-Trimethylpentane	TO-15	NS	µg/m^3	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	1.75 UJ	0.934 U	0.934 U
2-Butanone	TO-15	NS	µg/m^3	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.53	2.76 UJ	2.26	1.91
2-Hexanone	TO-15	NS	µg/m^3	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	1.53 UJ	0.82 U	0.82 U
3-Chloropropene	TO-15	NS	µg/m^3	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	1.17 UJ	0.626 U	0.626 U
4-Ethyltoluene	TO-15	NS	µg/m^3	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	1.84 UJ	1.01	0.983 U
4-Methyl-2-pentanone	TO-15	NS	µg/m^3	5.66	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	3.84 UJ	2.05 U	2.05 U
Acetone	TO-15	NS	µg/m^3	11.8 J	18.2 J	11.6 J	29.7 J	19.7 J	28 J	41.6 J	33.5 J	52.3 J
Benzene	TO-15	NS	µg/m^3	1.13	0.748	1.35	1.04	0.661	0.875	1.5 J	1.27	1.62
Benzyl chloride	TO-15	NS	µg/m^3	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.94 UJ	1.04 U	1.04 U
Bromodichloromethane	TO-15	NS	µg/m^3	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	2.51 UJ	1.34 U	1.34 U
Bromoform	TO-15	NS	µg/m^3	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	3.87 UJ	2.07 U	2.07 U
Bromomethane	TO-15	NS	µg/m^3	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	1.45 UJ	0.777 U	0.777 U
Carbon disulfide	TO-15	NS	µg/m^3	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	1.16 UJ	0.623 U	2.38
Chlorobenzene	TO-15	NS	µg/m^3	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	1.72 UJ	0.921 U	0.921 U
Chloroethane	TO-15	NS	µg/m^3	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.987 UJ	0.528 U	0.528 U
Chloroform	TO-15	NS	µg/m^3	5.76	0.977 U	0.977 U	2.33	1.46	2.15	3.39 J	3.88	2.85
Chloromethane	TO-15	NS	µg/m^3	1.07	1.02	1.12	1.45	1.23	1.23	1.38 J	2.21	1.68
cis-1,3-Dichloropropene	TO-15	NS	µg/m^3	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	1.7 UJ	0.908 U	0.908 U
Cyclohexane	TO-15	NS	µg/m^3	0.688 U	1.93	0.688 U	2.16	1.56	0.919	1.29 UJ	0.723	0.688 U
Dibromochloromethane	TO-15	NS	µg/m^3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.19 UJ	1.7 U	1.7 U
Dichlorodifluoromethane	TO-15	NS	µg/m^3	2.2	2.12	2.2	2.73	1.98	2.19	2.13 J	2.13	1.99
Ethyl Acetate	TO-15	NS	µg/m^3	1.8 U	1.8 U	5.26	2.71	1.8 U	2.79	3.41 J	4.14	7.1

Table 5. RI Phase 1 Air Sample Results

		Sample Number:		IA18-08	IA18-09	IA18-10	IA18-11	IA18-DUP2	IA18-12	IA18-13	IA18-14	IA18-15
		Sample Location:		Former Realty Office	Hallway near Elevator	SSDS Treatment Room	Hallway near Elevator	Hallway near Elevator	Hallway between Apartments C-2 & C-5	Apartment C-2	Apartment C-3	Apartment C-4
		Floor:		1st	1st	1st	2nd	2nd	2nd	2nd	2nd	2nd
		Collection Period:		8-hour	8-hour	8-hour	24-hour	24-hour	24-hour	24-hour	24-hour	24-hour
		Sample End Date:		3/28/2018	3/28/2018	3/28/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018
		Lab Sample ID:		L1810844-08	L1810844-09	L1810844-10	L1810844-11	L1810844-23	L1810844-12	L1810844-13	L1810844-14	L1810844-15
Parameter	Analytical Method	NYSDOH AGV	Units									
Ethyl Alcohol	TO-15	NS	µg/m^3	94.4	320	177	565	480	548	318 J	477	1670
Ethylbenzene	TO-15	NS	µg/m^3	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U	1.78 J	1.24	1.03
Heptane	TO-15	NS	µg/m^3	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.943	2 J	4.47	0.902
Hexachlorobutadiene	TO-15	NS	µg/m^3	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	3.99 UJ	2.13 U	2.13 U
iso-Propyl Alcohol	TO-15	NS	µg/m^3	364 J	10.4 J	11.5 J	22.5 J	15.5 J	20.6 J	33.9 J	17.2 J	25.1 J
Methyl tert butyl ether	TO-15	NS	µg/m^3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	1.35 UJ	0.721 U	0.721 U
Methylene chloride	TO-15	60	µg/m^3	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	3.25 UJ	1.74 U	1.74 U
n-Hexane	TO-15	NS	µg/m^3	0.871	0.705 U	1.65	1.06	0.825	0.923	2.32 J	2.26	1.38
o-Xylene	TO-15	NS	µg/m^3	0.869 U	0.869 U	0.869 U	1.09	0.869 U	1.07	2.27 J	1.65	1.22
p/m-Xylene	TO-15	NS	µg/m^3	2.85	1.74 U	2.42	3.15	2.33	3.2	6.6 J	4.33	3.42
Styrene	TO-15	NS	µg/m^3	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	1.59 UJ	0.852 U	0.852 U
tert-Butyl Alcohol	TO-15	NS	µg/m^3	1.52 UJ	1.52 UJ	1.52 UJ	1.52 UJ	1.52 U	1.52 UJ	2.84 UJ	1.52 U	1.52 U
Tetrahydrofuran	TO-15	NS	µg/m^3	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	2.76 UJ	1.47 U	1.47 U
Toluene	TO-15	NS	µg/m^3	1.96	1.5	2.46	2.07	1.64	2.34	3.42 J	3.99	3.53
trans-1,2-Dichloroethene	TO-15	NS	µg/m^3	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	1.48 UJ	0.793 U	0.793 U
trans-1,3-Dichloropropene	TO-15	NS	µg/m^3	0.908 UJ	0.908 UJ	0.908 UJ	0.908 UJ	0.908 U	0.908 UJ	1.7 UJ	0.908 U	0.908 U
Trichlorofluoromethane	TO-15	NS	µg/m^3	1.28	1.38	1.25	1.95	1.31	1.48	2.1 UJ	1.12 U	1.12 U
Vinyl bromide	TO-15	NS	µg/m^3	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	1.64 UJ	0.874 U	0.874 U
1,1,1-Trichloroethane	TO-15-SIM	NS	µg/m^3	0.109	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.204 UJ	0.109 U	0.109 U
1,1-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.148 UJ	0.079 U	0.079 U
Carbon tetrachloride	TO-15-SIM	NS	µg/m^3	0.723	0.39	0.604	0.453	0.34	0.415	0.471 J	0.44	0.39
cis-1,2-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.745 J	0.079 U	0.079 U	0.174 J	0.095 J	0.127 J	0.156 J	0.174	0.194
Tetrachloroethene	TO-15-SIM	30	µg/m^3	13.6	3.26	6.92	4.33	3.55	4.2	7.19 J	8.27	5.34
Trichloroethene	TO-15-SIM	2	µg/m^3	0.43	0.107 U	0.118	0.226 J	0.107 UJ	0.134	0.201 UJ	0.371	0.172
Vinyl chloride	TO-15-SIM	NS	µg/m^3	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.096 UJ	0.465	0.097

Notes:

J = estimated value
NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Results exceeding NYSDOH AGVs are in bold and italicized.

Table 5. RI Phase 1 Air Sample Results

			Sample Number:	IA18-16	IA18-17	IA18-19	IA18-20	IA18-21	IA18-22	IA18-58
			Sample Location:	Apartment C-5	Apartment C-6	Apartment C-8	Apartment C-9	Apartment C-11	Storage Area	58 North 6th Street
			Floor:	2nd	2nd	2nd	2nd	2nd	2nd	1st
			Collection Period:	24-hour	24-hour	24-hour	24-hour	24-hour	24-hour	8-hour
			Sample End Date:	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/28/2018
			Lab Sample ID:	L1810844-16	L1810844-17	L1810844-18	L1810844-19	L1810844-20	L1810844-24	L1810844-25
Parameter	Analytical Method	NYSDOH AGV	Units							
1,1,2,2-Tetrachloroethane	TO-15	NS	$\mu g/m^3$	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 UJ	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	TO-15	NS	$\mu g/m^3$	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 UJ	1.53 U
1,1,2-Trichloroethane	TO-15	NS	$\mu g/m^3$	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 UJ	1.09 U
1,1-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 UJ	0.809 U
1,2,4-Trichlorobenzene	TO-15	NS	$\mu g/m^3$	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 UJ	1.48 U
1,2,4-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	3.02	2.11	1.86	3.5	1.91	5.6 J	1.26
1,2-Dibromoethane	TO-15	NS	$\mu g/m^3$	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 UJ	1.54 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	TO-15	NS	$\mu g/m^3$	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 UJ	1.4 U
1,2-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 UJ	1.2 U
1,2-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 UJ	0.809 U
1,2-Dichloropropane	TO-15	NS	$\mu g/m^3$	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 UJ	0.924 U
1,3,5-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	1.23	1.03	0.983 U	1.53	0.983 U	2.46 J	0.983 U
1,3-Butadiene	TO-15	NS	$\mu g/m^3$	0.442 U	0.442 U	0.442 U	0.442 U	0.699	0.442 UJ	0.442 U
1,3-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 UJ	1.2 U
1,4-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.89	1.2 U	1.2 U	1.2 U	1.79	1.2 UJ	1.2 U
1,4-Dioxane	TO-15	NS	$\mu g/m^3$	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 UJ	0.721 U
2,2,4-Trimethylpentane	TO-15	NS	$\mu g/m^3$	0.995	0.934 U	0.934 U	0.934 U	0.934 U	0.934 UJ	0.934 U
2-Butanone	TO-15	NS	$\mu g/m^3$	2.47	2.82	5.07	3.86	5.1	1.73 J	1.47 U
2-Hexanone	TO-15	NS	$\mu g/m^3$	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 UJ	0.82 U
3-Chloropropene	TO-15	NS	$\mu g/m^3$	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 UJ	0.626 U
4-Ethyltoluene	TO-15	NS	$\mu g/m^3$	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	1.88 J	0.983 U
4-Methyl-2-pentanone	TO-15	NS	$\mu g/m^3$	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 UJ	2.05 U
Acetone	TO-15	NS	$\mu g/m^3$	86.2 J	51.3 J	76 J	36.1 J	76 J	45.4 J	17.2
Benzene	TO-15	NS	$\mu g/m^3$	1.39	1.24	1.23	1.17	1.52	1.33 J	0.642
Benzyl chloride	TO-15	NS	$\mu g/m^3$	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 UJ	1.04 U
Bromodichloromethane	TO-15	NS	$\mu g/m^3$	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 UJ	1.34 U
Bromoform	TO-15	NS	$\mu g/m^3$	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 UJ	2.07 U
Bromomethane	TO-15	NS	$\mu g/m^3$	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 UJ	0.777 U
Carbon disulfide	TO-15	NS	$\mu g/m^3$	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 UJ	0.623 U
Chlorobenzene	TO-15	NS	$\mu g/m^3$	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 UJ	0.921 U
Chloroethane	TO-15	NS	$\mu g/m^3$	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 UJ	0.528 U
Chloroform	TO-15	NS	$\mu g/m^3$	2.9	2.19	2.83	2.96	1.76	2.91 J	0.977 U
Chloromethane	TO-15	NS	$\mu g/m^3$	1.47	1.43	1.6	1.27	1.73	1.42 J	1.07
cis-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 UJ	0.908 U
Cyclohexane	TO-15	NS	$\mu g/m^3$	0.688 U	0.688 U	0.688 U	0.688 U	1.06	0.688 J	0.688 U
Dibromochloromethane	TO-15	NS	$\mu g/m^3$	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ	1.7 U
Dichlorodifluoromethane	TO-15	NS	$\mu g/m^3$	2.09	2.16	2.13	1.99	2.16	1.99 J	1.93
Ethyl Acetate	TO-15	NS	$\mu g/m^3$	5.59	6.63	12.3	6.05	4.5	1.8 UJ	1.8 U

Table 5. RI Phase 1 Air Sample Results

		Sample Number:		IA18-16	IA18-17	IA18-19	IA18-20	IA18-21	IA18-22	IA18-58
		Sample Location:		Apartment C-5	Apartment C-6	Apartment C-8	Apartment C-9	Apartment C-11	Storage Area	58 North 6th Street
		Floor:		2nd	2nd	2nd	2nd	2nd	2nd	1st
		Collection Period:		24-hour	24-hour	24-hour	24-hour	24-hour	24-hour	8-hour
		Sample End Date:		3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/28/2018
		Lab Sample ID:		L1810844-16	L1810844-17	L1810844-18	L1810844-19	L1810844-20	L1810844-24	L1810844-25
Parameter	Analytical Method	NYSDOH AGV	Units							
Ethyl Alcohol	TO-15	NS	µg/m^3	707	545	2340	1150	1070	300 J	25.8
Ethylbenzene	TO-15	NS	µg/m^3	1.42	1.26	1.03	1.16	1.44	2.41 J	0.869 U
Heptane	TO-15	NS	µg/m^3	2.2	1.89	2.51	0.848	4.51	1.25 J	1.59
Hexachlorobutadiene	TO-15	NS	µg/m^3	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 UJ	2.13 U
iso-Propyl Alcohol	TO-15	NS	µg/m^3	70.8 J	62.9 J	34.7 J	23 J	41.5 J	31.2 J	2.7 J
Methyl tert butyl ether	TO-15	NS	µg/m^3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 UJ	0.721 U
Methylene chloride	TO-15	60	µg/m^3	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 UJ	1.74 U
n-Hexane	TO-15	NS	µg/m^3	1.76	1.2	0.93	1.2	0.948	2.01 J	0.705 U
o-Xylene	TO-15	NS	µg/m^3	1.68	1.4	1.2	1.39	1.46	3.35 J	0.869 U
p/m-Xylene	TO-15	NS	µg/m^3	5.04	4.27	3.56	4.05	4.78	10.1 J	1.86
Styrene	TO-15	NS	µg/m^3	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 UJ	0.852 U
tert-Butyl Alcohol	TO-15	NS	µg/m^3	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 UJ	1.52 U
Tetrahydrofuran	TO-15	NS	µg/m^3	1.47 U	1.49	3.78	3.6 J	1.47 U	1.47 UJ	1.47 U
Toluene	TO-15	NS	µg/m^3	3.99	7.31	4.9	4.26	5.5	3.15 J	1.18
trans-1,2-Dichloroethene	TO-15	NS	µg/m^3	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 UJ	0.793 U
trans-1,3-Dichloropropene	TO-15	NS	µg/m^3	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 UJ	0.908 U
Trichlorofluoromethane	TO-15	NS	µg/m^3	1.35	1.21	1.12 U	1.12 U	1.56	1.13 J	1.12 U
Vinyl bromide	TO-15	NS	µg/m^3	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 UJ	0.874 U
1,1,1-Trichloroethane	TO-15-SIM	NS	µg/m^3	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 UJ	0.109 U
1,1-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 UJ	0.079 U
Carbon tetrachloride	TO-15-SIM	NS	µg/m^3	0.484	0.51	0.478	0.447	0.434	0.44 J	0.44
cis-1,2-Dichloroethene	TO-15-SIM	NS	µg/m^3	0.107	0.079 U	0.079 U	0.194	0.079 U	0.135 J	0.218
Tetrachloroethene	TO-15-SIM	30	µg/m^3	8.21	6.31	4.05	7.39	5.23	6.29 J	***51.9***
Trichloroethene	TO-15-SIM	2	µg/m^3	0.129	0.107 U	0.107 U	0.167	0.107 U	0.14 J	0.425
Vinyl chloride	TO-15-SIM	NS	µg/m^3	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 UJ	0.051 U

Notes:

J = estimated value
NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Results exceeding NYSDOH AGVs are in bold and italicized.

Table 6. October 2019 Air Sample Results for 58 North 6th Street

			Sample Number:	IA19-58-01	IA19-58-02	IA19-58-03	IA19-58-04	IA19-58-05	IA19-58-DUP	OA19-58-01
			Sample Location:	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street Outdoor Patio
			Floor:	Front Basement	Back Basement	1st	2nd	3rd	1st	2nd
			Collection Period:	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour
			Sample End Date:	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019
			Lab Sample ID:	L1948939-01	L1948939-02	L1948939-03	L1948939-04	L1948939-05	L1948939-06	L1948939-07
Parameter	Analytical Method	NYSDOH AGV	Units							
1,1,2,2-Tetrachloroethane	TO-15	NS	$\mu g/m^3$	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
1,1,2-Trichloroethane	TO-15	NS	$\mu g/m^3$	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
1,1-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2,4-Trichlorobenzene	TO-15	NS	$\mu g/m^3$	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	4.15	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,2-Dibromoethane	TO-15	NS	$\mu g/m^3$	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	TO-15	NS	$\mu g/m^3$	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2-Dichloropropane	TO-15	NS	$\mu g/m^3$	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
1,3,5-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	1.72	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,3-Butadiene	TO-15	NS	$\mu g/m^3$	1.05	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	TO-15	NS	$\mu g/m^3$	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
2,2,4-Trimethylpentane	TO-15	NS	$\mu g/m^3$	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U
2-Butanone	TO-15	NS	$\mu g/m^3$	2.19	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U
2-Hexanone	TO-15	NS	$\mu g/m^3$	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
3-Chloropropene	TO-15	NS	$\mu g/m^3$	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ	0.626 UJ
4-Ethyltoluene	TO-15	NS	$\mu g/m^3$	1.62	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
4-Methyl-2-pentanone	TO-15	NS	$\mu g/m^3$	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
Acetone	TO-15	NS	$\mu g/m^3$	18.2	8.6	7.46	9.98	24.2	7.1	4.13
Benzene	TO-15	NS	$\mu g/m^3$	0.639 U	0.639 U	0.639 U	0.639 U	0.639 U	0.639 U	0.639 U
Benzyl chloride	TO-15	NS	$\mu g/m^3$	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
Bromodichloromethane	TO-15	NS	$\mu g/m^3$	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U
Bromoform	TO-15	NS	$\mu g/m^3$	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
Bromomethane	TO-15	NS	$\mu g/m^3$	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U
Carbon disulfide	TO-15	NS	$\mu g/m^3$	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Chlorobenzene	TO-15	NS	$\mu g/m^3$	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Chloroethane	TO-15	NS	$\mu g/m^3$	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Chloroform	TO-15	NS	$\mu g/m^3$	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U
Chloromethane	TO-15	NS	$\mu g/m^3$	1.06	1.12	1.13	0.954	1.12	1.05	0.921
cis-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
Cyclohexane	TO-15	NS	$\mu g/m^3$	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane	TO-15	NS	$\mu g/m^3$	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	TO-15	NS	$\mu g/m^3$	1.47	1.43	1.64	1.48	1.54	1.73	1.52
Ethanol	TO-15	NS	$\mu g/m^3$	57.3 J	26.2 J	25.8 J	32.2 J	173 J	26.2 J	17.1 J

Table 6. October 2019 Air Sample Results for 58 North 6th Street

			Sample Number:	IA19-58-01	IA19-58-02	IA19-58-03	IA19-58-04	IA19-58-05	IA19-58-DUP	OA19-58-01
			Sample Location:	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street	58 North 6th Street Outdoor Patio
			Floor:	Front Basement	Back Basement	1st	2nd	3rd	1st	2nd
			Collection Period:	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour	8-hour
			Sample End Date:	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019	10/17/2019
			Lab Sample ID:	L1948939-01	L1948939-02	L1948939-03	L1948939-04	L1948939-05	L1948939-06	L1948939-07
Parameter	Analytical Method	NYSDOH AGV	Units							
Ethyl Acetate	TO-15	NS	µg/m^3	1.82	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Ethylbenzene	TO-15	NS	µg/m^3	0.938	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U
Freon-113	TO-15	NS	µg/m^3	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
Freon-114	TO-15	NS	µg/m^3	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Heptane	TO-15	NS	µg/m^3	2.6	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Hexachlorobutadiene	TO-15	NS	µg/m^3	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
Isopropanol	TO-15	NS	µg/m^3	8.38	6.96	4.15	7.79	543	4.72	1.23 U
Methyl tert butyl ether	TO-15	NS	µg/m^3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Methylene chloride	TO-15	60	µg/m^3	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
n-Hexane	TO-15	NS	µg/m^3	0.705 U	0.705 U	0.705 U	0.775	0.705 U	0.705 U	0.705 U
o-Xylene	TO-15	NS	µg/m^3	1.27	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U	0.869 U
p/m-Xylene	TO-15	NS	µg/m^3	3.32	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
Styrene	TO-15	NS	µg/m^3	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U
Tertiary butyl Alcohol	TO-15	NS	µg/m^3	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U	1.52 U
Tetrahydrofuran	TO-15	NS	µg/m^3	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U
Toluene	TO-15	NS	µg/m^3	2.46	1.07	0.961	1.3	0.946	0.938	0.754 U
trans-1,2-Dichloroethene	TO-15	NS	µg/m^3	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
trans-1,3-Dichloropropene	TO-15	NS	µg/m^3	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
Trichlorofluoromethane	TO-15	NS	µg/m^3	1.13	5.42	1.38	1.12 U	1.16	1.28	1.12 U
Vinyl bromide	TO-15	NS	µg/m^3	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U
1,1,1-Trichloroethane	TO15-SIM	NS	µg/m^3	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
1,1-Dichloroethene	TO15-SIM	NS	µg/m^3	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U	0.079 U
Carbon tetrachloride	TO15-SIM	NS	µg/m^3	0.365	0.352	0.377	0.465	0.327	0.39	0.421
cis-1,2-Dichloroethene	TO15-SIM	NS	µg/m^3	1.73	0.115	0.103	0.079	0.079 U	0.099	0.079 U
Tetrachloroethene	TO15-SIM	30	µg/m^3	***216***	18.1	14	12.1	5.9	14	0.136 U
Trichloroethene	TO15-SIM	2	µg/m^3	***2.27***	0.387	0.167	0.15	0.107 U	0.172	0.107 U
Vinyl chloride	TO15-SIM	NS	µg/m^3	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U

Notes:

J = estimated value
NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
U = analyzed but not detected
UJ = estimated but not detected, reporting limit shown

Results exceeding NYSDOH AGVs are in bold and italicized.

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

			Location:	OA22-01	OA22-02	IA22-01	IA22-02	IA22-03	IA22-04	IA22-05	IA22-06	IA22-07	IA22-08
			Sample Location:	Sidewalk	Sidewalk	HigherDOSE	HigherDOSE	Vacant	Blossom	Bathroom	Designers Collab	Office area	Hallway near elevator
			Floor:	Outside	Outside	1	1	1	1	1	1	1	1
			Collection Period:	8-hr	24-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr
			Sample Date:	3/23/2022	3/24/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022
			Lab Sample ID:	L2215527-11	L2215527-12	L2215527-01	L2215527-02	L2215527-03	L2215527-04	L2215527-05	L2215527-06	L2215527-07	L2215527-08
Parameter	Analytical Method	NYSDOH AGV	Units										
1,1,2,2-Tetrachloroethane	TO-15	NS	$\mu g/m^3$	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37
1,1,2-Trichloroethane	TO-15	NS	$\mu g/m^3$	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09
1,1-Dichloroethane	TO-15	NS	$\mu g/m^3$	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809
1,2,4-Trichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48
1,2,4-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	1.75
1,2-Dibromoethane	TO-15	NS	$\mu g/m^3$	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dichloroethane	TO-15	NS	$\mu g/m^3$	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809
1,2-Dichloropropane	TO-15	NS	$\mu g/m^3$	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924
1,3,5-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983
1,3-Butadiene	TO-15	NS	$\mu g/m^3$	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442
1,3-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,4-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,4-Dioxane	TO-15	NS	$\mu g/m^3$	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721
2,2,4-Trimethylpentane	TO-15	NS	$\mu g/m^3$	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934
2-Butanone	TO-15	NS	$\mu g/m^3$	<1.47	<1.47	5.9	5.07	1.78	1.66	2.25	3.21	3.57	1.73
2-Hexanone	TO-15	NS	$\mu g/m^3$	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820
3-Chloropropene	TO-15	NS	$\mu g/m^3$	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626
4-Ethyltoluene	TO-15	NS	$\mu g/m^3$	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983
4-Methyl-2-pentanone	TO-15	NS	$\mu g/m^3$	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05
Acetone	TO-15	NS	$\mu g/m^3$	9.34	2.97	22.2	47.5	16.2	22.1	20.9	20.2	19.1	13
Benzene	TO-15	NS	$\mu g/m^3$	0.783	0.639	<0.639	<0.639	0.658	0.728	0.716	<0.639	<0.639	0.751
Benzyl chloride	TO-15	NS	$\mu g/m^3$	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04
Bromodichloromethane	TO-15	NS	$\mu g/m^3$	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34
Bromoform	TO-15	NS	$\mu g/m^3$	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07
Bromomethane	TO-15	NS	$\mu g/m^3$	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777
Carbon disulfide	TO-15	NS	$\mu g/m^3$	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623
Chlorobenzene	TO-15	NS	$\mu g/m^3$	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921
Chloroethane	TO-15	NS	$\mu g/m^3$	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528
Chloroform	TO-15	NS	$\mu g/m^3$	<0.977	<0.977	<0.977	<0.977	<0.977	1.03	1.55	<0.977	<0.977	<0.977
Chloromethane	TO-15	NS	$\mu g/m^3$	1.2	1.26	1.66	1.86	1.45	1.6	1.58	1.51	1.44	1.39
cis-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
Cyclohexane	TO-15	NS	$\mu g/m^3$	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688
Dibromochloromethane	TO-15	NS	$\mu g/m^3$	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

			Location:	OA22-01	OA22-02	IA22-01	IA22-02	IA22-03	IA22-04	IA22-05	IA22-06	IA22-07	IA22-08
			Sample Location:	Sidewalk	Sidewalk	HigherDOSE	HigherDOSE	Vacant	Blossom	Bathroom	Designers Collab	Office area	Hallway near elevator
			Floor:	Outside	Outside	1	1	1	1	1	1	1	1
			Collection Period:	8-hr	24-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr	8-hr
			Sample Date:	3/23/2022	3/24/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/23/2022
			Lab Sample ID:	L2215527-11	L2215527-12	L2215527-01	L2215527-02	L2215527-03	L2215527-04	L2215527-05	L2215527-06	L2215527-07	L2215527-08
Parameter	Analytical Method	NYSDOH AGV	Units										
Dichlorodifluoromethane	TO-15	NS	$\mu g/m^3$	2.3	2.45	2.61	2.39	2.41	2.43	2.55	2.43	2.37	2.36
Ethanol	TO-15	NS	$\mu g/m^3$	19.2	10.9	562	931	222	661	318	285	334	165
Ethyl Acetate	TO-15	NS	$\mu g/m^3$	<1.80	<1.80	<1.80	2.13	<1.80	4.76	2.68	2.3	2.21	<1.80
Ethylbenzene	TO-15	NS	$\mu g/m^3$	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869
Freon-113	TO-15	NS	$\mu g/m^3$	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53
Freon-114	TO-15	NS	$\mu g/m^3$	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40
Heptane	TO-15	NS	$\mu g/m^3$	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820
Hexachlorobutadiene	TO-15	NS	$\mu g/m^3$	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13
Isopropanol	TO-15	NS	$\mu g/m^3$	3.56	2.23	170	1130	76.9	371	214	142	270	56.5
Methyl tert butyl ether	TO-15	NS	$\mu g/m^3$	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721
Methylene chloride	TO-15	60	$\mu g/m^3$	<1.74	<1.74	***74.7***	11.4	<1.74	13.9	9.31	<1.74	<1.74	<1.74
n-Hexane	TO-15	NS	$\mu g/m^3$	<0.705	<0.705	2.97	0.765	<0.705	1.12	0.768	<0.705	<0.705	<0.705
o-Xylene	TO-15	NS	$\mu g/m^3$	<0.869	<0.869	<0.869	1.13	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869
p/m-Xylene	TO-15	NS	$\mu g/m^3$	<1.74	<1.74	<1.74	2.51	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74
Styrene	TO-15	NS	$\mu g/m^3$	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852
Tertiary butyl Alcohol	TO-15	NS	$\mu g/m^3$	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52
Tetrahydrofuran	TO-15	NS	$\mu g/m^3$	<1.47	<1.47	<1.47	<1.47	<1.47	1.7	1.53	1.64	<1.47	<1.47
Toluene	TO-15	NS	$\mu g/m^3$	1.31	0.837	2.92	4.6	1.52	1.71	2.17	2.1	2.56	1.64
trans-1,2-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793
trans-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
Trichlorofluoromethane	TO-15	NS	$\mu g/m^3$	<1.12	<1.12	1.16	1.41	1.73	2.07	1.54	1.32	1.46	<1.12
Vinyl bromide	TO-15	NS	$\mu g/m^3$	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874
1,1,1-Trichloroethane	TO-15	NS	$\mu g/m^3$	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109
1,1-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
Carbon tetrachloride	TO-15	NS	$\mu g/m^3$	0.472	0.516	0.371	0.415	0.484	0.403	0.465	0.384	0.409	0.459
cis-1,2-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
Tetrachloroethene	TO-15	30	$\mu g/m^3$	0.583	0.393	1.44	7.66	7.8	12.8	6	5.61	5.89	11.7
Trichloroethene	TO-15	2	$\mu g/m^3$	<0.107	<0.107	<0.107	0.226	0.124	0.118	0.15	0.124	<0.107	<0.107
Vinyl chloride	TO-15	NS	$\mu g/m^3$	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051

Notes:

NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
< = analyzed but not detected, reporting limit shown

Data have not undergone data validation and are considered preliminary.
Results exceeding NYSDOH AGVs are in bold and italicized.

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

			Location:	IA22-09	IA22-10	IA22-11	IA22-12	IA22-13	IA22-14	IA22-15	IA22-16	IA22-18	IA22-19	IA22-20
			Sample Location:	SSDS room	Cellar	Hallway near elevator	Center hallway	Apt. C-2	Apt. C-3	Apt. C-4	Apt. C-5	Apt. C-7	Apt. C-8	Apt. C-9/C-10
			Floor:	1	0	2	2	2	2	2	2	2	2	2
			Collection Period:	8-hr	8-hr	8-hr	8-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
			Sample Date:	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022
			Lab Sample ID:	L2215527-09	L2215527-10	L2215527-13	L2215527-14	L2215527-15	L2215527-16	L2215527-17	L2215527-18	L2215527-19	L2215527-20	L2215527-21
Parameter	Analytical Method	NYSDOH AGV	Units											
1,1,2,2-Tetrachloroethane	TO-15	NS	$\mu g/m^3$	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37	<1.37
1,1,2-Trichloroethane	TO-15	NS	$\mu g/m^3$	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09	<1.09
1,1-Dichloroethane	TO-15	NS	$\mu g/m^3$	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809
1,2,4-Trichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48	<1.48
1,2,4-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	1.75	<0.983	0.993	1.44	3.16	1.66	4.12	2.33	1.16	1.79	1.47
1,2-Dibromoethane	TO-15	NS	$\mu g/m^3$	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54
1,2-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dichloroethane	TO-15	NS	$\mu g/m^3$	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809	<0.809
1,2-Dichloropropane	TO-15	NS	$\mu g/m^3$	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924	<0.924
1,3,5-Trimethylbenzene	TO-15	NS	$\mu g/m^3$	<0.983	<0.983	<0.983	<0.983	1.16	<0.983	1.6	<0.983	<0.983	<0.983	<0.983
1,3-Butadiene	TO-15	NS	$\mu g/m^3$	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442	<0.442
1,3-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,4-Dichlorobenzene	TO-15	NS	$\mu g/m^3$	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,4-Dioxane	TO-15	NS	$\mu g/m^3$	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721
2,2,4-Trimethylpentane	TO-15	NS	$\mu g/m^3$	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934	<0.934
2-Butanone	TO-15	NS	$\mu g/m^3$	<1.47	<1.47	<1.47	<1.47	3.57	1.69	1.63	1.69	<1.47	3.04	<1.47
2-Hexanone	TO-15	NS	$\mu g/m^3$	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820	<0.820
3-Chloropropene	TO-15	NS	$\mu g/m^3$	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626	<0.626
4-Ethyltoluene	TO-15	NS	$\mu g/m^3$	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983	<0.983
4-Methyl-2-pentanone	TO-15	NS	$\mu g/m^3$	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05
Acetone	TO-15	NS	$\mu g/m^3$	11.7	5.94	17.5	15.8	34	23	28.3	19.9	17.6	88.4	25.9
Benzene	TO-15	NS	$\mu g/m^3$	<0.639	0.725	<0.639	<0.639	0.655	<0.639	<0.639	<0.639	<0.639	<0.639	<0.639
Benzyl chloride	TO-15	NS	$\mu g/m^3$	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04
Bromodichloromethane	TO-15	NS	$\mu g/m^3$	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34	<1.34
Bromoform	TO-15	NS	$\mu g/m^3$	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07	<2.07
Bromomethane	TO-15	NS	$\mu g/m^3$	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777	<0.777
Carbon disulfide	TO-15	NS	$\mu g/m^3$	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623	<0.623
Chlorobenzene	TO-15	NS	$\mu g/m^3$	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921	<0.921
Chloroethane	TO-15	NS	$\mu g/m^3$	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528	<0.528
Chloroform	TO-15	NS	$\mu g/m^3$	<0.977	3.82	1.42	1.01	1.7	1.13	2.44	1.2	<0.977	2.89	1.29
Chloromethane	TO-15	NS	$\mu g/m^3$	1.37	1.25	1.52	1.57	1.48	1.48	1.44	1.29	1.48	1.52	1.42
cis-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
Cyclohexane	TO-15	NS	$\mu g/m^3$	<0.688	<0.688	<0.688	<0.688	0.85	<0.688	<0.688	<0.688	<0.688	<0.688	<0.688
Dibromochloromethane	TO-15	NS	$\mu g/m^3$	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

			Location:	IA22-09	IA22-10	IA22-11	IA22-12	IA22-13	IA22-14	IA22-15	IA22-16	IA22-18	IA22-19	IA22-20
			Sample Location:	SSDS room	Cellar	Hallway near elevator	Center hallway	Apt. C-2	Apt. C-3	Apt. C-4	Apt. C-5	Apt. C-7	Apt. C-8	Apt. C-9/C-10
			Floor:	1	0	2	2	2	2	2	2	2	2	2
			Collection Period:	8-hr	8-hr	8-hr	8-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
			Sample Date:	3/23/2022	3/23/2022	3/23/2022	3/23/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022	3/24/2022
			Lab Sample ID:	L2215527-09	L2215527-10	L2215527-13	L2215527-14	L2215527-15	L2215527-16	L2215527-17	L2215527-18	L2215527-19	L2215527-20	L2215527-21
Parameter	Analytical Method	NYSDOH AGV	Units											
Dichlorodifluoromethane	TO-15	NS	$\mu g/m^3$	2.3	2.39	2.25	2.29	2.27	2.34	2.16	2.3	2.43	2.86	2.92
Ethanol	TO-15	NS	$\mu g/m^3$	205	16.5	339	315	1040	415	724	298	450	1180	480
Ethyl Acetate	TO-15	NS	$\mu g/m^3$	<1.80	<1.80	<1.80	<1.80	4.94	<1.80	<1.80	10.3	4.29	17.6	5.48
Ethylbenzene	TO-15	NS	$\mu g/m^3$	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869
Freon-113	TO-15	NS	$\mu g/m^3$	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53	<1.53
Freon-114	TO-15	NS	$\mu g/m^3$	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40
Heptane	TO-15	NS	$\mu g/m^3$	<0.820	<0.820	<0.820	<0.820	1.36	<0.820	<0.820	<0.820	<0.820	0.926	<0.820
Hexachlorobutadiene	TO-15	NS	$\mu g/m^3$	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13	<2.13
Isopropanol	TO-15	NS	$\mu g/m^3$	71.5	2.44	70.5	88.2	112	63.9	103	50.9	75.5	322	90.2
Methyl tert butyl ether	TO-15	NS	$\mu g/m^3$	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721	<0.721
Methylene chloride	TO-15	60	$\mu g/m^3$	33.3	7.85	<1.74	2.37	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74
n-Hexane	TO-15	NS	$\mu g/m^3$	1.52	<0.705	<0.705	<0.705	<0.705	<0.705	<0.705	<0.705	<0.705	<0.705	<0.705
o-Xylene	TO-15	NS	$\mu g/m^3$	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869	<0.869
p/m-Xylene	TO-15	NS	$\mu g/m^3$	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74	<1.74
Styrene	TO-15	NS	$\mu g/m^3$	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852	<0.852
Tertiary butyl Alcohol	TO-15	NS	$\mu g/m^3$	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52	<1.52
Tetrahydrofuran	TO-15	NS	$\mu g/m^3$	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47	<1.47
Toluene	TO-15	NS	$\mu g/m^3$	1.44	1.39	1.46	1.37	1.76	1.06	1.39	1.67	1.16	1.98	1.15
trans-1,2-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793	<0.793
trans-1,3-Dichloropropene	TO-15	NS	$\mu g/m^3$	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908	<0.908
Trichlorofluoromethane	TO-15	NS	$\mu g/m^3$	<1.12	<1.12	<1.12	<1.12	<1.12	<1.12	<1.12	<1.12	<1.12	1.4	1.31
Vinyl bromide	TO-15	NS	$\mu g/m^3$	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874	<0.874
1,1,1-Trichloroethane	TO-15	NS	$\mu g/m^3$	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109
1,1-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
Carbon tetrachloride	TO-15	NS	$\mu g/m^3$	0.453	0.44	0.409	0.396	0.491	0.44	0.384	0.453	0.447	0.711	0.51
cis-1,2-Dichloroethene	TO-15	NS	$\mu g/m^3$	<0.079	0.123	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079
Tetrachloroethene	TO-15	30	$\mu g/m^3$	8.88	***47.7***	5.28	7.87	7.59	***32.4***	5.86	20.9	***34.2***	9.43	28.1
Trichloroethene	TO-15	2	$\mu g/m^3$	<0.107	0.586	<0.107	<0.107	<0.107	0.107	<0.107	<0.107	0.107	<0.107	0.14
Vinyl chloride	TO-15	NS	$\mu g/m^3$	<0.051	<0.051	<0.051	<0.051	<0.051	0.072	0.082	<0.051	<0.051	<0.051	<0.051

Notes:

NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
< = analyzed but not detected, reporting limit shown

Data have not undergone data validation and are considered preliminary.
Results exceeding NYSDOH AGVs are in bold and italicized.

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

Location:	IA22-21
Sample Location:	Apt. C-11
Floor:	2
Collection Period:	24-hr
Sample Date:	3/24/2022
Lab Sample ID:	L2215527-22

Parameter	Analytical Method	NYSDOH AGV	Units	
1,1,2,2-Tetrachloroethane	TO-15	NS	µg/m^3	<1.37
1,1,2-Trichloroethane	TO-15	NS	µg/m^3	<1.09
1,1-Dichloroethane	TO-15	NS	µg/m^3	<0.809
1,2,4-Trichlorobenzene	TO-15	NS	µg/m^3	<1.48
1,2,4-Trimethylbenzene	TO-15	NS	µg/m^3	1.45
1,2-Dibromoethane	TO-15	NS	µg/m^3	<1.54
1,2-Dichlorobenzene	TO-15	NS	µg/m^3	<1.20
1,2-Dichloroethane	TO-15	NS	µg/m^3	<0.809
1,2-Dichloropropane	TO-15	NS	µg/m^3	<0.924
1,3,5-Trimethylbenzene	TO-15	NS	µg/m^3	<0.983
1,3-Butadiene	TO-15	NS	µg/m^3	0.781
1,3-Dichlorobenzene	TO-15	NS	µg/m^3	<1.20
1,4-Dichlorobenzene	TO-15	NS	µg/m^3	<1.20
1,4-Dioxane	TO-15	NS	µg/m^3	<0.721
2,2,4-Trimethylpentane	TO-15	NS	µg/m^3	<0.934
2-Butanone	TO-15	NS	µg/m^3	3.75
2-Hexanone	TO-15	NS	µg/m^3	<0.820
3-Chloropropene	TO-15	NS	µg/m^3	<0.626
4-Ethyltoluene	TO-15	NS	µg/m^3	<0.983
4-Methyl-2-pentanone	TO-15	NS	µg/m^3	<2.05
Acetone	TO-15	NS	µg/m^3	66.5
Benzene	TO-15	NS	µg/m^3	1.16
Benzyl chloride	TO-15	NS	µg/m^3	<1.04
Bromodichloromethane	TO-15	NS	µg/m^3	<1.34
Bromoform	TO-15	NS	µg/m^3	<2.07
Bromomethane	TO-15	NS	µg/m^3	<0.777
Carbon disulfide	TO-15	NS	µg/m^3	<0.623
Chlorobenzene	TO-15	NS	µg/m^3	<0.921
Chloroethane	TO-15	NS	µg/m^3	<0.528
Chloroform	TO-15	NS	µg/m^3	1.28
Chloromethane	TO-15	NS	µg/m^3	2.15
cis-1,3-Dichloropropene	TO-15	NS	µg/m^3	<0.908
Cyclohexane	TO-15	NS	µg/m^3	<0.688
Dibromochloromethane	TO-15	NS	µg/m^3	<1.70

Table 7. Preliminary March 2022 Air Sample Results for 135 Kent Avenue

Location:	IA22-21
Sample Location:	Apt. C-11
Floor:	2
Collection Period:	24-hr
Sample Date:	3/24/2022
Lab Sample ID:	L2215527-22

Parameter	Analytical Method	NYSDOH AGV	Units	
Dichlorodifluoromethane	TO-15	NS	µg/m^3	2.86
Ethanol	TO-15	NS	µg/m^3	1190
Ethyl Acetate	TO-15	NS	µg/m^3	20.4
Ethylbenzene	TO-15	NS	µg/m^3	<0.869
Freon-113	TO-15	NS	µg/m^3	<1.53
Freon-114	TO-15	NS	µg/m^3	<1.40
Heptane	TO-15	NS	µg/m^3	2.97
Hexachlorobutadiene	TO-15	NS	µg/m^3	<2.13
Isopropanol	TO-15	NS	µg/m^3	315
Methyl tert butyl ether	TO-15	NS	µg/m^3	<0.721
Methylene chloride	TO-15	60	µg/m^3	<1.74
n-Hexane	TO-15	NS	µg/m^3	<0.705
o-Xylene	TO-15	NS	µg/m^3	0.869
p/m-Xylene	TO-15	NS	µg/m^3	2.32
Styrene	TO-15	NS	µg/m^3	<0.852
Tertiary butyl Alcohol	TO-15	NS	µg/m^3	<1.52
Tetrahydrofuran	TO-15	NS	µg/m^3	<1.47
Toluene	TO-15	NS	µg/m^3	3.66
trans-1,2-Dichloroethene	TO-15	NS	µg/m^3	<0.793
trans-1,3-Dichloropropene	TO-15	NS	µg/m^3	<0.908
Trichlorofluoromethane	TO-15	NS	µg/m^3	1.28
Vinyl bromide	TO-15	NS	µg/m^3	<0.874
1,1,1-Trichloroethane	TO-15	NS	µg/m^3	<0.109
1,1-Dichloroethene	TO-15	NS	µg/m^3	<0.079
Carbon tetrachloride	TO-15	NS	µg/m^3	0.522
cis-1,2-Dichloroethene	TO-15	NS	µg/m^3	<0.079
Tetrachloroethene	TO-15	30	µg/m^3	5.17
Trichloroethene	TO-15	2	µg/m^3	<0.107
Vinyl chloride	TO-15	NS	µg/m^3	<0.051

Notes:

NS = no standard
NYSDOH AGV = New York State Department of Health air guideline value
< = analyzed but not detected, reporting limit shown

Data have not undergone data validation and are considered preliminary.
Results exceeding NYSDOH AGVs are in bold and italicized.

Appendix A

Laboratory Reports

ANALYTICAL REPORT

Lab Number:	L1842348
Client:	Integral Consulting, Inc. 22 Cortlandt Street 16th Floor New York, NY 10007
ATTN:	Keith Brodock
Phone:	(212) 962-4301
Project Name:	KENT AVE
Project Number:	E051
Report Date:	10/29/18

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1842348-01	SVG-01-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:45	10/17/18
L1842348-02	SVG-02-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:42	10/17/18
L1842348-03	SVG-03-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:40	10/17/18
L1842348-04	SVG-11-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:02	10/17/18
L1842348-05	SVG-17-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:05	10/17/18
L1842348-06	SVG-12-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 11:54	10/17/18
L1842348-07	SVG-20-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 11:55	10/17/18
L1842348-08	SVG-04-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:33	10/17/18
L1842348-09	SVG-05-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:34	10/17/18
L1842348-10	SVG-18-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/17/18 11:32	10/17/18
L1842348-11	SVG-15-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:47	10/17/18
L1842348-12	SVG-19-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:07	10/17/18
L1842348-13	SVG-25-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:49	10/17/18
L1842348-14	SVG-14-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 09:34	10/17/18
L1842348-15	SVG-24-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 09:25	10/17/18
L1842348-16	SVG-23-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 09:26	10/17/18
L1842348-17	SVG-22-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 09:29	10/17/18
L1842348-18	SVG-06-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:35	10/17/18
L1842348-19	SVG-07-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:38	10/17/18
L1842348-20	SVG-08-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 10:39	10/17/18
L1842348-21	SVG-10-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:06	10/17/18
L1842348-22	SVG-16-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 12:07	10/17/18
L1842348-23	SVG-DUP01-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/16/18 00:00	10/17/18
L1842348-24	SVG-13-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/17/18 09:39	10/17/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1842348-25	SVG-21-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/17/18 09:40	10/17/18
L1842348-26	SVG-09-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/17/18 11:45	10/17/18
L1842348-27	SVG-DUP2-18	SOIL_VAPOR	135 KENT AVE BROOKLYN, NY	10/17/18 00:00	10/17/18
L1842348-30	UNUSED CAN 2373	AIR	135 KENT AVE BROOKLYN, NY		10/17/18

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: KENT AVE **Lab Number:** L1842348
Project Number: E051 **Report Date:** 10/29/18

Case Narrative (continued)

Report Submission
This report replaces the one previously issued on October 26, 2018. The report has been revised to correct the sample IDs for samples L1842348-11 through L1842348-15.

Volatile Organics in Air
Canisters were released from the laboratory on October 15, 2018. The canister certification results are provided as an addendum.

L1842348-02, -04, -05, -07 through -11: The samples were re-analyzed on dilution in order to quantify the results within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.
L1842348-02, -03 and -06: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1842348-12 through -15: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1842348-17: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1842348-15, -18 & -19: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1842348-21 through -24: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1842348-21, -24, & -25: results for Acetone should be considered estimated due to co-elution with a non-

Project Name: KENT AVE **Lab Number:** L1842348
Project Number: E051 **Report Date:** 10/29/18

Case Narrative (continued)

target peak.

L1842348-26: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

WG1172333-5: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1172378-3 LCS recoveries for bromoform (131%), 1,2,4-trichlorobenzene (139%) and hexachlorobutadiene (134%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

Sample Receipt
The following Flow Controllers are listed twice on the chain of custody form twice;
FC#0596 listed for -01 and -03
FC#0655 listed for -02 and -10
FC#0511 listed for -11 and -23

Additionally there were 4 flow controllers that were not listed on the chain of custody form: #0670, 0341, 0995, 01103.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 10/29/18

AIR

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-01
Client ID: SVG-01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 20:01
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.463	0.200	--	2.29	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	7.09	5.00	--	13.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	230	1.00	--	546	2.38	--		1
Trichlorofluoromethane	0.228	0.200	--	1.28	1.12	--		1
iso-Propyl Alcohol	5.45	0.500	--	13.4	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	9.73	0.500	--	29.5	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	16.1	0.500	--	47.5	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-01
Client ID: SVG-01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.813	0.500	--	3.33	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.480	0.200	--	1.81	0.754	--		1
2-Hexanone	8.54	0.200	--	35.0	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	6.96	0.200	--	47.2	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.226	0.200	--	0.982	0.869	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-01
Client ID: SVG-01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.01	0.400	--	4.39	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.405	0.200	--	1.76	0.869	--		1
4-Ethyltoluene	0.201	0.200	--	0.988	0.983	--		1
1,3,5-Trimethylbenzene	0.205	0.200	--	1.01	0.983	--		1
1,2,4-Trimethylbenzene	0.847	0.200	--	4.16	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	88		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-02 D
Client ID: SVG-02-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:42
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 20:34
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.667	--	ND	3.30	--		3.333
Chloromethane	ND	0.667	--	ND	1.38	--		3.333
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.667	--	ND	4.66	--		3.333
Vinyl chloride	ND	0.667	--	ND	1.71	--		3.333
1,3-Butadiene	ND	0.667	--	ND	1.48	--		3.333
Bromomethane	ND	0.667	--	ND	2.59	--		3.333
Chloroethane	ND	0.667	--	ND	1.76	--		3.333
Ethyl Alcohol	ND	16.7	--	ND	31.5	--		3.333
Vinyl bromide	ND	0.667	--	ND	2.92	--		3.333
Acetone	13.5	3.33	--	32.1	7.91	--		3.333
Trichlorofluoromethane	0.863	0.667	--	4.85	3.75	--		3.333
iso-Propyl Alcohol	ND	1.67	--	ND	4.10	--		3.333
1,1-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
tert-Butyl Alcohol	ND	1.67	--	ND	5.06	--		3.333
Methylene chloride	ND	1.67	--	ND	5.80	--		3.333
3-Chloropropene	ND	0.667	--	ND	2.09	--		3.333
Carbon disulfide	0.933	0.667	--	2.91	2.08	--		3.333
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.667	--	ND	5.11	--		3.333
trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
1,1-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
Methyl tert butyl ether	ND	0.667	--	ND	2.40	--		3.333
2-Butanone	ND	1.67	--	ND	4.93	--		3.333
cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-02 D
Client ID: SVG-02-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:42
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.67	--	ND	6.02	--		3.333
Chloroform	8.92	0.667	--	43.6	3.26	--		3.333
Tetrahydrofuran	ND	1.67	--	ND	4.93	--		3.333
1,2-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
n-Hexane	ND	0.667	--	ND	2.35	--		3.333
1,1,1-Trichloroethane	0.976	0.667	--	5.33	3.64	--		3.333
Benzene	ND	0.667	--	ND	2.13	--		3.333
Carbon tetrachloride	245	0.667	--	1540	4.20	--		3.333
Cyclohexane	ND	0.667	--	ND	2.30	--		3.333
1,2-Dichloropropane	ND	0.667	--	ND	3.08	--		3.333
Bromodichloromethane	ND	0.667	--	ND	4.47	--		3.333
1,4-Dioxane	ND	0.667	--	ND	2.40	--		3.333
Trichloroethene	5.47	0.667	--	29.4	3.58	--		3.333
2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--		3.333
Heptane	ND	0.667	--	ND	2.73	--		3.333
cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
4-Methyl-2-pentanone	ND	1.67	--	ND	6.84	--		3.333
trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Toluene	ND	0.667	--	ND	2.51	--		3.333
2-Hexanone	ND	0.667	--	ND	2.73	--		3.333
Dibromochloromethane	ND	0.667	--	ND	5.68	--		3.333
1,2-Dibromoethane	ND	0.667	--	ND	5.13	--		3.333
Tetrachloroethene	358	0.667	--	2430	4.52	--	E	3.333
Chlorobenzene	ND	0.667	--	ND	3.07	--		3.333
Ethylbenzene	ND	0.667	--	ND	2.90	--		3.333

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-02 D
Client ID: SVG-02-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:42
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	1.33	--	ND	5.78	--		3.333
Bromoform	ND	0.667	--	ND	6.90	--		3.333
Styrene	ND	0.667	--	ND	2.84	--		3.333
1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--		3.333
o-Xylene	ND	0.667	--	ND	2.90	--		3.333
4-Ethyltoluene	ND	0.667	--	ND	3.28	--		3.333
1,3,5-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
1,2,4-Trimethylbenzene	0.713	0.667	--	3.51	3.28	--		3.333
Benzyl chloride	ND	0.667	--	ND	3.45	--		3.333
1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--		3.333
Hexachlorobutadiene	ND	0.667	--	ND	7.11	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	89		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-02 D2
Client ID: SVG-02-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:42
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 07:58
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	421	2.00	--	2850	13.6	--		10

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	89		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-03 D
Client ID: SVG-03-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 21:38
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.448	0.333	--	2.22	1.65	--		1.667
Chloromethane	ND	0.333	--	ND	0.688	--		1.667
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.333	--	ND	2.33	--		1.667
Vinyl chloride	ND	0.333	--	ND	0.851	--		1.667
1,3-Butadiene	ND	0.333	--	ND	0.737	--		1.667
Bromomethane	ND	0.333	--	ND	1.29	--		1.667
Chloroethane	ND	0.333	--	ND	0.879	--		1.667
Ethyl Alcohol	ND	8.34	--	ND	15.7	--		1.667
Vinyl bromide	ND	0.333	--	ND	1.46	--		1.667
Acetone	175	1.67	--	416	3.97	--		1.667
Trichlorofluoromethane	ND	0.333	--	ND	1.87	--		1.667
iso-Propyl Alcohol	ND	0.834	--	ND	2.05	--		1.667
1,1-Dichloroethene	ND	0.333	--	ND	1.32	--		1.667
tert-Butyl Alcohol	1.86	0.834	--	5.64	2.53	--		1.667
Methylene chloride	ND	0.834	--	ND	2.90	--		1.667
3-Chloropropene	ND	0.333	--	ND	1.04	--		1.667
Carbon disulfide	ND	0.333	--	ND	1.04	--		1.667
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.333	--	ND	2.55	--		1.667
trans-1,2-Dichloroethene	ND	0.333	--	ND	1.32	--		1.667
1,1-Dichloroethane	ND	0.333	--	ND	1.35	--		1.667
Methyl tert butyl ether	ND	0.333	--	ND	1.20	--		1.667
2-Butanone	11.6	0.834	--	34.2	2.46	--		1.667
cis-1,2-Dichloroethene	2.07	0.333	--	8.21	1.32	--		1.667

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-03 D
Client ID: SVG-03-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.834	--	ND	3.01	--		1.667
Chloroform	0.917	0.333	--	4.48	1.63	--		1.667
Tetrahydrofuran	ND	0.834	--	ND	2.46	--		1.667
1,2-Dichloroethane	ND	0.333	--	ND	1.35	--		1.667
n-Hexane	ND	0.333	--	ND	1.17	--		1.667
1,1,1-Trichloroethane	ND	0.333	--	ND	1.82	--		1.667
Benzene	0.385	0.333	--	1.23	1.06	--		1.667
Carbon tetrachloride	ND	0.333	--	ND	2.09	--		1.667
Cyclohexane	ND	0.333	--	ND	1.15	--		1.667
1,2-Dichloropropane	ND	0.333	--	ND	1.54	--		1.667
Bromodichloromethane	ND	0.333	--	ND	2.23	--		1.667
1,4-Dioxane	ND	0.333	--	ND	1.20	--		1.667
Trichloroethene	7.73	0.333	--	41.5	1.79	--		1.667
2,2,4-Trimethylpentane	ND	0.333	--	ND	1.56	--		1.667
Heptane	ND	0.333	--	ND	1.36	--		1.667
cis-1,3-Dichloropropene	ND	0.333	--	ND	1.51	--		1.667
4-Methyl-2-pentanone	ND	0.834	--	ND	3.42	--		1.667
trans-1,3-Dichloropropene	ND	0.333	--	ND	1.51	--		1.667
1,1,2-Trichloroethane	ND	0.333	--	ND	1.82	--		1.667
Toluene	0.957	0.333	--	3.61	1.25	--		1.667
2-Hexanone	2.78	0.333	--	11.4	1.36	--		1.667
Dibromochloromethane	ND	0.333	--	ND	2.84	--		1.667
1,2-Dibromoethane	ND	0.333	--	ND	2.56	--		1.667
Tetrachloroethene	145	0.333	--	983	2.26	--		1.667
Chlorobenzene	ND	0.333	--	ND	1.53	--		1.667
Ethylbenzene	ND	0.333	--	ND	1.45	--		1.667

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-03 D
Client ID: SVG-03-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.13	0.667	--	4.91	2.90	--		1.667
Bromoform	ND	0.333	--	ND	3.44	--		1.667
Styrene	ND	0.333	--	ND	1.42	--		1.667
1,1,2,2-Tetrachloroethane	ND	0.333	--	ND	2.29	--		1.667
o-Xylene	0.478	0.333	--	2.08	1.45	--		1.667
4-Ethyltoluene	ND	0.333	--	ND	1.64	--		1.667
1,3,5-Trimethylbenzene	ND	0.333	--	ND	1.64	--		1.667
1,2,4-Trimethylbenzene	0.917	0.333	--	4.51	1.64	--		1.667
Benzyl chloride	ND	0.333	--	ND	1.72	--		1.667
1,3-Dichlorobenzene	ND	0.333	--	ND	2.00	--		1.667
1,4-Dichlorobenzene	ND	0.333	--	ND	2.00	--		1.667
1,2-Dichlorobenzene	ND	0.333	--	ND	2.00	--		1.667
1,2,4-Trichlorobenzene	ND	0.333	--	ND	2.47	--		1.667
Hexachlorobutadiene	ND	0.333	--	ND	3.55	--		1.667

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	89		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-04 D
Client ID: SVG-11-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:02
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 22:10
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	27.8	--	ND	137	--		138.9
Chloromethane	ND	27.8	--	ND	57.4	--		138.9
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	27.8	--	ND	194	--		138.9
Vinyl chloride	ND	27.8	--	ND	71.1	--		138.9
1,3-Butadiene	ND	27.8	--	ND	61.5	--		138.9
Bromomethane	ND	27.8	--	ND	108	--		138.9
Chloroethane	ND	27.8	--	ND	73.4	--		138.9
Ethyl Alcohol	ND	694.	--	ND	1310	--		138.9
Vinyl bromide	ND	27.8	--	ND	122	--		138.9
Acetone	ND	139	--	ND	330	--		138.9
Trichlorofluoromethane	ND	27.8	--	ND	156	--		138.9
iso-Propyl Alcohol	ND	69.4	--	ND	171	--		138.9
1,1-Dichloroethene	ND	27.8	--	ND	110	--		138.9
tert-Butyl Alcohol	ND	69.4	--	ND	210	--		138.9
Methylene chloride	ND	69.4	--	ND	241	--		138.9
3-Chloropropene	ND	27.8	--	ND	87.0	--		138.9
Carbon disulfide	ND	27.8	--	ND	86.6	--		138.9
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	27.8	--	ND	213	--		138.9
trans-1,2-Dichloroethene	ND	27.8	--	ND	110	--		138.9
1,1-Dichloroethane	ND	27.8	--	ND	113	--		138.9
Methyl tert butyl ether	ND	27.8	--	ND	100	--		138.9
2-Butanone	ND	69.4	--	ND	205	--		138.9
cis-1,2-Dichloroethene	ND	27.8	--	ND	110	--		138.9

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-04 D
Client ID: SVG-11-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:02
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	69.4	--	ND	250	--		138.9
Chloroform	ND	27.8	--	ND	136	--		138.9
Tetrahydrofuran	ND	69.4	--	ND	205	--		138.9
1,2-Dichloroethane	ND	27.8	--	ND	113	--		138.9
n-Hexane	ND	27.8	--	ND	98.0	--		138.9
1,1,1-Trichloroethane	ND	27.8	--	ND	152	--		138.9
Benzene	ND	27.8	--	ND	88.8	--		138.9
Carbon tetrachloride	ND	27.8	--	ND	175	--		138.9
Cyclohexane	ND	27.8	--	ND	95.7	--		138.9
1,2-Dichloropropane	ND	27.8	--	ND	128	--		138.9
Bromodichloromethane	ND	27.8	--	ND	186	--		138.9
1,4-Dioxane	ND	27.8	--	ND	100	--		138.9
Trichloroethene	ND	27.8	--	ND	149	--		138.9
2,2,4-Trimethylpentane	ND	27.8	--	ND	130	--		138.9
Heptane	ND	27.8	--	ND	114	--		138.9
cis-1,3-Dichloropropene	ND	27.8	--	ND	126	--		138.9
4-Methyl-2-pentanone	ND	69.4	--	ND	284	--		138.9
trans-1,3-Dichloropropene	ND	27.8	--	ND	126	--		138.9
1,1,2-Trichloroethane	ND	27.8	--	ND	152	--		138.9
Toluene	ND	27.8	--	ND	105	--		138.9
2-Hexanone	ND	27.8	--	ND	114	--		138.9
Dibromochloromethane	ND	27.8	--	ND	237	--		138.9
1,2-Dibromoethane	ND	27.8	--	ND	214	--		138.9
Tetrachloroethene	23300	27.8	--	158000	189	--	E	138.9
Chlorobenzene	ND	27.8	--	ND	128	--		138.9
Ethylbenzene	ND	27.8	--	ND	121	--		138.9

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-04 D
Client ID: SVG-11-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:02
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	55.6	--	ND	242	--		138.9
Bromoform	ND	27.8	--	ND	287	--		138.9
Styrene	ND	27.8	--	ND	118	--		138.9
1,1,2,2-Tetrachloroethane	ND	27.8	--	ND	191	--		138.9
o-Xylene	ND	27.8	--	ND	121	--		138.9
4-Ethyltoluene	ND	27.8	--	ND	137	--		138.9
1,3,5-Trimethylbenzene	ND	27.8	--	ND	137	--		138.9
1,2,4-Trimethylbenzene	ND	27.8	--	ND	137	--		138.9
Benzyl chloride	ND	27.8	--	ND	144	--		138.9
1,3-Dichlorobenzene	ND	27.8	--	ND	167	--		138.9
1,4-Dichlorobenzene	ND	27.8	--	ND	167	--		138.9
1,2-Dichlorobenzene	ND	27.8	--	ND	167	--		138.9
1,2,4-Trichlorobenzene	ND	27.8	--	ND	206	--		138.9
Hexachlorobutadiene	ND	27.8	--	ND	297	--		138.9

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	94		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-04 D2
Client ID: SVG-11-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:02
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 09:02
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	31300	111	--	212000	753	--		555.6

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	78		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	80		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-05 D
Client ID: SVG-17-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:05
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 22:42
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	11.1	--	ND	54.9	--		55.56
Chloromethane	ND	11.1	--	ND	22.9	--		55.56
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	11.1	--	ND	77.6	--		55.56
Vinyl chloride	ND	11.1	--	ND	28.4	--		55.56
1,3-Butadiene	ND	11.1	--	ND	24.6	--		55.56
Bromomethane	ND	11.1	--	ND	43.1	--		55.56
Chloroethane	ND	11.1	--	ND	29.3	--		55.56
Ethyl Alcohol	ND	278	--	ND	524	--		55.56
Vinyl bromide	ND	11.1	--	ND	48.5	--		55.56
Acetone	ND	55.6	--	ND	132	--		55.56
Trichlorofluoromethane	ND	11.1	--	ND	62.4	--		55.56
iso-Propyl Alcohol	ND	27.8	--	ND	68.3	--		55.56
1,1-Dichloroethene	ND	11.1	--	ND	44.0	--		55.56
tert-Butyl Alcohol	ND	27.8	--	ND	84.3	--		55.56
Methylene chloride	ND	27.8	--	ND	96.6	--		55.56
3-Chloropropene	ND	11.1	--	ND	34.7	--		55.56
Carbon disulfide	ND	11.1	--	ND	34.6	--		55.56
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11.1	--	ND	85.1	--		55.56
trans-1,2-Dichloroethene	ND	11.1	--	ND	44.0	--		55.56
1,1-Dichloroethane	ND	11.1	--	ND	44.9	--		55.56
Methyl tert butyl ether	ND	11.1	--	ND	40.0	--		55.56
2-Butanone	ND	27.8	--	ND	82.0	--		55.56
cis-1,2-Dichloroethene	ND	11.1	--	ND	44.0	--		55.56

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-05 D
Client ID: SVG-17-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:05
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	27.8	--	ND	100	--		55.56
Chloroform	16.4	11.1	--	80.1	54.2	--		55.56
Tetrahydrofuran	ND	27.8	--	ND	82.0	--		55.56
1,2-Dichloroethane	ND	11.1	--	ND	44.9	--		55.56
n-Hexane	ND	11.1	--	ND	39.1	--		55.56
1,1,1-Trichloroethane	ND	11.1	--	ND	60.6	--		55.56
Benzene	ND	11.1	--	ND	35.5	--		55.56
Carbon tetrachloride	ND	11.1	--	ND	69.8	--		55.56
Cyclohexane	ND	11.1	--	ND	38.2	--		55.56
1,2-Dichloropropane	ND	11.1	--	ND	51.3	--		55.56
Bromodichloromethane	ND	11.1	--	ND	74.4	--		55.56
1,4-Dioxane	ND	11.1	--	ND	40.0	--		55.56
Trichloroethene	24.3	11.1	--	131	59.7	--		55.56
2,2,4-Trimethylpentane	ND	11.1	--	ND	51.8	--		55.56
Heptane	ND	11.1	--	ND	45.5	--		55.56
cis-1,3-Dichloropropene	ND	11.1	--	ND	50.4	--		55.56
4-Methyl-2-pentanone	ND	27.8	--	ND	114	--		55.56
trans-1,3-Dichloropropene	ND	11.1	--	ND	50.4	--		55.56
1,1,2-Trichloroethane	ND	11.1	--	ND	60.6	--		55.56
Toluene	ND	11.1	--	ND	41.8	--		55.56
2-Hexanone	ND	11.1	--	ND	45.5	--		55.56
Dibromochloromethane	ND	11.1	--	ND	94.6	--		55.56
1,2-Dibromoethane	ND	11.1	--	ND	85.3	--		55.56
Tetrachloroethene	7490	11.1	--	50800	75.3	--	E	55.56
Chlorobenzene	ND	11.1	--	ND	51.1	--		55.56
Ethylbenzene	ND	11.1	--	ND	48.2	--		55.56

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-05 D
Client ID: SVG-17-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:05
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	22.2	--	ND	96.4	--		55.56
Bromoform	ND	11.1	--	ND	115	--		55.56
Styrene	ND	11.1	--	ND	47.3	--		55.56
1,1,2,2-Tetrachloroethane	ND	11.1	--	ND	76.2	--		55.56
o-Xylene	ND	11.1	--	ND	48.2	--		55.56
4-Ethyltoluene	ND	11.1	--	ND	54.6	--		55.56
1,3,5-Trimethylbenzene	ND	11.1	--	ND	54.6	--		55.56
1,2,4-Trimethylbenzene	ND	11.1	--	ND	54.6	--		55.56
Benzyl chloride	ND	11.1	--	ND	57.5	--		55.56
1,3-Dichlorobenzene	ND	11.1	--	ND	66.7	--		55.56
1,4-Dichlorobenzene	ND	11.1	--	ND	66.7	--		55.56
1,2-Dichlorobenzene	ND	11.1	--	ND	66.7	--		55.56
1,2,4-Trichlorobenzene	ND	11.1	--	ND	82.4	--		55.56
Hexachlorobutadiene	ND	11.1	--	ND	118	--		55.56

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	90		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-05 D2
Client ID: SVG-17-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:05
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 09:34
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	7850	27.8	--	53200	189	--		138.9

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-06 D
Client ID: SVG-12-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:54
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 23:15
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	5.77	--	ND	28.5	--		28.84
Chloromethane	ND	5.77	--	ND	11.9	--		28.84
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	5.77	--	ND	40.3	--		28.84
Vinyl chloride	ND	5.77	--	ND	14.7	--		28.84
1,3-Butadiene	ND	5.77	--	ND	12.8	--		28.84
Bromomethane	ND	5.77	--	ND	22.4	--		28.84
Chloroethane	ND	5.77	--	ND	15.2	--		28.84
Ethyl Alcohol	ND	144	--	ND	271	--		28.84
Vinyl bromide	ND	5.77	--	ND	25.2	--		28.84
Acetone	195	28.8	--	463	68.4	--		28.84
Trichlorofluoromethane	ND	5.77	--	ND	32.4	--		28.84
iso-Propyl Alcohol	ND	14.4	--	ND	35.4	--		28.84
1,1-Dichloroethene	ND	5.77	--	ND	22.9	--		28.84
tert-Butyl Alcohol	ND	14.4	--	ND	43.7	--		28.84
Methylene chloride	ND	14.4	--	ND	50.0	--		28.84
3-Chloropropene	ND	5.77	--	ND	18.1	--		28.84
Carbon disulfide	ND	5.77	--	ND	18.0	--		28.84
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.77	--	ND	44.2	--		28.84
trans-1,2-Dichloroethene	ND	5.77	--	ND	22.9	--		28.84
1,1-Dichloroethane	ND	5.77	--	ND	23.4	--		28.84
Methyl tert butyl ether	ND	5.77	--	ND	20.8	--		28.84
2-Butanone	ND	14.4	--	ND	42.5	--		28.84
cis-1,2-Dichloroethene	ND	5.77	--	ND	22.9	--		28.84

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-06 D
Client ID: SVG-12-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:54
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	14.4	--	ND	51.9	--		28.84
Chloroform	ND	5.77	--	ND	28.2	--		28.84
Tetrahydrofuran	ND	14.4	--	ND	42.5	--		28.84
1,2-Dichloroethane	ND	5.77	--	ND	23.4	--		28.84
n-Hexane	ND	5.77	--	ND	20.3	--		28.84
1,1,1-Trichloroethane	ND	5.77	--	ND	31.5	--		28.84
Benzene	ND	5.77	--	ND	18.4	--		28.84
Carbon tetrachloride	ND	5.77	--	ND	36.3	--		28.84
Cyclohexane	ND	5.77	--	ND	19.9	--		28.84
1,2-Dichloropropane	ND	5.77	--	ND	26.7	--		28.84
Bromodichloromethane	ND	5.77	--	ND	38.7	--		28.84
1,4-Dioxane	ND	5.77	--	ND	20.8	--		28.84
Trichloroethene	32.0	5.77	--	172	31.0	--		28.84
2,2,4-Trimethylpentane	ND	5.77	--	ND	27.0	--		28.84
Heptane	ND	5.77	--	ND	23.6	--		28.84
cis-1,3-Dichloropropene	ND	5.77	--	ND	26.2	--		28.84
4-Methyl-2-pentanone	ND	14.4	--	ND	59.0	--		28.84
trans-1,3-Dichloropropene	ND	5.77	--	ND	26.2	--		28.84
1,1,2-Trichloroethane	ND	5.77	--	ND	31.5	--		28.84
Toluene	ND	5.77	--	ND	21.7	--		28.84
2-Hexanone	ND	5.77	--	ND	23.6	--		28.84
Dibromochloromethane	ND	5.77	--	ND	49.2	--		28.84
1,2-Dibromoethane	ND	5.77	--	ND	44.3	--		28.84
Tetrachloroethene	2840	5.77	--	19300	39.1	--		28.84
Chlorobenzene	ND	5.77	--	ND	26.6	--		28.84
Ethylbenzene	ND	5.77	--	ND	25.1	--		28.84

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-06 D
Client ID: SVG-12-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:54
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	11.5	--	ND	50.0	--		28.84
Bromoform	ND	5.77	--	ND	59.7	--		28.84
Styrene	ND	5.77	--	ND	24.6	--		28.84
1,1,2,2-Tetrachloroethane	ND	5.77	--	ND	39.6	--		28.84
o-Xylene	ND	5.77	--	ND	25.1	--		28.84
4-Ethyltoluene	ND	5.77	--	ND	28.4	--		28.84
1,3,5-Trimethylbenzene	ND	5.77	--	ND	28.4	--		28.84
1,2,4-Trimethylbenzene	ND	5.77	--	ND	28.4	--		28.84
Benzyl chloride	ND	5.77	--	ND	29.9	--		28.84
1,3-Dichlorobenzene	ND	5.77	--	ND	34.7	--		28.84
1,4-Dichlorobenzene	ND	5.77	--	ND	34.7	--		28.84
1,2-Dichlorobenzene	ND	5.77	--	ND	34.7	--		28.84
1,2,4-Trichlorobenzene	ND	5.77	--	ND	42.8	--		28.84
Hexachlorobutadiene	ND	5.77	--	ND	61.5	--		28.84

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	92		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-07 D
Client ID: SVG-20-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:55
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 23:47
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	40.3	--	ND	199	--		201.6
Chloromethane	ND	40.3	--	ND	83.2	--		201.6
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	40.3	--	ND	282	--		201.6
Vinyl chloride	ND	40.3	--	ND	103	--		201.6
1,3-Butadiene	ND	40.3	--	ND	89.2	--		201.6
Bromomethane	ND	40.3	--	ND	156	--		201.6
Chloroethane	ND	40.3	--	ND	106	--		201.6
Ethyl Alcohol	ND	1010	--	ND	1900	--		201.6
Vinyl bromide	ND	40.3	--	ND	176	--		201.6
Acetone	ND	202.	--	ND	480	--		201.6
Trichlorofluoromethane	ND	40.3	--	ND	226	--		201.6
iso-Propyl Alcohol	ND	101.	--	ND	248	--		201.6
1,1-Dichloroethene	ND	40.3	--	ND	160	--		201.6
tert-Butyl Alcohol	ND	101.	--	ND	306	--		201.6
Methylene chloride	ND	101.	--	ND	351	--		201.6
3-Chloropropene	ND	40.3	--	ND	126	--		201.6
Carbon disulfide	ND	40.3	--	ND	125	--		201.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	40.3	--	ND	309	--		201.6
trans-1,2-Dichloroethene	ND	40.3	--	ND	160	--		201.6
1,1-Dichloroethane	ND	40.3	--	ND	163	--		201.6
Methyl tert butyl ether	ND	40.3	--	ND	145	--		201.6
2-Butanone	ND	101	--	ND	298	--		201.6
cis-1,2-Dichloroethene	246	40.3	--	975	160	--		201.6

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-07 D
Client ID: SVG-20-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:55
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	101.	--	ND	364	--		201.6
Chloroform	72.6	40.3	--	355	197	--		201.6
Tetrahydrofuran	ND	101.	--	ND	298	--		201.6
1,2-Dichloroethane	ND	40.3	--	ND	163	--		201.6
n-Hexane	ND	40.3	--	ND	142	--		201.6
1,1,1-Trichloroethane	ND	40.3	--	ND	220	--		201.6
Benzene	ND	40.3	--	ND	129	--		201.6
Carbon tetrachloride	ND	40.3	--	ND	254	--		201.6
Cyclohexane	ND	40.3	--	ND	139	--		201.6
1,2-Dichloropropane	ND	40.3	--	ND	186	--		201.6
Bromodichloromethane	ND	40.3	--	ND	270	--		201.6
1,4-Dioxane	ND	40.3	--	ND	145	--		201.6
Trichloroethene	980	40.3	--	5270	217	--		201.6
2,2,4-Trimethylpentane	ND	40.3	--	ND	188	--		201.6
Heptane	ND	40.3	--	ND	165	--		201.6
cis-1,3-Dichloropropene	ND	40.3	--	ND	183	--		201.6
4-Methyl-2-pentanone	ND	101.	--	ND	414	--		201.6
trans-1,3-Dichloropropene	ND	40.3	--	ND	183	--		201.6
1,1,2-Trichloroethane	ND	40.3	--	ND	220	--		201.6
Toluene	ND	40.3	--	ND	152	--		201.6
2-Hexanone	ND	40.3	--	ND	165	--		201.6
Dibromochloromethane	ND	40.3	--	ND	343	--		201.6
1,2-Dibromoethane	ND	40.3	--	ND	310	--		201.6
Tetrachloroethene	90700	40.3	--	615000	273	--	E	201.6
Chlorobenzene	ND	40.3	--	ND	186	--		201.6
Ethylbenzene	ND	40.3	--	ND	175	--		201.6

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-07 D
Client ID: SVG-20-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:55
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	80.6	--	ND	350	--		201.6
Bromoform	ND	40.3	--	ND	417	--		201.6
Styrene	ND	40.3	--	ND	172	--		201.6
1,1,2,2-Tetrachloroethane	ND	40.3	--	ND	277	--		201.6
o-Xylene	ND	40.3	--	ND	175	--		201.6
4-Ethyltoluene	ND	40.3	--	ND	198	--		201.6
1,3,5-Trimethylbenzene	ND	40.3	--	ND	198	--		201.6
1,2,4-Trimethylbenzene	ND	40.3	--	ND	198	--		201.6
Benzyl chloride	ND	40.3	--	ND	209	--		201.6
1,3-Dichlorobenzene	ND	40.3	--	ND	242	--		201.6
1,4-Dichlorobenzene	ND	40.3	--	ND	242	--		201.6
1,2-Dichlorobenzene	ND	40.3	--	ND	242	--		201.6
1,2,4-Trichlorobenzene	ND	40.3	--	ND	299	--		201.6
Hexachlorobutadiene	ND	40.3	--	ND	430	--		201.6

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	96		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-07 D2
Client ID: SVG-20-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 11:55
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 09:40
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	203000	417	--	1380000	2830	--		2083

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-08 D
Client ID: SVG-04-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:33
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 00:20
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	156.	--	ND	771	--		781.3
Chloromethane	ND	156.	--	ND	322	--		781.3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	156.	--	ND	1090	--		781.3
Vinyl chloride	425	156	--	1090	399	--		781.3
1,3-Butadiene	ND	156.	--	ND	345	--		781.3
Bromomethane	ND	156.	--	ND	606	--		781.3
Chloroethane	ND	156.	--	ND	412	--		781.3
Ethyl Alcohol	ND	3910	--	ND	7370	--		781.3
Vinyl bromide	ND	156.	--	ND	682	--		781.3
Acetone	ND	781	--	ND	1860	--		781.3
Trichlorofluoromethane	ND	156.	--	ND	877	--		781.3
iso-Propyl Alcohol	ND	391.	--	ND	961	--		781.3
1,1-Dichloroethene	ND	156.	--	ND	619	--		781.3
tert-Butyl Alcohol	ND	391.	--	ND	1190	--		781.3
Methylene chloride	ND	391.	--	ND	1360	--		781.3
3-Chloropropene	ND	156.	--	ND	488	--		781.3
Carbon disulfide	ND	156.	--	ND	486	--		781.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	156.	--	ND	1200	--		781.3
trans-1,2-Dichloroethene	354	156	--	1400	619	--		781.3
1,1-Dichloroethane	ND	156.	--	ND	631	--		781.3
Methyl tert butyl ether	ND	156.	--	ND	562	--		781.3
2-Butanone	ND	391.	--	ND	1150	--		781.3
cis-1,2-Dichloroethene	42400	156	--	168000	619	--		781.3

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-08 D
Client ID: SVG-04-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:33
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	391.	--	ND	1410	--		781.3
Chloroform	ND	156	--	ND	762	--		781.3
Tetrahydrofuran	ND	391.	--	ND	1150	--		781.3
1,2-Dichloroethane	ND	156.	--	ND	631	--		781.3
n-Hexane	ND	156.	--	ND	550	--		781.3
1,1,1-Trichloroethane	ND	156.	--	ND	851	--		781.3
Benzene	ND	156	--	ND	498	--		781.3
Carbon tetrachloride	ND	156.	--	ND	981	--		781.3
Cyclohexane	ND	156.	--	ND	537	--		781.3
1,2-Dichloropropane	ND	156.	--	ND	721	--		781.3
Bromodichloromethane	ND	156.	--	ND	1050	--		781.3
1,4-Dioxane	ND	156.	--	ND	562	--		781.3
Trichloroethene	22100	156	--	119000	838	--		781.3
2,2,4-Trimethylpentane	ND	156.	--	ND	729	--		781.3
Heptane	ND	156.	--	ND	639	--		781.3
cis-1,3-Dichloropropene	ND	156.	--	ND	708	--		781.3
4-Methyl-2-pentanone	ND	391.	--	ND	1600	--		781.3
trans-1,3-Dichloropropene	ND	156.	--	ND	708	--		781.3
1,1,2-Trichloroethane	ND	156.	--	ND	851	--		781.3
Toluene	ND	156.	--	ND	588	--		781.3
2-Hexanone	ND	156.	--	ND	639	--		781.3
Dibromochloromethane	ND	156.	--	ND	1330	--		781.3
1,2-Dibromoethane	ND	156.	--	ND	1200	--		781.3
Tetrachloroethene	442000	156	--	3000000	1060	--	E	781.3
Chlorobenzene	ND	156.	--	ND	718	--		781.3
Ethylbenzene	ND	156.	--	ND	678	--		781.3

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-08 D
Client ID: SVG-04-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:33
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	312.	--	ND	1360	--		781.3
Bromoform	ND	156.	--	ND	1610	--		781.3
Styrene	ND	156.	--	ND	664	--		781.3
1,1,2,2-Tetrachloroethane	ND	156.	--	ND	1070	--		781.3
o-Xylene	ND	156.	--	ND	678	--		781.3
4-Ethyltoluene	ND	156.	--	ND	767	--		781.3
1,3,5-Trimethylbenzene	ND	156.	--	ND	767	--		781.3
1,2,4-Trimethylbenzene	ND	156.	--	ND	767	--		781.3
Benzyl chloride	ND	156.	--	ND	808	--		781.3
1,3-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,4-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,2-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,2,4-Trichlorobenzene	ND	156.	--	ND	1160	--		781.3
Hexachlorobutadiene	ND	156.	--	ND	1660	--		781.3

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	97		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-08 D2
Client ID: SVG-04-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:33
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 10:11
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	933000	2500	--	6330000	17000	--		12500

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-09 D
Client ID: SVG-05-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 00:52
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	156.	--	ND	771	--		781.3
Chloromethane	ND	156.	--	ND	322	--		781.3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	156.	--	ND	1090	--		781.3
Vinyl chloride	ND	156.	--	ND	399	--		781.3
1,3-Butadiene	ND	156.	--	ND	345	--		781.3
Bromomethane	ND	156.	--	ND	606	--		781.3
Chloroethane	ND	156.	--	ND	412	--		781.3
Ethyl Alcohol	ND	3910	--	ND	7370	--		781.3
Vinyl bromide	ND	156.	--	ND	682	--		781.3
Acetone	ND	781	--	ND	1860	--		781.3
Trichlorofluoromethane	ND	156.	--	ND	877	--		781.3
iso-Propyl Alcohol	ND	391.	--	ND	961	--		781.3
1,1-Dichloroethene	ND	156.	--	ND	619	--		781.3
tert-Butyl Alcohol	ND	391.	--	ND	1190	--		781.3
Methylene chloride	ND	391.	--	ND	1360	--		781.3
3-Chloropropene	ND	156.	--	ND	488	--		781.3
Carbon disulfide	ND	156.	--	ND	486	--		781.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	156.	--	ND	1200	--		781.3
trans-1,2-Dichloroethene	ND	156	--	ND	619	--		781.3
1,1-Dichloroethane	ND	156.	--	ND	631	--		781.3
Methyl tert butyl ether	ND	156.	--	ND	562	--		781.3
2-Butanone	ND	391.	--	ND	1150	--		781.3
cis-1,2-Dichloroethene	4590	156	--	18200	619	--		781.3

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-09 D
Client ID: SVG-05-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	391.	--	ND	1410	--		781.3
Chloroform	ND	156	--	ND	762	--		781.3
Tetrahydrofuran	ND	391.	--	ND	1150	--		781.3
1,2-Dichloroethane	ND	156.	--	ND	631	--		781.3
n-Hexane	ND	156.	--	ND	550	--		781.3
1,1,1-Trichloroethane	ND	156.	--	ND	851	--		781.3
Benzene	ND	156.	--	ND	498	--		781.3
Carbon tetrachloride	289	156	--	1820	981	--		781.3
Cyclohexane	ND	156.	--	ND	537	--		781.3
1,2-Dichloropropane	ND	156.	--	ND	721	--		781.3
Bromodichloromethane	ND	156.	--	ND	1050	--		781.3
1,4-Dioxane	ND	156.	--	ND	562	--		781.3
Trichloroethene	7360	156	--	39600	838	--		781.3
2,2,4-Trimethylpentane	ND	156.	--	ND	729	--		781.3
Heptane	ND	156.	--	ND	639	--		781.3
cis-1,3-Dichloropropene	ND	156.	--	ND	708	--		781.3
4-Methyl-2-pentanone	ND	391.	--	ND	1600	--		781.3
trans-1,3-Dichloropropene	ND	156.	--	ND	708	--		781.3
1,1,2-Trichloroethane	ND	156.	--	ND	851	--		781.3
Toluene	ND	156.	--	ND	588	--		781.3
2-Hexanone	ND	156.	--	ND	639	--		781.3
Dibromochloromethane	ND	156.	--	ND	1330	--		781.3
1,2-Dibromoethane	ND	156.	--	ND	1200	--		781.3
Tetrachloroethene	442000	156	--	3000000	1060	--	E	781.3
Chlorobenzene	ND	156.	--	ND	718	--		781.3
Ethylbenzene	ND	156.	--	ND	678	--		781.3

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-09 D
Client ID: SVG-05-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	312.	--	ND	1360	--		781.3
Bromoform	ND	156.	--	ND	1610	--		781.3
Styrene	ND	156.	--	ND	664	--		781.3
1,1,2,2-Tetrachloroethane	ND	156.	--	ND	1070	--		781.3
o-Xylene	ND	156.	--	ND	678	--		781.3
4-Ethyltoluene	ND	156.	--	ND	767	--		781.3
1,3,5-Trimethylbenzene	ND	156.	--	ND	767	--		781.3
1,2,4-Trimethylbenzene	ND	156.	--	ND	767	--		781.3
Benzyl chloride	ND	156.	--	ND	808	--		781.3
1,3-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,4-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,2-Dichlorobenzene	ND	156.	--	ND	938	--		781.3
1,2,4-Trichlorobenzene	ND	156.	--	ND	1160	--		781.3
Hexachlorobutadiene	ND	156.	--	ND	1660	--		781.3

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	95		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-09 D2
Client ID: SVG-05-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 10:42
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	834000	2500	--	5660000	17000	--		12500

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	94		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-10 D
Client ID: SVG-18-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:32
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 01:24
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	30.7	--	ND	152	--		153.4
Chloromethane	ND	30.7	--	ND	63.4	--		153.4
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	30.7	--	ND	215	--		153.4
Vinyl chloride	ND	30.7	--	ND	78.5	--		153.4
1,3-Butadiene	ND	30.7	--	ND	67.9	--		153.4
Bromomethane	ND	30.7	--	ND	119	--		153.4
Chloroethane	ND	30.7	--	ND	81.0	--		153.4
Ethyl Alcohol	ND	767	--	ND	1450	--		153.4
Vinyl bromide	ND	30.7	--	ND	134	--		153.4
Acetone	ND	153	--	ND	363	--		153.4
Trichlorofluoromethane	ND	30.7	--	ND	173	--		153.4
iso-Propyl Alcohol	ND	76.7	--	ND	189	--		153.4
1,1-Dichloroethene	ND	30.7	--	ND	122	--		153.4
tert-Butyl Alcohol	ND	76.7	--	ND	233	--		153.4
Methylene chloride	ND	76.7	--	ND	266	--		153.4
3-Chloropropene	ND	30.7	--	ND	96.1	--		153.4
Carbon disulfide	ND	30.7	--	ND	95.6	--		153.4
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	30.7	--	ND	235	--		153.4
trans-1,2-Dichloroethene	ND	30.7	--	ND	122	--		153.4
1,1-Dichloroethane	ND	30.7	--	ND	124	--		153.4
Methyl tert butyl ether	ND	30.7	--	ND	111	--		153.4
2-Butanone	ND	76.7	--	ND	226	--		153.4
cis-1,2-Dichloroethene	53.5	30.7	--	212	122	--		153.4

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-10 D
Client ID: SVG-18-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:32
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	76.7	--	ND	276	--		153.4
Chloroform	ND	30.7	--	ND	150	--		153.4
Tetrahydrofuran	ND	76.7	--	ND	226	--		153.4
1,2-Dichloroethane	ND	30.7	--	ND	124	--		153.4
n-Hexane	ND	30.7	--	ND	108	--		153.4
1,1,1-Trichloroethane	ND	30.7	--	ND	168	--		153.4
Benzene	ND	30.7	--	ND	98.1	--		153.4
Carbon tetrachloride	ND	30.7	--	ND	193	--		153.4
Cyclohexane	ND	30.7	--	ND	106	--		153.4
1,2-Dichloropropane	ND	30.7	--	ND	142	--		153.4
Bromodichloromethane	ND	30.7	--	ND	206	--		153.4
1,4-Dioxane	ND	30.7	--	ND	111	--		153.4
Trichloroethene	189	30.7	--	1020	165	--		153.4
2,2,4-Trimethylpentane	ND	30.7	--	ND	143	--		153.4
Heptane	ND	30.7	--	ND	126	--		153.4
cis-1,3-Dichloropropene	ND	30.7	--	ND	139	--		153.4
4-Methyl-2-pentanone	ND	76.7	--	ND	314	--		153.4
trans-1,3-Dichloropropene	ND	30.7	--	ND	139	--		153.4
1,1,2-Trichloroethane	ND	30.7	--	ND	168	--		153.4
Toluene	ND	30.7	--	ND	116	--		153.4
2-Hexanone	ND	30.7	--	ND	126	--		153.4
Dibromochloromethane	ND	30.7	--	ND	262	--		153.4
1,2-Dibromoethane	ND	30.7	--	ND	236	--		153.4
Tetrachloroethene	24100	30.7	--	163000	208	--	E	153.4
Chlorobenzene	ND	30.7	--	ND	141	--		153.4
Ethylbenzene	ND	30.7	--	ND	133	--		153.4

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-10 D
Client ID: SVG-18-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:32
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	61.4	--	ND	267	--		153.4
Bromoform	ND	30.7	--	ND	317	--		153.4
Styrene	ND	30.7	--	ND	131	--		153.4
1,1,2,2-Tetrachloroethane	ND	30.7	--	ND	211	--		153.4
o-Xylene	ND	30.7	--	ND	133	--		153.4
4-Ethyltoluene	ND	30.7	--	ND	151	--		153.4
1,3,5-Trimethylbenzene	ND	30.7	--	ND	151	--		153.4
1,2,4-Trimethylbenzene	ND	30.7	--	ND	151	--		153.4
Benzyl chloride	ND	30.7	--	ND	159	--		153.4
1,3-Dichlorobenzene	ND	30.7	--	ND	185	--		153.4
1,4-Dichlorobenzene	ND	30.7	--	ND	185	--		153.4
1,2-Dichlorobenzene	ND	30.7	--	ND	185	--		153.4
1,2,4-Trichlorobenzene	ND	30.7	--	ND	228	--		153.4
Hexachlorobutadiene	ND	30.7	--	ND	327	--		153.4

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	92		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-10 D2
Client ID: SVG-18-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:32
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 10:07
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	27600	122	--	187000	827	--		609.8

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	88		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	89		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-11 D
Client ID: SVG-15-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:47
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 01:56
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	39.7	--	ND	196	--		198.4
Chloromethane	ND	39.7	--	ND	82.0	--		198.4
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	39.7	--	ND	277	--		198.4
Vinyl chloride	ND	39.7	--	ND	101	--		198.4
1,3-Butadiene	ND	39.7	--	ND	87.8	--		198.4
Bromomethane	ND	39.7	--	ND	154	--		198.4
Chloroethane	ND	39.7	--	ND	105	--		198.4
Ethyl Alcohol	ND	992.	--	ND	1870	--		198.4
Vinyl bromide	ND	39.7	--	ND	174	--		198.4
Acetone	ND	198	--	ND	470	--		198.4
Trichlorofluoromethane	ND	39.7	--	ND	223	--		198.4
iso-Propyl Alcohol	ND	99.2	--	ND	244	--		198.4
1,1-Dichloroethene	ND	39.7	--	ND	157	--		198.4
tert-Butyl Alcohol	ND	99.2	--	ND	301	--		198.4
Methylene chloride	ND	99.2	--	ND	345	--		198.4
3-Chloropropene	ND	39.7	--	ND	124	--		198.4
Carbon disulfide	ND	39.7	--	ND	124	--		198.4
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	39.7	--	ND	304	--		198.4
trans-1,2-Dichloroethene	ND	39.7	--	ND	157	--		198.4
1,1-Dichloroethane	ND	39.7	--	ND	161	--		198.4
Methyl tert butyl ether	ND	39.7	--	ND	143	--		198.4
2-Butanone	ND	99.2	--	ND	293	--		198.4
cis-1,2-Dichloroethene	44.4	39.7	--	176	157	--		198.4

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-11 D
Client ID: SVG-15-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:47
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	99.2	--	ND	357	--		198.4
Chloroform	ND	39.7	--	ND	194	--		198.4
Tetrahydrofuran	ND	99.2	--	ND	293	--		198.4
1,2-Dichloroethane	ND	39.7	--	ND	161	--		198.4
n-Hexane	ND	39.7	--	ND	140	--		198.4
1,1,1-Trichloroethane	ND	39.7	--	ND	217	--		198.4
Benzene	ND	39.7	--	ND	127	--		198.4
Carbon tetrachloride	ND	39.7	--	ND	250	--		198.4
Cyclohexane	ND	39.7	--	ND	137	--		198.4
1,2-Dichloropropane	ND	39.7	--	ND	183	--		198.4
Bromodichloromethane	ND	39.7	--	ND	266	--		198.4
1,4-Dioxane	ND	39.7	--	ND	143	--		198.4
Trichloroethene	92.2	39.7	--	496	213	--		198.4
2,2,4-Trimethylpentane	ND	39.7	--	ND	185	--		198.4
Heptane	ND	39.7	--	ND	163	--		198.4
cis-1,3-Dichloropropene	ND	39.7	--	ND	180	--		198.4
4-Methyl-2-pentanone	ND	99.2	--	ND	407	--		198.4
trans-1,3-Dichloropropene	ND	39.7	--	ND	180	--		198.4
1,1,2-Trichloroethane	ND	39.7	--	ND	217	--		198.4
Toluene	ND	39.7	--	ND	150	--		198.4
2-Hexanone	ND	39.7	--	ND	163	--		198.4
Dibromochloromethane	ND	39.7	--	ND	338	--		198.4
1,2-Dibromoethane	ND	39.7	--	ND	305	--		198.4
Tetrachloroethene	49800	39.7	--	338000	269	--	E	198.4
Chlorobenzene	ND	39.7	--	ND	183	--		198.4
Ethylbenzene	ND	39.7	--	ND	172	--		198.4

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-11 D
Client ID: SVG-15-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:47
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	79.4	--	ND	345	--		198.4
Bromoform	ND	39.7	--	ND	410	--		198.4
Styrene	ND	39.7	--	ND	169	--		198.4
1,1,2,2-Tetrachloroethane	ND	39.7	--	ND	273	--		198.4
o-Xylene	ND	39.7	--	ND	172	--		198.4
4-Ethyltoluene	ND	39.7	--	ND	195	--		198.4
1,3,5-Trimethylbenzene	ND	39.7	--	ND	195	--		198.4
1,2,4-Trimethylbenzene	ND	39.7	--	ND	195	--		198.4
Benzyl chloride	ND	39.7	--	ND	206	--		198.4
1,3-Dichlorobenzene	ND	39.7	--	ND	239	--		198.4
1,4-Dichlorobenzene	ND	39.7	--	ND	239	--		198.4
1,2-Dichlorobenzene	ND	39.7	--	ND	239	--		198.4
1,2,4-Trichlorobenzene	ND	39.7	--	ND	295	--		198.4
Hexachlorobutadiene	ND	39.7	--	ND	423	--		198.4

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	93		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-11 D2
Client ID: SVG-15-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:47
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 10:39
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	67400	161	--	457000	1090	--		806.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	88		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-12 D
Client ID: SVG-19-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 17:26
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	6.88	--	ND	34.0	--		34.39
Chloromethane	ND	6.88	--	ND	14.2	--		34.39
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	6.88	--	ND	48.1	--		34.39
Vinyl chloride	ND	6.88	--	ND	17.6	--		34.39
1,3-Butadiene	ND	6.88	--	ND	15.2	--		34.39
Bromomethane	ND	6.88	--	ND	26.7	--		34.39
Chloroethane	ND	6.88	--	ND	18.2	--		34.39
Ethyl Alcohol	ND	172	--	ND	324	--		34.39
Vinyl bromide	ND	6.88	--	ND	30.1	--		34.39
Acetone	ND	34.4	--	ND	81.7	--		34.39
Trichlorofluoromethane	ND	6.88	--	ND	38.7	--		34.39
iso-Propyl Alcohol	ND	17.2	--	ND	42.3	--		34.39
1,1-Dichloroethene	ND	6.88	--	ND	27.3	--		34.39
tert-Butyl Alcohol	ND	17.2	--	ND	52.1	--		34.39
Methylene chloride	ND	17.2	--	ND	59.8	--		34.39
3-Chloropropene	ND	6.88	--	ND	21.5	--		34.39
Carbon disulfide	ND	6.88	--	ND	21.4	--		34.39
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	6.88	--	ND	52.7	--		34.39
trans-1,2-Dichloroethene	ND	6.88	--	ND	27.3	--		34.39
1,1-Dichloroethane	ND	6.88	--	ND	27.8	--		34.39
Methyl tert butyl ether	ND	6.88	--	ND	24.8	--		34.39
2-Butanone	ND	17.2	--	ND	50.7	--		34.39
cis-1,2-Dichloroethene	ND	6.88	--	ND	27.3	--		34.39

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-12 D
Client ID: SVG-19-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	17.2	--	ND	62.0	--		34.39
Chloroform	32.6	6.88	--	159	33.6	--		34.39
Tetrahydrofuran	ND	17.2	--	ND	50.7	--		34.39
1,2-Dichloroethane	ND	6.88	--	ND	27.8	--		34.39
n-Hexane	ND	6.88	--	ND	24.2	--		34.39
1,1,1-Trichloroethane	22.7	6.88	--	124	37.5	--		34.39
Benzene	ND	6.88	--	ND	22.0	--		34.39
Carbon tetrachloride	ND	6.88	--	ND	43.3	--		34.39
Cyclohexane	ND	6.88	--	ND	23.7	--		34.39
1,2-Dichloropropane	ND	6.88	--	ND	31.8	--		34.39
Bromodichloromethane	ND	6.88	--	ND	46.1	--		34.39
1,4-Dioxane	ND	6.88	--	ND	24.8	--		34.39
Trichloroethene	32.7	6.88	--	176	37.0	--		34.39
2,2,4-Trimethylpentane	ND	6.88	--	ND	32.1	--		34.39
Heptane	ND	6.88	--	ND	28.2	--		34.39
cis-1,3-Dichloropropene	ND	6.88	--	ND	31.2	--		34.39
4-Methyl-2-pentanone	ND	17.2	--	ND	70.5	--		34.39
trans-1,3-Dichloropropene	ND	6.88	--	ND	31.2	--		34.39
1,1,2-Trichloroethane	ND	6.88	--	ND	37.5	--		34.39
Toluene	ND	6.88	--	ND	25.9	--		34.39
2-Hexanone	ND	6.88	--	ND	28.2	--		34.39
Dibromochloromethane	ND	6.88	--	ND	58.6	--		34.39
1,2-Dibromoethane	ND	6.88	--	ND	52.9	--		34.39
Tetrachloroethene	2390	6.88	--	16200	46.7	--		34.39
Chlorobenzene	ND	6.88	--	ND	31.7	--		34.39
Ethylbenzene	ND	6.88	--	ND	29.9	--		34.39

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-12 D
Client ID: SVG-19-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	13.8	--	ND	59.9	--		34.39
Bromoform	ND	6.88	--	ND	71.1	--		34.39
Styrene	ND	6.88	--	ND	29.3	--		34.39
1,1,2,2-Tetrachloroethane	ND	6.88	--	ND	47.2	--		34.39
o-Xylene	ND	6.88	--	ND	29.9	--		34.39
4-Ethyltoluene	ND	6.88	--	ND	33.8	--		34.39
1,3,5-Trimethylbenzene	ND	6.88	--	ND	33.8	--		34.39
1,2,4-Trimethylbenzene	ND	6.88	--	ND	33.8	--		34.39
Benzyl chloride	ND	6.88	--	ND	35.6	--		34.39
1,3-Dichlorobenzene	ND	6.88	--	ND	41.4	--		34.39
1,4-Dichlorobenzene	ND	6.88	--	ND	41.4	--		34.39
1,2-Dichlorobenzene	ND	6.88	--	ND	41.4	--		34.39
1,2,4-Trichlorobenzene	ND	6.88	--	ND	51.1	--		34.39
Hexachlorobutadiene	ND	6.88	--	ND	73.4	--		34.39

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	100		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-13 D
Client ID: SVG-25-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:49
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 18:03
Analyst: EW

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	8.04	--	ND	39.8	--		40.19
Chloromethane	ND	8.04	--	ND	16.6	--		40.19
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	8.04	--	ND	56.2	--		40.19
Vinyl chloride	ND	8.04	--	ND	20.6	--		40.19
1,3-Butadiene	ND	8.04	--	ND	17.8	--		40.19
Bromomethane	ND	8.04	--	ND	31.2	--		40.19
Chloroethane	ND	8.04	--	ND	21.2	--		40.19
Ethyl Alcohol	ND	201	--	ND	379	--		40.19
Vinyl bromide	ND	8.04	--	ND	35.2	--		40.19
Acetone	43.8	40.2	--	104	95.5	--		40.19
Trichlorofluoromethane	ND	8.04	--	ND	45.2	--		40.19
iso-Propyl Alcohol	ND	20.1	--	ND	49.4	--		40.19
1,1-Dichloroethene	ND	8.04	--	ND	31.9	--		40.19
tert-Butyl Alcohol	ND	20.1	--	ND	60.9	--		40.19
Methylene chloride	ND	20.1	--	ND	69.8	--		40.19
3-Chloropropene	ND	8.04	--	ND	25.2	--		40.19
Carbon disulfide	ND	8.04	--	ND	25.0	--		40.19
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.04	--	ND	61.6	--		40.19
trans-1,2-Dichloroethene	ND	8.04	--	ND	31.9	--		40.19
1,1-Dichloroethane	ND	8.04	--	ND	32.5	--		40.19
Methyl tert butyl ether	ND	8.04	--	ND	29.0	--		40.19
2-Butanone	ND	20.1	--	ND	59.3	--		40.19
cis-1,2-Dichloroethene	ND	8.04	--	ND	31.9	--		40.19

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-13 D
Client ID: SVG-25-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:49
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	20.1	--	ND	72.4	--		40.19
Chloroform	48.3	8.04	--	236	39.3	--		40.19
Tetrahydrofuran	ND	20.1	--	ND	59.3	--		40.19
1,2-Dichloroethane	ND	8.04	--	ND	32.5	--		40.19
n-Hexane	ND	8.04	--	ND	28.3	--		40.19
1,1,1-Trichloroethane	14.3	8.04	--	78.0	43.9	--		40.19
Benzene	ND	8.04	--	ND	25.7	--		40.19
Carbon tetrachloride	ND	8.04	--	ND	50.6	--		40.19
Cyclohexane	ND	8.04	--	ND	27.7	--		40.19
1,2-Dichloropropane	ND	8.04	--	ND	37.2	--		40.19
Bromodichloromethane	ND	8.04	--	ND	53.9	--		40.19
1,4-Dioxane	ND	8.04	--	ND	29.0	--		40.19
Trichloroethene	59.4	8.04	--	319	43.2	--		40.19
2,2,4-Trimethylpentane	ND	8.04	--	ND	37.6	--		40.19
Heptane	ND	8.04	--	ND	32.9	--		40.19
cis-1,3-Dichloropropene	ND	8.04	--	ND	36.5	--		40.19
4-Methyl-2-pentanone	ND	20.1	--	ND	82.4	--		40.19
trans-1,3-Dichloropropene	ND	8.04	--	ND	36.5	--		40.19
1,1,2-Trichloroethane	ND	8.04	--	ND	43.9	--		40.19
Toluene	ND	8.04	--	ND	30.3	--		40.19
2-Hexanone	ND	8.04	--	ND	32.9	--		40.19
Dibromochloromethane	ND	8.04	--	ND	68.5	--		40.19
1,2-Dibromoethane	ND	8.04	--	ND	61.8	--		40.19
Tetrachloroethene	3710	8.04	--	25200	54.5	--		40.19
Chlorobenzene	ND	8.04	--	ND	37.0	--		40.19
Ethylbenzene	ND	8.04	--	ND	34.9	--		40.19

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-13 D
Client ID: SVG-25-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:49
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	16.1	--	ND	69.9	--		40.19
Bromoform	ND	8.04	--	ND	83.1	--		40.19
Styrene	ND	8.04	--	ND	34.2	--		40.19
1,1,2,2-Tetrachloroethane	ND	8.04	--	ND	55.2	--		40.19
o-Xylene	ND	8.04	--	ND	34.9	--		40.19
4-Ethyltoluene	ND	8.04	--	ND	39.5	--		40.19
1,3,5-Trimethylbenzene	ND	8.04	--	ND	39.5	--		40.19
1,2,4-Trimethylbenzene	ND	8.04	--	ND	39.5	--		40.19
Benzyl chloride	ND	8.04	--	ND	41.6	--		40.19
1,3-Dichlorobenzene	ND	8.04	--	ND	48.3	--		40.19
1,4-Dichlorobenzene	ND	8.04	--	ND	48.3	--		40.19
1,2-Dichlorobenzene	ND	8.04	--	ND	48.3	--		40.19
1,2,4-Trichlorobenzene	ND	8.04	--	ND	59.7	--		40.19
Hexachlorobutadiene	ND	8.04	--	ND	85.8	--		40.19

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	101		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-14 D
Client ID: SVG-14-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 18:39
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.667	--	ND	3.30	--		3.333
Chloromethane	ND	0.667	--	ND	1.38	--		3.333
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.667	--	ND	4.66	--		3.333
Vinyl chloride	ND	0.667	--	ND	1.71	--		3.333
1,3-Butadiene	ND	0.667	--	ND	1.48	--		3.333
Bromomethane	ND	0.667	--	ND	2.59	--		3.333
Chloroethane	ND	0.667	--	ND	1.76	--		3.333
Ethyl Alcohol	ND	16.7	--	ND	31.5	--		3.333
Vinyl bromide	ND	0.667	--	ND	2.92	--		3.333
Acetone	14.7	3.33	--	34.9	7.91	--		3.333
Trichlorofluoromethane	ND	0.667	--	ND	3.75	--		3.333
iso-Propyl Alcohol	1.88	1.67	--	4.62	4.10	--		3.333
1,1-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
tert-Butyl Alcohol	ND	1.67	--	ND	5.06	--		3.333
Methylene chloride	ND	1.67	--	ND	5.80	--		3.333
3-Chloropropene	ND	0.667	--	ND	2.09	--		3.333
Carbon disulfide	ND	0.667	--	ND	2.08	--		3.333
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.667	--	ND	5.11	--		3.333
trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
1,1-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
Methyl tert butyl ether	ND	0.667	--	ND	2.40	--		3.333
2-Butanone	ND	1.67	--	ND	4.93	--		3.333
cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-14 D
Client ID: SVG-14-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.67	--	ND	6.02	--		3.333
Chloroform	0.986	0.667	--	4.82	3.26	--		3.333
Tetrahydrofuran	ND	1.67	--	ND	4.93	--		3.333
1,2-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
n-Hexane	ND	0.667	--	ND	2.35	--		3.333
1,1,1-Trichloroethane	1.67	0.667	--	9.11	3.64	--		3.333
Benzene	ND	0.667	--	ND	2.13	--		3.333
Carbon tetrachloride	ND	0.667	--	ND	4.20	--		3.333
Cyclohexane	ND	0.667	--	ND	2.30	--		3.333
1,2-Dichloropropane	ND	0.667	--	ND	3.08	--		3.333
Bromodichloromethane	ND	0.667	--	ND	4.47	--		3.333
1,4-Dioxane	ND	0.667	--	ND	2.40	--		3.333
Trichloroethene	ND	0.667	--	ND	3.58	--		3.333
2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--		3.333
Heptane	ND	0.667	--	ND	2.73	--		3.333
cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
4-Methyl-2-pentanone	ND	1.67	--	ND	6.84	--		3.333
trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Toluene	ND	0.667	--	ND	2.51	--		3.333
2-Hexanone	ND	0.667	--	ND	2.73	--		3.333
Dibromochloromethane	ND	0.667	--	ND	5.68	--		3.333
1,2-Dibromoethane	ND	0.667	--	ND	5.13	--		3.333
Tetrachloroethene	243	0.667	--	1650	4.52	--		3.333
Chlorobenzene	ND	0.667	--	ND	3.07	--		3.333
Ethylbenzene	ND	0.667	--	ND	2.90	--		3.333

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-14 D
Client ID: SVG-14-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:34
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	1.33	--	ND	5.78	--		3.333
Bromoform	ND	0.667	--	ND	6.90	--		3.333
Styrene	ND	0.667	--	ND	2.84	--		3.333
1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--		3.333
o-Xylene	ND	0.667	--	ND	2.90	--		3.333
4-Ethyltoluene	ND	0.667	--	ND	3.28	--		3.333
1,3,5-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
1,2,4-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
Benzyl chloride	ND	0.667	--	ND	3.45	--		3.333
1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--		3.333
Hexachlorobutadiene	ND	0.667	--	ND	7.11	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-15 D
Client ID: SVG-24-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:25
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 19:50
Analyst: EW

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.99	--	ND	14.8	--		14.96
Chloromethane	ND	2.99	--	ND	6.17	--		14.96
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.99	--	ND	20.9	--		14.96
Vinyl chloride	ND	2.99	--	ND	7.64	--		14.96
1,3-Butadiene	ND	2.99	--	ND	6.61	--		14.96
Bromomethane	ND	2.99	--	ND	11.6	--		14.96
Chloroethane	ND	2.99	--	ND	7.89	--		14.96
Ethyl Alcohol	ND	74.8	--	ND	141	--		14.96
Vinyl bromide	ND	2.99	--	ND	13.1	--		14.96
Acetone	ND	15.0	--	ND	35.6	--		14.96
Trichlorofluoromethane	ND	2.99	--	ND	16.8	--		14.96
iso-Propyl Alcohol	ND	7.48	--	ND	18.4	--		14.96
1,1-Dichloroethene	ND	2.99	--	ND	11.9	--		14.96
tert-Butyl Alcohol	ND	7.48	--	ND	22.7	--		14.96
Methylene chloride	ND	7.48	--	ND	26.0	--		14.96
3-Chloropropene	ND	2.99	--	ND	9.36	--		14.96
Carbon disulfide	ND	2.99	--	ND	9.31	--		14.96
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.99	--	ND	22.9	--		14.96
trans-1,2-Dichloroethene	ND	2.99	--	ND	11.9	--		14.96
1,1-Dichloroethane	ND	2.99	--	ND	12.1	--		14.96
Methyl tert butyl ether	ND	2.99	--	ND	10.8	--		14.96
2-Butanone	ND	7.48	--	ND	22.1	--		14.96
cis-1,2-Dichloroethene	ND	2.99	--	ND	11.9	--		14.96

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-15 D
Client ID: SVG-24-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:25
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	7.48	--	ND	27.0	--		14.96
Chloroform	27.6	2.99	--	135	14.6	--		14.96
Tetrahydrofuran	ND	7.48	--	ND	22.1	--		14.96
1,2-Dichloroethane	ND	2.99	--	ND	12.1	--		14.96
n-Hexane	ND	2.99	--	ND	10.5	--		14.96
1,1,1-Trichloroethane	ND	2.99	--	ND	16.3	--		14.96
Benzene	ND	2.99	--	ND	9.55	--		14.96
Carbon tetrachloride	ND	2.99	--	ND	18.8	--		14.96
Cyclohexane	ND	2.99	--	ND	10.3	--		14.96
1,2-Dichloropropane	ND	2.99	--	ND	13.8	--		14.96
Bromodichloromethane	ND	2.99	--	ND	20.0	--		14.96
1,4-Dioxane	ND	2.99	--	ND	10.8	--		14.96
Trichloroethene	29.9	2.99	--	161	16.1	--		14.96
2,2,4-Trimethylpentane	ND	2.99	--	ND	14.0	--		14.96
Heptane	ND	2.99	--	ND	12.3	--		14.96
cis-1,3-Dichloropropene	ND	2.99	--	ND	13.6	--		14.96
4-Methyl-2-pentanone	ND	7.48	--	ND	30.7	--		14.96
trans-1,3-Dichloropropene	ND	2.99	--	ND	13.6	--		14.96
1,1,2-Trichloroethane	ND	2.99	--	ND	16.3	--		14.96
Toluene	ND	2.99	--	ND	11.3	--		14.96
2-Hexanone	ND	2.99	--	ND	12.3	--		14.96
Dibromochloromethane	ND	2.99	--	ND	25.5	--		14.96
1,2-Dibromoethane	ND	2.99	--	ND	23.0	--		14.96
Tetrachloroethene	1210	2.99	--	8210	20.3	--		14.96
Chlorobenzene	ND	2.99	--	ND	13.8	--		14.96
Ethylbenzene	ND	2.99	--	ND	13.0	--		14.96

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-15 D
Client ID: SVG-24-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:25
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	5.98	--	ND	26.0	--		14.96
Bromoform	ND	2.99	--	ND	30.9	--		14.96
Styrene	ND	2.99	--	ND	12.7	--		14.96
1,1,2,2-Tetrachloroethane	ND	2.99	--	ND	20.5	--		14.96
o-Xylene	ND	2.99	--	ND	13.0	--		14.96
4-Ethyltoluene	ND	2.99	--	ND	14.7	--		14.96
1,3,5-Trimethylbenzene	ND	2.99	--	ND	14.7	--		14.96
1,2,4-Trimethylbenzene	ND	2.99	--	ND	14.7	--		14.96
Benzyl chloride	ND	2.99	--	ND	15.5	--		14.96
1,3-Dichlorobenzene	ND	2.99	--	ND	18.0	--		14.96
1,4-Dichlorobenzene	ND	2.99	--	ND	18.0	--		14.96
1,2-Dichlorobenzene	ND	2.99	--	ND	18.0	--		14.96
1,2,4-Trichlorobenzene	ND	2.99	--	ND	22.2	--		14.96
Hexachlorobutadiene	ND	2.99	--	ND	31.9	--		14.96

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	92		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-16
Client ID: SVG-23-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:26
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 20:28
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.460	0.200	--	2.27	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	114	1.00	--	271	2.38	--		1
Trichlorofluoromethane	0.242	0.200	--	1.36	1.12	--		1
iso-Propyl Alcohol	0.818	0.500	--	2.01	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	1.65	0.500	--	5.00	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	7.78	0.500	--	22.9	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-16
Client ID: SVG-23-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:26
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.312	0.200	--	1.52	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.458	0.200	--	1.46	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.284	0.200	--	0.978	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	1.89	0.200	--	10.2	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.08	0.200	--	7.84	0.754	--		1
2-Hexanone	2.32	0.200	--	9.51	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	30.7	0.200	--	208	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.464	0.200	--	2.02	0.869	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-16
Client ID: SVG-23-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:26
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.67	0.400	--	7.25	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.601	0.200	--	2.61	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.210	0.200	--	1.03	0.983	--		1
1,2,4-Trimethylbenzene	0.903	0.200	--	4.44	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	91		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-17 D
Client ID: SVG-22-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:29
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 08:34
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.608	0.400	--	3.01	1.98	--		2
Chloromethane	ND	0.400	--	ND	0.826	--		2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.400	--	ND	2.80	--		2
Vinyl chloride	ND	0.400	--	ND	1.02	--		2
1,3-Butadiene	ND	0.400	--	ND	0.885	--		2
Bromomethane	ND	0.400	--	ND	1.55	--		2
Chloroethane	ND	0.400	--	ND	1.06	--		2
Ethyl Alcohol	ND	10.0	--	ND	18.8	--		2
Vinyl bromide	ND	0.400	--	ND	1.75	--		2
Acetone	163	2.00	--	387	4.75	--		2
Trichlorofluoromethane	ND	0.400	--	ND	2.25	--		2
iso-Propyl Alcohol	2.31	1.00	--	5.68	2.46	--		2
1,1-Dichloroethene	ND	0.400	--	ND	1.59	--		2
tert-Butyl Alcohol	4.02	1.00	--	12.2	3.03	--		2
Methylene chloride	ND	1.00	--	ND	3.47	--		2
3-Chloropropene	ND	0.400	--	ND	1.25	--		2
Carbon disulfide	0.482	0.400	--	1.50	1.25	--		2
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.400	--	ND	3.07	--		2
trans-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--		2
1,1-Dichloroethane	ND	0.400	--	ND	1.62	--		2
Methyl tert butyl ether	ND	0.400	--	ND	1.44	--		2
2-Butanone	5.82	1.00	--	17.2	2.95	--		2
cis-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--		2

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-17 D
Client ID: SVG-22-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:29
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.00	--	ND	3.60	--		2
Chloroform	2.02	0.400	--	9.86	1.95	--		2
Tetrahydrofuran	ND	1.00	--	ND	2.95	--		2
1,2-Dichloroethane	ND	0.400	--	ND	1.62	--		2
n-Hexane	ND	0.400	--	ND	1.41	--		2
1,1,1-Trichloroethane	2.99	0.400	--	16.3	2.18	--		2
Benzene	ND	0.400	--	ND	1.28	--		2
Carbon tetrachloride	0.628	0.400	--	3.95	2.52	--		2
Cyclohexane	ND	0.400	--	ND	1.38	--		2
1,2-Dichloropropane	ND	0.400	--	ND	1.85	--		2
Bromodichloromethane	ND	0.400	--	ND	2.68	--		2
1,4-Dioxane	ND	0.400	--	ND	1.44	--		2
Trichloroethene	13.0	0.400	--	69.9	2.15	--		2
2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--		2
Heptane	ND	0.400	--	ND	1.64	--		2
cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
4-Methyl-2-pentanone	ND	1.00	--	ND	4.10	--		2
trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--		2
1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Toluene	0.464	0.400	--	1.75	1.51	--		2
2-Hexanone	ND	0.400	--	ND	1.64	--		2
Dibromochloromethane	ND	0.400	--	ND	3.41	--		2
1,2-Dibromoethane	ND	0.400	--	ND	3.07	--		2
Tetrachloroethene	189	0.400	--	1280	2.71	--		2
Chlorobenzene	ND	0.400	--	ND	1.84	--		2
Ethylbenzene	ND	0.400	--	ND	1.74	--		2

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-17 D
Client ID: SVG-22-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 09:29
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.800	--	ND	3.47	--		2
Bromoform	ND	0.400	--	ND	4.14	--		2
Styrene	ND	0.400	--	ND	1.70	--		2
1,1,2,2-Tetrachloroethane	ND	0.400	--	ND	2.75	--		2
o-Xylene	ND	0.400	--	ND	1.74	--		2
4-Ethyltoluene	ND	0.400	--	ND	1.97	--		2
1,3,5-Trimethylbenzene	ND	0.400	--	ND	1.97	--		2
1,2,4-Trimethylbenzene	0.626	0.400	--	3.08	1.97	--		2
Benzyl chloride	ND	0.400	--	ND	2.07	--		2
1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--		2
Hexachlorobutadiene	ND	0.400	--	ND	4.27	--		2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	70		60-140
Bromochloromethane	66		60-140
chlorobenzene-d5	74		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-18 D
Client ID: SVG-06-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:35
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 21:39
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1250	--	ND	6180	--		6250
Chloromethane	ND	1250	--	ND	2580	--		6250
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1250	--	ND	8740	--		6250
Vinyl chloride	ND	1250	--	ND	3200	--		6250
1,3-Butadiene	ND	1250	--	ND	2770	--		6250
Bromomethane	ND	1250	--	ND	4850	--		6250
Chloroethane	ND	1250	--	ND	3300	--		6250
Ethyl Alcohol	ND	31200	--	ND	58800	--		6250
Vinyl bromide	ND	1250	--	ND	5470	--		6250
Acetone	ND	6250	--	ND	14800	--		6250
Trichlorofluoromethane	ND	1250	--	ND	7020	--		6250
iso-Propyl Alcohol	ND	3120	--	ND	7670	--		6250
1,1-Dichloroethene	ND	1250	--	ND	4960	--		6250
tert-Butyl Alcohol	ND	3120	--	ND	9460	--		6250
Methylene chloride	ND	3120	--	ND	10800	--		6250
3-Chloropropene	ND	1250	--	ND	3910	--		6250
Carbon disulfide	ND	1250	--	ND	3890	--		6250
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1250	--	ND	9580	--		6250
trans-1,2-Dichloroethene	ND	1250	--	ND	4960	--		6250
1,1-Dichloroethane	ND	1250	--	ND	5060	--		6250
Methyl tert butyl ether	ND	1250	--	ND	4510	--		6250
2-Butanone	ND	3120	--	ND	9200	--		6250
cis-1,2-Dichloroethene	2220	1250	--	8800	4960	--		6250

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-18 D
Client ID: SVG-06-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:35
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	3120	--	ND	11200	--		6250
Chloroform	ND	1250	--	ND	6100	--		6250
Tetrahydrofuran	ND	3120	--	ND	9200	--		6250
1,2-Dichloroethane	ND	1250	--	ND	5060	--		6250
n-Hexane	ND	1250	--	ND	4410	--		6250
1,1,1-Trichloroethane	ND	1250	--	ND	6820	--		6250
Benzene	ND	1250	--	ND	3990	--		6250
Carbon tetrachloride	ND	1250	--	ND	7860	--		6250
Cyclohexane	ND	1250	--	ND	4300	--		6250
1,2-Dichloropropane	ND	1250	--	ND	5780	--		6250
Bromodichloromethane	ND	1250	--	ND	8370	--		6250
1,4-Dioxane	ND	1250	--	ND	4500	--		6250
Trichloroethene	2750	1250	--	14800	6720	--		6250
2,2,4-Trimethylpentane	ND	1250	--	ND	5840	--		6250
Heptane	ND	1250	--	ND	5120	--		6250
cis-1,3-Dichloropropene	ND	1250	--	ND	5670	--		6250
4-Methyl-2-pentanone	ND	3120	--	ND	12800	--		6250
trans-1,3-Dichloropropene	ND	1250	--	ND	5670	--		6250
1,1,2-Trichloroethane	ND	1250	--	ND	6820	--		6250
Toluene	ND	1250	--	ND	4710	--		6250
2-Hexanone	ND	1250	--	ND	5120	--		6250
Dibromochloromethane	ND	1250	--	ND	10600	--		6250
1,2-Dibromoethane	ND	1250	--	ND	9610	--		6250
Tetrachloroethene	763000	1250	--	5170000	8480	--	E	6250
Chlorobenzene	ND	1250	--	ND	5760	--		6250
Ethylbenzene	ND	1250	--	ND	5430	--		6250

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-18 D
Client ID: SVG-06-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:35
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	2500	--	ND	10900	--		6250
Bromoform	ND	1250	--	ND	12900	--		6250
Styrene	ND	1250	--	ND	5320	--		6250
1,1,2,2-Tetrachloroethane	ND	1250	--	ND	8580	--		6250
o-Xylene	ND	1250	--	ND	5430	--		6250
4-Ethyltoluene	ND	1250	--	ND	6150	--		6250
1,3,5-Trimethylbenzene	ND	1250	--	ND	6150	--		6250
1,2,4-Trimethylbenzene	ND	1250	--	ND	6150	--		6250
Benzyl chloride	ND	1250	--	ND	6470	--		6250
1,3-Dichlorobenzene	ND	1250	--	ND	7520	--		6250
1,4-Dichlorobenzene	ND	1250	--	ND	7520	--		6250
1,2-Dichlorobenzene	ND	1250	--	ND	7520	--		6250
1,2,4-Trichlorobenzene	ND	1250	--	ND	9280	--		6250
Hexachlorobutadiene	ND	1250	--	ND	13300	--		6250

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	93		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-18 D
Client ID: SVG-06-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:35
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 09:10
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tetrachloroethene	1240000	5000	--	8410000	33900	--		25000

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	83		60-140
chlorobenzene-d5	85		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-19 D
Client ID: SVG-07-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:38
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 22:15
Analyst: EW

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	109	--	ND	539	--		543.5
Chloromethane	ND	109.	--	ND	225	--		543.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	109.	--	ND	762	--		543.5
Vinyl chloride	ND	109.	--	ND	279	--		543.5
1,3-Butadiene	ND	109.	--	ND	241	--		543.5
Bromomethane	ND	109.	--	ND	423	--		543.5
Chloroethane	ND	109.	--	ND	288	--		543.5
Ethyl Alcohol	ND	2720	--	ND	5130	--		543.5
Vinyl bromide	ND	109.	--	ND	477	--		543.5
Acetone	ND	544	--	ND	1290	--		543.5
Trichlorofluoromethane	ND	109.	--	ND	613	--		543.5
iso-Propyl Alcohol	ND	272.	--	ND	669	--		543.5
1,1-Dichloroethene	ND	109.	--	ND	432	--		543.5
tert-Butyl Alcohol	ND	272.	--	ND	825	--		543.5
Methylene chloride	ND	272	--	ND	945	--		543.5
3-Chloropropene	ND	109.	--	ND	341	--		543.5
Carbon disulfide	ND	109.	--	ND	339	--		543.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	109.	--	ND	835	--		543.5
trans-1,2-Dichloroethene	ND	109.	--	ND	432	--		543.5
1,1-Dichloroethane	ND	109.	--	ND	441	--		543.5
Methyl tert butyl ether	ND	109.	--	ND	393	--		543.5
2-Butanone	ND	272.	--	ND	802	--		543.5
cis-1,2-Dichloroethene	358	109	--	1420	432	--		543.5

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-19 D
Client ID: SVG-07-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:38
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	272.	--	ND	980	--		543.5
Chloroform	ND	109.	--	ND	532	--		543.5
Tetrahydrofuran	ND	272.	--	ND	802	--		543.5
1,2-Dichloroethane	ND	109.	--	ND	441	--		543.5
n-Hexane	ND	109.	--	ND	384	--		543.5
1,1,1-Trichloroethane	ND	109.	--	ND	595	--		543.5
Benzene	ND	109.	--	ND	348	--		543.5
Carbon tetrachloride	ND	109.	--	ND	686	--		543.5
Cyclohexane	ND	109.	--	ND	375	--		543.5
1,2-Dichloropropane	ND	109.	--	ND	504	--		543.5
Bromodichloromethane	ND	109.	--	ND	730	--		543.5
1,4-Dioxane	ND	109.	--	ND	393	--		543.5
Trichloroethene	372	109	--	2000	586	--		543.5
2,2,4-Trimethylpentane	ND	109.	--	ND	509	--		543.5
Heptane	ND	109.	--	ND	447	--		543.5
cis-1,3-Dichloropropene	ND	109.	--	ND	495	--		543.5
4-Methyl-2-pentanone	ND	272.	--	ND	1110	--		543.5
trans-1,3-Dichloropropene	ND	109.	--	ND	495	--		543.5
1,1,2-Trichloroethane	ND	109.	--	ND	595	--		543.5
Toluene	ND	109.	--	ND	411	--		543.5
2-Hexanone	ND	109.	--	ND	447	--		543.5
Dibromochloromethane	ND	109.	--	ND	929	--		543.5
1,2-Dibromoethane	ND	109.	--	ND	838	--		543.5
Tetrachloroethene	26600	109	--	180000	739	--		543.5
Chlorobenzene	ND	109.	--	ND	502	--		543.5
Ethylbenzene	ND	109.	--	ND	473	--		543.5

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-19 D
Client ID: SVG-07-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:38
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	217.	--	ND	943	--		543.5
Bromoform	ND	109.	--	ND	1130	--		543.5
Styrene	ND	109.	--	ND	464	--		543.5
1,1,2,2-Tetrachloroethane	ND	109.	--	ND	749	--		543.5
o-Xylene	ND	109.	--	ND	473	--		543.5
4-Ethyltoluene	ND	109.	--	ND	536	--		543.5
1,3,5-Trimethylbenzene	ND	109.	--	ND	536	--		543.5
1,2,4-Trimethylbenzene	ND	109.	--	ND	536	--		543.5
Benzyl chloride	ND	109.	--	ND	564	--		543.5
1,3-Dichlorobenzene	ND	109.	--	ND	655	--		543.5
1,4-Dichlorobenzene	ND	109.	--	ND	655	--		543.5
1,2-Dichlorobenzene	ND	109.	--	ND	655	--		543.5
1,2,4-Trichlorobenzene	ND	109.	--	ND	809	--		543.5
Hexachlorobutadiene	ND	109.	--	ND	1160	--		543.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-20
Client ID: SVG-08-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 22:53
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.464	0.200	--	2.29	0.989	--		1
Chloromethane	0.206	0.200	--	0.425	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.20	1.00	--	14.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.722	0.500	--	2.13	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-20
Client ID: SVG-08-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.247	0.200	--	1.33	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.234	0.200	--	0.882	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.905	0.200	--	6.14	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-20
Client ID: SVG-08-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 10:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.420	0.400	--	1.82	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.432	0.200	--	2.12	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	88		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-21 D
Client ID: SVG-10-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:06
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/25/18 23:28
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	4.00	--	ND	19.8	--		20
Chloromethane	ND	4.00	--	ND	8.26	--		20
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	4.00	--	ND	28.0	--		20
Vinyl chloride	ND	4.00	--	ND	10.2	--		20
1,3-Butadiene	ND	4.00	--	ND	8.85	--		20
Bromomethane	ND	4.00	--	ND	15.5	--		20
Chloroethane	ND	4.00	--	ND	10.6	--		20
Ethyl Alcohol	ND	100	--	ND	188	--		20
Vinyl bromide	ND	4.00	--	ND	17.5	--		20
Acetone	60.3	20.0	--	143	47.5	--		20
Trichlorofluoromethane	ND	4.00	--	ND	22.5	--		20
iso-Propyl Alcohol	ND	10.0	--	ND	24.6	--		20
1,1-Dichloroethene	ND	4.00	--	ND	15.9	--		20
tert-Butyl Alcohol	ND	10.0	--	ND	30.3	--		20
Methylene chloride	ND	10.0	--	ND	34.7	--		20
3-Chloropropene	ND	4.00	--	ND	12.5	--		20
Carbon disulfide	ND	4.00	--	ND	12.5	--		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	4.00	--	ND	30.7	--		20
trans-1,2-Dichloroethene	ND	4.00	--	ND	15.9	--		20
1,1-Dichloroethane	ND	4.00	--	ND	16.2	--		20
Methyl tert butyl ether	ND	4.00	--	ND	14.4	--		20
2-Butanone	ND	10.0	--	ND	29.5	--		20
cis-1,2-Dichloroethene	ND	4.00	--	ND	15.9	--		20

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-21 D
Client ID: SVG-10-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:06
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	10.0	--	ND	36.0	--		20
Chloroform	4.20	4.00	--	20.5	19.5	--		20
Tetrahydrofuran	ND	10.0	--	ND	29.5	--		20
1,2-Dichloroethane	ND	4.00	--	ND	16.2	--		20
n-Hexane	ND	4.00	--	ND	14.1	--		20
1,1,1-Trichloroethane	ND	4.00	--	ND	21.8	--		20
Benzene	ND	4.00	--	ND	12.8	--		20
Carbon tetrachloride	ND	4.00	--	ND	25.2	--		20
Cyclohexane	ND	4.00	--	ND	13.8	--		20
1,2-Dichloropropane	ND	4.00	--	ND	18.5	--		20
Bromodichloromethane	ND	4.00	--	ND	26.8	--		20
1,4-Dioxane	ND	4.00	--	ND	14.4	--		20
Trichloroethene	8.50	4.00	--	45.7	21.5	--		20
2,2,4-Trimethylpentane	ND	4.00	--	ND	18.7	--		20
Heptane	ND	4.00	--	ND	16.4	--		20
cis-1,3-Dichloropropene	ND	4.00	--	ND	18.2	--		20
4-Methyl-2-pentanone	ND	10.0	--	ND	41.0	--		20
trans-1,3-Dichloropropene	ND	4.00	--	ND	18.2	--		20
1,1,2-Trichloroethane	ND	4.00	--	ND	21.8	--		20
Toluene	ND	4.00	--	ND	15.1	--		20
2-Hexanone	ND	4.00	--	ND	16.4	--		20
Dibromochloromethane	ND	4.00	--	ND	34.1	--		20
1,2-Dibromoethane	ND	4.00	--	ND	30.7	--		20
Tetrachloroethene	1150	4.00	--	7800	27.1	--		20
Chlorobenzene	ND	4.00	--	ND	18.4	--		20
Ethylbenzene	ND	4.00	--	ND	17.4	--		20

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-21 D
Client ID: SVG-10-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:06
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	8.00	--	ND	34.7	--		20
Bromoform	ND	4.00	--	ND	41.4	--		20
Styrene	ND	4.00	--	ND	17.0	--		20
1,1,2,2-Tetrachloroethane	ND	4.00	--	ND	27.5	--		20
o-Xylene	ND	4.00	--	ND	17.4	--		20
4-Ethyltoluene	ND	4.00	--	ND	19.7	--		20
1,3,5-Trimethylbenzene	ND	4.00	--	ND	19.7	--		20
1,2,4-Trimethylbenzene	ND	4.00	--	ND	19.7	--		20
Benzyl chloride	ND	4.00	--	ND	20.7	--		20
1,3-Dichlorobenzene	ND	4.00	--	ND	24.0	--		20
1,4-Dichlorobenzene	ND	4.00	--	ND	24.0	--		20
1,2-Dichlorobenzene	ND	4.00	--	ND	24.0	--		20
1,2,4-Trichlorobenzene	ND	4.00	--	ND	29.7	--		20
Hexachlorobutadiene	ND	4.00	--	ND	42.7	--		20

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-22 D
Client ID: SVG-16-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 09:46
Analyst: EW

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.500	--	ND	2.47	--		2.5
Chloromethane	ND	0.500	--	ND	1.03	--		2.5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.500	--	ND	3.49	--		2.5
Vinyl chloride	ND	0.500	--	ND	1.28	--		2.5
1,3-Butadiene	ND	0.500	--	ND	1.11	--		2.5
Bromomethane	ND	0.500	--	ND	1.94	--		2.5
Chloroethane	ND	0.500	--	ND	1.32	--		2.5
Ethyl Alcohol	ND	12.5	--	ND	23.6	--		2.5
Vinyl bromide	ND	0.500	--	ND	2.19	--		2.5
Acetone	82.9	2.50	--	197	5.94	--		2.5
Trichlorofluoromethane	ND	0.500	--	ND	2.81	--		2.5
iso-Propyl Alcohol	1.48	1.25	--	3.64	3.07	--		2.5
1,1-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
tert-Butyl Alcohol	ND	1.25	--	ND	3.79	--		2.5
Methylene chloride	ND	1.25	--	ND	4.34	--		2.5
3-Chloropropene	ND	0.500	--	ND	1.57	--		2.5
Carbon disulfide	ND	0.500	--	ND	1.56	--		2.5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.500	--	ND	3.83	--		2.5
trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
1,1-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
Methyl tert butyl ether	ND	0.500	--	ND	1.80	--		2.5
2-Butanone	4.99	1.25	--	14.7	3.69	--		2.5
cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-22 D
Client ID: SVG-16-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.25	--	ND	4.50	--		2.5
Chloroform	0.890	0.500	--	4.35	2.44	--		2.5
Tetrahydrofuran	ND	1.25	--	ND	3.69	--		2.5
1,2-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
n-Hexane	ND	0.500	--	ND	1.76	--		2.5
1,1,1-Trichloroethane	0.962	0.500	--	5.25	2.73	--		2.5
Benzene	ND	0.500	--	ND	1.60	--		2.5
Carbon tetrachloride	ND	0.500	--	ND	3.15	--		2.5
Cyclohexane	ND	0.500	--	ND	1.72	--		2.5
1,2-Dichloropropane	ND	0.500	--	ND	2.31	--		2.5
Bromodichloromethane	ND	0.500	--	ND	3.35	--		2.5
1,4-Dioxane	ND	0.500	--	ND	1.80	--		2.5
Trichloroethene	1.50	0.500	--	8.06	2.69	--		2.5
2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--		2.5
Heptane	ND	0.500	--	ND	2.05	--		2.5
cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--		2.5
trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Toluene	0.888	0.500	--	3.35	1.88	--		2.5
2-Hexanone	ND	0.500	--	ND	2.05	--		2.5
Dibromochloromethane	ND	0.500	--	ND	4.26	--		2.5
1,2-Dibromoethane	ND	0.500	--	ND	3.84	--		2.5
Tetrachloroethene	172	0.500	--	1170	3.39	--		2.5
Chlorobenzene	ND	0.500	--	ND	2.30	--		2.5
Ethylbenzene	ND	0.500	--	ND	2.17	--		2.5

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-22 D
Client ID: SVG-16-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 12:07
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.50	1.00	--	6.52	4.34	--		2.5
Bromoform	ND	0.500	--	ND	5.17	--		2.5
Styrene	ND	0.500	--	ND	2.13	--		2.5
1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--		2.5
o-Xylene	0.528	0.500	--	2.29	2.17	--		2.5
4-Ethyltoluene	ND	0.500	--	ND	2.46	--		2.5
1,3,5-Trimethylbenzene	ND	0.500	--	ND	2.46	--		2.5
1,2,4-Trimethylbenzene	1.10	0.500	--	5.41	2.46	--		2.5
Benzyl chloride	ND	0.500	--	ND	2.59	--		2.5
1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--		2.5
Hexachlorobutadiene	ND	0.500	--	ND	5.33	--		2.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	88		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-23 D
Client ID: SVG-DUP01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 00:39
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	217.	--	ND	1070	--		1087
Chloromethane	ND	217.	--	ND	448	--		1087
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	217.	--	ND	1520	--		1087
Vinyl chloride	ND	217.	--	ND	555	--		1087
1,3-Butadiene	ND	217.	--	ND	480	--		1087
Bromomethane	ND	217.	--	ND	843	--		1087
Chloroethane	ND	217.	--	ND	573	--		1087
Ethyl Alcohol	ND	5440	--	ND	10300	--		1087
Vinyl bromide	ND	217.	--	ND	949	--		1087
Acetone	ND	1090	--	ND	2590	--		1087
Trichlorofluoromethane	ND	217.	--	ND	1220	--		1087
iso-Propyl Alcohol	ND	544.	--	ND	1340	--		1087
1,1-Dichloroethene	ND	217.	--	ND	860	--		1087
tert-Butyl Alcohol	ND	544.	--	ND	1650	--		1087
Methylene chloride	ND	544.	--	ND	1890	--		1087
3-Chloropropene	ND	217.	--	ND	679	--		1087
Carbon disulfide	ND	217.	--	ND	676	--		1087
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	217.	--	ND	1660	--		1087
trans-1,2-Dichloroethene	ND	217.	--	ND	860	--		1087
1,1-Dichloroethane	ND	217.	--	ND	878	--		1087
Methyl tert butyl ether	ND	217.	--	ND	782	--		1087
2-Butanone	ND	544.	--	ND	1600	--		1087
cis-1,2-Dichloroethene	ND	217.	--	ND	860	--		1087

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-23 D
Client ID: SVG-DUP01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	544.	--	ND	1960	--		1087
Chloroform	ND	217.	--	ND	1060	--		1087
Tetrahydrofuran	ND	544.	--	ND	1600	--		1087
1,2-Dichloroethane	ND	217.	--	ND	878	--		1087
n-Hexane	ND	217.	--	ND	765	--		1087
1,1,1-Trichloroethane	ND	217.	--	ND	1180	--		1087
Benzene	ND	217.	--	ND	693	--		1087
Carbon tetrachloride	ND	217.	--	ND	1370	--		1087
Cyclohexane	ND	217.	--	ND	747	--		1087
1,2-Dichloropropane	ND	217.	--	ND	1000	--		1087
Bromodichloromethane	ND	217.	--	ND	1450	--		1087
1,4-Dioxane	ND	217.	--	ND	782	--		1087
Trichloroethene	242	217	--	1300	1170	--		1087
2,2,4-Trimethylpentane	ND	217.	--	ND	1010	--		1087
Heptane	ND	217.	--	ND	889	--		1087
cis-1,3-Dichloropropene	ND	217.	--	ND	985	--		1087
4-Methyl-2-pentanone	ND	544.	--	ND	2230	--		1087
trans-1,3-Dichloropropene	ND	217.	--	ND	985	--		1087
1,1,2-Trichloroethane	ND	217.	--	ND	1180	--		1087
Toluene	ND	217.	--	ND	818	--		1087
2-Hexanone	ND	217.	--	ND	889	--		1087
Dibromochloromethane	ND	217.	--	ND	1850	--		1087
1,2-Dibromoethane	ND	217.	--	ND	1670	--		1087
Tetrachloroethene	69600	217	--	472000	1470	--		1087
Chlorobenzene	ND	217.	--	ND	999	--		1087
Ethylbenzene	ND	217.	--	ND	943	--		1087

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-23 D
Client ID: SVG-DUP01-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/16/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	435.	--	ND	1890	--		1087
Bromoform	ND	217.	--	ND	2240	--		1087
Styrene	ND	217.	--	ND	924	--		1087
1,1,2,2-Tetrachloroethane	ND	217.	--	ND	1490	--		1087
o-Xylene	ND	217.	--	ND	943	--		1087
4-Ethyltoluene	ND	217.	--	ND	1070	--		1087
1,3,5-Trimethylbenzene	ND	217.	--	ND	1070	--		1087
1,2,4-Trimethylbenzene	ND	217.	--	ND	1070	--		1087
Benzyl chloride	ND	217.	--	ND	1120	--		1087
1,3-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,4-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,2-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,2,4-Trichlorobenzene	ND	217.	--	ND	1610	--		1087
Hexachlorobutadiene	ND	217.	--	ND	2310	--		1087

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	96		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-24 D
Client ID: SVG-13-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 10:23
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.514	0.250	--	2.54	1.24	--		1.25
Chloromethane	ND	0.250	--	ND	0.516	--		1.25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.250	--	ND	1.75	--		1.25
Vinyl chloride	ND	0.250	--	ND	0.639	--		1.25
1,3-Butadiene	ND	0.250	--	ND	0.553	--		1.25
Bromomethane	ND	0.250	--	ND	0.971	--		1.25
Chloroethane	ND	0.250	--	ND	0.660	--		1.25
Ethyl Alcohol	ND	6.25	--	ND	11.8	--		1.25
Vinyl bromide	ND	0.250	--	ND	1.09	--		1.25
Acetone	2.11	1.25	--	5.01	2.97	--		1.25
Trichlorofluoromethane	0.301	0.250	--	1.69	1.40	--		1.25
iso-Propyl Alcohol	ND	0.625	--	ND	1.54	--		1.25
1,1-Dichloroethene	ND	0.250	--	ND	0.991	--		1.25
tert-Butyl Alcohol	ND	0.625	--	ND	1.89	--		1.25
Methylene chloride	ND	0.625	--	ND	2.17	--		1.25
3-Chloropropene	ND	0.250	--	ND	0.783	--		1.25
Carbon disulfide	ND	0.250	--	ND	0.779	--		1.25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.250	--	ND	1.92	--		1.25
trans-1,2-Dichloroethene	ND	0.250	--	ND	0.991	--		1.25
1,1-Dichloroethane	ND	0.250	--	ND	1.01	--		1.25
Methyl tert butyl ether	ND	0.250	--	ND	0.901	--		1.25
2-Butanone	ND	0.625	--	ND	1.84	--		1.25
cis-1,2-Dichloroethene	ND	0.250	--	ND	0.991	--		1.25

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-24 D
Client ID: SVG-13-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.625	--	ND	2.25	--		1.25
Chloroform	20.2	0.250	--	98.6	1.22	--		1.25
Tetrahydrofuran	ND	0.625	--	ND	1.84	--		1.25
1,2-Dichloroethane	ND	0.250	--	ND	1.01	--		1.25
n-Hexane	ND	0.250	--	ND	0.881	--		1.25
1,1,1-Trichloroethane	0.951	0.250	--	5.19	1.36	--		1.25
Benzene	ND	0.250	--	ND	0.799	--		1.25
Carbon tetrachloride	ND	0.250	--	ND	1.57	--		1.25
Cyclohexane	ND	0.250	--	ND	0.861	--		1.25
1,2-Dichloropropane	ND	0.250	--	ND	1.16	--		1.25
Bromodichloromethane	0.434	0.250	--	2.91	1.67	--		1.25
1,4-Dioxane	ND	0.250	--	ND	0.901	--		1.25
Trichloroethene	1.99	0.250	--	10.7	1.34	--		1.25
2,2,4-Trimethylpentane	ND	0.250	--	ND	1.17	--		1.25
Heptane	ND	0.250	--	ND	1.02	--		1.25
cis-1,3-Dichloropropene	ND	0.250	--	ND	1.13	--		1.25
4-Methyl-2-pentanone	ND	0.625	--	ND	2.56	--		1.25
trans-1,3-Dichloropropene	ND	0.250	--	ND	1.13	--		1.25
1,1,2-Trichloroethane	ND	0.250	--	ND	1.36	--		1.25
Toluene	ND	0.250	--	ND	0.942	--		1.25
2-Hexanone	ND	0.250	--	ND	1.02	--		1.25
Dibromochloromethane	ND	0.250	--	ND	2.13	--		1.25
1,2-Dibromoethane	ND	0.250	--	ND	1.92	--		1.25
Tetrachloroethene	82.9	0.250	--	562	1.70	--		1.25
Chlorobenzene	ND	0.250	--	ND	1.15	--		1.25
Ethylbenzene	ND	0.250	--	ND	1.09	--		1.25

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-24 D
Client ID: SVG-13-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:39
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.500	--	ND	2.17	--		1.25
Bromoform	ND	0.250	--	ND	2.58	--		1.25
Styrene	ND	0.250	--	ND	1.06	--		1.25
1,1,2,2-Tetrachloroethane	ND	0.250	--	ND	1.72	--		1.25
o-Xylene	ND	0.250	--	ND	1.09	--		1.25
4-Ethyltoluene	ND	0.250	--	ND	1.23	--		1.25
1,3,5-Trimethylbenzene	ND	0.250	--	ND	1.23	--		1.25
1,2,4-Trimethylbenzene	0.270	0.250	--	1.33	1.23	--		1.25
Benzyl chloride	ND	0.250	--	ND	1.29	--		1.25
1,3-Dichlorobenzene	ND	0.250	--	ND	1.50	--		1.25
1,4-Dichlorobenzene	ND	0.250	--	ND	1.50	--		1.25
1,2-Dichlorobenzene	ND	0.250	--	ND	1.50	--		1.25
1,2,4-Trichlorobenzene	ND	0.250	--	ND	1.86	--		1.25
Hexachlorobutadiene	ND	0.250	--	ND	2.67	--		1.25

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	91		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-25
Client ID: SVG-21-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 01:52
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.462	0.200	--	2.28	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.08	1.00	--	4.94	2.38	--		1
Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--		1
iso-Propyl Alcohol	0.841	0.500	--	2.07	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-25
Client ID: SVG-21-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.583	0.200	--	2.85	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.236	0.200	--	0.754	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.87	0.200	--	7.05	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	1.81	0.200	--	12.3	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.637	0.200	--	2.77	0.869	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-25
Client ID: SVG-21-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 09:40
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	2.67	0.400	--	11.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.10	0.200	--	4.78	0.869	--		1
4-Ethyltoluene	0.403	0.200	--	1.98	0.983	--		1
1,3,5-Trimethylbenzene	0.540	0.200	--	2.65	0.983	--		1
1,2,4-Trimethylbenzene	1.99	0.200	--	9.78	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-26 D
Client ID: SVG-09-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 02:28
Analyst: EW

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	111.	--	ND	549	--		555.6
Chloromethane	ND	111.	--	ND	229	--		555.6
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	111.	--	ND	776	--		555.6
Vinyl chloride	ND	111.	--	ND	284	--		555.6
1,3-Butadiene	ND	111.	--	ND	246	--		555.6
Bromomethane	ND	111.	--	ND	431	--		555.6
Chloroethane	ND	111.	--	ND	293	--		555.6
Ethyl Alcohol	ND	2780	--	ND	5240	--		555.6
Vinyl bromide	ND	111.	--	ND	485	--		555.6
Acetone	644	556	--	1530	1320	--		555.6
Trichlorofluoromethane	ND	111.	--	ND	624	--		555.6
iso-Propyl Alcohol	ND	278.	--	ND	683	--		555.6
1,1-Dichloroethene	ND	111.	--	ND	440	--		555.6
tert-Butyl Alcohol	ND	278.	--	ND	843	--		555.6
Methylene chloride	ND	278.	--	ND	966	--		555.6
3-Chloropropene	ND	111.	--	ND	347	--		555.6
Carbon disulfide	ND	111.	--	ND	346	--		555.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	111.	--	ND	851	--		555.6
trans-1,2-Dichloroethene	ND	111.	--	ND	440	--		555.6
1,1-Dichloroethane	ND	111.	--	ND	449	--		555.6
Methyl tert butyl ether	ND	111.	--	ND	400	--		555.6
2-Butanone	ND	278	--	ND	820	--		555.6
cis-1,2-Dichloroethene	ND	111.	--	ND	440	--		555.6

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-26 D
Client ID: SVG-09-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	278.	--	ND	1000	--		555.6
Chloroform	ND	111.	--	ND	542	--		555.6
Tetrahydrofuran	ND	278.	--	ND	820	--		555.6
1,2-Dichloroethane	ND	111.	--	ND	449	--		555.6
n-Hexane	ND	111	--	ND	391	--		555.6
1,1,1-Trichloroethane	ND	111.	--	ND	606	--		555.6
Benzene	ND	111.	--	ND	355	--		555.6
Carbon tetrachloride	ND	111.	--	ND	698	--		555.6
Cyclohexane	ND	111	--	ND	382	--		555.6
1,2-Dichloropropane	ND	111.	--	ND	513	--		555.6
Bromodichloromethane	ND	111.	--	ND	744	--		555.6
1,4-Dioxane	ND	111.	--	ND	400	--		555.6
Trichloroethene	153	111	--	822	597	--		555.6
2,2,4-Trimethylpentane	ND	111.	--	ND	518	--		555.6
Heptane	372	111	--	1520	455	--		555.6
cis-1,3-Dichloropropene	ND	111.	--	ND	504	--		555.6
4-Methyl-2-pentanone	ND	278.	--	ND	1140	--		555.6
trans-1,3-Dichloropropene	ND	111.	--	ND	504	--		555.6
1,1,2-Trichloroethane	ND	111.	--	ND	606	--		555.6
Toluene	ND	111.	--	ND	418	--		555.6
2-Hexanone	ND	111.	--	ND	455	--		555.6
Dibromochloromethane	ND	111.	--	ND	946	--		555.6
1,2-Dibromoethane	ND	111.	--	ND	853	--		555.6
Tetrachloroethene	21100	111	--	143000	753	--		555.6
Chlorobenzene	ND	111	--	ND	511	--		555.6
Ethylbenzene	ND	111.	--	ND	482	--		555.6

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-26 D
Client ID: SVG-09-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 11:45
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	222	--	ND	964	--		555.6
Bromoform	ND	111.	--	ND	1150	--		555.6
Styrene	ND	111.	--	ND	473	--		555.6
1,1,2,2-Tetrachloroethane	ND	111.	--	ND	762	--		555.6
o-Xylene	ND	111.	--	ND	482	--		555.6
4-Ethyltoluene	ND	111.	--	ND	546	--		555.6
1,3,5-Trimethylbenzene	ND	111.	--	ND	546	--		555.6
1,2,4-Trimethylbenzene	ND	111	--	ND	546	--		555.6
Benzyl chloride	ND	111.	--	ND	575	--		555.6
1,3-Dichlorobenzene	ND	111.	--	ND	667	--		555.6
1,4-Dichlorobenzene	ND	111.	--	ND	667	--		555.6
1,2-Dichlorobenzene	ND	111.	--	ND	667	--		555.6
1,2,4-Trichlorobenzene	ND	111.	--	ND	824	--		555.6
Hexachlorobutadiene	ND	111.	--	ND	1180	--		555.6

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	98		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-27
Client ID: SVG-DUP2-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/26/18 03:06
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.483	0.200	--	2.39	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.25	1.00	--	5.34	2.38	--		1
Trichlorofluoromethane	0.235	0.200	--	1.32	1.12	--		1
iso-Propyl Alcohol	0.744	0.500	--	1.83	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-27
Client ID: SVG-DUP2-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.977	0.200	--	4.77	0.977	--		1
Tetrahydrofuran	0.721	0.500	--	2.13	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.261	0.200	--	1.40	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.481	0.200	--	1.81	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	2.77	0.200	--	18.8	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

SAMPLE RESULTS

Lab ID: L1842348-27
Client ID: SVG-DUP2-18
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 10/17/18 00:00
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.421	0.400	--	1.83	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.309	0.200	--	1.52	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 12-27 Batch: WG1172333-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 12-27 Batch: WG1172333-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 12-27 Batch: WG1172333-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 12-27 Batch: WG1172333-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:58

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 12-27 Batch: WG1172333-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1172335-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051
Lab Number: L1842348
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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1172335-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1172335-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1172335-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1172335-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:22

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 07-09 Batch: WG1172378-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
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Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:22

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 07-09 Batch: WG1172378-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:22

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 07-09 Batch: WG1172378-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:22

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 07-09 Batch: WG1172378-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/25/18 14:22

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 07-09 Batch: WG1172378-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 Batch: WG1172333-3								
Chlorodifluoromethane	90		-		70-130	-		
Propylene	113		-		70-130	-		
Propane	87		-		70-130	-		
Dichlorodifluoromethane	102		-		70-130	-		
Chloromethane	107		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	101		-		70-130	-		
Methanol	94		-		70-130	-		
Vinyl chloride	91		-		70-130	-		
1,3-Butadiene	102		-		70-130	-		
Butane	98		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	87		-		70-130	-		
Ethyl Alcohol	93		-		70-130	-		
Dichlorofluoromethane	83		-		70-130	-		
Vinyl bromide	90		-		70-130	-		
Acrolein	82		-		70-130	-		
Acetone	116		-		70-130	-		
Acetonitrile	87		-		70-130	-		
Trichlorofluoromethane	94		-		70-130	-		
iso-Propyl Alcohol	128		-		70-130	-		
Acrylonitrile	90		-		70-130	-		
Pentane	96		-		70-130	-		
Ethyl ether	76		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 Batch: WG1172333-3								
1,1-Dichloroethene	91		-		70-130	-		
tert-Butyl Alcohol	82		-		70-130	-		
Methylene chloride	112		-		70-130	-		
3-Chloropropene	107		-		70-130	-		
Carbon disulfide	98		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	93		-		70-130	-		
trans-1,2-Dichloroethene	88		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	100		-		70-130	-		
Vinyl acetate	118		-		70-130	-		
2-Butanone	109		-		70-130	-		
cis-1,2-Dichloroethene	84		-		70-130	-		
Ethyl Acetate	96		-		70-130	-		
Chloroform	94		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
2,2-Dichloropropane	91		-		70-130	-		
1,2-Dichloroethane	99		-		70-130	-		
n-Hexane	91		-		70-130	-		
Isopropyl Ether	81		-		70-130	-		
Ethyl-Tert-Butyl-Ether	84		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
1,1-Dichloropropene	96		-		70-130	-		
Benzene	91		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 Batch: WG1172333-3								
Carbon tetrachloride	105		-		70-130	-		
Cyclohexane	94		-		70-130	-		
Tertiary-Amyl Methyl Ether	89		-		70-130	-		
Dibromomethane	89		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	95		-		70-130	-		
Trichloroethene	90		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Methyl Methacrylate	116		-		70-130	-		
Heptane	113		-		70-130	-		
cis-1,3-Dichloropropene	105		-		70-130	-		
4-Methyl-2-pentanone	116		-		70-130	-		
trans-1,3-Dichloropropene	94		-		70-130	-		
1,1,2-Trichloroethane	97		-		70-130	-		
Toluene	88		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		
2-Hexanone	109		-		70-130	-		
Dibromochloromethane	102		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Butyl Acetate	90		-		70-130	-		
Octane	81		-		70-130	-		
Tetrachloroethene	84		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 Batch: WG1172333-3								
1,1,1,2-Tetrachloroethane	87		-		70-130	-		
Chlorobenzene	89		-		70-130	-		
Ethylbenzene	90		-		70-130	-		
p/m-Xylene	92		-		70-130	-		
Bromoform	97		-		70-130	-		
Styrene	91		-		70-130	-		
1,1,2,2-Tetrachloroethane	96		-		70-130	-		
o-Xylene	95		-		70-130	-		
1,2,3-Trichloropropane	91		-		70-130	-		
Nonane (C9)	97		-		70-130	-		
Isopropylbenzene	91		-		70-130	-		
Bromobenzene	89		-		70-130	-		
o-Chlorotoluene	83		-		70-130	-		
n-Propylbenzene	84		-		70-130	-		
p-Chlorotoluene	85		-		70-130	-		
4-Ethyltoluene	97		-		70-130	-		
1,3,5-Trimethylbenzene	81		-		70-130	-		
tert-Butylbenzene	90		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Decane (C10)	92		-		70-130	-		
Benzyl chloride	114		-		70-130	-		
1,3-Dichlorobenzene	94		-		70-130	-		
1,4-Dichlorobenzene	94		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 Batch: WG1172333-3								
sec-Butylbenzene	93		-		70-130	-		
p-Isopropyltoluene	88		-		70-130	-		
1,2-Dichlorobenzene	96		-		70-130	-		
n-Butylbenzene	103		-		70-130	-		
1,2-Dibromo-3-chloropropane	110		-		70-130	-		
Undecane	101		-		70-130	-		
Dodecane (C12)	104		-		70-130	-		
1,2,4-Trichlorobenzene	115		-		70-130	-		
Naphthalene	104		-		70-130	-		
1,2,3-Trichlorobenzene	102		-		70-130	-		
Hexachlorobutadiene	110		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1172335-3								
Chlorodifluoromethane	78		-		70-130	-		
Propylene	95		-		70-130	-		
Propane	72		-		70-130	-		
Dichlorodifluoromethane	95		-		70-130	-		
Chloromethane	81		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	98		-		70-130	-		
Methanol	73		-		70-130	-		
Vinyl chloride	92		-		70-130	-		
1,3-Butadiene	91		-		70-130	-		
Butane	73		-		70-130	-		
Bromomethane	100		-		70-130	-		
Chloroethane	94		-		70-130	-		
Ethyl Alcohol	79		-		70-130	-		
Dichlorofluoromethane	86		-		70-130	-		
Vinyl bromide	101		-		70-130	-		
Acrolein	80		-		70-130	-		
Acetone	94		-		70-130	-		
Acetonitrile	73		-		70-130	-		
Trichlorofluoromethane	100		-		70-130	-		
iso-Propyl Alcohol	107		-		70-130	-		
Acrylonitrile	89		-		70-130	-		
Pentane	80		-		70-130	-		
Ethyl ether	75		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1172335-3								
1,1-Dichloroethene	92		-		70-130	-		
tert-Butyl Alcohol	87		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	92		-		70-130	-		
Carbon disulfide	99		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	105		-		70-130	-		
trans-1,2-Dichloroethene	91		-		70-130	-		
1,1-Dichloroethane	94		-		70-130	-		
Methyl tert butyl ether	95		-		70-130	-		
Vinyl acetate	96		-		70-130	-		
2-Butanone	91		-		70-130	-		
cis-1,2-Dichloroethene	93		-		70-130	-		
Ethyl Acetate	106		-		70-130	-		
Chloroform	102		-		70-130	-		
Tetrahydrofuran	82		-		70-130	-		
2,2-Dichloropropane	87		-		70-130	-		
1,2-Dichloroethane	89		-		70-130	-		
n-Hexane	87		-		70-130	-		
Isopropyl Ether	84		-		70-130	-		
Ethyl-Tert-Butyl-Ether	75		-		70-130	-		
1,1,1-Trichloroethane	88		-		70-130	-		
1,1-Dichloropropene	81		-		70-130	-		
Benzene	88		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1172335-3								
Carbon tetrachloride	90		-		70-130	-		
Cyclohexane	84		-		70-130	-		
Tertiary-Amyl Methyl Ether	77		-		70-130	-		
Dibromomethane	83		-		70-130	-		
1,2-Dichloropropane	85		-		70-130	-		
Bromodichloromethane	90		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	93		-		70-130	-		
2,2,4-Trimethylpentane	88		-		70-130	-		
Methyl Methacrylate	77		-		70-130	-		
Heptane	80		-		70-130	-		
cis-1,3-Dichloropropene	90		-		70-130	-		
4-Methyl-2-pentanone	84		-		70-130	-		
trans-1,3-Dichloropropene	75		-		70-130	-		
1,1,2-Trichloroethane	94		-		70-130	-		
Toluene	105		-		70-130	-		
1,3-Dichloropropane	94		-		70-130	-		
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	117		-		70-130	-		
1,2-Dibromoethane	109		-		70-130	-		
Butyl Acetate	91		-		70-130	-		
Octane	98		-		70-130	-		
Tetrachloroethene	110		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1172335-3								
1,1,1,2-Tetrachloroethane	105		-		70-130	-		
Chlorobenzene	110		-		70-130	-		
Ethylbenzene	104		-		70-130	-		
p/m-Xylene	105		-		70-130	-		
Bromoform	124		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	113		-		70-130	-		
o-Xylene	107		-		70-130	-		
1,2,3-Trichloropropane	97		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	105		-		70-130	-		
Bromobenzene	96		-		70-130	-		
o-Chlorotoluene	106		-		70-130	-		
n-Propylbenzene	104		-		70-130	-		
p-Chlorotoluene	97		-		70-130	-		
4-Ethyltoluene	111		-		70-130	-		
1,3,5-Trimethylbenzene	107		-		70-130	-		
tert-Butylbenzene	102		-		70-130	-		
1,2,4-Trimethylbenzene	111		-		70-130	-		
Decane (C10)	90		-		70-130	-		
Benzyl chloride	102		-		70-130	-		
1,3-Dichlorobenzene	108		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1172335-3								
sec-Butylbenzene	92		-		70-130	-		
p-Isopropyltoluene	99		-		70-130	-		
1,2-Dichlorobenzene	116		-		70-130	-		
n-Butylbenzene	107		-		70-130	-		
1,2-Dibromo-3-chloropropane	94		-		70-130	-		
Undecane	100		-		70-130	-		
Dodecane (C12)	107		-		70-130	-		
1,2,4-Trichlorobenzene	122		-		70-130	-		
Naphthalene	105		-		70-130	-		
1,2,3-Trichlorobenzene	109		-		70-130	-		
Hexachlorobutadiene	122		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 Batch: WG1172378-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	106		-		70-130	-		
Propane	72		-		70-130	-		
Dichlorodifluoromethane	102		-		70-130	-		
Chloromethane	95		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	111		-		70-130	-		
Methanol	77		-		70-130	-		
Vinyl chloride	99		-		70-130	-		
1,3-Butadiene	105		-		70-130	-		
Butane	81		-		70-130	-		
Bromomethane	106		-		70-130	-		
Chloroethane	102		-		70-130	-		
Ethyl Alcohol	80		-		70-130	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	110		-		70-130	-		
Acrolein	87		-		70-130	-		
Acetone	102		-		70-130	-		
Acetonitrile	76		-		70-130	-		
Trichlorofluoromethane	116		-		70-130	-		
iso-Propyl Alcohol	103		-		70-130	-		
Acrylonitrile	90		-		70-130	-		
Pentane	79		-		70-130	-		
Ethyl ether	73		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 Batch: WG1172378-3								
1,1-Dichloroethene	103		-		70-130	-		
tert-Butyl Alcohol	92		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	83		-		70-130	-		
Carbon disulfide	106		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	116		-		70-130	-		
trans-1,2-Dichloroethene	100		-		70-130	-		
1,1-Dichloroethane	101		-		70-130	-		
Methyl tert butyl ether	104		-		70-130	-		
Vinyl acetate	103		-		70-130	-		
2-Butanone	93		-		70-130	-		
cis-1,2-Dichloroethene	103		-		70-130	-		
Ethyl Acetate	106		-		70-130	-		
Chloroform	110		-		70-130	-		
Tetrahydrofuran	92		-		70-130	-		
2,2-Dichloropropane	97		-		70-130	-		
1,2-Dichloroethane	101		-		70-130	-		
n-Hexane	83		-		70-130	-		
Isopropyl Ether	84		-		70-130	-		
Ethyl-Tert-Butyl-Ether	71		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
1,1-Dichloropropene	82		-		70-130	-		
Benzene	85		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 Batch: WG1172378-3								
Carbon tetrachloride	97		-		70-130	-		
Cyclohexane	81		-		70-130	-		
Tertiary-Amyl Methyl Ether	75		-		70-130	-		
Dibromomethane	84		-		70-130	-		
1,2-Dichloropropane	80		-		70-130	-		
Bromodichloromethane	93		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	85		-		70-130	-		
Methyl Methacrylate	72		-		70-130	-		
Heptane	77		-		70-130	-		
cis-1,3-Dichloropropene	90		-		70-130	-		
4-Methyl-2-pentanone	78		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	94		-		70-130	-		
Toluene	100		-		70-130	-		
1,3-Dichloropropane	94		-		70-130	-		
2-Hexanone	94		-		70-130	-		
Dibromochloromethane	120		-		70-130	-		
1,2-Dibromoethane	108		-		70-130	-		
Butyl Acetate	97		-		70-130	-		
Octane	95		-		70-130	-		
Tetrachloroethene	117		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 Batch: WG1172378-3								
1,1,1,2-Tetrachloroethane	107		-		70-130	-		
Chlorobenzene	111		-		70-130	-		
Ethylbenzene	105		-		70-130	-		
p/m-Xylene	104		-		70-130	-		
Bromoform	**131**	Q	-		70-130	-		
Styrene	109		-		70-130	-		
1,1,2,2-Tetrachloroethane	110		-		70-130	-		
o-Xylene	108		-		70-130	-		
1,2,3-Trichloropropane	94		-		70-130	-		
Nonane (C9)	83		-		70-130	-		
Isopropylbenzene	103		-		70-130	-		
Bromobenzene	94		-		70-130	-		
o-Chlorotoluene	104		-		70-130	-		
n-Propylbenzene	106		-		70-130	-		
p-Chlorotoluene	98		-		70-130	-		
4-Ethyltoluene	110		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
tert-Butylbenzene	105		-		70-130	-		
1,2,4-Trimethylbenzene	113		-		70-130	-		
Decane (C10)	91		-		70-130	-		
Benzyl chloride	118		-		70-130	-		
1,3-Dichlorobenzene	118		-		70-130	-		
1,4-Dichlorobenzene	116		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 Batch: WG1172378-3								
sec-Butylbenzene	102		-		70-130	-		
p-Isopropyltoluene	97		-		70-130	-		
1,2-Dichlorobenzene	119		-		70-130	-		
n-Butylbenzene	109		-		70-130	-		
1,2-Dibromo-3-chloropropane	101		-		70-130	-		
Undecane	99		-		70-130	-		
Dodecane (C12)	119		-		70-130	-		
1,2,4-Trichlorobenzene	**139**	Q	-		70-130	-		
Naphthalene	110		-		70-130	-		
1,2,3-Trichlorobenzene	130		-		70-130	-		
Hexachlorobutadiene	**134**	Q	-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 QC Batch ID: WG1172333-5 QC Sample: L1842348-14 Client ID: SVG-14-18						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	14.7	15.2	ppbV	3		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	1.88	1.98	ppbV	5		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 QC Batch ID: WG1172333-5 QC Sample: L1842348-14 Client ID: SVG-14-18						
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	0.986	1.01	ppbV	2		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	1.67	1.70	ppbV	2		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 12-27 QC Batch ID: WG1172333-5 QC Sample: L1842348-14 Client ID: SVG-14-18						
Toluene	ND	ND	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	243	245	ppbV	1		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1172335-5 QC Sample: L1842348-02 Client ID: SVG-02-18						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	13.5	12.8	ppbV	5		25
Trichlorofluoromethane	0.863	0.813	ppbV	6		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.933	0.933	ppbV	0		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1172335-5 QC Sample: L1842348-02 Client ID: SVG-02-18						
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	8.92	8.50	ppbV	5		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	0.976	1.02	ppbV	4		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	245	242	ppbV	1		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	5.47	5.33	ppbV	3		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1172335-5 QC Sample: L1842348-02 Client ID: SVG-02-18						
Toluene	ND	ND	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	358E	351E	ppbV	2		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.713	0.700	ppbV	2		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1172335-5 QC Sample: L1842348-02 Client ID: SVG-02-18						
Tetrachloroethene	421	348	ppbV	19		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 QC Batch ID: WG1172378-5 QC Sample: L1843034-02 Client ID: DUP Sample						
Dichlorodifluoromethane	0.618	0.453	ppbV	**31**	Q	25
Chloromethane	0.361	0.335	ppbV	7		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	0.263	0.222	ppbV	17		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acrolein	0.756	0.757	ppbV	0		25
Acetone	38.5	40.2	ppbV	4		25
Trichlorofluoromethane	0.320	0.310	ppbV	3		25
iso-Propyl Alcohol	5.03	5.20	ppbV	3		25
Acrylonitrile	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	0.721	0.596	ppbV	19		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	5.19	5.33	ppbV	3		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
Chloroform	5.69	5.80	ppbV	2		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 QC Batch ID: WG1172378-5 QC Sample: L1843034-02 Client ID: DUP Sample						
Tetrahydrofuran	1.23	1.37	ppbV	11		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	3.15	3.42	ppbV	8		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	2.15	2.22	ppbV	3		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	1.76	1.88	ppbV	7		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	0.522	0.554	ppbV	6		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	0.281	0.312	ppbV	10		25
Methyl Methacrylate	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	0.928	0.990	ppbV	6		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	5.37	5.36	ppbV	0		25
1,3-Dichloropropane	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	28.2	28.0	ppbV	1		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	1.88	1.90	ppbV	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 07-09 QC Batch ID: WG1172378-5 QC Sample: L1843034-02 Client ID: DUP Sample						
p/m-Xylene	5.82	5.78	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	0.552	0.558	ppbV	1		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	2.66	2.66	ppbV	0		25
Isopropylbenzene	0.357	0.366	ppbV	2		25
1,3,5-Trimethylbenzene	1.02	1.04	ppbV	2		25
1,2,4-Trimethylbenzene	3.39	3.35	ppbV	1		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Naphthalene	2.45	2.51	ppbV	2		25

Project Name: KENT AVE

Project Number: E051

Lab Number: L1842348

Report Date: 10/29/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1842348-01	SVG-01-18	0596	SV200	10/15/18	276086		-	-	-	Pass	212	208	2
L1842348-01	SVG-01-18	2215	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.1	0.6	-	-	-	-
L1842348-02	SVG-02-18	0655	SV200	10/15/18	276086		-	-	-	Pass	218	199	9
L1842348-02	SVG-02-18	1729	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.5	0.3	-	-	-	-
L1842348-03	SVG-03-18	0596	SV200	10/15/18	276086		-	-	-	Pass	212	208	2
L1842348-03	SVG-03-18	2190	2.7L Can	10/15/18	276086	L1840873-02	Pass	-28.9	0.8	-	-	-	-
L1842348-04	SVG-11-18	0672	SV200	10/15/18	276086		-	-	-	Pass	212	209	1
L1842348-04	SVG-11-18	465	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	0.4	-	-	-	-
L1842348-05	SVG-17-18	0508	SV200	10/15/18	276086		-	-	-	Pass	217	215	1
L1842348-05	SVG-17-18	2213	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	0.3	-	-	-	-
L1842348-06	SVG-12-18	0704	SV200	10/15/18	276086		-	-	-	Pass	213	215	1
L1842348-06	SVG-12-18	539	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	-0.1	-	-	-	-
L1842348-07	SVG-20-18	0533	SV200	10/15/18	276086		-	-	-	Pass	210	210	0
L1842348-07	SVG-20-18	1750	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	-0.1	-	-	-	-
L1842348-08	SVG-04-18	0565	SV200	10/15/18	276086		-	-	-	Pass	208	213	2

Project Name: KENT AVE

Project Number: E051

Lab Number: L1842348

Report Date: 10/29/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1842348-08	SVG-04-18	2610	2.7L Can	10/15/18	276086	L1840873-01	Pass	-2.90	0.9	-	-	-	-
L1842348-09	SVG-05-18	0504	SV200	10/15/18	276086		-	-	-	Pass	215	209	3
L1842348-09	SVG-05-18	2276	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.1	0.8	-	-	-	-
L1842348-10	SVG-18-18	0655	SV200	10/15/18	276086		-	-	-	Pass	218	199	9
L1842348-10	SVG-18-18	696	6.0L Can	10/15/18	276726	L1840657-03	Pass	-29.0	-11.0	-	-	-	-
L1842348-11	SVG-15-18	0511	SV200	10/15/18	276086		-	-	-	Pass	213	209	2
L1842348-11	SVG-15-18	320	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.1	0.0	-	-	-	-
L1842348-12	SVG-19-18	0708	SV200	10/15/20	276086		-	-	-	Pass	226	220	3
L1842348-12	SVG-19-18	2044	2.7L Can	10/15/18	276086	L1840873-02	Pass	-28.8	0.1	-	-	-	-
L1842348-13	SVG-25-18	0709	SV200	10/15/18	276086		-	-	-	Pass	221	208	6
L1842348-13	SVG-25-18	474	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.2	-0.3	-	-	-	-
L1842348-14	SVG-14-18	0685	SV200	10/15/18	276086		-	-	-	Pass	215	212	1
L1842348-14	SVG-14-18	2374	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.0	0.0	-	-	-	-
L1842348-15	SVG-24-18	0613	SV200	10/15/18	276086		-	-	-	Pass	200	192	4
L1842348-15	SVG-24-18	2242	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.0	0.0	-	-	-	-

Project Name: KENT AVE

Project Number: E051

Lab Number: L1842348

Report Date: 10/29/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1842348-16	SVG-23-18	0855	SV200	10/15/18	276086		-	-	-	Pass	215	210	2
L1842348-16	SVG-23-18	2036	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.0	0.1	-	-	-	-
L1842348-17	SVG-22-18	0523	SV200	10/15/18	276086		-	-	-	Pass	216	205	5
L1842348-17	SVG-22-18	2037	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.0	0.3	-	-	-	-
L1842348-18	SVG-06-18	0692	SV200	10/15/18	276086		-	-	-	Pass	218	207	5
L1842348-18	SVG-06-18	2302	2.7L Can	10/15/18	276086	L1840873-01	Pass	-28.1	0.7	-	-	-	-
L1842348-19	SVG-07-18	0503	SV200	10/15/18	276086		-	-	-	Pass	216	191	12
L1842348-19	SVG-07-18	328	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.3	0.8	-	-	-	-
L1842348-20	SVG-08-18	0652	SV200	10/15/18	276086		-	-	-	Pass	215	211	2
L1842348-20	SVG-08-18	2437	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.2	0.8	-	-	-	-
L1842348-21	SVG-10-18	0525	SV200	10/15/18	276086		-	-	-	Pass	220	209	5
L1842348-21	SVG-10-18	505	2.7L Can	10/15/18	276086	L1840277-01	Pass	-29.0	0.1	-	-	-	-
L1842348-22	SVG-16-18	0861	SV200	10/15/18	276086		-	-	-	Pass	215	210	2
L1842348-22	SVG-16-18	371	2.7L Can	10/15/18	276086	L1840277-01	Pass	-29.3	0.1	-	-	-	-
L1842348-23	SVG-DUP01-18	0511	SV200	10/15/18	276086		-	-	-	Pass	213	209	2

Project Name: KENT AVE

Project Number: E051

Lab Number: L1842348

Report Date: 10/29/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1842348-23	SVG-DUP01-18	2079	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	0.0	-	-	-	-
L1842348-24	SVG-13-18	0650	SV200	10/15/18	276086		-	-	-	Pass	212	206	3
L1842348-24	SVG-13-18	487	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.3	0.5	-	-	-	-
L1842348-25	SVG-21-18	0614	SV200	10/15/18	276086		-	-	-	Pass	216	206	5
L1842348-25	SVG-21-18	2228	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.1	0.2	-	-	-	-
L1842348-26	SVG-09-18	0858	SV200	10/15/18	276086		-	-	-	Pass	201	208	3
L1842348-26	SVG-09-18	2228	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.1	0.2	-	-	-	-
L1842348-26	SVG-09-18	561	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	0.2	-	-	-	-
L1842348-27	SVG-DUP2-18	0604	SV200	10/15/18	276086		-	-	-	Pass	213	207	3
L1842348-27	SVG-DUP2-18	561	2.7L Can	10/15/18	276086	L1840873-02	Pass	-29.0	0.2	-	-	-	-
L1842348-30	UNUSED CAN 2373	2373	2.7L Can	10/15/18	276086	L1840873-01	Pass	-29.4	-29.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/05/18 20:11
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	86		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/05/18 20:11
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840277
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840277-01
Client ID: CAN 329 SHELF 1
Sample Location:

Date Collected: 10/04/18 16:00
Date Received: 10/05/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/09/18 21:16
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/09/18 21:16
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840657
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840657-03
Client ID: CAN 1661 SHELF54
Sample Location:

Date Collected: 10/08/18 16:00
Date Received: 10/09/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/10/18 16:51
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/10/18 16:51
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-01
Client ID: CAN 511 SHELF 4
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 10/10/18 17:29
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 10/10/18 17:29
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1840873
Report Date: 10/29/18

Air Canister Certification Results

Lab ID: L1840873-02
Client ID: CAN 257 SHELF 9
Sample Location:

Date Collected: 10/09/18 16:00
Date Received: 10/10/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1842348-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-09A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-10A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-11A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-12A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-13A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-14A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-15A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-16A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-17A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-18A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-19A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-20A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-21A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-22A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-23A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name: KENT AVE
Project Number: E051

Lab Number: L1842348
Report Date: 10/29/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1842348-24A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-25A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-26A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-27A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1842348-30A	Canister - 2.7 Liter	N/A	NA			Y	Absent		CAN-RENT()

*Values in parentheses indicate holding time in days

Project Name:	KENT AVE	**Lab Number:**	L1842348
Project Number:	E051	**Report Date:**	10/29/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report

Project Name: KENT AVE **Lab Number:** L1842348

Project Number: E051 **Report Date:** 10/29/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

ALPHA ANALYTICAL **CHAIN OF CUSTODY**

PAGE 1 OF 3

Date Rec'd in Lab: 10/18/18

ALPHA Job #: L1842348

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Integral Engineering
Address: 22 Cortlandt St
New York, NY 10007
Phone: Jonathan Pereira (201)314-1343
Fax:
Email: jpereira@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Kent Ave.
Project Location: Brooklyn, NY
Project #: E051
Project Manager: Keith Brodock
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: TAT 10 days Time:

Report Information - Data Deliverables

☐ FAX
☑ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)
Jonathan Pereira
jpereira@integral-corp.com

Billing Information

☐ Same as Client info PO #: E051
Ronda Henkel
285 Century Pl
Suite 190
Louisville, CO 80027

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
42348.01	SVG-01-18	10/16	1025	1045	-29.87	0.0	SV	JP	2.7L	2215	0596	X					
02	SVG-02-18	10/16	1026	1042	-30.53	0.0	SV	JP	2.7L	1729	0655	X					
03	SVG-03-18	10/16	1028	1040	-29.50	0.0	SV	JP	2.7L	2215	0596	X					
04	SVG-11-18	10/16	1145	1202	-30.19	0.0	↓	↓	2.7L	4650	0672	X					
05	SVG-17-18	10/16	1148	1205	-29.92	0.0	↓	↓	2.7L	2213	0508	X					
06	SVG-12-18	10/16	1138	1154	-30.08	0.0	↓	↓	2.7L	5390	0704	X					
07	SVG-20-18	10/16	1139	1155	-29.80	0.0	↓	↓	2.7L	1750	0533	X					
08	SVG-04-18	10/16	1015	1033	-29.81	0.0	↓	↓	2.7L	2610	0565	X					
09	SVG-05-18	10/16	1016	1034	-29.48	0.0	↓	↓	2.7L	2276	0504	X					
10	SVG-18-18	10/17	1126	1132	-30.20	0.0	↓	↓	6.0L	1729	0655	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
J Pereira 10/17 1957	10/17/18 1230	Remerk Jackson AAL 10/17 1230	10/17 1230
10/18	0200	10/18/18 0200	10/18/18 0200
10/18/18 0530		10/18/18 0530	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

AIR ANALYSIS

ALPHA ANALYTICAL **CHAIN OF CUSTODY**

PAGE 2 OF 3

Date Rec'd in Lab: 10/18/18

ALPHA Job #: 4842348

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Integral Engineering
Address: 22 Cortlandt St. New York, NY 10007
Phone: Jonathan (201) 314-1343
Fax: Pereira
Email: jpereira@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Kent Ave.
Project Location: Brooklyn, NY
Project #: E051
Project Manager: Keith
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: TAT 10 days Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)
Jonathan Pereira
jpereira@integral-corp.com

Billing Information

☐ Same as Client info PO #: E051
Ronda Henkel

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
	~~SVG-06-18~~						SV	JP	2.7L			X					
	~~SVG-07-18~~								2.7L			X					
	~~SVG-08-18~~					JP			2.7L			X					
42348.11	SVG-15-18	10/16	1232	1247	~~-29.90~~ -29.38	JP 0.0			2.7L	320	0511	X					
12	SVG-19-18	10/16	1151	1207	-29.76	-0.0			2.7L	2044	0708	X					
13	SVG-25-18	10/16	1233	1249	~~-29.76~~ -30.05	JP 0.0			2.7L	474	0709	X					
14	SVG-14-18	10/16	0918	0934	-29.69	0.0			2.7L	2374	0685	X					
15	SVG-24-18	10/16	0908	0925	-29.11	-0.06			2.7L	2242	0613	X					
16	SVG-23-18	10/16	0911	0926	-29.71	0.0			2.7L	2036	0855	X					
17	SVG-22-18	10/16	0913	0929	-30.18	-0.0			2.7L	2037	0523	X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature] 10/17 1957	10/17/18 1230	Romeik Jackson AAL	10/17 1230
[signature] 10/18	1230	[signature]	10/18/18 0200
[signature] 10/18/18	0530	[signature]	10/18/18 0530

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

AIR ANALYSIS

ALPHA ANALYTICAL **CHAIN OF CUSTODY**

PAGE 3 OF 3

Date Rec'd in Lab: 10/18/18

ALPHA Job #: L1842348

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Integral Engineering
Address: 22 Cortlandt St. New York, NY 10007
Phone: Jonathan 201-314-1343
Fax: Pereira
Email: jpereira@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Kent Ave.
Project Location: Brooklyn, NY
Project #: E051
Project Manager: Keith Brodock
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager) Jonathan Pereira jpereira@integral-corp.com

Billing Information

☐ Same as Client info PO #: E051
Ronda Henkel

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
42348.18	SVG-06-18	10/16	1018	1035	-29.0	0.0	SV	JP	2.7	2302	0692	X					
19	SVG-07-18	10/16	1020	1038	-30.25	0.0	SV			328	0503	X					
20	SVG-08-18	10/16	1023	1039	-28.85	0.0	SV			2437	0652	X					
21	SVG-10-18	10/16	1149	1206	-30.55	0.0				505	0525	X					
22	SVG-16-18	10/16	1150	1207	-30.30	0.0				371	0861	X					
23	SVG-DUP01-18	10/16	0000	0000	-29.90	0.0				2079	0511	X					
24	SVG-13-18	10/17	0922	0939	-29.87	0.0				487	0650	X					
25	SVG-21-18	10/17	0923	0940	-30.17	0.0				2228	0614	X					
26	SVG-09-18	10/17	1129	1145	-29.90	0.0				561	0858	X					
27	SVG-DUP2-18	10/17	0000	0000	-30.03	0.0				543	0604	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
J Pereira	10/17/18 1230	Rameek Jackson AAL	10/17 1230
[signature]	10/18/18 0530	[signature]	10/18/18 0520
		[signature]	10/18/18 0530

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

ANALYTICAL REPORT

Lab Number:	L1842205
Client:	Integral Consulting, Inc. 22 Cortlandt Street 16th Floor New York, NY 10007
ATTN:	Keith Brodock
Phone:	(212) 962-4301
Project Name:	KENT AVE.
Project Number:	E051
Report Date:	10/26/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1842205-01	CON-01-18	SOLID	135 KENT AVE., BROOKLYN, NY	10/16/18 12:25	10/17/18
L1842205-02	CON-02-18	SOLID	135 KENT AVE., BROOKLYN, NY	10/16/18 12:01	10/17/18
L1842205-03	CON-03-18	SOLID	135 KENT AVE., BROOKLYN, NY	10/16/18 11:59	10/17/18

Project Name: KENT AVE. **Lab Number:** L1842205
Project Number: E051 **Report Date:** 10/26/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: KENT AVE. **Lab Number:** L1842205
Project Number: E051 **Report Date:** 10/26/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

L1842205-01, -02, -03, WG1172306-6, and WG1172306-7: The surrogate recoveries are below the acceptance criteria for dibromofluoromethane (32%, 34%, 28%, 32%, 37% respectively), possibly due to the matrix effect caused by the high pH of the samples (>10).

The WG1172306-6/-7 MS/MSD recoveries, performed on L1842205-01, are below the acceptance criteria for 1,1,2,2-tetrachloroethane (0%/0%), due to the concentration of this compound falling below the reported detection limit.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 10/26/18

ORGANICS

VOLATILES

Project Name: KENT AVE.
Project Number: E051
Lab Number: L1842205
Report Date: 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-01
Client ID: CON-01-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 12:25
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 10/25/18 11:56
Analyst: JC
Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-01 Date Collected: 10/16/18 12:25

Client ID: CON-01-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	29		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-01 Date Collected: 10/16/18 12:25

Client ID: CON-01-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Tentatively Identified Compounds				
Total TIC Compounds	262	J	ug/kg	1
Unknown	22.6	J	ug/kg	1
Unknown	5.60	J	ug/kg	1
Unknown	9.19	J	ug/kg	1
Unknown	3.38	J	ug/kg	1
Unknown	3.48	J	ug/kg	1
Unknown	31.2	J	ug/kg	1
Unknown	11.0	J	ug/kg	1
Unknown	28.4	J	ug/kg	1
Unknown	64.8	J	ug/kg	1
Unknown	7.78	J	ug/kg	1
1-Heptene, 6-methyl-	31.4	NJ	ug/kg	1
Unknown	6.60	J	ug/kg	1
Unknown	10.9	J	ug/kg	1
3-Carene	21.1	NJ	ug/kg	1
Pentane, 2,3,3-trimethyl-	5.04	NJ	ug/kg	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-01 Date Collected: 10/16/18 12:25

Client ID: CON-01-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	**32**	Q	70-130

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-02
Client ID: CON-02-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 12:01
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 10/25/18 12:51
Analyst: JC
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	30		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	ND		ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-02 Date Collected: 10/16/18 12:01

Client ID: CON-02-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.93	1
Acetone	130		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.66	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-02 Date Collected: 10/16/18 12:01

Client ID: CON-02-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

Tentatively Identified Compounds				
Total TIC Compounds	122	J	ug/kg	1
Unknown	46.0	J	ug/kg	1
Unknown	3.00	J	ug/kg	1
Unknown Alkane	3.21	J	ug/kg	1
Unknown	15.3	J	ug/kg	1
Unknown	16.3	J	ug/kg	1
Unknown	37.7	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	**34**	Q	70-130

Project Name: KENT AVE.
Project Number: E051
Lab Number: L1842205
Report Date: 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-03
Client ID: CON-03-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 11:59
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8260C
Analytical Date: 10/25/18 13:18
Analyst: JC
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	5.2		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-03 Date Collected: 10/16/18 11:59

Client ID: CON-03-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
Xylenes, Total	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	8.8	J	ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
Vinyl acetate	ND		ug/kg	9.6	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.96	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-03 Date Collected: 10/16/18 11:59

Client ID: CON-03-18 Date Received: 10/17/18

Sample Location: 135 KENT AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.96	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	96	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Tentatively Identified Compounds				
Total TIC Compounds	265	J	ug/kg	1
Unknown	15.6	J	ug/kg	1
Unknown	12.2	J	ug/kg	1
1-Butanol	59.0	NJ	ug/kg	1
Unknown	4.08	J	ug/kg	1
Hexanal	4.95	NJ	ug/kg	1
Unknown	134	J	ug/kg	1
Unknown	35.6	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	70		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	**28**	Q	70-130

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1172306-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1172306-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1172306-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/25/18 10:07
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1172306-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1172306-3 WG1172306-4								
Methylene chloride	87		91		70-130	4		30
1,1-Dichloroethane	89		92		70-130	3		30
Chloroform	90		94		70-130	4		30
Carbon tetrachloride	85		89		70-130	5		30
1,2-Dichloropropane	92		97		70-130	5		30
Dibromochloromethane	88		93		70-130	6		30
1,1,2-Trichloroethane	96		99		70-130	3		30
Tetrachloroethene	94		96		70-130	2		30
Chlorobenzene	89		93		70-130	4		30
Trichlorofluoromethane	84		88		70-139	5		30
1,2-Dichloroethane	80		85		70-130	6		30
1,1,1-Trichloroethane	87		91		70-130	4		30
Bromodichloromethane	91		96		70-130	5		30
trans-1,3-Dichloropropene	90		94		70-130	4		30
cis-1,3-Dichloropropene	98		103		70-130	5		30
1,1-Dichloropropene	93		97		70-130	4		30
Bromoform	88		95		70-130	8		30
1,1,2,2-Tetrachloroethane	93		98		70-130	5		30
Benzene	95		99		70-130	4		30
Toluene	92		95		70-130	3		30
Ethylbenzene	88		91		70-130	3		30
Chloromethane	96		98		52-130	2		30
Bromomethane	88		93		57-147	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1172306-3 WG1172306-4								
Vinyl chloride	92		96		67-130	4		30
Chloroethane	75		76		50-151	1		30
1,1-Dichloroethene	88		92		65-135	4		30
trans-1,2-Dichloroethene	96		100		70-130	4		30
Trichloroethene	94		97		70-130	3		30
1,2-Dichlorobenzene	89		93		70-130	4		30
1,3-Dichlorobenzene	88		92		70-130	4		30
1,4-Dichlorobenzene	85		92		70-130	8		30
Methyl tert butyl ether	93		98		66-130	5		30
p/m-Xylene	91		94		70-130	3		30
o-Xylene	92		95		70-130	3		30
cis-1,2-Dichloroethene	97		102		70-130	5		30
Dibromomethane	91		98		70-130	7		30
Styrene	93		97		70-130	4		30
Dichlorodifluoromethane	88		92		30-146	4		30
Acetone	92		96		54-140	4		30
Carbon disulfide	82		77		59-130	6		30
2-Butanone	93		99		70-130	6		30
Vinyl acetate	87		92		70-130	6		30
4-Methyl-2-pentanone	90		95		70-130	5		30
1,2,3-Trichloropropane	87		94		68-130	8		30
2-Hexanone	90		93		70-130	3		30
Bromochloromethane	98		103		70-130	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1172306-3 WG1172306-4								
2,2-Dichloropropane	84		88		70-130	5		30
1,2-Dibromoethane	97		101		70-130	4		30
1,3-Dichloropropane	91		95		69-130	4		30
1,1,1,2-Tetrachloroethane	88		92		70-130	4		30
Bromobenzene	89		93		70-130	4		30
n-Butylbenzene	86		90		70-130	5		30
sec-Butylbenzene	86		90		70-130	5		30
tert-Butylbenzene	86		90		70-130	5		30
o-Chlorotoluene	86		90		70-130	5		30
p-Chlorotoluene	84		88		70-130	5		30
1,2-Dibromo-3-chloropropane	84		92		68-130	9		30
Hexachlorobutadiene	90		93		67-130	3		30
Isopropylbenzene	86		88		70-130	2		30
p-Isopropyltoluene	86		90		70-130	5		30
Naphthalene	94		98		70-130	4		30
Acrylonitrile	96		100		70-130	4		30
n-Propylbenzene	85		89		70-130	5		30
1,2,3-Trichlorobenzene	92		96		70-130	4		30
1,2,4-Trichlorobenzene	94		98		70-130	4		30
1,3,5-Trimethylbenzene	86		90		70-130	5		30
1,2,4-Trimethylbenzene	85		90		70-130	6		30
1,4-Dioxane	109		125		65-136	14		30
p-Diethylbenzene	88		92		70-130	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1172306-3 WG1172306-4								
p-Ethyltoluene	86		90		70-130	5		30
1,2,4,5-Tetramethylbenzene	88		92		70-130	4		30
Ethyl ether	87		92		67-130	6		30
trans-1,4-Dichloro-2-butene	74		79		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	81		82		70-130
Toluene-d8	93		93		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	92		94		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1172306-6 WG1172306-7 QC Sample: L1842205-01 Client ID: CON-01-18												
Methylene chloride	ND	96.2	91	94		73	91		70-130	22		30
1,1-Dichloroethane	ND	96.2	96	100		75	94		70-130	25		30
Chloroform	ND	96.2	89	92		71	90		70-130	22		30
Carbon tetrachloride	ND	96.2	95	98		70	88		70-130	**31**	Q	30
1,2-Dichloropropane	ND	96.2	92	96		76	96		70-130	19		30
Dibromochloromethane	ND	96.2	61	**63**	Q	54	**68**	Q	70-130	11		30
1,1,2-Trichloroethane	ND	96.2	14	**15**	Q	15	**18**	Q	70-130	1		30
Tetrachloroethene	ND	96.2	69	72		51	**64**	Q	70-130	**31**	Q	30
Chlorobenzene	ND	96.2	61	**63**	Q	50	**63**	Q	70-130	19		30
Trichlorofluoromethane	ND	96.2	98	102		71	90		70-139	**31**	Q	30
1,2-Dichloroethane	ND	96.2	79	82		66	83		70-130	18		30
1,1,1-Trichloroethane	ND	96.2	95	99		71	90		70-130	28		30
Bromodichloromethane	ND	96.2	59	**62**	Q	51	**64**	Q	70-130	15		30
trans-1,3-Dichloropropene	ND	96.2	74	77		65	81		70-130	14		30
cis-1,3-Dichloropropene	ND	96.2	85	88		72	90		70-130	16		30
1,1-Dichloropropene	ND	96.2	95	98		70	88		70-130	30		30
Bromoform	ND	96.2	75	78		69	86		70-130	9		30
1,1,2,2-Tetrachloroethane	ND	96.2	ND	**0**	Q	ND	**0**	Q	70-130	NC		30
Benzene	ND	96.2	93	97		74	93		70-130	24		30
Toluene	ND	96.2	73	75		56	71		70-130	25		30
Ethylbenzene	ND	96.2	56	**58**	Q	44	**55**	Q	70-130	25		30
Chloromethane	ND	96.2	100	107		79	100		52-130	26		30
Bromomethane	ND	96.2	89	93		68	86		57-147	26		30

Matrix Spike Analysis

Batch Quality Control

Project Name: KENT AVE.

Project Number: E051

Lab Number: L1842205

Report Date: 10/26/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1172306-6 WG1172306-7 QC Sample: L1842205-01 Client ID: CON-01-18												
Vinyl chloride	ND	96.2	120	121		85	107		67-130	**31**	Q	30
Chloroethane	ND	96.2	81	85		58	73		50-151	**34**	Q	30
1,1-Dichloroethene	ND	96.2	170	**172**	Q	120	**156**	Q	65-135	28		30
trans-1,2-Dichloroethene	ND	96.2	100	106		77	96		70-130	29		30
Trichloroethene	ND	96.2	170	**175**	Q	130	**169**	Q	70-130	23		30
1,2-Dichlorobenzene	ND	96.2	44	**45**	Q	42	**52**	Q	70-130	5		30
1,3-Dichlorobenzene	ND	96.2	38	**40**	Q	35	**44**	Q	70-130	9		30
1,4-Dichlorobenzene	ND	96.2	36	**37**	Q	33	**42**	Q	70-130	6		30
Methyl tert butyl ether	ND	96.2	97	101		83	104		66-130	16		30
p/m-Xylene	ND	192	110	**56**	Q	85	**53**	Q	70-130	24		30
o-Xylene	ND	192	110	**59**	Q	92	**58**	Q	70-130	20		30
cis-1,2-Dichloroethene	ND	96.2	98	102		78	98		70-130	23		30
Dibromomethane	ND	96.2	93	96		79	99		70-130	16		30
Styrene	ND	192	110	**58**	Q	96	**60**	Q	70-130	16		30
Dichlorodifluoromethane	ND	96.2	120	123		86	109		30-146	**31**	Q	30
Acetone	29	96.2	120	90		100	89		54-140	15		30
Carbon disulfide	ND	96.2	86	90		62	78		59-130	**33**	Q	30
2-Butanone	ND	96.2	96	100		80	101		70-130	18		30
Vinyl acetate	ND	96.2	12	**12**	Q	9.9	**12**	Q	70-130	18		30
4-Methyl-2-pentanone	ND	96.2	96	100		83	104		70-130	15		30
1,2,3-Trichloropropane	ND	96.2	64	**67**	Q	59	74		68-130	9		30
2-Hexanone	ND	96.2	92	96		80	100		70-130	15		30
Bromochloromethane	ND	96.2	97	101		79	100		70-130	20		30

Matrix Spike Analysis
Batch Quality Control

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1172306-6 WG1172306-7 QC Sample: L1842205-01 Client ID: CON-01-18												
2,2-Dichloropropane	ND	96.2	93	96		70	88		70-130	28		30
1,2-Dibromoethane	ND	96.2	87	91		76	95		70-130	14		30
1,3-Dichloropropane	ND	96.2	83	86		71	90		69-130	15		30
1,1,1,2-Tetrachloroethane	ND	96.2	59	**62**	Q	51	**64**	Q	70-130	16		30
Bromobenzene	ND	96.2	54	**56**	Q	48	**61**	Q	70-130	12		30
n-Butylbenzene	ND	96.2	23	**24**	Q	19	**23**	Q	70-130	23		30
sec-Butylbenzene	ND	96.2	35	**36**	Q	27	**34**	Q	70-130	26		30
tert-Butylbenzene	ND	96.2	41	**43**	Q	33	**41**	Q	70-130	23		30
o-Chlorotoluene	ND	96.2	43	**44**	Q	36	**45**	Q	70-130	18		30
p-Chlorotoluene	ND	96.2	38	**39**	Q	32	**40**	Q	70-130	16		30
1,2-Dibromo-3-chloropropane	ND	96.2	9.1	**9**	Q	11	**14**	Q	68-130	20		30
Hexachlorobutadiene	ND	96.2	19	**20**	Q	15	**19**	Q	67-130	21		30
Isopropylbenzene	ND	96.2	47	**49**	Q	36	**46**	Q	70-130	26		30
p-Isopropyltoluene	ND	96.2	30	**31**	Q	24	**30**	Q	70-130	22		30
Naphthalene	ND	96.2	56	**58**	Q	59	75		70-130	6		30
Acrylonitrile	ND	96.2	90	93		77	97		70-130	15		30
n-Propylbenzene	ND	96.2	38	**39**	Q	29	**37**	Q	70-130	25		30
1,2,3-Trichlorobenzene	ND	96.2	35	**36**	Q	39	**49**	Q	70-130	11		30
1,2,4-Trichlorobenzene	ND	96.2	31	**33**	Q	33	**42**	Q	70-130	5		30
1,3,5-Trimethylbenzene	ND	96.2	38	**40**	Q	31	**39**	Q	70-130	20		30
1,2,4-Trimethylbenzene	ND	96.2	37	**38**	Q	31	**39**	Q	70-130	16		30
1,4-Dioxane	ND	4810	5200	108		4400	112		65-136	16		30
p-Diethylbenzene	ND	96.2	25	**26**	Q	21	**26**	Q	70-130	18		30

Matrix Spike Analysis

Batch Quality Control

Project Name: KENT AVE.

Project Number: E051

Lab Number: L1842205

Report Date: 10/26/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1172306-6 WG1172306-7 QC Sample: L1842205-01 Client ID: CON-01-18												
p-Ethyltoluene	ND	96.2	35	**37**	Q	29	**36**	Q	70-130	21		30
1,2,4,5-Tetramethylbenzene	ND	96.2	29	**30**	Q	28	**35**	Q	70-130	4		30
Ethyl ether	ND	96.2	87	90		72	90		67-130	19		30
trans-1,4-Dichloro-2-butene	ND	96.2	60	**62**	Q	55	**69**	Q	70-130	9		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		82		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	**32**	Q	**37**	Q	70-130
Toluene-d8	92		91		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-01
Client ID: CON-01-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 12:25
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97.2		%	0.100	NA	1	-	10/18/18 13:26	121,2540G	RI

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-02
Client ID: CON-02-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 12:01
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.2		%	0.100	NA	1	-	10/18/18 13:26	121,2540G	RI

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

SAMPLE RESULTS

Lab ID: L1842205-03
Client ID: CON-03-18
Sample Location: 135 KENT AVE., BROOKLYN, NY

Date Collected: 10/16/18 11:59
Date Received: 10/17/18
Field Prep: Not Specified

Sample Depth:
Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.1		%	0.100	NA	1	-	10/18/18 13:26	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: KENT AVE.

Project Number: E051

Lab Number: L1842205

Report Date: 10/26/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1169663-1 QC Sample: L1842205-01 Client ID: CON-01-18						
Solids, Total	97.2	97.0	%	0		20

Project Name: KENT AVE.
Project Number: E051

Lab Number: L1842205
Report Date: 10/26/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1842205-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TS(7),NYTCL-8260(14)
L1842205-01A1	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TS(7),NYTCL-8260(14)
L1842205-01X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1842205-01X1	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1842205-01X2	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1842205-01Y	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-01Y1	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-01Y2	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-01Z	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-01Z1	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-01Z2	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-02A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TS(7),NYTCL-8260(14)
L1842205-02X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1842205-02Y	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-02Z	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-03A	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		TS(7),NYTCL-8260(14)
L1842205-03X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1842205-03Y	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)
L1842205-03Z	Vial Water preserved split	A	NA		3.5	Y	Absent	**23-OCT-18 04:29**	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	KENT AVE.	**Lab Number:**	L1842205
Project Number:	E051	**Report Date:**	10/26/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers

Project Name: KENT AVE. **Lab Number:** L1842205

Project Number: E051 **Report Date:** 10/26/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: KENT AVE. **Lab Number:** L1842205
Project Number: E051 **Report Date:** 10/26/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/18/18

ALPHA Job #: L1842205

Project Information
Project Name: Kent Ave.
Project Location: 135 Kent Ave. Booklyn, NY
Project #: E051
(Use Project name as Project #) ☐
Project Manager: Keith Brodock
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date: 10 day TAT
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Integral Engineering
Address: 22 Cortland St New York, NY 10007
Phone: Jonathan Pereira
Fax: 201-314-1373
Email: jpereira@integral-corp.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use BCP
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO # Ronda Henkel 285 Century Pl, Suite 19 Louisville, Co 800

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TO-15								Sample Specific Comments	Total Bottle
~~42205-01~~ CG															
42205-~~02~~-01	CON-01-18	10/16/18	1225	Concrete	JP	X									
-02	CON-02-18	10/16/18	1201	↓	JP	X									
-03	CON-03-18	10/16/18	1159	↓	JP	X									
-01	CON=MS MSD=18	10/16/18	0000	↓	JP	X									

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

solid concrete samples

Container Type: A
Preservative:

Relinquished By:	Date/Time	Received By:	Date/Time
J Pereira	10/17/18	Bernie K Jackson AAL	10/17 1230
10/17 1857	1230	Paul Mazzella	10/17/18 2005
Paul Mazzella	10/18/18 00:20	[signature]	10/18/18 0020

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1810844
Client:	Integral Consulting, Inc. 61 Broadway Suite 1601 New York, NY 10006-2756
ATTN:	Sara Barbuto
Phone:	(212) 962-4301
Project Name:	KENT AVE
Project Number:	E051
Report Date:	04/05/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), NJ NELAP (MA015), CT (PH-0141), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-13-00067), USFWS (Permit #LE2069641).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1810844-01	IA18-01	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 15:36	03/29/18
L1810844-02	IA18-02	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 18:25	03/29/18
L1810844-03	IA18-03	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 18:27	03/29/18
L1810844-04	IA18-04	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 18:20	03/29/18
L1810844-05	IA18-05	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 18:34	03/29/18
L1810844-06	IA18-06	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 16:21	03/29/18
L1810844-07	IA18-07	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 16:35	03/29/18
L1810844-08	IA18-08	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 16:34	03/29/18
L1810844-09	IA18-09	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 10:00	03/29/18
L1810844-10	IA18-10	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 16:32	03/29/18
L1810844-11	IA18-11	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:04	03/29/18
L1810844-12	IA18-12	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:26	03/29/18
L1810844-13	IA18-13	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 12:48	03/29/18
L1810844-14	IA18-14	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:25	03/29/18
L1810844-15	IA18-15	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 13:53	03/29/18
L1810844-16	IA18-16	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 13:00	03/29/18
L1810844-17	IA18-17	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:11	03/29/18
L1810844-18	IA18-19	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 10:44	03/29/18
L1810844-19	IA18-20	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:46	03/29/18
L1810844-20	IA18-21	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 13:04	03/29/18
L1810844-21	OA18-01	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 16:19	03/29/18
L1810844-22	OA18-02	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 08:54	03/29/18
L1810844-23	IA18-DUP2	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:03	03/29/18
L1810844-24	IA18-22	AIR	135 KENT AVE BROOKLYN, NY	03/29/18 09:58	03/29/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1810844-25	IA18-58	AIR	135 KENT AVE BROOKLYN, NY	03/28/18 18:32	03/29/18
L1810844-26	UNUSED CAN #1809	AIR	135 KENT AVE BROOKLYN, NY		03/29/18

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: KENT AVE **Lab Number:** L1810844
Project Number: E051 **Report Date:** 04/05/18

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 26, 2018. The canister certification results are provided as an addendum.

L1810844-01, -09 through -12 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1810844-02 through -05, -07 and -08 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1810844-04: The sample was re-analyzed on dilution in order to quantify the results within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

L1810844-06, -13 through -17, -19 through -24 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1810844-13 : The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canister was pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the sample. The reporting limits have been elevated accordingly.

L1810844-15, -18, -19 and -20: The samples were re-analyzed on dilution in order to quantify the results within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

Project Name: KENT AVE **Lab Number:** L1810844
Project Number: E051 **Report Date:** 04/05/18

Case Narrative (continued)

L1810844-19 results for Tetrahydrofuran should be considered estimated due to co-elution with a non-target peak.

The WG1102770-3 LCS recoveries for dibromochloromethane (136%) and bromoform (141%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes

The WG1103162-3 LCS recoveries for dibromochloromethane (133%) and bromoform (136%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

WG1103162-5, WG1103163-5: The internal standard (IS) response(s) for 1,4-Difluorobenzene(57%) was below the acceptance criteria; all other duplicate criteria was met so no further action was taken.

WG1103534-5: The relative percent difference for acetone (35%) is above the RPD limit of 25%. This compound represented less than 10% of the compounds detected, therefore no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 04/05/18

AIR

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-01
Client ID: IA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 15:36
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 00:41
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.478	0.200	--	2.36	0.989	--		1
Chloromethane	0.542	0.200	--	1.12	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	11.7	5.00	--	22.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.06	1.00	--	9.64	2.38	--		1
Trichlorofluoromethane	0.235	0.200	--	1.32	1.12	--		1
iso-Propyl Alcohol	0.571	0.500	--	1.40	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.589	0.500	--	2.05	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	8.96	0.200	--	43.8	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-01
Client ID: IA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 15:36
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.244	0.200	--	0.860	0.705	--		1
Benzene	0.350	0.200	--	1.12	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	0.610	0.200	--	4.09	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.855	0.200	--	3.22	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.384	0.200	--	1.67	0.869	--		1
p/m-Xylene	1.84	0.400	--	7.99	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.589	0.200	--	2.56	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-01
Client ID: IA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 15:36
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	63		60-140
Bromochloromethane	79		60-140
chlorobenzene-d5	80		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-01
Client ID: IA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 15:36
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 00:41
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	0.022	0.020	--	0.056	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	1.61	0.020	--	6.38	0.079	--		1
1,1,1-Trichloroethane	0.117	0.020	--	0.638	0.109	--		1
Carbon tetrachloride	0.142	0.020	--	0.893	0.126	--		1
Trichloroethene	0.570	0.020	--	3.06	0.107	--		1
Tetrachloroethene	10.8	0.020	--	73.2	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	62		60-140
bromochloromethane	80		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-02
Client ID: IA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 01:33
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.439	0.200	--	2.17	0.989	--		1
Chloromethane	0.604	0.200	--	1.25	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	298	5.00	--	562	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.0	1.00	--	30.9	2.38	--		1
Trichlorofluoromethane	0.242	0.200	--	1.36	1.12	--		1
iso-Propyl Alcohol	10.5	0.500	--	25.8	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.12	0.500	--	3.30	1.47	--		1
Ethyl Acetate	1.15	0.500	--	4.14	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-02
Client ID: IA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.283	0.200	--	0.997	0.705	--		1
Benzene	0.449	0.200	--	1.43	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.352	0.200	--	1.44	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.27	0.200	--	8.55	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.201	0.200	--	0.873	0.869	--		1
p/m-Xylene	0.697	0.400	--	3.03	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.224	0.200	--	0.973	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-02
Client ID: IA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.215	0.200	--	1.06	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	66		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	77		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-02
Client ID: IA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 01:33
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.093	0.020	--	0.585	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.02	0.020	--	6.92	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	67		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	77		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-03
Client ID: IA18-03
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:27
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 02:08
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.457	0.200	--	2.26	0.989	--		1
Chloromethane	0.552	0.200	--	1.14	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	118	5.00	--	222	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.55	1.00	--	17.9	2.38	--		1
Trichlorofluoromethane	0.252	0.200	--	1.42	1.12	--		1
iso-Propyl Alcohol	22.5	0.500	--	55.3	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	1.76	0.500	--	6.11	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.36	0.500	--	4.01	1.47	--		1
Ethyl Acetate	0.550	0.500	--	1.98	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-03
Client ID: IA18-03
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:27
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.388	0.200	--	1.37	0.705	--		1
Benzene	0.438	0.200	--	1.40	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.913	0.200	--	3.44	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.685	0.400	--	2.98	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.214	0.200	--	0.930	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-03
Client ID: IA18-03
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:27
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	67		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	79		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-03
Client ID: IA18-03
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:27
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 02:08
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.096	0.020	--	0.604	0.126	--		1
Trichloroethene	0.028	0.020	--	0.150	0.107	--		1
Tetrachloroethene	0.880	0.020	--	5.97	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	68		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	79		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-04
Client ID: IA18-04
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:20
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 02:44
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.447	0.200	--	2.21	0.989	--		1
Chloromethane	0.577	0.200	--	1.19	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	266	5.00	--	501	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.4	1.00	--	39.0	2.38	--		1
Trichlorofluoromethane	0.330	0.200	--	1.85	1.12	--		1
iso-Propyl Alcohol	304	0.500	--	747	1.23	--	E	1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.06	0.500	--	3.13	1.47	--		1
Ethyl Acetate	2.64	0.500	--	9.51	1.80	--		1
Chloroform	0.398	0.200	--	1.94	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-04
Client ID: IA18-04
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:20
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.488	0.200	--	1.72	0.705	--		1
Benzene	0.522	0.200	--	1.67	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.666	0.200	--	3.11	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.34	0.200	--	8.82	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.303	0.200	--	1.32	0.869	--		1
p/m-Xylene	1.06	0.400	--	4.60	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.320	0.200	--	1.39	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-04
Client ID: IA18-04
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:20
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.215	0.200	--	1.06	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	75		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	85		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-04
Client ID: IA18-04
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:20
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 02:44
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	0.291	0.020	--	1.15	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.087	0.020	--	0.547	0.126	--		1
Trichloroethene	0.026	0.020	--	0.140	0.107	--		1
Tetrachloroethene	1.96	0.020	--	13.3	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	76		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-04 D
Client ID: IA18-04
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:20
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 02:26
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
iso-Propyl Alcohol	360	1.25	--	885	3.07	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	72		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	84		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-05
Client ID: IA18-05
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 03:20
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.421	0.200	--	2.08	0.989	--		1
Chloromethane	0.602	0.200	--	1.24	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	335	5.00	--	631	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	15.7	1.00	--	37.3	2.38	--		1
Trichlorofluoromethane	0.534	0.200	--	3.00	1.12	--		1
iso-Propyl Alcohol	198	0.500	--	487	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.752	0.500	--	2.22	1.47	--		1
Ethyl Acetate	2.79	0.500	--	10.1	1.80	--		1
Chloroform	0.616	0.200	--	3.01	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-05
Client ID: IA18-05
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.242	0.200	--	0.853	0.705	--		1
Benzene	0.389	0.200	--	1.24	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.850	0.200	--	3.20	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.279	0.200	--	1.21	0.869	--		1
p/m-Xylene	0.936	0.400	--	4.07	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.263	0.200	--	1.14	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-05
Client ID: IA18-05
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	75		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-05
Client ID: IA18-05
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 03:20
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.086	0.020	--	0.541	0.126	--		1
Trichloroethene	0.043	0.020	--	0.231	0.107	--		1
Tetrachloroethene	4.40	0.020	--	29.8	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	76		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-06
Client ID: IA18-06
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:21
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 17:06
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.385	0.200	--	1.90	0.989	--		1
Chloromethane	0.584	0.200	--	1.21	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	129	5.00	--	243	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	17.8	1.00	--	42.3	2.38	--		1
Trichlorofluoromethane	0.239	0.200	--	1.34	1.12	--		1
iso-Propyl Alcohol	36.7	0.500	--	90.2	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.230	0.200	--	1.12	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-06
Client ID: IA18-06
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:21
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.502	0.200	--	1.77	0.705	--		1
Benzene	0.280	0.200	--	0.895	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.505	0.200	--	1.90	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.408	0.400	--	1.77	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-06
Client ID: IA18-06
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:21
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	84		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-06
Client ID: IA18-06
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:21
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 17:06
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.027	0.020	--	0.107	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.067	0.020	--	0.421	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.495	0.020	--	3.36	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-07
Client ID: IA18-07
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:35
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 04:31
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.439	0.200	--	2.17	0.989	--		1
Chloromethane	0.497	0.200	--	1.03	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	35.0	5.00	--	65.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.59	1.00	--	10.9	2.38	--		1
Trichlorofluoromethane	0.215	0.200	--	1.21	1.12	--		1
iso-Propyl Alcohol	2.82	0.500	--	6.93	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.08	0.200	--	5.27	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-07
Client ID: IA18-07
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:35
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.244	0.200	--	0.860	0.705	--		1
Benzene	0.310	0.200	--	0.990	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.522	0.200	--	1.97	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.660	0.400	--	2.87	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-07
Client ID: IA18-07
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:35
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	75		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-07
Client ID: IA18-07
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:35
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 04:31
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.166	0.020	--	0.658	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.092	0.020	--	0.579	0.126	--		1
Trichloroethene	0.074	0.020	--	0.398	0.107	--		1
Tetrachloroethene	1.71	0.020	--	11.6	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	76		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-08
Client ID: IA18-08
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 05:07
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.444	0.200	--	2.20	0.989	--		1
Chloromethane	0.520	0.200	--	1.07	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	50.1	5.00	--	94.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.96	1.00	--	11.8	2.38	--		1
Trichlorofluoromethane	0.227	0.200	--	1.28	1.12	--		1
iso-Propyl Alcohol	148	0.500	--	364	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.18	0.200	--	5.76	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-08
Client ID: IA18-08
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.247	0.200	--	0.871	0.705	--		1
Benzene	0.353	0.200	--	1.13	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.38	0.500	--	5.66	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.519	0.200	--	1.96	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.656	0.400	--	2.85	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-08
Client ID: IA18-08
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	68		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	76		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-08
Client ID: IA18-08
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:34
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 05:07
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.188	0.020	--	0.745	0.079	--		1
1,1,1-Trichloroethane	0.020	0.020	--	0.109	0.109	--		1
Carbon tetrachloride	0.115	0.020	--	0.723	0.126	--		1
Trichloroethene	0.080	0.020	--	0.430	0.107	--		1
Tetrachloroethene	2.00	0.020	--	13.6	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	68		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	75		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-09
Client ID: IA18-09
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 10:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 20:30
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.428	0.200	--	2.12	0.989	--		1
Chloromethane	0.496	0.200	--	1.02	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	170	5.00	--	320	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.66	1.00	--	18.2	2.38	--		1
Trichlorofluoromethane	0.246	0.200	--	1.38	1.12	--		1
iso-Propyl Alcohol	4.24	0.500	--	10.4	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-09
Client ID: IA18-09
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 10:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.234	0.200	--	0.748	0.639	--		1
Cyclohexane	0.560	0.200	--	1.93	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.397	0.200	--	1.50	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-09
Client ID: IA18-09
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 10:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-09
Client ID: IA18-09
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 10:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 20:30
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.481	0.020	--	3.26	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-10
Client ID: IA18-10
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 21:06
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.444	0.200	--	2.20	0.989	--		1
Chloromethane	0.541	0.200	--	1.12	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	94.0	5.00	--	177	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.87	1.00	--	11.6	2.38	--		1
Trichlorofluoromethane	0.222	0.200	--	1.25	1.12	--		1
iso-Propyl Alcohol	4.67	0.500	--	11.5	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.46	0.500	--	5.26	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-10
Client ID: IA18-10
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.469	0.200	--	1.65	0.705	--		1
Benzene	0.423	0.200	--	1.35	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.653	0.200	--	2.46	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.556	0.400	--	2.42	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-10
Client ID: IA18-10
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	64		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	72		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-10
Client ID: IA18-10
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 21:06
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.096	0.020	--	0.604	0.126	--		1
Trichloroethene	0.022	0.020	--	0.118	0.107	--		1
Tetrachloroethene	1.02	0.020	--	6.92	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	64		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	73		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-11
Client ID: IA18-11
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 22:18
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.553	0.200	--	2.73	0.989	--		1
Chloromethane	0.703	0.200	--	1.45	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	300	5.00	--	565	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.5	1.00	--	29.7	2.38	--		1
Trichlorofluoromethane	0.347	0.200	--	1.95	1.12	--		1
iso-Propyl Alcohol	9.17	0.500	--	22.5	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	0.752	0.500	--	2.71	1.80	--		1
Chloroform	0.477	0.200	--	2.33	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-11
Client ID: IA18-11
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.301	0.200	--	1.06	0.705	--		1
Benzene	0.327	0.200	--	1.04	0.639	--		1
Cyclohexane	0.627	0.200	--	2.16	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.548	0.200	--	2.07	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.725	0.400	--	3.15	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.251	0.200	--	1.09	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-11
Client ID: IA18-11
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.448	0.200	--	2.20	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	64		60-140
Bromochloromethane	71		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-11
Client ID: IA18-11
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 22:18
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.044	0.020	--	0.174	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	0.042	0.020	--	0.226	0.107	--		1
Tetrachloroethene	0.638	0.020	--	4.33	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	63		60-140
bromochloromethane	71		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-12
Client ID: IA18-12
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:26
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/03/18 22:53
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.442	0.200	--	2.19	0.989	--		1
Chloromethane	0.598	0.200	--	1.23	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	291	5.00	--	548	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	11.8	1.00	--	28.0	2.38	--		1
Trichlorofluoromethane	0.263	0.200	--	1.48	1.12	--		1
iso-Propyl Alcohol	8.39	0.500	--	20.6	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.518	0.500	--	1.53	1.47	--		1
Ethyl Acetate	0.774	0.500	--	2.79	1.80	--		1
Chloroform	0.441	0.200	--	2.15	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-12
Client ID: IA18-12
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:26
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.262	0.200	--	0.923	0.705	--		1
Benzene	0.274	0.200	--	0.875	0.639	--		1
Cyclohexane	0.267	0.200	--	0.919	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.230	0.200	--	0.943	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.621	0.200	--	2.34	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.737	0.400	--	3.20	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.247	0.200	--	1.07	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-12
Client ID: IA18-12
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:26
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.486	0.200	--	2.39	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	77		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-12
Client ID: IA18-12
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:26
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 22:53
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.032	0.020	--	0.127	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	0.025	0.020	--	0.134	0.107	--		1
Tetrachloroethene	0.619	0.020	--	4.20	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	77		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-13 D
Client ID: IA18-13
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 12:48
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 17:41
Analyst: MB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.430	0.374	--	2.13	1.85	--		1.872
Chloromethane	0.666	0.374	--	1.38	0.772	--		1.872
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.374	--	ND	2.61	--		1.872
1,3-Butadiene	ND	0.374	--	ND	0.827	--		1.872
Bromomethane	ND	0.374	--	ND	1.45	--		1.872
Chloroethane	ND	0.374	--	ND	0.987	--		1.872
Ethyl Alcohol	169	9.36	--	318	17.6	--		1.872
Vinyl bromide	ND	0.374	--	ND	1.64	--		1.872
Acetone	17.5	1.87	--	41.6	4.44	--		1.872
Trichlorofluoromethane	ND	0.374	--	ND	2.10	--		1.872
iso-Propyl Alcohol	13.8	0.936	--	33.9	2.30	--		1.872
tert-Butyl Alcohol	ND	0.936	--	ND	2.84	--		1.872
Methylene chloride	ND	0.936	--	ND	3.25	--		1.872
3-Chloropropene	ND	0.374	--	ND	1.17	--		1.872
Carbon disulfide	ND	0.374	--	ND	1.16	--		1.872
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.374	--	ND	2.87	--		1.872
trans-1,2-Dichloroethene	ND	0.374	--	ND	1.48	--		1.872
1,1-Dichloroethane	ND	0.374	--	ND	1.51	--		1.872
Methyl tert butyl ether	ND	0.374	--	ND	1.35	--		1.872
2-Butanone	ND	0.936	--	ND	2.76	--		1.872
Ethyl Acetate	0.947	0.936	--	3.41	3.37	--		1.872
Chloroform	0.694	0.374	--	3.39	1.83	--		1.872
Tetrahydrofuran	ND	0.936	--	ND	2.76	--		1.872

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-13 D
Client ID: IA18-13
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 12:48
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.374	--	ND	1.51	--		1.872
n-Hexane	0.659	0.374	--	2.32	1.32	--		1.872
Benzene	0.468	0.374	--	1.50	1.19	--		1.872
Cyclohexane	ND	0.374	--	ND	1.29	--		1.872
1,2-Dichloropropane	ND	0.374	--	ND	1.73	--		1.872
Bromodichloromethane	ND	0.374	--	ND	2.51	--		1.872
1,4-Dioxane	ND	0.374	--	ND	1.35	--		1.872
2,2,4-Trimethylpentane	ND	0.374	--	ND	1.75	--		1.872
Heptane	0.488	0.374	--	2.00	1.53	--		1.872
cis-1,3-Dichloropropene	ND	0.374	--	ND	1.70	--		1.872
4-Methyl-2-pentanone	ND	0.936	--	ND	3.84	--		1.872
trans-1,3-Dichloropropene	ND	0.374	--	ND	1.70	--		1.872
1,1,2-Trichloroethane	ND	0.374	--	ND	2.04	--		1.872
Toluene	0.908	0.374	--	3.42	1.41	--		1.872
2-Hexanone	ND	0.374	--	ND	1.53	--		1.872
Dibromochloromethane	ND	0.374	--	ND	3.19	--		1.872
1,2-Dibromoethane	ND	0.374	--	ND	2.87	--		1.872
Chlorobenzene	ND	0.374	--	ND	1.72	--		1.872
Ethylbenzene	0.410	0.374	--	1.78	1.62	--		1.872
p/m-Xylene	1.52	0.749	--	6.60	3.25	--		1.872
Bromoform	ND	0.374	--	ND	3.87	--		1.872
Styrene	ND	0.374	--	ND	1.59	--		1.872
1,1,2,2-Tetrachloroethane	ND	0.374	--	ND	2.57	--		1.872
o-Xylene	0.522	0.374	--	2.27	1.62	--		1.872
4-Ethyltoluene	ND	0.374	--	ND	1.84	--		1.872
1,3,5-Trimethylbenzene	ND	0.374	--	ND	1.84	--		1.872

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-13 D
Client ID: IA18-13
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 12:48
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.704	0.374	--	3.46	1.84	--		1.872
Benzyl chloride	ND	0.374	--	ND	1.94	--		1.872
1,3-Dichlorobenzene	ND	0.374	--	ND	2.25	--		1.872
1,4-Dichlorobenzene	ND	0.374	--	ND	2.25	--		1.872
1,2-Dichlorobenzene	ND	0.374	--	ND	2.25	--		1.872
1,2,4-Trichlorobenzene	ND	0.374	--	ND	2.78	--		1.872
Hexachlorobutadiene	ND	0.374	--	ND	3.99	--		1.872

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-13 D
Client ID: IA18-13
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 12:48
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 17:41
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.037	--	ND	0.096	--		1.872
1,1-Dichloroethene	ND	0.037	--	ND	0.148	--		1.872
cis-1,2-Dichloroethene	0.039	0.037	--	0.156	0.148	--		1.872
1,1,1-Trichloroethane	ND	0.037	--	ND	0.204	--		1.872
Carbon tetrachloride	0.075	0.037	--	0.471	0.235	--		1.872
Trichloroethene	ND	0.037	--	ND	0.201	--		1.872
Tetrachloroethene	1.06	0.037	--	7.19	0.254	--		1.872

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	85		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	78		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-14
Client ID: IA18-14
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 18:16
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.430	0.200	--	2.13	0.989	--		1
Chloromethane	1.07	0.200	--	2.21	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	253	5.00	--	477	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	14.1	1.00	--	33.5	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	6.98	0.500	--	17.2	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.766	0.500	--	2.26	1.47	--		1
Ethyl Acetate	1.15	0.500	--	4.14	1.80	--		1
Chloroform	0.795	0.200	--	3.88	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-14
Client ID: IA18-14
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.641	0.200	--	2.26	0.705	--		1
Benzene	0.397	0.200	--	1.27	0.639	--		1
Cyclohexane	0.210	0.200	--	0.723	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	1.09	0.200	--	4.47	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.06	0.200	--	3.99	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.285	0.200	--	1.24	0.869	--		1
p/m-Xylene	0.997	0.400	--	4.33	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.381	0.200	--	1.65	0.869	--		1
4-Ethyltoluene	0.205	0.200	--	1.01	0.983	--		1
1,3,5-Trimethylbenzene	0.519	0.200	--	2.55	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-14
Client ID: IA18-14
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.19	0.200	--	5.85	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-14
Client ID: IA18-14
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:25
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 18:16
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	0.182	0.020	--	0.465	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.044	0.020	--	0.174	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.069	0.020	--	0.371	0.107	--		1
Tetrachloroethene	1.22	0.020	--	8.27	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	79		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-15
Client ID: IA18-15
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:53
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 19:49
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.403	0.200	--	1.99	0.989	--		1
Chloromethane	0.814	0.200	--	1.68	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.320	0.200	--	0.708	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	722	5.00	--	1360	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	22.0	1.00	--	52.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	10.2	0.500	--	25.1	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.765	0.200	--	2.38	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.648	0.500	--	1.91	1.47	--		1
Ethyl Acetate	1.97	0.500	--	7.10	1.80	--		1
Chloroform	0.584	0.200	--	2.85	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-15
Client ID: IA18-15
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:53
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.392	0.200	--	1.38	0.705	--		1
Benzene	0.506	0.200	--	1.62	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.220	0.200	--	0.902	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.938	0.200	--	3.53	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.238	0.200	--	1.03	0.869	--		1
p/m-Xylene	0.788	0.400	--	3.42	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.282	0.200	--	1.22	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.250	0.200	--	1.23	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-15
Client ID: IA18-15
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:53
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.588	0.200	--	2.89	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	91		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-15
Client ID: IA18-15
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:53
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 19:49
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	0.038	0.020	--	0.097	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.049	0.020	--	0.194	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--		1
Trichloroethene	0.032	0.020	--	0.172	0.107	--		1
Tetrachloroethene	0.788	0.020	--	5.34	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-15 D
Client ID: IA18-15
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:53
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 07:29
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Alcohol	884	12.5	--	1670	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	78		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-16
Client ID: IA18-16
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 20:24
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.423	0.200	--	2.09	0.989	--		1
Chloromethane	0.714	0.200	--	1.47	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	375	5.00	--	707	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	36.3	1.00	--	86.2	2.38	--		1
Trichlorofluoromethane	0.240	0.200	--	1.35	1.12	--		1
iso-Propyl Alcohol	28.8	0.500	--	70.8	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.837	0.500	--	2.47	1.47	--		1
Ethyl Acetate	1.55	0.500	--	5.59	1.80	--		1
Chloroform	0.594	0.200	--	2.90	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-16
Client ID: IA18-16
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.499	0.200	--	1.76	0.705	--		1
Benzene	0.434	0.200	--	1.39	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.213	0.200	--	0.995	0.934	--		1
Heptane	0.538	0.200	--	2.20	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.06	0.200	--	3.99	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.327	0.200	--	1.42	0.869	--		1
p/m-Xylene	1.16	0.400	--	5.04	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.387	0.200	--	1.68	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.250	0.200	--	1.23	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-16
Client ID: IA18-16
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.614	0.200	--	3.02	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.315	0.200	--	1.89	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-16
Client ID: IA18-16
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:00
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 20:24
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.027	0.020	--	0.107	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	0.024	0.020	--	0.129	0.107	--		1
Tetrachloroethene	1.21	0.020	--	8.21	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	87		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	82		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-17
Client ID: IA18-17
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:11
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 20:59
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.437	0.200	--	2.16	0.989	--		1
Chloromethane	0.693	0.200	--	1.43	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	289	5.00	--	545	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	21.6	1.00	--	51.3	2.38	--		1
Trichlorofluoromethane	0.216	0.200	--	1.21	1.12	--		1
iso-Propyl Alcohol	25.6	0.500	--	62.9	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.956	0.500	--	2.82	1.47	--		1
Ethyl Acetate	1.84	0.500	--	6.63	1.80	--		1
Chloroform	0.449	0.200	--	2.19	0.977	--		1
Tetrahydrofuran	0.506	0.500	--	1.49	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-17
Client ID: IA18-17
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:11
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.341	0.200	--	1.20	0.705	--		1
Benzene	0.388	0.200	--	1.24	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.461	0.200	--	1.89	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.94	0.200	--	7.31	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.289	0.200	--	1.26	0.869	--		1
p/m-Xylene	0.984	0.400	--	4.27	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.323	0.200	--	1.40	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.209	0.200	--	1.03	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-17
Client ID: IA18-17
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:11
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.429	0.200	--	2.11	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-17
Client ID: IA18-17
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:11
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 20:59
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.930	0.020	--	6.31	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	84		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-18
Client ID: IA18-19
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 10:44
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 21:34
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.431	0.200	--	2.13	0.989	--		1
Chloromethane	0.777	0.200	--	1.60	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	970	5.00	--	1830	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	32.0	1.00	--	76.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	14.1	0.500	--	34.7	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.72	0.500	--	5.07	1.47	--		1
Ethyl Acetate	3.41	0.500	--	12.3	1.80	--		1
Chloroform	0.580	0.200	--	2.83	0.977	--		1
Tetrahydrofuran	1.28	0.500	--	3.78	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-18
Client ID: IA18-19
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 10:44
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.264	0.200	--	0.930	0.705	--		1
Benzene	0.385	0.200	--	1.23	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.612	0.200	--	2.51	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.30	0.200	--	4.90	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.237	0.200	--	1.03	0.869	--		1
p/m-Xylene	0.820	0.400	--	3.56	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.276	0.200	--	1.20	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-18
Client ID: IA18-19
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 10:44
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.378	0.200	--	1.86	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	85		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-18
Client ID: IA18-19
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 10:44
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 21:34
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.076	0.020	--	0.478	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.597	0.020	--	4.05	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	87		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	82		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-18 D
Client ID: IA18-19
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 10:44
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 08:02
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Alcohol	1240	25.0	--	2340	47.1	--		5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	80		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-19
Client ID: IA18-20
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:46
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 22:44
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.402	0.200	--	1.99	0.989	--		1
Chloromethane	0.617	0.200	--	1.27	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	557	5.00	--	1050	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	15.2	1.00	--	36.1	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	9.37	0.500	--	23.0	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.31	0.500	--	3.86	1.47	--		1
Ethyl Acetate	1.68	0.500	--	6.05	1.80	--		1
Chloroform	0.606	0.200	--	2.96	0.977	--		1
Tetrahydrofuran	1.22	0.500	--	3.60	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-19
Client ID: IA18-20
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:46
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.340	0.200	--	1.20	0.705	--		1
Benzene	0.365	0.200	--	1.17	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.207	0.200	--	0.848	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.13	0.200	--	4.26	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.266	0.200	--	1.16	0.869	--		1
p/m-Xylene	0.932	0.400	--	4.05	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.319	0.200	--	1.39	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.312	0.200	--	1.53	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-19
Client ID: IA18-20
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:46
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.712	0.200	--	3.50	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	86		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-19
Client ID: IA18-20
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:46
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 22:44
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.049	0.020	--	0.194	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	0.031	0.020	--	0.167	0.107	--		1
Tetrachloroethene	1.09	0.020	--	7.39	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-19 D
Client ID: IA18-20
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:46
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 09:08
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Alcohol	608	10.0	--	1150	18.8	--		2

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	78		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-20
Client ID: IA18-21
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 23:19
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.437	0.200	--	2.16	0.989	--		1
Chloromethane	0.837	0.200	--	1.73	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.316	0.200	--	0.699	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	518	5.00	--	976	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	32.0	1.00	--	76.0	2.38	--		1
Trichlorofluoromethane	0.278	0.200	--	1.56	1.12	--		1
iso-Propyl Alcohol	16.9	0.500	--	41.5	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.73	0.500	--	5.10	1.47	--		1
Ethyl Acetate	1.25	0.500	--	4.50	1.80	--		1
Chloroform	0.361	0.200	--	1.76	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-20
Client ID: IA18-21
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.269	0.200	--	0.948	0.705	--		1
Benzene	0.477	0.200	--	1.52	0.639	--		1
Cyclohexane	0.308	0.200	--	1.06	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	1.10	0.200	--	4.51	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.46	0.200	--	5.50	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.332	0.200	--	1.44	0.869	--		1
p/m-Xylene	1.10	0.400	--	4.78	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.336	0.200	--	1.46	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-20
Client ID: IA18-21
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.388	0.200	--	1.91	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.298	0.200	--	1.79	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	85		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-20
Client ID: IA18-21
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 23:19
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.771	0.020	--	5.23	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-20 D
Client ID: IA18-21
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 13:04
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 09:42
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Alcohol	569	10.0	--	1070	18.8	--		2

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	84		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	77		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-21
Client ID: OA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:19
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/04/18 23:54
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.429	0.200	--	2.12	0.989	--		1
Chloromethane	0.551	0.200	--	1.14	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	7.63	5.00	--	14.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.42	1.00	--	5.75	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-21
Client ID: OA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:19
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.262	0.200	--	0.837	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.404	0.200	--	1.52	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-21
Client ID: OA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:19
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	80		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-21
Client ID: OA18-01
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 16:19
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/04/18 23:54
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.035	0.020	--	0.237	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	77		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-22
Client ID: OA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 08:54
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 00:29
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.392	0.200	--	1.94	0.989	--		1
Chloromethane	0.593	0.200	--	1.22	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	11.3	5.00	--	21.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.79	1.00	--	6.63	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	0.864	0.500	--	2.12	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.635	0.500	--	2.21	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-22
Client ID: OA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 08:54
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.211	0.200	--	0.744	0.705	--		1
Benzene	0.311	0.200	--	0.994	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.467	0.200	--	1.76	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-22
Client ID: OA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 08:54
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	79		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-22
Client ID: OA18-02
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 08:54
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/05/18 00:29
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.068	0.020	--	0.428	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.072	0.020	--	0.488	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	78		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-23
Client ID: IA18-DUP2
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:03
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 01:03
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.401	0.200	--	1.98	0.989	--		1
Chloromethane	0.594	0.200	--	1.23	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	255	5.00	--	480	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.29	1.00	--	19.7	2.38	--		1
Trichlorofluoromethane	0.233	0.200	--	1.31	1.12	--		1
iso-Propyl Alcohol	6.31	0.500	--	15.5	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.299	0.200	--	1.46	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-23
Client ID: IA18-DUP2
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:03
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.234	0.200	--	0.825	0.705	--		1
Benzene	0.207	0.200	--	0.661	0.639	--		1
Cyclohexane	0.453	0.200	--	1.56	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.434	0.200	--	1.64	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.536	0.400	--	2.33	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-23
Client ID: IA18-DUP2
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:03
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.281	0.200	--	1.38	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-23
Client ID: IA18-DUP2
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:03
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/05/18 01:03
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.024	0.020	--	0.095	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.054	0.020	--	0.340	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.523	0.020	--	3.55	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-24
Client ID: IA18-22
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:58
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 01:38
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.403	0.200	--	1.99	0.989	--		1
Chloromethane	0.688	0.200	--	1.42	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	159	5.00	--	300	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.1	1.00	--	45.4	2.38	--		1
Trichlorofluoromethane	0.201	0.200	--	1.13	1.12	--		1
iso-Propyl Alcohol	12.7	0.500	--	31.2	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.588	0.500	--	1.73	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.596	0.200	--	2.91	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-24
Client ID: IA18-22
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:58
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.569	0.200	--	2.01	0.705	--		1
Benzene	0.415	0.200	--	1.33	0.639	--		1
Cyclohexane	0.200	0.200	--	0.688	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.306	0.200	--	1.25	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.835	0.200	--	3.15	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.555	0.200	--	2.41	0.869	--		1
p/m-Xylene	2.32	0.400	--	10.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.771	0.200	--	3.35	0.869	--		1
4-Ethyltoluene	0.383	0.200	--	1.88	0.983	--		1
1,3,5-Trimethylbenzene	0.500	0.200	--	2.46	0.983	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-24
Client ID: IA18-22
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:58
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	1.14	0.200	--	5.60	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	81		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-24
Client ID: IA18-22
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/29/18 09:58
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/05/18 01:38
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.034	0.020	--	0.135	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.026	0.020	--	0.140	0.107	--		1
Tetrachloroethene	0.927	0.020	--	6.29	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	83		60-140
bromochloromethane	84		60-140
chlorobenzene-d5	79		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-25
Client ID: IA18-58
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/05/18 02:14
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.390	0.200	--	1.93	0.989	--		1
Chloromethane	0.517	0.200	--	1.07	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	13.7	5.00	--	25.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.22	1.00	--	17.2	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	1.10	0.500	--	2.70	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-25
Client ID: IA18-58
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.201	0.200	--	0.642	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.388	0.200	--	1.59	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.312	0.200	--	1.18	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.429	0.400	--	1.86	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: KENT AVE
Project Number: E051
Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-25
Client ID: IA18-58
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.256	0.200	--	1.26	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	87		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

SAMPLE RESULTS

Lab ID: L1810844-25
Client ID: IA18-58
Sample Location: 135 KENT AVE BROOKLYN, NY

Date Collected: 03/28/18 18:32
Date Received: 03/29/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/05/18 02:14
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.055	0.020	--	0.218	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.079	0.020	--	0.425	0.107	--		1
Tetrachloroethene	7.65	0.020	--	51.9	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	83		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/02/18 16:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102770-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/02/18 16:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102770-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/02/18 16:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102770-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/02/18 16:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102770-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/02/18 16:12

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102770-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/02/18 16:48

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102773-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/02/18 16:48

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102773-4								
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/02/18 16:48

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102773-4								
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/02/18 16:48

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-05,07-08 Batch: WG1102773-4								
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01,04,09-12 Batch: WG1103162-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01,04,09-12 Batch: WG1103162-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01,04,09-12 Batch: WG1103162-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01,04,09-12 Batch: WG1103162-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01,04,09-12 Batch: WG1103162-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01,09-12 Batch: WG1103163-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01,09-12 Batch: WG1103163-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01,09-12 Batch: WG1103163-4								
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/03/18 15:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01,09-12 Batch: WG1103163-4								

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/04/18 15:26

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103534-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/04/18 15:26

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103534-4								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1

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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103534-4								
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1

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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103534-4								
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1

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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103534-4								
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

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Project Number: E051

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Batch Quality Control

Analytical Method: 48,TO-15-SIM
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103537-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1

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Method Blank Analysis
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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103537-4								
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1

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Method Blank Analysis
Batch Quality Control

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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103537-4								
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1

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Method Blank Analysis
Batch Quality Control

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Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 06,13-25 Batch: WG1103537-4								
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102770-3								
Chlorodifluoromethane	82		-		70-130	-		
Propylene	98		-		70-130	-		
Propane	78		-		70-130	-		
Dichlorodifluoromethane	86		-		70-130	-		
Chloromethane	89		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	90		-		70-130	-		
Methanol	79		-		70-130	-		
Vinyl chloride	85		-		70-130	-		
1,3-Butadiene	97		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	91		-		70-130	-		
Chloroethane	87		-		70-130	-		
Ethyl Alcohol	95		-		70-130	-		
Dichlorofluoromethane	95		-		70-130	-		
Vinyl bromide	98		-		70-130	-		
Acrolein	85		-		70-130	-		
Acetone	92		-		70-130	-		
Acetonitrile	78		-		70-130	-		
Trichlorofluoromethane	91		-		70-130	-		
iso-Propyl Alcohol	82		-		70-130	-		
Acrylonitrile	89		-		70-130	-		
Pentane	84		-		70-130	-		
Ethyl ether	80		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102770-3								
1,1-Dichloroethene	89		-		70-130	-		
tert-Butyl Alcohol	78		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	96		-		70-130	-		
Carbon disulfide	97		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	98		-		70-130	-		
Vinyl acetate	102		-		70-130	-		
2-Butanone	108		-		70-130	-		
cis-1,2-Dichloroethene	126		-		70-130	-		
Ethyl Acetate	111		-		70-130	-		
Chloroform	101		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
2,2-Dichloropropane	87		-		70-130	-		
1,2-Dichloroethane	88		-		70-130	-		
n-Hexane	100		-		70-130	-		
Isopropyl Ether	90		-		70-130	-		
Ethyl-Tert-Butyl-Ether	78		-		70-130	-		
1,1,1-Trichloroethane	90		-		70-130	-		
1,1-Dichloropropene	90		-		70-130	-		
Benzene	94		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
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Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102770-3								
Carbon tetrachloride	98		-		70-130	-		
Cyclohexane	99		-		70-130	-		
Tertiary-Amyl Methyl Ether	79		-		70-130	-		
Dibromomethane	87		-		70-130	-		
1,2-Dichloropropane	91		-		70-130	-		
Bromodichloromethane	99		-		70-130	-		
1,4-Dioxane	107		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	97		-		70-130	-		
Methyl Methacrylate	108		-		70-130	-		
Heptane	100		-		70-130	-		
cis-1,3-Dichloropropene	96		-		70-130	-		
4-Methyl-2-pentanone	98		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	95		-		70-130	-		
Toluene	115		-		70-130	-		
1,3-Dichloropropane	105		-		70-130	-		
2-Hexanone	116		-		70-130	-		
Dibromochloromethane	**136**	Q	-		70-130	-		
1,2-Dibromoethane	115		-		70-130	-		
Butyl Acetate	102		-		70-130	-		
Octane	111		-		70-130	-		
Tetrachloroethene	116		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102770-3								
1,1,1,2-Tetrachloroethane	115		-		70-130	-		
Chlorobenzene	118		-		70-130	-		
Ethylbenzene	117		-		70-130	-		
p/m-Xylene	117		-		70-130	-		
Bromoform	**141**	Q	-		70-130	-		
Styrene	118		-		70-130	-		
1,1,2,2-Tetrachloroethane	120		-		70-130	-		
o-Xylene	119		-		70-130	-		
1,2,3-Trichloropropane	106		-		70-130	-		
Nonane (C9)	108		-		70-130	-		
Isopropylbenzene	115		-		70-130	-		
Bromobenzene	107		-		70-130	-		
o-Chlorotoluene	114		-		70-130	-		
n-Propylbenzene	112		-		70-130	-		
p-Chlorotoluene	110		-		70-130	-		
4-Ethyltoluene	124		-		70-130	-		
1,3,5-Trimethylbenzene	117		-		70-130	-		
tert-Butylbenzene	117		-		70-130	-		
1,2,4-Trimethylbenzene	122		-		70-130	-		
Decane (C10)	107		-		70-130	-		
Benzyl chloride	130		-		70-130	-		
1,3-Dichlorobenzene	119		-		70-130	-		
1,4-Dichlorobenzene	117		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102770-3								
sec-Butylbenzene	112		-		70-130	-		
p-Isopropyltoluene	107		-		70-130	-		
1,2-Dichlorobenzene	118		-		70-130	-		
n-Butylbenzene	112		-		70-130	-		
1,2-Dibromo-3-chloropropane	112		-		70-130	-		
Undecane	108		-		70-130	-		
Dodecane (C12)	108		-		70-130	-		
1,2,4-Trichlorobenzene	109		-		70-130	-		
Naphthalene	105		-		70-130	-		
1,2,3-Trichlorobenzene	105		-		70-130	-		
Hexachlorobutadiene	121		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102773-3								
Propylene	92		-		70-130	-		25
Dichlorodifluoromethane	82		-		70-130	-		25
Chloromethane	86		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	87		-		70-130	-		25
Vinyl chloride	83		-		70-130	-		25
1,3-Butadiene	98		-		70-130	-		25
Bromomethane	88		-		70-130	-		25
Chloroethane	81		-		70-130	-		25
Ethyl Alcohol	88		-		70-130	-		25
Vinyl bromide	97		-		70-130	-		25
Acetone	94		-		70-130	-		25
Trichlorofluoromethane	88		-		70-130	-		25
iso-Propyl Alcohol	83		-		70-130	-		25
Acrylonitrile	87		-		70-130	-		25
1,1-Dichloroethene	85		-		70-130	-		25
tert-Butyl Alcohol[1]	71		-		70-130	-		25
Methylene chloride	95		-		70-130	-		25
3-Chloropropene	98		-		70-130	-		25
Carbon disulfide	97		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	98		-		70-130	-		25
trans-1,2-Dichloroethene	93		-		70-130	-		25
1,1-Dichloroethane	90		-		70-130	-		25
Methyl tert butyl ether	100		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102773-3								
Vinyl acetate	101		-		70-130	-		25
2-Butanone	107		-		70-130	-		25
cis-1,2-Dichloroethene	107		-		70-130	-		25
Ethyl Acetate	113		-		70-130	-		25
Chloroform	99		-		70-130	-		25
Tetrahydrofuran	106		-		70-130	-		25
1,2-Dichloroethane	85		-		70-130	-		25
n-Hexane	99		-		70-130	-		25
1,1,1-Trichloroethane	89		-		70-130	-		25
Benzene	92		-		70-130	-		25
Carbon tetrachloride	98		-		70-130	-		25
Cyclohexane	98		-		70-130	-		25
Dibromomethane[1]	78		-		70-130	-		25
1,2-Dichloropropane	91		-		70-130	-		25
Bromodichloromethane	96		-		70-130	-		25
1,4-Dioxane	106		-		70-130	-		25
Trichloroethene	99		-		70-130	-		25
2,2,4-Trimethylpentane	98		-		70-130	-		25
cis-1,3-Dichloropropene	79		-		70-130	-		25
4-Methyl-2-pentanone	101		-		70-130	-		25
trans-1,3-Dichloropropene	95		-		70-130	-		25
1,1,2-Trichloroethane	95		-		70-130	-		25
Toluene	116		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102773-3								
2-Hexanone	118		-		70-130	-		25
Dibromochloromethane	**146**	Q	-		70-130	-		25
1,2-Dibromoethane	118		-		70-130	-		25
Tetrachloroethene	118		-		70-130	-		25
1,1,1,2-Tetrachloroethane	116		-		70-130	-		25
Chlorobenzene	119		-		70-130	-		25
Ethylbenzene	122		-		70-130	-		25
p/m-Xylene	124		-		70-130	-		25
Bromoform	**148**	Q	-		70-130	-		25
Styrene	128		-		70-130	-		25
1,1,2,2-Tetrachloroethane	124		-		70-130	-		25
o-Xylene	125		-		70-130	-		25
1,2,3-Trichloropropane[1]	111		-		70-130	-		25
Isopropylbenzene	120		-		70-130	-		25
Bromobenzene[1]	110		-		70-130	-		25
4-Ethyltoluene	**135**	Q	-		70-130	-		25
1,3,5-Trimethylbenzene	130		-		70-130	-		25
1,2,4-Trimethylbenzene	**132**	Q	-		70-130	-		25
Benzyl chloride	**138**	Q	-		70-130	-		25
1,3-Dichlorobenzene	126		-		70-130	-		25
1,4-Dichlorobenzene	123		-		70-130	-		25
sec-Butylbenzene	122		-		70-130	-		25
p-Isopropyltoluene	113		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-05,07-08 Batch: WG1102773-3								
1,2-Dichlorobenzene	125		-		70-130	-		25
n-Butylbenzene	117		-		70-130	-		25
1,2,4-Trichlorobenzene	111		-		70-130	-		25
Naphthalene	110		-		70-130	-		25
1,2,3-Trichlorobenzene	110		-		70-130	-		25
Hexachlorobutadiene	126		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 Batch: WG1103162-3								
Chlorodifluoromethane	82		-		70-130	-		
Propylene	95		-		70-130	-		
Propane	79		-		70-130	-		
Dichlorodifluoromethane	87		-		70-130	-		
Chloromethane	90		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	90		-		70-130	-		
Methanol	80		-		70-130	-		
Vinyl chloride	85		-		70-130	-		
1,3-Butadiene	99		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	91		-		70-130	-		
Chloroethane	87		-		70-130	-		
Ethyl Alcohol	97		-		70-130	-		
Dichlorofluoromethane	93		-		70-130	-		
Vinyl bromide	98		-		70-130	-		
Acrolein	85		-		70-130	-		
Acetone	92		-		70-130	-		
Acetonitrile	78		-		70-130	-		
Trichlorofluoromethane	90		-		70-130	-		
iso-Propyl Alcohol	82		-		70-130	-		
Acrylonitrile	90		-		70-130	-		
Pentane	83		-		70-130	-		
Ethyl ether	81		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 Batch: WG1103162-3								
1,1-Dichloroethene	88		-		70-130	-		
tert-Butyl Alcohol	77		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	95		-		70-130	-		
Carbon disulfide	97		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		-		70-130	-		
trans-1,2-Dichloroethene	93		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
Methyl tert butyl ether	97		-		70-130	-		
Vinyl acetate	112		-		70-130	-		
2-Butanone	107		-		70-130	-		
cis-1,2-Dichloroethene	125		-		70-130	-		
Ethyl Acetate	112		-		70-130	-		
Chloroform	100		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
2,2-Dichloropropane	86		-		70-130	-		
1,2-Dichloroethane	87		-		70-130	-		
n-Hexane	101		-		70-130	-		
Isopropyl Ether	91		-		70-130	-		
Ethyl-Tert-Butyl-Ether	79		-		70-130	-		
1,1,1-Trichloroethane	91		-		70-130	-		
1,1-Dichloropropene	92		-		70-130	-		
Benzene	95		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 Batch: WG1103162-3								
Carbon tetrachloride	97		-		70-130	-		
Cyclohexane	100		-		70-130	-		
Tertiary-Amyl Methyl Ether	80		-		70-130	-		
Dibromomethane	88		-		70-130	-		
1,2-Dichloropropane	93		-		70-130	-		
Bromodichloromethane	100		-		70-130	-		
1,4-Dioxane	109		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	98		-		70-130	-		
Methyl Methacrylate	110		-		70-130	-		
Heptane	102		-		70-130	-		
cis-1,3-Dichloropropene	96		-		70-130	-		
4-Methyl-2-pentanone	99		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	114		-		70-130	-		
1,3-Dichloropropane	104		-		70-130	-		
2-Hexanone	115		-		70-130	-		
Dibromochloromethane	**133**	Q	-		70-130	-		
1,2-Dibromoethane	112		-		70-130	-		
Butyl Acetate	102		-		70-130	-		
Octane	110		-		70-130	-		
Tetrachloroethene	114		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 Batch: WG1103162-3								
1,1,1,2-Tetrachloroethane	115		-		70-130	-		
Chlorobenzene	116		-		70-130	-		
Ethylbenzene	115		-		70-130	-		
p/m-Xylene	116		-		70-130	-		
Bromoform	**136**	Q	-		70-130	-		
Styrene	116		-		70-130	-		
1,1,2,2-Tetrachloroethane	118		-		70-130	-		
o-Xylene	117		-		70-130	-		
1,2,3-Trichloropropane	105		-		70-130	-		
Nonane (C9)	107		-		70-130	-		
Isopropylbenzene	113		-		70-130	-		
Bromobenzene	106		-		70-130	-		
o-Chlorotoluene	111		-		70-130	-		
n-Propylbenzene	113		-		70-130	-		
p-Chlorotoluene	110		-		70-130	-		
4-Ethyltoluene	122		-		70-130	-		
1,3,5-Trimethylbenzene	116		-		70-130	-		
tert-Butylbenzene	115		-		70-130	-		
1,2,4-Trimethylbenzene	122		-		70-130	-		
Decane (C10)	108		-		70-130	-		
Benzyl chloride	129		-		70-130	-		
1,3-Dichlorobenzene	118		-		70-130	-		
1,4-Dichlorobenzene	116		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 Batch: WG1103162-3								
sec-Butylbenzene	112		-		70-130	-		
p-Isopropyltoluene	106		-		70-130	-		
1,2-Dichlorobenzene	117		-		70-130	-		
n-Butylbenzene	112		-		70-130	-		
1,2-Dibromo-3-chloropropane	111		-		70-130	-		
Undecane	107		-		70-130	-		
Dodecane (C12)	107		-		70-130	-		
1,2,4-Trichlorobenzene	110		-		70-130	-		
Naphthalene	106		-		70-130	-		
1,2,3-Trichlorobenzene	103		-		70-130	-		
Hexachlorobutadiene	118		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,09-12 Batch: WG1103163-3								
Propylene	89		-		70-130	-		25
Dichlorodifluoromethane	81		-		70-130	-		25
Chloromethane	85		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	86		-		70-130	-		25
Vinyl chloride	82		-		70-130	-		25
1,3-Butadiene	97		-		70-130	-		25
Bromomethane	87		-		70-130	-		25
Chloroethane	80		-		70-130	-		25
Ethyl Alcohol	88		-		70-130	-		25
Vinyl bromide	95		-		70-130	-		25
Acetone	91		-		70-130	-		25
Trichlorofluoromethane	86		-		70-130	-		25
iso-Propyl Alcohol	82		-		70-130	-		25
Acrylonitrile	86		-		70-130	-		25
1,1-Dichloroethene	84		-		70-130	-		25
Methylene chloride	94		-		70-130	-		25
3-Chloropropene	96		-		70-130	-		25
Carbon disulfide	95		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		-		70-130	-		25
trans-1,2-Dichloroethene	91		-		70-130	-		25
1,1-Dichloroethane	89		-		70-130	-		25
Methyl tert butyl ether	98		-		70-130	-		25
Vinyl acetate	111		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,09-12 Batch: WG1103163-3								
2-Butanone	105		-		70-130	-		25
cis-1,2-Dichloroethene	104		-		70-130	-		25
Ethyl Acetate	110		-		70-130	-		25
Chloroform	97		-		70-130	-		25
Tetrahydrofuran	104		-		70-130	-		25
1,2-Dichloroethane	84		-		70-130	-		25
n-Hexane	98		-		70-130	-		25
1,1,1-Trichloroethane	87		-		70-130	-		25
Benzene	91		-		70-130	-		25
Carbon tetrachloride	95		-		70-130	-		25
Cyclohexane	97		-		70-130	-		25
Dibromomethane[1]	77		-		70-130	-		25
1,2-Dichloropropane	90		-		70-130	-		25
Bromodichloromethane	94		-		70-130	-		25
1,4-Dioxane	103		-		70-130	-		25
Trichloroethene	98		-		70-130	-		25
2,2,4-Trimethylpentane	96		-		70-130	-		25
cis-1,3-Dichloropropene	77		-		70-130	-		25
4-Methyl-2-pentanone	100		-		70-130	-		25
trans-1,3-Dichloropropene	93		-		70-130	-		25
1,1,2-Trichloroethane	93		-		70-130	-		25
Toluene	114		-		70-130	-		25
2-Hexanone	117		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,09-12 Batch: WG1103163-3								
Dibromochloromethane	**141**	Q	-		70-130	-		25
1,2-Dibromoethane	116		-		70-130	-		25
Tetrachloroethene	116		-		70-130	-		25
1,1,1,2-Tetrachloroethane	114		-		70-130	-		25
Chlorobenzene	117		-		70-130	-		25
Ethylbenzene	120		-		70-130	-		25
p/m-Xylene	122		-		70-130	-		25
Bromoform	**145**	Q	-		70-130	-		25
Styrene	126		-		70-130	-		25
1,1,2,2-Tetrachloroethane	122		-		70-130	-		25
o-Xylene	123		-		70-130	-		25
1,2,3-Trichloropropane[1]	110		-		70-130	-		25
Isopropylbenzene	118		-		70-130	-		25
Bromobenzene[1]	109		-		70-130	-		25
4-Ethyltoluene	**135**	Q	-		70-130	-		25
1,3,5-Trimethylbenzene	129		-		70-130	-		25
1,2,4-Trimethylbenzene	130		-		70-130	-		25
Benzyl chloride	**134**	Q	-		70-130	-		25
1,3-Dichlorobenzene	122		-		70-130	-		25
1,4-Dichlorobenzene	122		-		70-130	-		25
sec-Butylbenzene	119		-		70-130	-		25
p-Isopropyltoluene	111		-		70-130	-		25
1,2-Dichlorobenzene	122		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,09-12 Batch: WG1103163-3								
n-Butylbenzene	115		-		70-130	-		25
1,2,4-Trichlorobenzene	107		-		70-130	-		25
Naphthalene	107		-		70-130	-		25
1,2,3-Trichlorobenzene	108		-		70-130	-		25
Hexachlorobutadiene	123		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103534-3								
Chlorodifluoromethane	84		-		70-130	-		
Propylene	103		-		70-130	-		
Propane	89		-		70-130	-		
Dichlorodifluoromethane	88		-		70-130	-		
Chloromethane	97		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	90		-		70-130	-		
Methanol	99		-		70-130	-		
Vinyl chloride	94		-		70-130	-		
1,3-Butadiene	108		-		70-130	-		
Butane	88		-		70-130	-		
Bromomethane	85		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethyl Alcohol	98		-		70-130	-		
Dichlorofluoromethane	84		-		70-130	-		
Vinyl bromide	90		-		70-130	-		
Acrolein	94		-		70-130	-		
Acetone	94		-		70-130	-		
Acetonitrile	96		-		70-130	-		
Trichlorofluoromethane	77		-		70-130	-		
iso-Propyl Alcohol	86		-		70-130	-		
Acrylonitrile	86		-		70-130	-		
Pentane	86		-		70-130	-		
Ethyl ether	91		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103534-3								
1,1-Dichloroethene	86		-		70-130	-		
tert-Butyl Alcohol	80		-		70-130	-		
Methylene chloride	93		-		70-130	-		
3-Chloropropene	103		-		70-130	-		
Carbon disulfide	85		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	87		-		70-130	-		
trans-1,2-Dichloroethene	87		-		70-130	-		
1,1-Dichloroethane	86		-		70-130	-		
Methyl tert butyl ether	90		-		70-130	-		
Vinyl acetate	105		-		70-130	-		
2-Butanone	99		-		70-130	-		
cis-1,2-Dichloroethene	87		-		70-130	-		
Ethyl Acetate	97		-		70-130	-		
Chloroform	86		-		70-130	-		
Tetrahydrofuran	88		-		70-130	-		
2,2-Dichloropropane	79		-		70-130	-		
1,2-Dichloroethane	86		-		70-130	-		
n-Hexane	94		-		70-130	-		
Isopropyl Ether	84		-		70-130	-		
Ethyl-Tert-Butyl-Ether	83		-		70-130	-		
1,1,1-Trichloroethane	89		-		70-130	-		
1,1-Dichloropropene	82		-		70-130	-		
Benzene	87		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103534-3								
Carbon tetrachloride	88		-		70-130	-		
Cyclohexane	96		-		70-130	-		
Tertiary-Amyl Methyl Ether	77		-		70-130	-		
Dibromomethane	81		-		70-130	-		
1,2-Dichloropropane	86		-		70-130	-		
Bromodichloromethane	94		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	91		-		70-130	-		
2,2,4-Trimethylpentane	97		-		70-130	-		
Methyl Methacrylate	115		-		70-130	-		
Heptane	100		-		70-130	-		
cis-1,3-Dichloropropene	91		-		70-130	-		
4-Methyl-2-pentanone	102		-		70-130	-		
trans-1,3-Dichloropropene	77		-		70-130	-		
1,1,2-Trichloroethane	89		-		70-130	-		
Toluene	90		-		70-130	-		
1,3-Dichloropropane	84		-		70-130	-		
2-Hexanone	102		-		70-130	-		
Dibromochloromethane	102		-		70-130	-		
1,2-Dibromoethane	90		-		70-130	-		
Butyl Acetate	87		-		70-130	-		
Octane	84		-		70-130	-		
Tetrachloroethene	96		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103534-3								
1,1,1,2-Tetrachloroethane	88		-		70-130	-		
Chlorobenzene	92		-		70-130	-		
Ethylbenzene	92		-		70-130	-		
p/m-Xylene	93		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	93		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	99		-		70-130	-		
1,2,3-Trichloropropane	87		-		70-130	-		
Nonane (C9)	94		-		70-130	-		
Isopropylbenzene	93		-		70-130	-		
Bromobenzene	88		-		70-130	-		
o-Chlorotoluene	91		-		70-130	-		
n-Propylbenzene	93		-		70-130	-		
p-Chlorotoluene	89		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	96		-		70-130	-		
tert-Butylbenzene	99		-		70-130	-		
1,2,4-Trimethylbenzene	107		-		70-130	-		
Decane (C10)	97		-		70-130	-		
Benzyl chloride	111		-		70-130	-		
1,3-Dichlorobenzene	105		-		70-130	-		
1,4-Dichlorobenzene	104		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103534-3								
sec-Butylbenzene	99		-		70-130	-		
p-Isopropyltoluene	92		-		70-130	-		
1,2-Dichlorobenzene	104		-		70-130	-		
n-Butylbenzene	101		-		70-130	-		
1,2-Dibromo-3-chloropropane	93		-		70-130	-		
Undecane	102		-		70-130	-		
Dodecane (C12)	116		-		70-130	-		
1,2,4-Trichlorobenzene	114		-		70-130	-		
Naphthalene	101		-		70-130	-		
1,2,3-Trichlorobenzene	105		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103537-3								
Propylene	113		-		70-130	-		25
Dichlorodifluoromethane	86		-		70-130	-		25
Chloromethane	96		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	88		-		70-130	-		25
Vinyl chloride	92		-		70-130	-		25
1,3-Butadiene	104		-		70-130	-		25
Bromomethane	88		-		70-130	-		25
Chloroethane	91		-		70-130	-		25
Ethyl Alcohol	94		-		70-130	-		25
Vinyl bromide	91		-		70-130	-		25
Acetone	94		-		70-130	-		25
Trichlorofluoromethane	83		-		70-130	-		25
iso-Propyl Alcohol	85		-		70-130	-		25
Acrylonitrile	86		-		70-130	-		25
1,1-Dichloroethene	87		-		70-130	-		25
tert-Butyl Alcohol[1]	77		-		70-130	-		25
Methylene chloride	93		-		70-130	-		25
3-Chloropropene	106		-		70-130	-		25
Carbon disulfide	87		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	88		-		70-130	-		25
trans-1,2-Dichloroethene	90		-		70-130	-		25
1,1-Dichloroethane	89		-		70-130	-		25
Methyl tert butyl ether	90		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103537-3								
Vinyl acetate	102		-		70-130	-		25
2-Butanone	99		-		70-130	-		25
cis-1,2-Dichloroethene	89		-		70-130	-		25
Ethyl Acetate	100		-		70-130	-		25
Chloroform	89		-		70-130	-		25
Tetrahydrofuran	89		-		70-130	-		25
1,2-Dichloroethane	88		-		70-130	-		25
n-Hexane	99		-		70-130	-		25
1,1,1-Trichloroethane	94		-		70-130	-		25
Benzene	90		-		70-130	-		25
Carbon tetrachloride	95		-		70-130	-		25
Cyclohexane	99		-		70-130	-		25
Dibromomethane[1]	79		-		70-130	-		25
1,2-Dichloropropane	93		-		70-130	-		25
Bromodichloromethane	100		-		70-130	-		25
1,4-Dioxane	99		-		70-130	-		25
Trichloroethene	95		-		70-130	-		25
2,2,4-Trimethylpentane	102		-		70-130	-		25
cis-1,3-Dichloropropene	97		-		70-130	-		25
4-Methyl-2-pentanone	106		-		70-130	-		25
trans-1,3-Dichloropropene	83		-		70-130	-		25
1,1,2-Trichloroethane	96		-		70-130	-		25
Toluene	93		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103537-3								
2-Hexanone	106		-		70-130	-		25
Dibromochloromethane	106		-		70-130	-		25
1,2-Dibromoethane	95		-		70-130	-		25
Tetrachloroethene	100		-		70-130	-		25
1,1,1,2-Tetrachloroethane	92		-		70-130	-		25
Chlorobenzene	96		-		70-130	-		25
Ethylbenzene	96		-		70-130	-		25
p/m-Xylene	98		-		70-130	-		25
Bromoform	112		-		70-130	-		25
Styrene	98		-		70-130	-		25
1,1,2,2-Tetrachloroethane	100		-		70-130	-		25
o-Xylene	100		-		70-130	-		25
1,2,3-Trichloropropane[1]	93		-		70-130	-		25
Isopropylbenzene	94		-		70-130	-		25
Bromobenzene[1]	93		-		70-130	-		25
4-Ethyltoluene	112		-		70-130	-		25
1,3,5-Trimethylbenzene	106		-		70-130	-		25
1,2,4-Trimethylbenzene	111		-		70-130	-		25
Benzyl chloride	108		-		70-130	-		25
1,3-Dichlorobenzene	115		-		70-130	-		25
1,4-Dichlorobenzene	113		-		70-130	-		25
sec-Butylbenzene	95		-		70-130	-		25
p-Isopropyltoluene	90		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06,13-25 Batch: WG1103537-3								
1,2-Dichlorobenzene	114		-		70-130	-		25
n-Butylbenzene	100		-		70-130	-		25
1,2,4-Trichlorobenzene	123		-		70-130	-		25
Naphthalene	112		-		70-130	-		25
1,2,3-Trichlorobenzene	121		-		70-130	-		25
Hexachlorobutadiene	122		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 QC Batch ID: WG1102770-5 QC Sample: L1810650-01 Client ID: DUP Sample						
Dichlorodifluoromethane	0.414	0.478	ppbV	14		25
Chloromethane	0.512	0.586	ppbV	13		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	43.1	50.7	ppbV	16		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	8.48	7.51	ppbV	12		25
Trichlorofluoromethane	0.212	0.240	ppbV	12		25
iso-Propyl Alcohol	2.12	2.42	ppbV	13		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	4.33	5.40	ppbV	22		25
Ethyl Acetate	0.508	0.597	ppbV	16		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 QC Batch ID: WG1102770-5 QC Sample: L1810650-01 Client ID: DUP Sample						
Chloroform	0.228	0.251	ppbV	10		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	1.09	1.27	ppbV	15		25
Benzene	0.600	0.691	ppbV	14		25
Cyclohexane	0.284	0.323	ppbV	13		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	0.334	0.385	ppbV	14		25
Heptane	0.341	0.410	ppbV	18		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	2.96	3.12	ppbV	5		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	2.35	2.49	ppbV	6		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-05,07-08 QC Batch ID: WG1102770-5 QC Sample: L1810650-01 Client ID: DUP Sample						
p/m-Xylene	2.22	2.38	ppbV	7		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	3.10	3.32	ppbV	7		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.735	0.793	ppbV	8		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.450	0.491	ppbV	9		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-05,07-08 QC Batch ID: WG1102773-5 QC Sample: L1810650-01 Client ID: DUP Sample						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.028	0.030	ppbV	7		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.069	0.085	ppbV	21		25
Trichloroethene	1.82	2.12	ppbV	15		25
Tetrachloroethene	0.218	0.231	ppbV	6		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 QC Batch ID: WG1103162-5 QC Sample: L1810844-10 Client ID: IA18-10						
Dichlorodifluoromethane	0.444	0.457	ppbV	3		25
Chloromethane	0.541	0.544	ppbV	1		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	94.0	95.4	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	4.87	5.21	ppbV	7		25
Trichlorofluoromethane	0.222	0.229	ppbV	3		25
iso-Propyl Alcohol	4.67	4.76	ppbV	2		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	1.46	1.47	ppbV	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 QC Batch ID: WG1103162-5 QC Sample: L1810844-10 Client ID: IA18-10						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.469	0.553	ppbV	16		25
Benzene	0.423	0.475	ppbV	12		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.653	0.690	ppbV	6		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,04,09-12 QC Batch ID: WG1103162-5 QC Sample: L1810844-10 Client ID: IA18-10						
p/m-Xylene	0.556	0.571	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	0.201	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,09-12 QC Batch ID: WG1103163-5 QC Sample: L1810844-10 Client ID: IA18-10						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.096	0.106	ppbV	10		25
Trichloroethene	0.022	0.023	ppbV	4		25
Tetrachloroethene	1.02	1.07	ppbV	5		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 QC Batch ID: WG1103534-5 QC Sample: L1810844-18 Client ID: IA18-19						
Dichlorodifluoromethane	0.431	0.440	ppbV	2		25
Chloromethane	0.777	0.798	ppbV	3		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	970E	1020E	ppbV	5		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	32.0	45.7	ppbV	**35**	Q	25
Trichlorofluoromethane	ND	0.266	ppbV	NC		25
iso-Propyl Alcohol	14.1	15.3	ppbV	8		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	1.72	1.69	ppbV	2		25
Ethyl Acetate	3.41	3.40	ppbV	0		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 QC Batch ID: WG1103534-5 QC Sample: L1810844-18 Client ID: IA18-19						
Chloroform	0.580	0.618	ppbV	6		25
Tetrahydrofuran	1.28	1.35	ppbV	5		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.264	0.285	ppbV	8		25
Benzene	0.385	0.371	ppbV	4		25
Cyclohexane	ND	0.212	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	0.612	0.644	ppbV	5		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.30	1.40	ppbV	7		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.237	0.256	ppbV	8		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 QC Batch ID: WG1103534-5 QC Sample: L1810844-18 Client ID: IA18-19						
p/m-Xylene	0.820	0.836	ppbV	2		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.276	0.272	ppbV	1		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.378	0.384	ppbV	2		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air - Mansfield Lab Associated sample(s): 06,13-25 QC Batch ID: WG1103534-5 QC Sample: L1810844-18 Client ID: IA18-19						
Ethyl Alcohol	1240	1280	ppbV	3		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 06,13-25 QC Batch ID: WG1103537-5 QC Sample: L1810844-18 Client ID: IA18-19						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.076	0.078	ppbV	3		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.597	0.614	ppbV	3		25

Project Name: KENT AVE

Project Number: E051

Lab Number: L1810844

Report Date: 04/05/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1810844-01	IA18-01	0454	Flow 3	03/26/18	261208		-	-	-	Pass	9.5	8.0	17
L1810844-01	IA18-01	748	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	-8.5	-	-	-	-
L1810844-02	IA18-02	0541	Flow 5	03/26/18	261208		-	-	-	Pass	10.0	9.8	2
L1810844-02	IA18-02	597	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	-6.2	-	-	-	-
L1810844-03	IA18-03	0073	Flow 4	03/26/18	261208		-	-	-	Pass	10.0	9.9	1
L1810844-03	IA18-03	1941	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.9	-4.9	-	-	-	-
L1810844-04	IA18-04	0575	Flow 4	03/26/18	261208		-	-	-	Pass	10.0	10.5	5
L1810844-04	IA18-04	1655	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	-5.6	-	-	-	-
L1810844-05	IA18-05	01039	Flow 5	03/26/18	261208		-	-	-	Pass	9.9	9.8	1
L1810844-05	IA18-05	753	6.0L Can	03/26/18	261208	L1810120-02	Pass	-30.0	-8.0	-	-	-	-
L1810844-06	IA18-06	0975	Flow 3	03/26/18	261208		-	-	-	Pass	9.7	6.9	34
L1810844-06	IA18-06	1883	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.7	-7.3	-	-	-	-
L1810844-07	IA18-07	0490	Flow 3	03/26/18	261208		-	-	-	Pass	10.0	10.7	7
L1810844-07	IA18-07	1652	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.3	-6.6	-	-	-	-
L1810844-08	IA18-08	0982	Flow 5	03/26/18	261208		-	-	-	Pass	9.5	8.8	8

Project Name: KENT AVE

Project Number: E051

Lab Number: L1810844

Report Date: 04/05/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1810844-08	IA18-08	610	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.9	-7.6	-	-	-	-
L1810844-09	IA18-09	0169	Flow 4	03/26/18	261208		-	-	-	Pass	9.6	7.3	27
L1810844-09	IA18-09	2111	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	0.8	-	-	-	-
L1810844-10	IA18-10	0560	Flow 5	03/26/18	261208		-	-	-	Pass	9.7	8.8	10
L1810844-10	IA18-10	1598	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	-7.3	-	-	-	-
L1810844-11	IA18-11	0726	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.3	0
L1810844-11	IA18-11	2102	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.9	-5.2	-	-	-	-
L1810844-12	IA18-12	0172	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.2	3
L1810844-12	IA18-12	738	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.9	-6.7	-	-	-	-
L1810844-13	IA18-13	0592	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	2.8	16
L1810844-13	IA18-13	1602	6.0L Can	03/26/18	261208	L1810120-01	Pass	-30.0	-18.4	-	-	-	-
L1810844-14	IA18-14	0838	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.2	3
L1810844-14	IA18-14	1699	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.7	-8.4	-	-	-	-
L1810844-15	IA18-15	0629	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.2	3
L1810844-15	IA18-15	632	6.0L Can	03/26/18	261208	L1810120-02	Pass	-30.0	-7.7	-	-	-	-

Project Name: KENT AVE

Project Number: E051

Lab Number: L1810844

Report Date: 04/05/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1810844-16	IA18-16	0632	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.3	0
L1810844-16	IA18-16	933	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.7	-7.3	-	-	-	-
L1810844-17	IA18-17	0380	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.6	9
L1810844-17	IA18-17	637	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.7	-4.8	-	-	-	-
L1810844-18	IA18-19	0498	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.4	3
L1810844-18	IA18-19	1536	6.0L Can	03/26/18	261208	L1810120-02	Pass	-29.9	-6.5	-	-	-	-
L1810844-19	IA18-20	0478	Flow 5	03/26/18	261208		-	-	-	Pass	3.2	3.3	3
L1810844-19	IA18-20	1597	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.9	-7.0	-	-	-	-
L1810844-20	IA18-21	0256	Flow 4	03/26/18	261208		-	-	-	Pass	3.3	3.5	6
L1810844-20	IA18-21	1601	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.9	-5.1	-	-	-	-
L1810844-21	OA18-01	0593	Flow 3	03/26/18	261208		-	-	-	Pass	10.0	10.1	1
L1810844-21	OA18-01	614	6.0L Can	03/26/18	261208	L1810120-01	Pass	-30.0	-6.4	-	-	-	-
L1810844-22	OA18-02	1982	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.9	-4.9	-	-	-	-
L1810844-23	IA18-DUP2	0028	Flow 5	03/26/18	261208		-	-	-	Pass	-	4.5	-
L1810844-23	IA18-DUP2	1711	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.9	0.6	-	-	-	-

Project Name: KENT AVE

Project Number: E051

Lab Number: L1810844

Report Date: 04/05/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1810844-24	IA18-22	0413	Flow 5	03/26/18	261208		-	-	-	Pass	3.2	3.2	0
L1810844-24	IA18-22	626	6.0L Can	03/26/18	261208	L1810120-01	Pass	-29.9	-5.1	-	-	-	-
L1810844-25	IA18-58	0133	Flow 5	03/26/18	261208		-	-	-	Pass	3.3	3.1	6
L1810844-25	IA18-58	1899	6.0L Can	03/26/18	261208	L1810120-03	Pass	-29.9	0.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/24/18 16:46
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/24/18 16:46
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-01
Client ID: CAN 2100 SHELF 56
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/24/18 17:21
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/24/18 17:21
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-02
Client ID: CAN 1544 SHELF 57
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/24/18 17:57
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
Silanol, Trimethyl-	1.2	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/24/18 17:57
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	0.069	0.050	--	0.529	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810120
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810120-03
Client ID: CAN 1050 SHELF 58
Sample Location:

Date Collected: 03/23/18 16:00
Date Received: 03/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/26/18 17:01
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/26/18 17:01
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810146
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810146-02
Client ID: CAN 1608 SHELF 47
Sample Location:

Date Collected: 03/24/18 16:00
Date Received: 03/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/27/18 20:24
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/27/18 20:24
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1810371
Report Date: 04/05/18

Air Canister Certification Results

Lab ID: L1810371-01
Client ID: CAN 454 SHELF 3
Sample Location:

Date Collected: 03/27/18 09:00
Date Received: 03/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	95		60-140

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1810844-01A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-02A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-03A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-04A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-05A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-06A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-07A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-08A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-09A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-10A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-11A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-12A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-13A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-14A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-15A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-16A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-17A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-18A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-19A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-20A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-21A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-22A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-23A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: KENT AVE
Project Number: E051

Lab Number: L1810844
Report Date: 04/05/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1810844-24A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-25A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1810844-26A	Canister - 6 Liter	N/A	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name: KENT AVE **Lab Number:** L1810844

Project Number: E051 **Report Date:** 04/05/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Project Name: KENT AVE **Lab Number:** L1810844

Project Number: E051 **Report Date:** 04/05/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: KENT AVE
Project Number: E051
Lab Number: L1810844
Report Date: 04/05/18

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 3

Date Rec'd in Lab: 3/30/18

ALPHA Job #: L1810844

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Integral Consulting Inc
Address: 61 Broadway
Suite 1601
Phone: Sarabarbuto (860) 705-0620
~~Fax:~~ phone (781) 863 0988
Email: sbarbuto@integralcorp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: ~~E051~~ Kent AVE
Project Location: Brooklyn, NY
Project #: E051
Project Manager: Keith Brodeck
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☑ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)
Sarabarbuto
sbarbuto@integral-corp.com

Billing Information

☐ Same as Client info PO #:
Ronda Henkel
285 Century Place, Ste 190
Louisville CO 80027

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐ Category B deliverable.

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15			Sample Comments (i.e. PID)
10844.01	1A18-01	3/28/18	0944	1536	~~0.0~~ -29.99	-9.92	~~AA~~ AA	KC	~~2.7L~~ 6.2	748	0454	X							Category B
02	1A18-02	↓	1027	1825	-30.63	-6.57	AA	KC	↓	597	0541	X							deliverable
03	~~1A18~~ 1A18-03	↓	10:28	1827	-28.90	-5.96	↓	↓	↓	1941	0073	X							↓
04	1A18-04	↓	1025	1820	-30.00	-6.66	↓	↓	↓	1655	0575	X							↓
05	1A18-05	↓	1121	1834	-30.37	-9.81	↓	↓	↓	753	01039	X							↓
06	1A18-06	↓	0833	1621	-30.45	-8.80	↓	↓	↓	1883	0975	X							↓
07	1A18-07	↓	0925	1635	-30.35	-7.73	↓	↓	↓	1652	0490	X							↓
08	1A18-08	↓	0859	1634	-30.17	-8.81	↓	↓	↓	610	0982	X							↓
09	1A18-09	↓	0842	1000	-30.45	0.0	↓	↓	↓	2111 ~~1809~~ ~~2111~~	~~0074~~ 0169	X							↓
10	1A18-10	↓	0845	1632	-29.76	-7.77	↓	↓	↓	1598	0560	X							↓

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: Summa canister

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
Kathryn Cafer	3/29/18 1500	Ramalk Jackson AAL	3/29 ~~1500~~ 1422
[signature]	3/29 2030	[signature]	3/29 2300
[signature]	3/30 0230	[signature]	03/30/18 0230
	03/30/18 0520	[signature]	3/30/18 0620

AIR ANALYSIS

PAGE 2 OF 3

ALPHA ANALYTICAL — CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/30/18

ALPHA Job #: L1816844

Client Information

Client: Integral Consulting
Address: 61 Broadway
Suite 1601
Phone: Sara Barbuto (860) 705-0620
Fax: phone: (781) 683-0988
Email: sbarbuto@integral-corp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Kent Ave
Project Location: Brooklyn, NY
Project #: E051
Project Manager: Keith Brodock
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: TAT=10 days Time:

Report Information - Data Deliverables

☐ FAX
☑ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)
sara Barbuto
sbarbuto@integral-corp.com

Billing Information

☐ Same as Client info PO #: E051
Fonda Henkel
285 Century place, ste 190
Louisville, CO 80027.

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both

* IA1873 - final vacuum is -18.98 in Hg. ran for 27 hours.

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐ Catagory B deliverable.

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH (Subject Non-petroleum HCs) ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
10844.11	IA18-11	3/29/18	0858	0904	-30.52	-6.14	AA	KL	6L	2102	0726	X					Catagory B
12	IA18-12		0935	0924	-30.02	-7.06				738	0172	X					Deliverable
13	IA18-13		0948	1248	-29.97	-18.98				1602	0592	X					
14	IA18-14		0953	0925	-30.52	-9.08				1699	0838	X					
15	IA18-15		1349	1353	-30.57	-8.75				632	0629	X					
16	IA18-16		1320	1300	-31.49	-8.48				933	0632	X					
17	IA18-17		0908	0911	-30.80	-6.53				637	0380	X					
18	IA18-19		1053	1044	-30.24	-7.30				1538	0498	X					
19	IA18-20		0956	0946	-30.16	-7.89				1597	0478	X					
20	IA18-21		1305	1304	-30.21	-5.88				1601	0256	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: Summa canister

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	3/29/18 1500	[signature] ALL	3/29 1422
[signature]	3/29 2030	[signature]	3/29 2200
[signature]	3/30 0230	[signature]	03/30/18 0230
[signature]	03/30/18 0620	[signature]	3/30/18 0620

AIR ANALYSIS

PAGE 3 OF 3

ALPHA ANALYTICAL — *CHAIN OF CUSTODY*

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/30/18

ALPHA Job #: L1810844

Client Information

Client: Ingral Consulting Inc
Address: 61 Broadway, Ste 1601 NY, NY 10006
Phone: (781) 683-0988
Fax: phone (860) 705-0620.
Email: sbarbuto@integral-corp.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Kent Ave
Project Location: 135 Kent Ave Brooklyn, NY
Project #: E051
Project Manager: Sara Barbuto.
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: 10 day TAT Time:

Report Information - Data Deliverables

☐ FAX
☑ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☑ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)
Sara Barbuto
sbarbuto@integralcorp.com

Billing Information

☐ Same as Client info PO #: E051
Ronda Henkel
ap@integral-corp.com

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
NYS	BCP	Both.

Other Project Specific Requirements/Comments: Flow controller for IA18-22 is # 0413. Did not zero initially
Category B deliverable.

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	☐	Sample Comments (i.e. PID)
10844.21	DA18-01	3/28/18	0827	1619	-30.00	-7.75	AA	KC	62	614	0593	X						Cat B Deliverable
.22	DA18-02	3/28/18	0833	0854	-29.94	-6.53				1982	—	X						
.23	IA18-Dup2	3/29/18	0858	0903	-30.10	-0.19				1711	0028	X						
.24	IA18-22	3/29/18	0842	0958	-38.24	-7.00				626	0413	X						Flow controller faulty. Did not 0.
.25	IA18-58	3/28/18	1044	1832	-29.05	-0.18				1894	0133	X						

KC 3/29/18

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
	3/29/18 1500	Ramesh Jackson NAL	3/29 1500 MAA
	3/29 2030		3/29 2300
3/30	0230		03/30/18 0230
03/30/18	0626		3/30/18 0620

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

www.alphalab.com

Alpha Analytical

Laboratory Code: 11148

SDG Number: L1948939

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IA19-58-03 (L1948939-03) Analyzed: 10/24/19 18:58 526
IA19-58-04 (L1948939-04) Analyzed: 10/24/19 20:02 533
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STD10.0 Injected on: 10/23/19 16:36 635
STD20.0 Injected on: 10/23/19 17:06 643
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Project Name: 135 KENT AVE
Project Number: E051

Lab Number: L1948939
Report Date: 10/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1948939-01	IA19-58-01	AIR	58 N 6TH ST.	10/17/19 17:48	10/18/19
L1948939-02	IA19-58-02	AIR	58 N 6TH ST.	10/17/19 17:45	10/18/19
L1948939-03	IA19-58-03	AIR	58 N 6TH ST.	10/17/19 17:40	10/18/19
L1948939-04	IA19-58-04	AIR	58 N 6TH ST.	10/17/19 17:36	10/18/19
L1948939-05	IA19-58-05	AIR	58 N 6TH ST.	10/17/19 17:37	10/18/19
L1948939-06	IA19-58-DUP	AIR	58 N 6TH ST.	10/17/19 17:40	10/18/19
L1948939-07	OA19-58-01	AIR	58 N 6TH ST.	10/17/19 17:33	10/18/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on October 16, 2019. The canister certification results are provided as an addendum.

Sample Receipt

Two of the tags placed on the canister with the canister ID numbers were transposed by the laboratory before sending out the canisters. Subsequesntly the canister ID numbers listed on the CoC wee taken from the tags and are transposed on the CoC for the samples deignated IA19-58-01 (L1948939-01) and OA19-58-01 (L1948939-07). These samples were logged in based on the client IDs on the tags and the CoC.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J Anderson Report Date: 10/25/19

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)	Column Type: Restek RTX 502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 105 Meters
Concentrator: EST Encon (or equivalent)	df: 3.00 um
Autosampler: EST Centurion (or equivalent)	ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD	Column Type: DB-VRX
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 60 Meters
Concentrator: Tekmar Velocity / EST Encon	df: 1.40 um
Autosampler: Varian Archon / EST Centurion	ID: 0.25 mm
Purge time: 11 min	Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1uL
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Sample Delivery Group Summary

Alpha Job Number : L1948939

Received : 18-OCT-2019
Reviewer : Dylan Snook

Account Name : Integral Consulting, Inc.
Project Number : E051
Project Name : 135 KENT AVE

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
NA	Present/Intact/NA			

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between sample labels & COC?	**NO**
5) Are samples in appropriate containers for requested analysis? Please refer to information noted in Question 3 above.	**NO**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**YES**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NA**

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 25 2019, 04:32 pm

Login Number: L1948939
Account: INTEGRAL Integral Consulting, Inc.Project: E051
Received: 18OCT19 Due Date: 25OCT19

Sample #	Client ID	Mat	PR	Collected
L1948939-01	IA19-58-01	10	S0	17OCT19 17:48
Hard 5 BD TAT. ASP-B Package Due Date: 10/25/19				
ASP-B,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-02	IA19-58-02	10	S0	17OCT19 17:45
Hard 5 BD TAT. Package Due Date: 10/25/19				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-03	IA19-58-03	10	S0	17OCT19 17:40
Hard 5 BD TAT. Package Due Date: 10/25/19				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-04	IA19-58-04	10	S0	17OCT19 17:36
Hard 5 BD TAT. Package Due Date: 10/25/19				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-05	IA19-58-05	10	S0	17OCT19 17:37
Hard 5 BD TAT. Package Due Date: 10/25/19				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-06	IA19-58-DUP	10	S0	17OCT19 17:40
Hard 5 BD TAT. Package Due Date: 10/25/19				
CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM				
L1948939-07	OA19-58-01	10	S0	17OCT19 17:33
Hard 5 BD TAT. Package Due Date: 10/25/19				

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 25 2019, 04:32 pm

Login Number: L1948939
Account: INTEGRAL Integral Consulting, Inc.Project: E051
Received: 18OCT19 Due Date: 25OCT19

Sample #	Client ID	Mat	PR	Collected

CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Logged By: Chris Anderson

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE 1 OF 1

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/19/19

ALPHA Job #: L1948939

Client Information

Client: Integral
Address: 1001 6th Avenue 11th floor
New York, NY 10018
Phone: 212-440-6704
Fax: jpereira@integral-corp.com
Email: sbarbuto@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 135 Kent Ave.
Project Location: 58 N 6th St.
Project #: E051
Project Manager: Sara Barbuto
ALPHA Quote #: 9345

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)
SBARBUTO@INTEGRAL-CORP.COM

Billing Information

☐ Same as Client info PO #:
RONDA HENKEL
285 CENTURY PL SUITE 190
LOUISVILLE, CO 80021

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm
St/NY	BCP	BOTH

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐ CATEGORY B DELIVERABLE

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Subtract Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
48939.01	IA19-58-01	10/17/19	0915	1748	-29.51	-6.39	AA	JMP	GL	1589	0624	X					Category B deliverable
-02	IA19-58-02	10/17/19	0910	1745	-29.46	-8.44	AA	JMP	GG	2604	01442	X					
-03	IA19-58-03	10/17/19	0924	1740	-29.50	-4.46	AA	JMP	GL	608	01033	X					
-04	IA19-58-04	10/17/19	0934	1736	-29.46	-6.94	AA	JMP	GL	2264	0625	X					
-05	IA19-58-05	10/17/19	0945	1737	-29.69	-6.20	AA	JMP	GL	1788	01168	X					
-06	IA19-58-DUP	10/17/19	0925	1740	-29.47	-4.88	AA	JMP	GL	2119	~~0116~~ 01445 JP	X					
-07	IA19-58-01	10/17/19	0939	1733	-29.39	-5.33	AA	JMP	GL	1659	01166	X					

JMB 10/17/19

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
D. Pereira	10/18/19	D. Santos AAL	10/18/19 0821
D. Santos AAL	10/18/19 1700	[illegible]	10/19/19 0030
[illegible] 10/19 0030			

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

Supporting Documentation

Project Name: 135 KENT AVE

Project Number: E051

Lab Number: L1948939

Report Date: 10/25/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1948939-01	IA19-58-01	0624	Flow 4	10/16/19	303815		-	-	-	Pass	10.0	10.5	5
L1948939-01	IA19-58-01	1659	6.0L Can	10/16/19	303815	L1946760-06	Pass	-29.0	-6.5	-	-	-	-
L1948939-02	IA19-58-02	01442	Flow 3	10/16/19	303815		-	-	-	Pass	10.0	5.9	52
L1948939-02	IA19-58-02	2604	6.0L Can	10/16/19	303815	L1946760-06	Pass	-29.4	-8.4	-	-	-	-
L1948939-03	IA19-58-03	01033	Flow 4	10/16/19	303815		-	-	-	Pass	10.0	10.8	8
L1948939-03	IA19-58-03	608	6.0L Can	10/16/19	303815	L1946760-08	Pass	-29.4	-4.5	-	-	-	-
L1948939-04	IA19-58-04	0625	Flow 3	10/16/19	303815		-	-	-	Pass	10.0	11.3	12
L1948939-04	IA19-58-04	2264	6.0L Can	10/16/19	303815	L1946760-06	Pass	-29.2	-7.1	-	-	-	-
L1948939-05	IA19-58-05	01168	Flow 3	10/16/19	303815		-	-	-	Pass	10.0	11.2	11
L1948939-05	IA19-58-05	1788	6.0L Can	10/16/19	303815	L1946760-06	Pass	-29.0	-6.3	-	-	-	-
L1948939-06	IA19-58-DUP	01445	Flow 3	10/16/19	303815		-	-	-	Pass	10.0	7.8	25
L1948939-06	IA19-58-DUP	2119	6.0L Can	10/16/19	303815	L1946760-06	Pass	-29.2	-4.5	-	-	-	-
L1948939-07	OA19-58-01	01166	Flow 3	10/16/19	303815		-	-	-	Pass	10.0	10.5	5
L1948939-07	OA19-58-01	1589	6.0L Can	10/16/19	303815	L1946760-08	Pass	-29.5	-4.9	-	-	-	-

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	10/09/19 18:24		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
Silanol, Trimethyl-	1.0	NJ	ppbV		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	10/09/19 18:24		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-06	Date Collected:	10/08/19 09:00
Client ID:	CAN 986 SHELF 35	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	100		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	101		60-140

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	10/09/19 19:44		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	102		60-140
Bromochloromethane	103		60-140
chlorobenzene-d5	101		60-140

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	10/09/19 19:44		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L1946760
Project Number:	CANISTER QC BAT	***Report Date:***	10/25/19

Air Canister Certification Results

Lab ID:	L1946760-08	Date Collected:	10/08/19 09:00
Client ID:	CAN 1692 SHELF 39	Date Received:	10/08/19
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	104		60-140

Organics

Volatile Organics in Air
TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Client Sample ID	: IA19-58-03	Matrix	: AIR
Lab Sample ID	: L1948939-03	Analysis Date	: 10/24/19 18:58
Lab File ID	: R168832	DUP File ID	: R168833
Dup Sample ID	: WG1300314-5	DUP Analysis Date	: 10/24/19 19:30

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.331	0.313	6	25
Chloromethane	0.546	0.551	1	25
Freon-114	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	13.7	13.9	1	25
Vinyl bromide	ND	ND	NC	25
Acetone	3.14	3.11	1	25
Trichlorofluoromethane	0.245	0.227	8	25
Isopropanol	1.69	1.69	0	25
Tertiary butyl Alcohol	ND	ND	NC	25
Methylene chloride	ND	ND	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	ND	ND	NC	25
Freon-113	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	ND	ND	NC	25
Methyl tert butyl ether	ND	ND	NC	25
2-Butanone	ND	ND	NC	25
Ethyl Acetate	ND	ND	NC	25
Chloroform	ND	ND	NC	25
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	ND	ND	NC	25
n-Hexane	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Client Sample ID	: IA19-58-03	Matrix	: AIR
Lab Sample ID	: L1948939-03	Analysis Date	: 10/24/19 18:58
Lab File ID	: R168832	DUP File ID	: R168833
Dup Sample ID	: WG1300314-5	DUP Analysis Date	: 10/24/19 19:30

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzene	ND	ND	NC	25
Cyclohexane	ND	ND	NC	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	0.255	0.251	2	25
2-Hexanone	ND	ND	NC	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	ND	ND	NC	25
p/m-Xylene	ND	ND	NC	25
Bromoform	ND	ND	NC	25
Styrene	ND	ND	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	ND	ND	NC	25
4-Ethyltoluene	ND	ND	NC	25
1,3,5-Trimethylbenzene	ND	ND	NC	25
1,2,4-Trimethylbenzene	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Client Sample ID	: IA19-58-03	Matrix	: AIR
Lab Sample ID	: L1948939-03	Analysis Date	: 10/24/19 18:58
Lab File ID	: R168832	DUP File ID	: R168833
Dup Sample ID	: WG1300314-5	DUP Analysis Date	: 10/24/19 19:30

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzyl chloride	ND	ND	NC	25
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	ND	ND	NC	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Hexachlorobutadiene	ND	ND	NC	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Matrix	: AIR		
LCS Sample ID	: WG1300314-3	**Analysis Date** : 10/24/19 13:30	**File ID** : R168824
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Propylene	10	10.8	108				-	70-130	-
Dichlorodifluoromethane	10	8.94	89				-	70-130	-
Chloromethane	10	9.78	98				-	70-130	-
Freon-114	10	9.92	99				-	70-130	-
Vinyl chloride	10	9.82	98				-	70-130	-
1,3-Butadiene	10	9.80	98				-	70-130	-
Bromomethane	10	9.50	95				-	70-130	-
Chloroethane	10	9.80	98				-	70-130	-
Ethanol	50	42.4	85				-	40-160	-
Vinyl bromide	10	9.57	96				-	70-130	-
Acetone	50	40.7	81				-	40-160	-
Trichlorofluoromethane	10	9.86	99				-	70-130	-
Isopropanol	25	20.9	84				-	40-160	-
1,1-Dichloroethene	10	9.71	97				-	70-130	-
Tertiary butyl Alcohol	10	9.40	94				-	70-130	-
Methylene chloride	10	9.56	96				-	70-130	-
3-Chloropropene	10	9.38	94				-	70-130	-
Carbon disulfide	10	9.08	91				-	70-130	-
Freon-113	10	9.98	100				-	70-130	-
trans-1,2-Dichloroethene	10	10.3	103				-	70-130	-
1,1-Dichloroethane	10	10.2	102				-	70-130	-
Methyl tert butyl ether	10	10.0	100				-	70-130	-
Vinyl acetate	10	10.1	101				-	70-130	-
2-Butanone	10	9.81	98				-	70-130	-
cis-1,2-Dichloroethene	10	10.8	108				-	70-130	-
Ethyl Acetate	10	9.88	99				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Matrix	: AIR		
LCS Sample ID	: WG1300314-3	**Analysis Date** : 10/24/19 13:30	**File ID** : R168824
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	10.0	100				-	70-130	-
Tetrahydrofuran	10	9.39	94				-	70-130	-
1,2-Dichloroethane	10	9.50	95				-	70-130	-
n-Hexane	10	10.1	101				-	70-130	-
1,1,1-Trichloroethane	10	10.1	101				-	70-130	-
Benzene	10	9.79	98				-	70-130	-
Carbon tetrachloride	10	10.1	101				-	70-130	-
Cyclohexane	10	9.96	100				-	70-130	-
1,2-Dichloropropane	10	10.3	103				-	70-130	-
Bromodichloromethane	10	10.4	104				-	70-130	-
1,4-Dioxane	10	10.3	103				-	70-130	-
Trichloroethene	10	10.4	104				-	70-130	-
2,2,4-Trimethylpentane	10	10.2	102				-	70-130	-
Heptane	10	10.3	103				-	70-130	-
cis-1,3-Dichloropropene	10	11.1	111				-	70-130	-
4-Methyl-2-pentanone	10	10.4	104				-	70-130	-
trans-1,3-Dichloropropene	10	9.39	94				-	70-130	-
1,1,2-Trichloroethane	10	10.4	104				-	70-130	-
Toluene	10	10.0	100				-	70-130	-
2-Hexanone	10	11.4	114				-	70-130	-
Dibromochloromethane	10	10.8	108				-	70-130	-
1,2-Dibromoethane	10	10.3	103				-	70-130	-
Tetrachloroethene	10	10.3	103				-	70-130	-
Chlorobenzene	10	10.3	103				-	70-130	-
Ethylbenzene	10	10.2	102				-	70-130	-
p/m-Xylene	20	20.6	103				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Matrix	: AIR		
LCS Sample ID	: WG1300314-3	**Analysis Date** : 10/24/19 13:30	**File ID** : R168824
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Bromoform	10	10.7	107				-	70-130	-
Styrene	10	10.2	102				-	70-130	-
1,1,2,2-Tetrachloroethane	10	10.6	106				-	70-130	-
o-Xylene	10	10.5	105				-	70-130	-
4-Ethyltoluene	10	10.1	101				-	70-130	-
1,3,5-Trimethylbenzene	10	10.3	103				-	70-130	-
1,2,4-Trimethylbenzene	10	10.7	107				-	70-130	-
Benzyl chloride	10	10.7	107				-	70-130	-
1,3-Dichlorobenzene	10	10.4	104				-	70-130	-
1,4-Dichlorobenzene	10	10.3	103				-	70-130	-
1,2-Dichlorobenzene	10	10.5	105				-	70-130	-
1,2,4-Trichlorobenzene	10	11.9	119				-	70-130	-
Hexachlorobutadiene	10	12.2	122				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Lab Sample ID	: WG1300314-4	**Lab File ID**	: R168828
Instrument ID	: AIRPIANO1		
Matrix	: AIR	**Analysis Date**	: 10/24/19 16:24

Client Sample No.	Lab Sample ID	Analysis Date
WG1300314-3LCS	WG1300314-3	10/24/19 13:30
OA19-58-01	L1948939-07	10/24/19 17:21
IA19-58-01	L1948939-01	10/24/19 17:53
IA19-58-02	L1948939-02	10/24/19 18:25
IA19-58-03	L1948939-03	10/24/19 18:58
IA19-58-03DUP	WG1300314-5	10/24/19 19:30
IA19-58-04	L1948939-04	10/24/19 20:02
IA19-58-05	L1948939-05	10/24/19 20:35
IA19-58-DUP	L1948939-06	10/24/19 21:07

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Analysis Date	: 10/23/19 12:21
Tune Standard	: WG1300074-1	Tune File ID	: R168806_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15.6
75	30.0 - 66.0% of mass 95	42.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	90.4
175	4.0 - 9.0% of mass 174	7 (7.7)1
176	93.0 - 101% of mass 174	87.5 (96.8)1
177	5.0 - 9.0% of mass 176	5.8 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1245966-1	R168810	10/23/19 14:26
STD0.5	R1245966-2	R168811	10/23/19 14:57
STD1.0	R1245966-3	R168812	10/23/19 15:31
STD5.0	R1245966-4	R168813	10/23/19 16:02
STD10.0	R1245966-5	R168814	10/23/19 16:36
STD20.0	R1245966-6	R168815	10/23/19 17:06
STD50.0	R1245966-7	R168816	10/23/19 17:38
STD100.0	R1245966-8	R168817	10/23/19 18:11
ICV QUANT	R1245966-9	R168820	10/24/19 08:27

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Instrument ID	: AIRPIANO1	**Analysis Date**	: 10/24/19 12:26
Tune Standard	: WG1300314-1	**Tune File ID**	: R168822_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15.5
75	30.0 - 66.0% of mass 95	42
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	90.3
175	4.0 - 9.0% of mass 174	6.7 (7.5)1
176	93.0 - 101% of mass 174	87.6 (97)1
177	5.0 - 9.0% of mass 176	5.8 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1300314-2CCAL	WG1300314-2	R168824	10/24/19 13:30
WG1300314-3LCS	WG1300314-3	R168824	10/24/19 13:30
WG1300314-4BLANK	WG1300314-4	R168828	10/24/19 16:24
OA19-58-01	L1948939-07	R168829	10/24/19 17:21
IA19-58-01	L1948939-01	R168830	10/24/19 17:53
IA19-58-02	L1948939-02	R168831	10/24/19 18:25
IA19-58-03	L1948939-03	R168832	10/24/19 18:58
WG1300314-5DUP	WG1300314-5	R168833	10/24/19 19:30
IA19-58-04	L1948939-04	R168834	10/24/19 20:02
IA19-58-05	L1948939-05	R168835	10/24/19 20:35
IA19-58-DUP	L1948939-06	R168836	10/24/19 21:07

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Instrument ID	: AIRPIANO1	**Analysis Date**	: 10/24/19 13:30
Sample No	: WG1300314-2	**Lab File ID**	: R168824

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1300314-2	325698	10.11	741488	12.35	123702	16.80
Upper Limit	455977	10.44	1038083	12.68	173183	17.13
Lower Limit	195419	9.78	444893	12.02	74221	16.47
Sample ID						
WG1300314-3 LCS	325698	10.11	741488	12.35	123702	16.80
WG1300314-4 BLANK	309183	10.11	697048	12.35	119050	16.80
OA19-58-01	303516	10.11	654726	12.35	114530	16.80
IA19-58-01	284067	10.11	632201	12.35	105118	16.80
IA19-58-02	285197	10.11	628212	12.35	101273	16.80
IA19-58-03	283107	10.11	635898	12.35	106124	16.80
IA19-58-03 DUP	283607	10.11	633942	12.35	103471	16.80
IA19-58-04	272591	10.11	552611	12.35	103598	16.80
IA19-58-05	280194	10.11	607301	12.35	103651	16.80
IA19-58-DUP	284929	10.11	605033	12.35	104632	16.80

Area Upper Limit = +40% of internal standard area
Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT
RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

Date Created: 12/17/18
Created By: Jason Hebert
File: PM5830-1
Page: 1

Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.2	0.0368	ppbV	70-130			25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.057	ppbV	70-130			25	25			
1,1,2-Trichloroethane	79-00-5	0.2	0.0726	ppbV	70-130			25	25			
1,1-Dichloroethane	75-34-3	0.2	0.0484	ppbV	70-130			25	25			
1,1-Dichloroethene	75-35-4	0.2	0.0279	ppbV	70-130			25	25			
1,2,3-Trimethylbenzene	526-73-8	0.2	0.086	ppbV	70-130			25	25			
1,2,4-Trichlorobenzene	120-82-1	0.2	0.0505	ppbV	70-130			25	25			
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0587	ppbV	70-130			25	25			
1,2,4,5-Tetramethylbenzene	95-93-2	0.2	0.048	ppbV	70-130			25	25			
1,2-Dibromoethane	106-93-4	0.2	0.0548	ppbV	70-130			25	25			
1,2-Dichlorobenzene	95-50-1	0.2	0.0708	ppbV	70-130			25	25			
1,2-Dichloroethane	107-06-2	0.2	0.0444	ppbV	70-130			25	25			
1,2-Dichloropropane	78-87-5	0.2	0.0651	ppbV	70-130			25	25			
1,3,5-Trimethylbenzene	108-67-8	0.2	0.0624	ppbV	70-130			25	25			
1,3-Butadiene	106-99-0	0.2	0.0488	ppbV	70-130			25	25			
1,3-Dichlorobenzene	541-73-1	0.2	0.0711	ppbV	70-130			25	25			
1,4-Dichlorobenzene	106-46-7	0.2	0.0745	ppbV	70-130			25	25			
1,4-Dioxane	123-91-1	0.2	0.106	ppbV	70-130			25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0494	ppbV	70-130			25	25			
2-Butanone	78-93-3	0.5	0.0638	ppbV	70-130			25	25			
2-Hexanone	591-78-6	0.2	0.087	ppbV	70-130			25	25			
2-Methylthiophene	554-14-3	0.2	0.0649	ppbV	70-130			25	25			
3-Methylthiophene	616-44-4	0.2	0.0565	ppbV	70-130			25	25			
3-Chloropropene	107-05-1	0.2	0.0354	ppbV	70-130			25	25			
2-Ethylthiophene	872-55-9	0.2	0.0553	ppbV	70-130			25	25			
4-Ethyltoluene	622-96-8	0.2	0.0554	ppbV	70-130			25	25			
Acetone	67-64-1	1	0.689	ppbV	70-130			25	25			
Benzene	71-43-2	0.2	0.054	ppbV	70-130			25	25			
Benzyl chloride	100-44-7	0.2	0.0512	ppbV	70-130			25	25			
Benzothiophene	95-15-8	0.5	0.0681	ppbV	70-130			25	25			
Bromodichloromethane	75-27-4	0.2	0.0426	ppbV	70-130			25	25			
Bromoform	75-25-2	0.2	0.0547	ppbV	70-130			25	25			
Bromomethane	74-83-9	0.2	0.0465	ppbV	70-130			25	25			
Carbon disulfide	75-15-0	0.2	0.0354	ppbV	70-130			25	25			
Carbon tetrachloride	56-23-5	0.2	0.0493	ppbV	70-130			25	25			
Chlorobenzene	108-90-7	0.2	0.0579	ppbV	70-130			25	25			
Chloroethane	75-00-3	0.2	0.0923	ppbV	70-130			25	25			
Chloroform	67-66-3	0.2	0.0502	ppbV	70-130			25	25			
Chloromethane	74-87-3	0.2	0.0507	ppbV	70-130			25	25			
cis-1,2-Dichloroethene	156-59-2	0.2	0.138	ppbV	70-130			25	25			
cis-1,3-Dichloropropene	10061-01-5	0.2	0.0622	ppbV	70-130			25	25			
Cyclohexane	110-82-7	0.2	0.0495	ppbV	70-130			25	25			

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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibromochloromethane	124-48-1	0.2	0.0657	ppbV	70-130			25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.0377	ppbV	70-130			25	25			
Ethyl Alcohol	GCDAI06	5	0.531	ppbV	70-130			25	25			
Ethyl Acetate	141-78-6	0.5	0.193	ppbV	70-130			25	25			
Ethylbenzene	100-41-4	0.2	0.057	ppbV	70-130			25	25			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0409	ppbV	70-130			25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0417	ppbV	70-130			25	25			
Hexachlorobutadiene	87-68-3	0.2	0.062	ppbV	70-130			25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.478	ppbV	70-130			25	25			
Methylene chloride	75-09-2	0.5	0.134	ppbV	70-130			25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.0648	ppbV	70-130			25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0747	ppbV	70-130			25	25			
Methyl Methacrylate	80-62-6	0.5	0.0796	ppbV	70-130			25	25			
p/m-Xylene	179601-23-1	0.4	0.125	ppbV	70-130			25	25			
o-Xylene	95-47-6	0.2	0.0688	ppbV	70-130			25	25			
Xylene (Total)	1330-20-7	0.2	0.0688	ppbV				25	25			
Heptane	142-82-5	0.2	0.0702	ppbV	70-130			25	25			
n-Heptane	142-82-5	0.2	0.0702	ppbV	70-130			25	25			
n-Hexane	110-54-3	0.2	0.0519	ppbV	70-130			25	25			
Propylene	115-07-1	0.5	0.0785	ppbV	70-130			25	25			
Styrene	100-42-5	0.2	0.0639	ppbV	70-130			25	25			
Tetrachloroethene	127-18-4	0.2	0.0663	ppbV	70-130			25	25			
Thiophene	110-02-1	0.2	0.0388	ppbV	70-130			25	25			
Tetrahydrofuran	109-99-9	0.5	0.0829	ppbV	70-130			25	25			
Toluene	108-88-3	0.2	0.0538	ppbV	70-130			25	25			
trans-1,2-Dichloroethene	156-60-5	0.2	0.0638	ppbV	70-130			25	25			
1,2-Dichloroethene (total)	540-59-0	0.2	0.0638	ppbV				25	25			
trans-1,3-Dichloropropene	10061-02-6	0.2	0.0639	ppbV	70-130			25	25			
1,3-Dichloropropene, Total	542-75-6	0.2	0.0622	ppbV				25	25			
Trichloroethene	79-01-6	0.2	0.054	ppbV	70-130			25	25			
Trichlorofluoromethane	75-69-4	0.2	0.0414	ppbV	70-130			25	25			
Vinyl acetate	108-05-4	1	0.0726	ppbV	70-130			25	25			
Vinyl bromide	593-60-2	0.2	0.0573	ppbV	70-130			25	25			
Vinyl chloride	75-01-4	0.2	0.0392	ppbV	70-130			25	25			
Naphthalene	91-20-3	0.2	0.0834	ppbV	70-130			25	25			
Total HC As Hexane	NONE	10	0.0519	ppbV	70-130			25	25			
Total VOCs As Toluene	NONE	10	0.0538	ppbV	70-130			25	25			
Propane	74-98-6	0.5	0.171	ppbV	70-130			25	25			
Acrylonitrile	107-13-1	0.5	0.037	ppbV	70-130			25	25			
Acrolein	107-02-8	0.5	0.0629	ppbV	70-130			25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.2	0.065	ppbV	70-130			25	25			
Isopropylbenzene	98-82-8	0.2	0.0636	ppbV	70-130			25	25			

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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,2,3-Trichloropropane	96-18-4	0.2	0.0477	ppbV	70-130			25	25			
Acetonitrile	75-05-8	0.2	0.0745	ppbV	70-130			25	25			
Bromobenzene	108-86-1	0.2	0.0639	ppbV	70-130			25	25			
Chlorodifluoromethane	75-45-6	0.2	0.0322	ppbV	70-130			25	25			
Dichlorofluoromethane	75-43-4	0.2	0.0531	ppbV	70-130			25	25			
Dibromomethane	74-95-3	0.2	0.0503	ppbV	70-130			25	25			
Pentane	109-66-0	0.2	0.0415	ppbV	70-130			25	25			
Octane	111-65-9	0.2	0.0715	ppbV	70-130			25	25			
Tertiary-Amyl Methyl Ether	994-05-8	0.2	0.0731	ppbV	70-130			25	25			
o-Chlorotoluene	95-49-8	0.2	0.0639	ppbV	70-130			25	25			
p-Chlorotoluene	106-43-4	0.2	0.0702	ppbV	70-130			25	25			
2,2-Dichloropropane	594-20-7	0.2	0.0558	ppbV	70-130			25	25			
1,1-Dichloropropene	563-58-6	0.2	0.0607	ppbV	70-130			25	25			
Isopropyl Ether	108-20-3	0.2	0.0978	ppbV	70-130			25	25			
Ethyl-Tert-Butyl-Ether	637-92-3	0.2	0.0656	ppbV	70-130			25	25			
1,2,3-Trichlorobenzene	87-61-6	0.2	0.064	ppbV	70-130			25	25			
Ethyl ether	60-29-7	0.2	0.0694	ppbV	70-130			25	25			
n-Butylbenzene	104-51-8	0.2	0.0621	ppbV	70-130			25	25			
sec-Butylbenzene	135-98-8	0.2	0.0601	ppbV	70-130			25	25			
tert-Butylbenzene	98-06-6	0.2	0.0644	ppbV	70-130			25	25			
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.0375	ppbV	70-130			25	25			
p-Isopropyltoluene	99-87-6	0.2	0.0809	ppbV	70-130			25	25			
n-Propylbenzene	103-65-1	0.2	0.0624	ppbV	70-130			25	25			
1,3-Dichloropropane	142-28-9	0.2	0.106	ppbV	70-130			25	25			
Methanol	67-56-1	5	1.84	ppbV	70-130			25	25			
Acetaldehyde	75-07-0	2.5	0.455	ppbV	70-130			25	25			
Butane	106-97-8	0.2	0.041	ppbV	70-130			25	25			
Nonane (C9)	111-84-2	0.2	0.0692	ppbV	70-130			25	25			
Decane (C10)	124-18-5	0.2	0.0639	ppbV	70-130			25	25			
Undecane	1120-21-4	0.2	0.0694	ppbV	70-130			25	25			
Indane	496-11-7	0.2	0.0706	ppbV	70-130			25	25			
Indene	95-13-6	0.2	0.059	ppbV	70-130			25	25			
1-Methylnaphthalene	90-12-0	1	0.388	ppbV	70-130			25	25			
Dodecane (C12)	112-40-3	0.2	0.0933	ppbV	70-130			25	25			
Butyl Acetate	123-86-4	0.5	0.166	ppbV	70-130			25	25			
tert-Butyl Alcohol	75-65-0	0.5	0.0552	ppbV	70-130			25	25			
2-Methylnaphthalene	91-57-6	1	0.507	ppbV	70-130			25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

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Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-01	Date Collected	: 10/17/19 17:48
Client ID	: IA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:53
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168830	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.298	0.200	--	1.47	0.989	--	
74-87-3	Chloromethane	0.511	0.200	--	1.06	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	0.475	0.200	--	1.05	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	30.4	5.00	--	57.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	7.67	1.00	--	18.2	2.38	--	
75-69-4	Trichlorofluoromethane	0.201	0.200	--	1.13	1.12	--	
67-63-0	Isopropanol	3.41	0.500	--	8.38	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.744	0.500	--	2.19	1.47	--	
141-78-6	Ethyl Acetate	0.506	0.500	--	1.82	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-01	Date Collected	: 10/17/19 17:48
Client ID	: IA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:53
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168830	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.635	0.200	--	2.60	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.654	0.200	--	2.46	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.216	0.200	--	0.938	0.869	--	
179601-23-1	p/m-Xylene	0.764	0.400	--	3.32	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.292	0.200	--	1.27	0.869	--	
622-96-8	4-Ethyltoluene	0.329	0.200	--	1.62	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.350	0.200	--	1.72	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.845	0.200	--	4.15	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-01	Date Collected	: 10/17/19 17:48
Client ID	: IA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:53
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168830	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-02	Date Collected	: 10/17/19 17:45
Client ID	: IA19-58-02	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168831	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.290	0.200	--	1.43	0.989	--	
74-87-3	Chloromethane	0.543	0.200	--	1.12	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	13.9	5.00	--	26.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.62	1.00	--	8.60	2.38	--	
75-69-4	Trichlorofluoromethane	0.965	0.200	--	5.42	1.12	--	
67-63-0	Isopropanol	2.83	0.500	--	6.96	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-02	Date Collected	: 10/17/19 17:45
Client ID	: IA19-58-02	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168831	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.284	0.200	--	1.07	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-02	Date Collected	: 10/17/19 17:45
Client ID	: IA19-58-02	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168831	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-03	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:58
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168832	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.331	0.200	--	1.64	0.989	--	
74-87-3	Chloromethane	0.546	0.200	--	1.13	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	13.7	5.00	--	25.8	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.14	1.00	--	7.46	2.38	--	
75-69-4	Trichlorofluoromethane	0.245	0.200	--	1.38	1.12	--	
67-63-0	Isopropanol	1.69	0.500	--	4.15	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-03	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:58
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168832	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.255	0.200	--	0.961	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-03	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:58
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168832	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-04	Date Collected	: 10/17/19 17:36
Client ID	: IA19-58-04	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:02
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168834	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.299	0.200	--	1.48	0.989	--	
74-87-3	Chloromethane	0.462	0.200	--	0.954	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	17.1	5.00	--	32.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	4.20	1.00	--	9.98	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	3.17	0.500	--	7.79	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.220	0.200	--	0.775	0.705	--	
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-04	Date Collected	: 10/17/19 17:36
Client ID	: IA19-58-04	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:02
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168834	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.346	0.200	--	1.30	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-04	Date Collected	: 10/17/19 17:36
Client ID	: IA19-58-04	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:02
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168834	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-05	Date Collected	: 10/17/19 17:37
Client ID	: IA19-58-05	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:35
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168835	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.311	0.200	--	1.54	0.989	--	
74-87-3	Chloromethane	0.540	0.200	--	1.12	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	92.0	5.00	--	173	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	10.2	1.00	--	24.2	2.38	--	
75-69-4	Trichlorofluoromethane	0.206	0.200	--	1.16	1.12	--	
67-63-0	Isopropanol	221	0.500	--	543	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-05	Date Collected	: 10/17/19 17:37
Client ID	: IA19-58-05	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:35
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168835	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.251	0.200	--	0.946	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-05	Date Collected	: 10/17/19 17:37
Client ID	: IA19-58-05	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:35
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168835	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-06	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-DUP	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 21:07
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168836	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.350	0.200	--	1.73	0.989	--	
74-87-3	Chloromethane	0.508	0.200	--	1.05	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	13.9	5.00	--	26.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	2.99	1.00	--	7.10	2.38	--	
75-69-4	Trichlorofluoromethane	0.227	0.200	--	1.28	1.12	--	
67-63-0	Isopropanol	1.92	0.500	--	4.72	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-06	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-DUP	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 21:07
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168836	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.249	0.200	--	0.938	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-06	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-DUP	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 21:07
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168836	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-07	Date Collected	: 10/17/19 17:33
Client ID	: OA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:21
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168829	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.308	0.200	--	1.52	0.989	--	
74-87-3	Chloromethane	0.446	0.200	--	0.921	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	9.06	5.00	--	17.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.74	1.00	--	4.13	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-07	Date Collected	: 10/17/19 17:33
Client ID	: OA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:21
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168829	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-07	Date Collected	: 10/17/19 17:33
Client ID	: OA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:21
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168829	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-4	Date Collected	: NA
Client ID	: WG1300314-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/24/19 16:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168828	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	--	ND	0.861	--	U
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
108-05-4	Vinyl acetate	ND	1.00	--	ND	3.52	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-4	Date Collected	: NA
Client ID	: WG1300314-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/24/19 16:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168828	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-4	Date Collected	: NA
Client ID	: WG1300314-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/24/19 16:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168828	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-5	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03DUP	Date Received	: 10/18/19
Sample Location	:	Date Analyzed	: 10/24/19 19:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168833	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.313	0.200	--	1.55	0.989	--	
74-87-3	Chloromethane	0.551	0.200	--	1.14	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	13.9	5.00	--	26.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.11	1.00	--	7.39	2.38	--	
75-69-4	Trichlorofluoromethane	0.227	0.200	--	1.28	1.12	--	
67-63-0	Isopropanol	1.69	0.500	--	4.15	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-5	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03DUP	Date Received	: 10/18/19
Sample Location	:	Date Analyzed	: 10/24/19 19:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168833	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.251	0.200	--	0.946	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300314-5	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03DUP	Date Received	: 10/18/19
Sample Location	:	Date Analyzed	: 10/24/19 19:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R168833	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168829.D
Acq On : 24 Oct 2019 5:21 pm
Operator : AIRPIANO1:TS
Sample : L1948939-07,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 14:39:08 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.110	49	303516	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		93.19%	
43) 1,4-difluorobenzene	12.348	114	654726	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		88.30%	
67) chlorobenzene-D5	16.801	54	114530	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		92.59%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	8968	0.308	ppbV	92
6) chloromethane	4.238	50	4423	0.446	ppbV	94
7) Freon-114	4.372		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	5.041		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.609	31	59910	9.059	ppbV	94
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.279	43	31835	1.745	ppbV #	100
21) trichlorofluoromethane	6.446	101	5725	0.187	ppbV	94
22) isopropyl alcohol	0.000		0	N.D.	d	
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	4901	0.371	ppbV	91
29) 3-chloropropene	7.619		0	N.D.		
30) carbon disulfide	7.787		0	N.D.		
31) Freon 113	7.815	101	1521	0.058	ppbV	90
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	9.025		0	N.D.		
36) 2-butanone	9.366		0	N.D.		
38) Ethyl Acetate	10.249		0	N.D.		
39) chloroform	10.271		0	N.D.		
40) Tetrahydrofuran	10.816		0	N.D.		
42) 1,2-dichloroethane	11.138		0	N.D.		
44) hexane	10.164	57	2551M3	0.100	ppbV	
50) benzene	11.929	78	3914	0.093	ppbV	94
53) cyclohexane	12.243	56	757	0.037	ppbV	88

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168829.D
Acq On : 24 Oct 2019 5:21 pm
Operator : AIRPIANO1:TS
Sample : L1948939-07,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 14:39:08 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

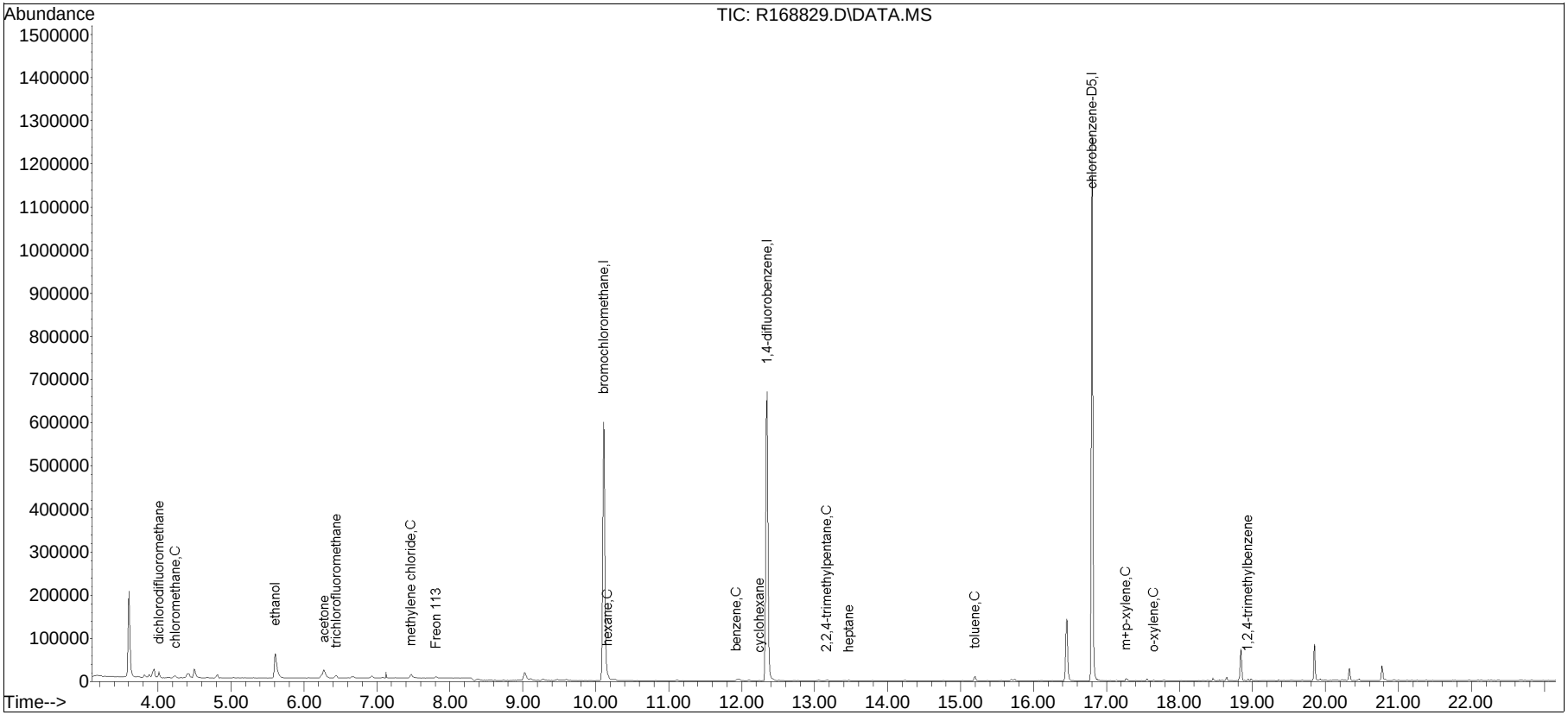
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	13.163	57	2754	0.043	ppbV #	87
62)	heptane	13.465	43	1046	0.045	ppbV #	92
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	14.243		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	15.198	91	8742	0.161	ppbV	94
72)	2-hexanone	15.404		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.139		0	N.D.		
83)	m+p-xylene	17.268	91	4330	0.082	ppbV	93
84)	bromoform	0.000		0	N.D.		
85)	styrene	17.567		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.646	91	1710	0.032	ppbV	98
96)	4-ethyl toluene	18.577		0	N.D.		
97)	1,3,5-trimethylbenzene	18.627		0	N.D.		
99)	1,2,4-trimethylbenzene	18.937	105	2006	0.032	ppbV #	57
101)	Benzyl Chloride	18.937		0	N.D.		
102)	1,3-dichlorobenzene	19.076		0	N.D.		
103)	1,4-dichlorobenzene	19.118		0	N.D.		
107)	1,2-dichlorobenzene	19.390		0	N.D.		
115)	1,2,4-trichlorobenzene	20.808		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

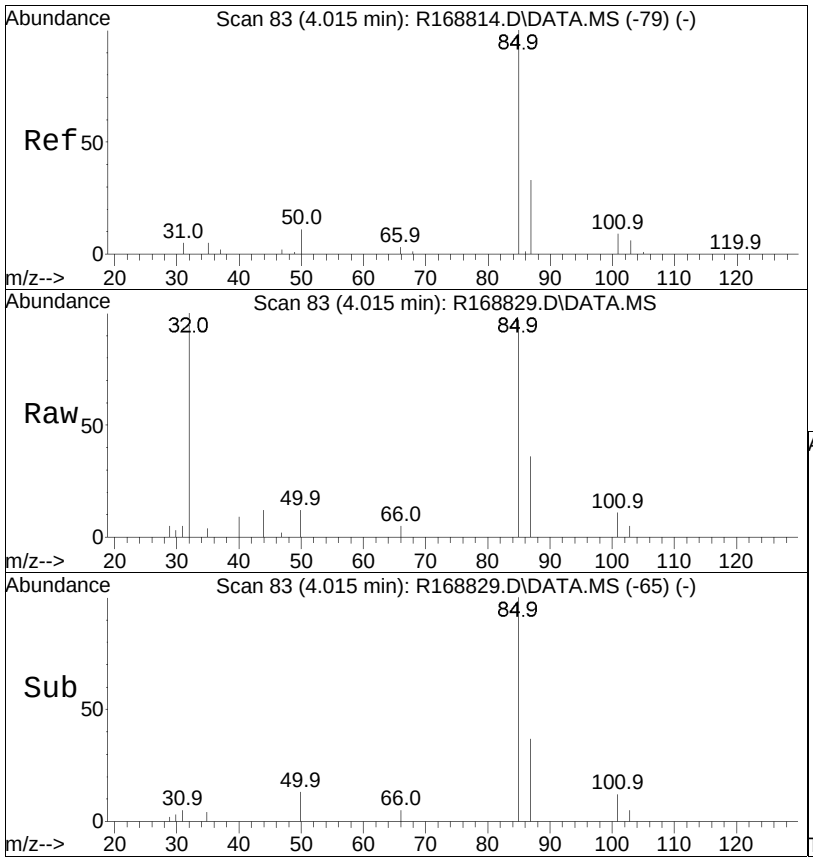
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168829.D
Acq On : 24 Oct 2019 5:21 pm
Operator : AIRPIANO1:TS
Sample : L1948939-07,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 14:39:08 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

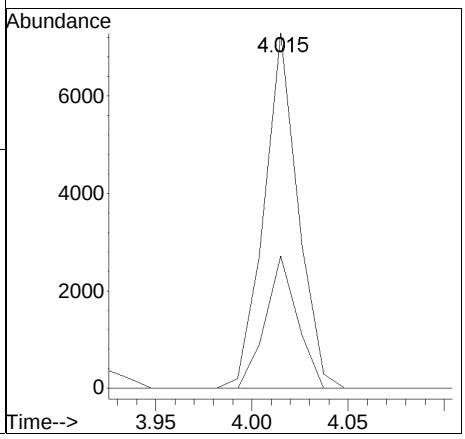


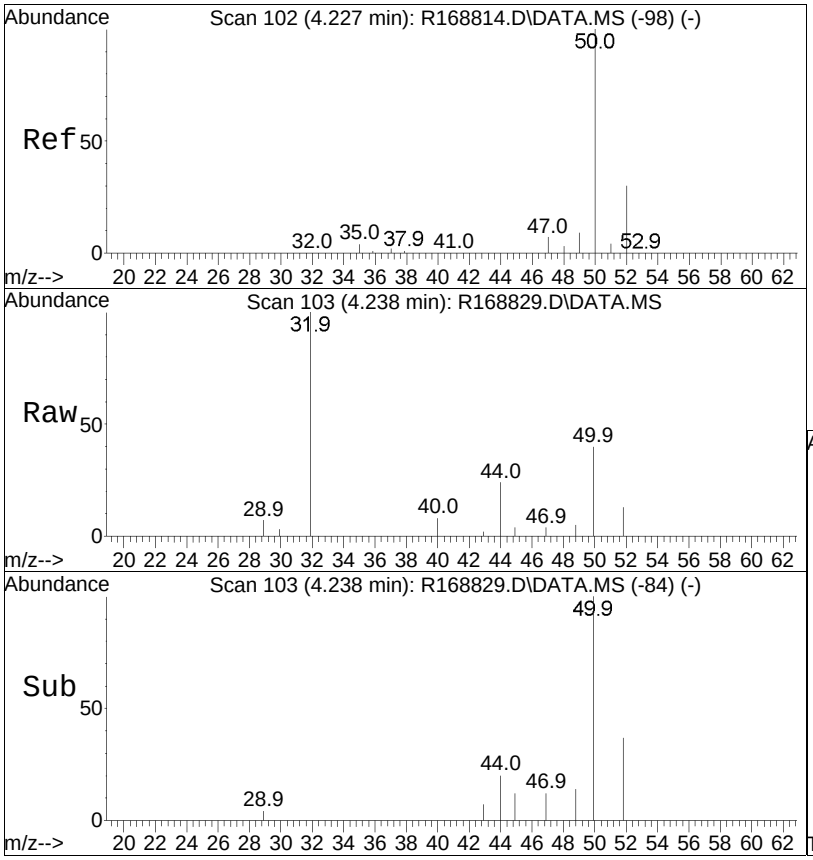


#5
dichlorodifluoromethane
Concen: 0.31 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 85 Resp: 8968

Ion	Ratio	Lower	Upper
85	100		
87	37.3	26.1	39.1

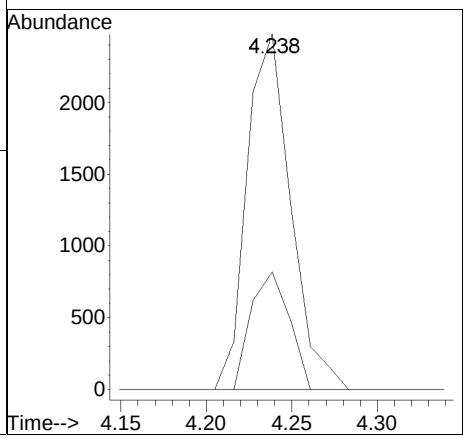


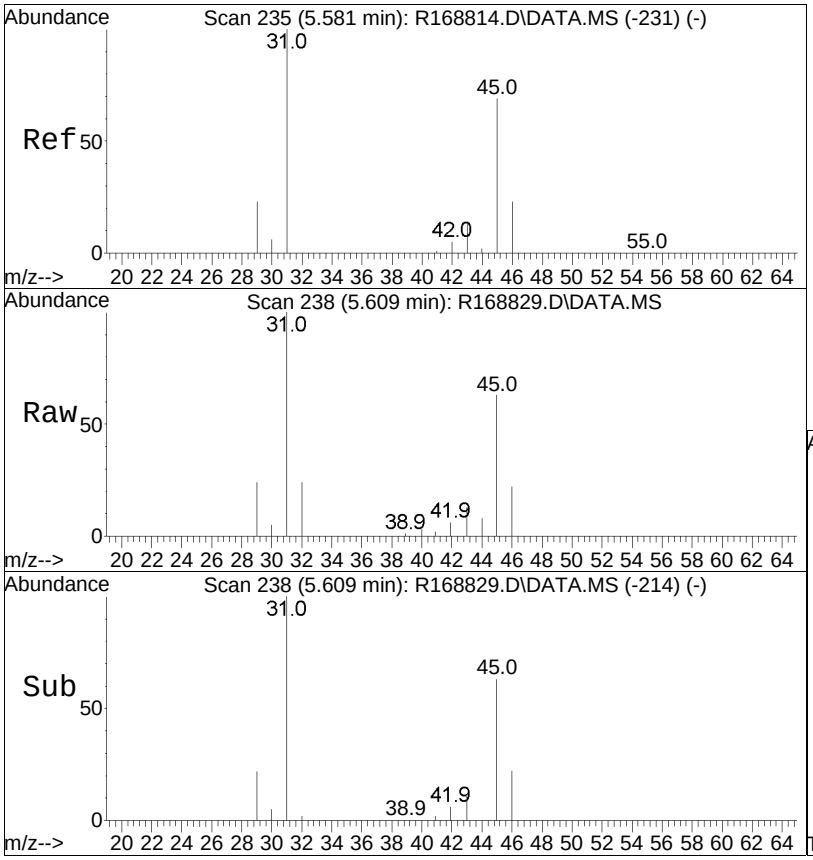


#6
chloromethane
Concen: 0.45 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 50 Resp: 4423

Ion	Ratio	Lower	Upper
50	100		
52	33.1	23.7	35.5

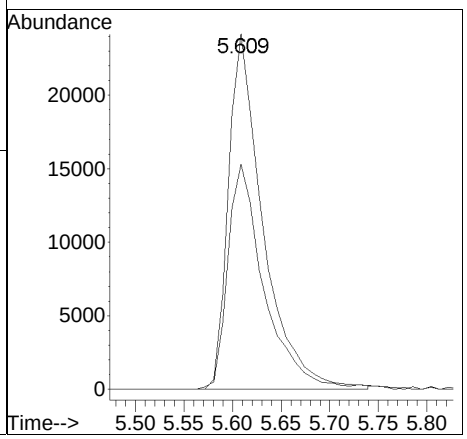


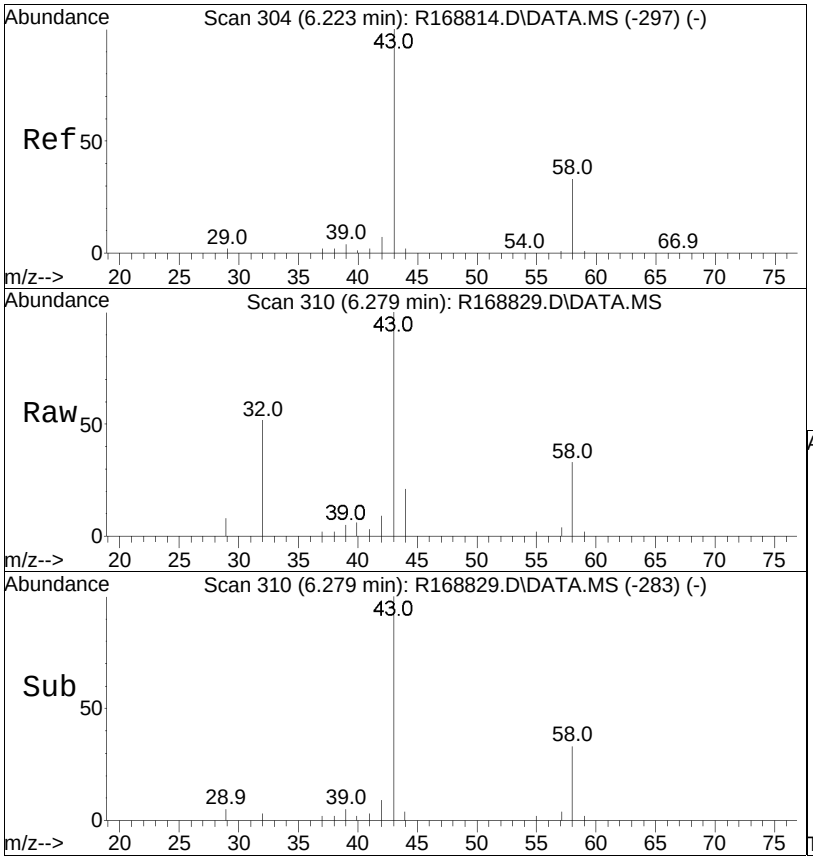


#15
ethanol
Concen: 9.06 ppbV
RT: 5.609 min Scan# 238
Delta R.T. 0.028 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 31 Resp: 59910

Ion	Ratio	Lower	Upper
31	100		
45	63.3	54.3	81.5

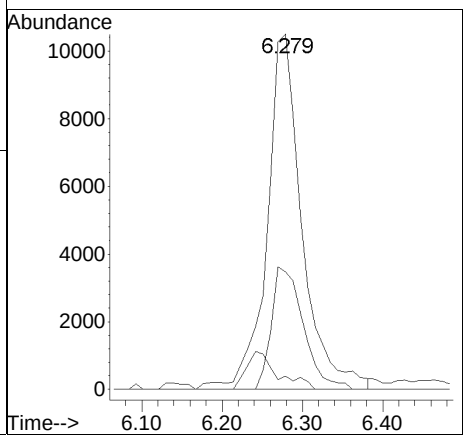


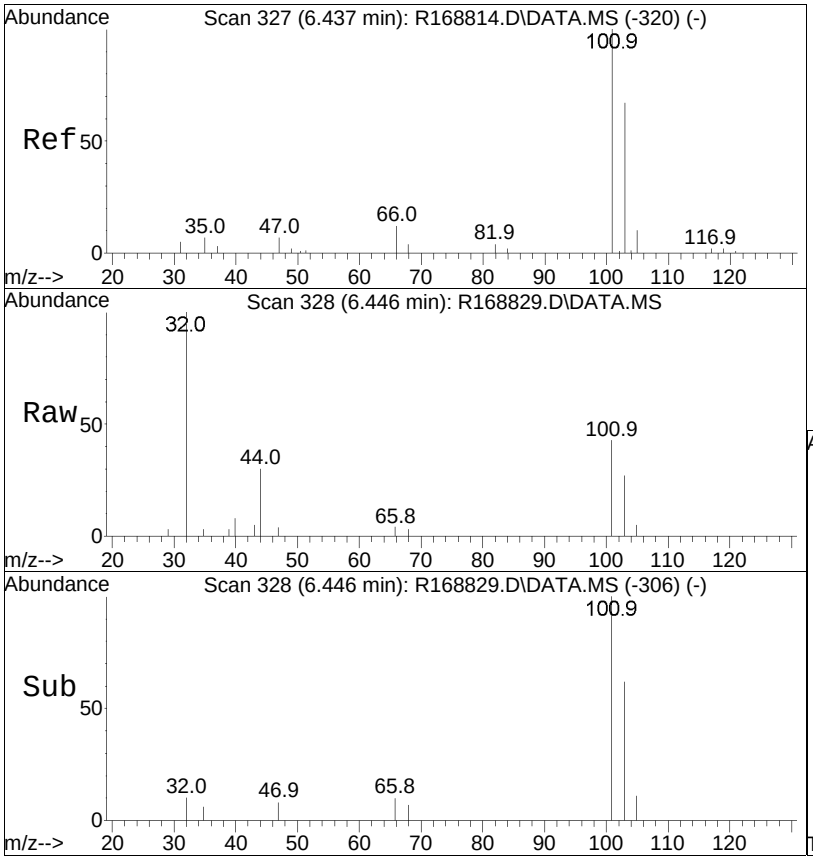


#19
acetone
Concen: 1.75 ppbV
RT: 6.279 min Scan# 310
Delta R.T. 0.056 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 43 Resp: 31835

Ion	Ratio	Lower	Upper
43	100		
58	33.1	26.5	39.7
57	3.8	0.8	1.2#

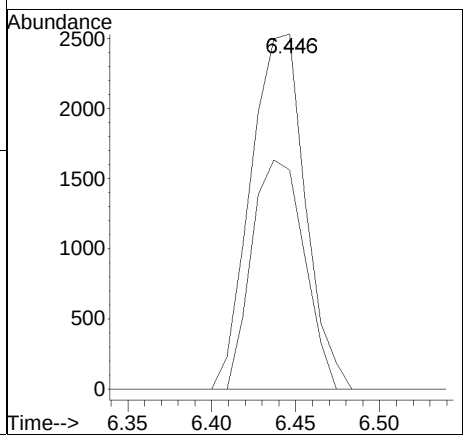


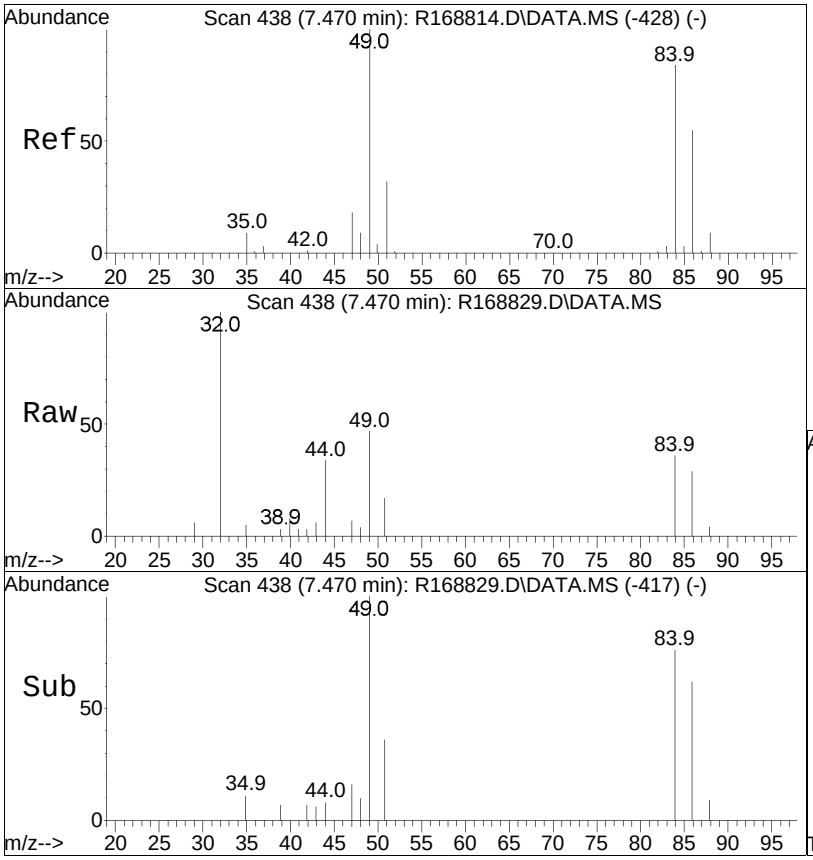


#21
trichlorofluoromethane
Concen: 0.19 ppbV
RT: 6.446 min Scan# 328
Delta R.T. 0.009 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion:101 Resp: 5725

Ion	Ratio	Lower	Upper
101	100		
103	61.8	53.4	80.2

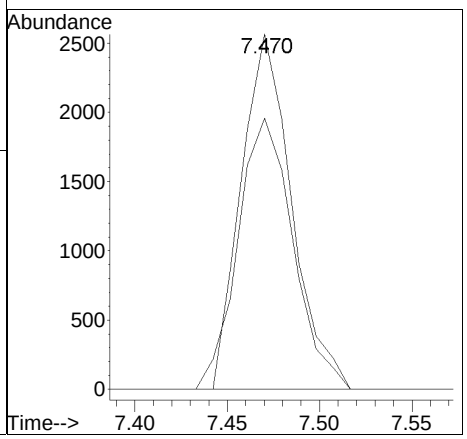


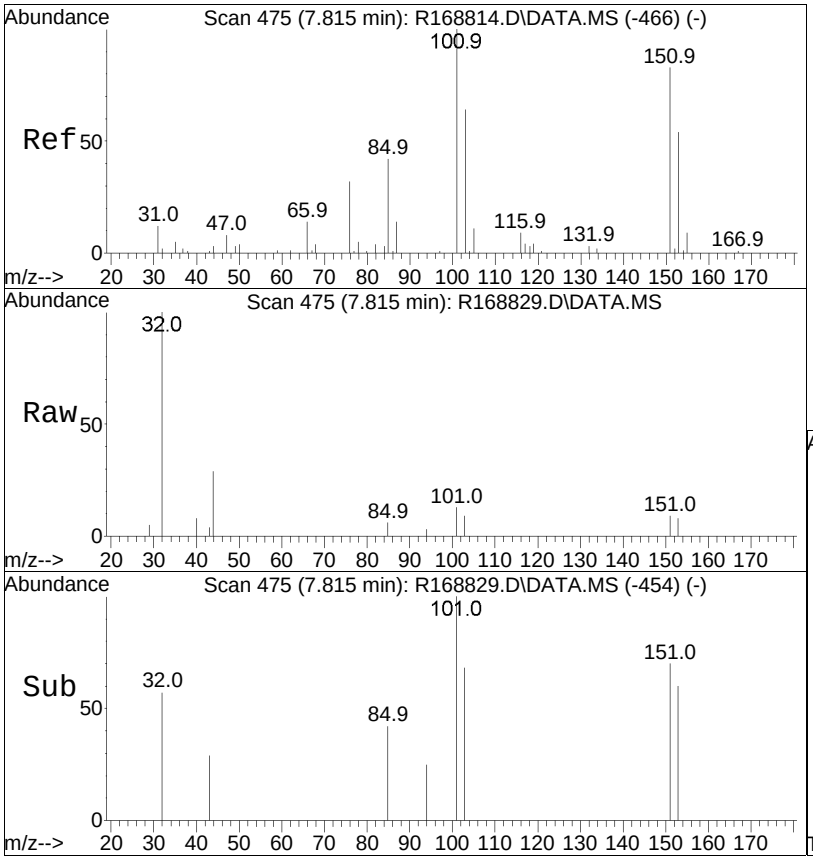


#28
methylene chloride
Concen: 0.37 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 49 Resp: 4901

Ion	Ratio	Lower	Upper
49	100		
84	76.3	67.3	100.9

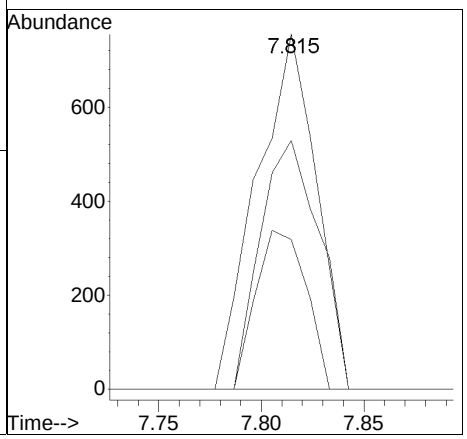


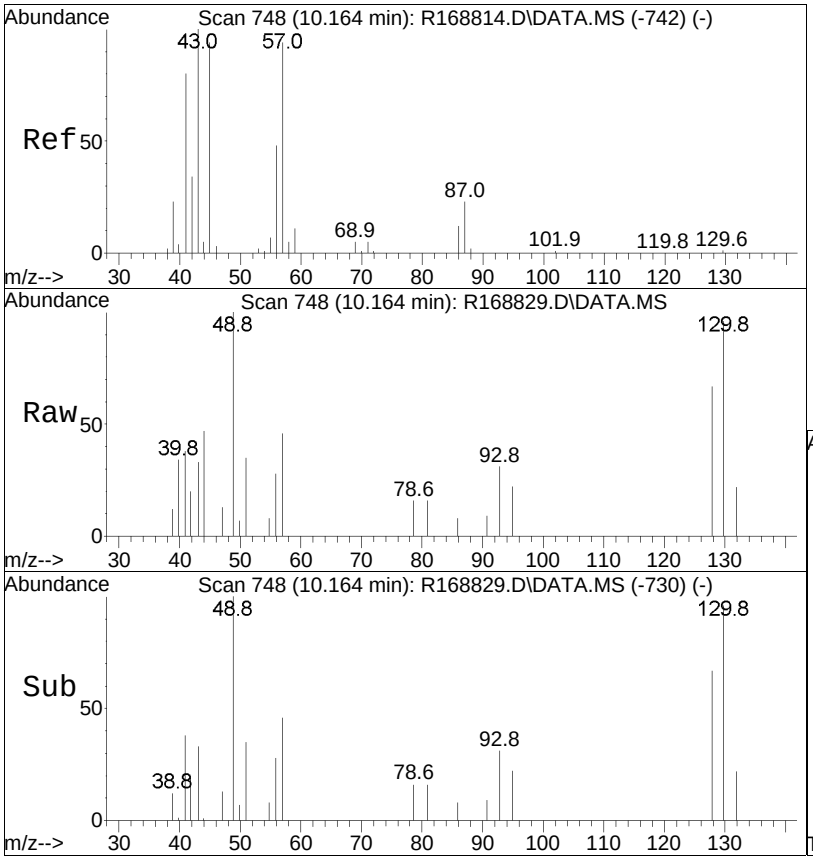


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion:101 Resp: 1521

Ion	Ratio	Lower	Upper
101	100		
85	42.1	33.2	49.8
151	70.1	66.2	99.2

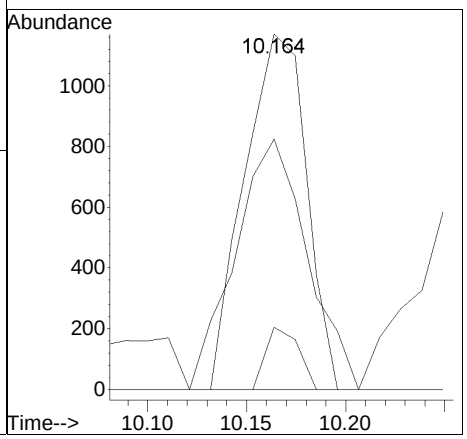


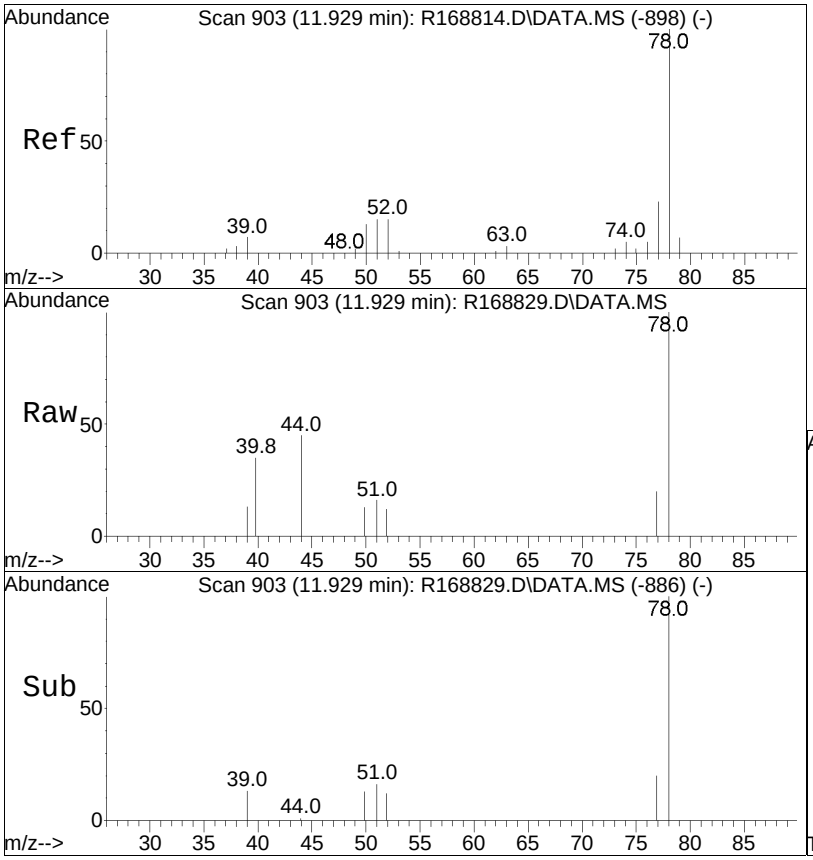


#44
hexane
Concen: 0.10 ppbV m
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 57 Resp: 2551

Ion	Ratio	Lower	Upper
57	100		
43	70.4	85.5	128.3#
86	17.5	10.5	15.7#

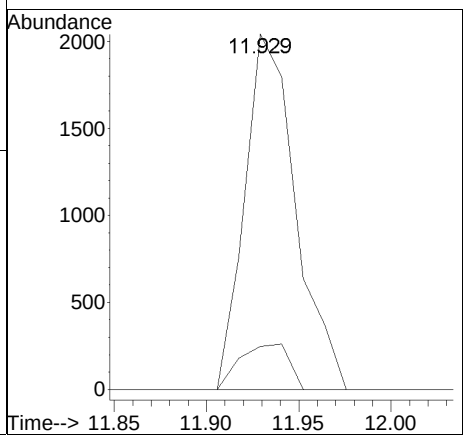


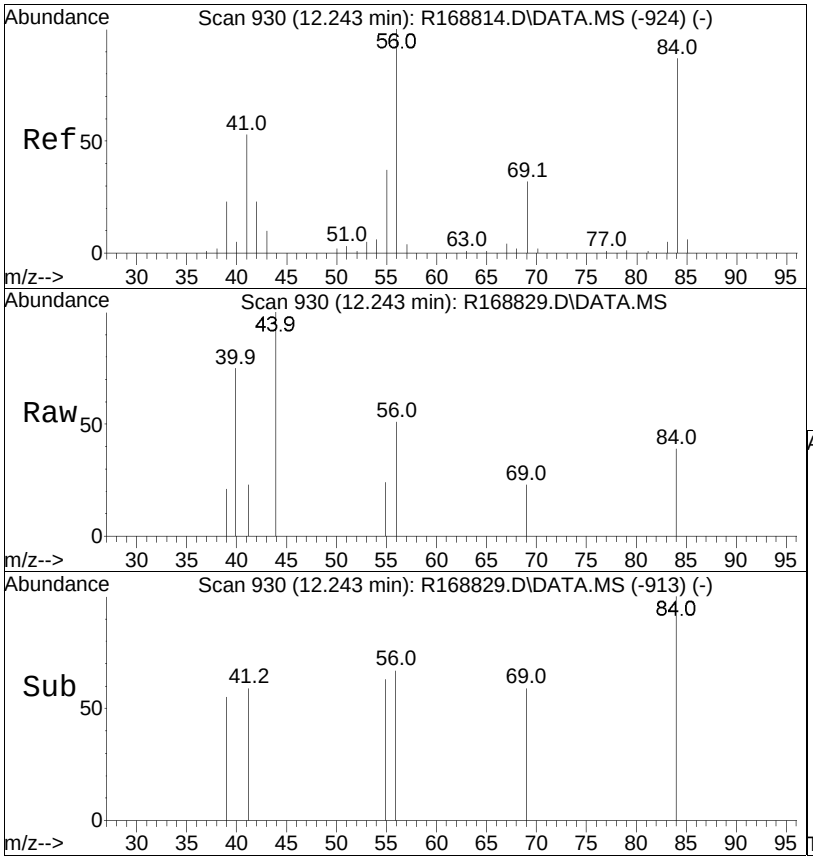


#50
benzene
Concen: 0.09 ppbV
RT: 11.929 min Scan# 903
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 78 Resp: 3914

Ion	Ratio	Lower	Upper
78	100		
52	12.1	11.7	17.5

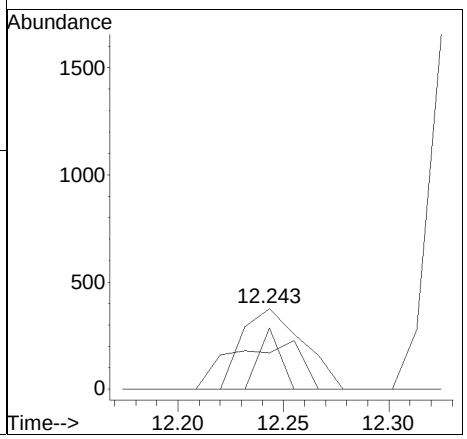


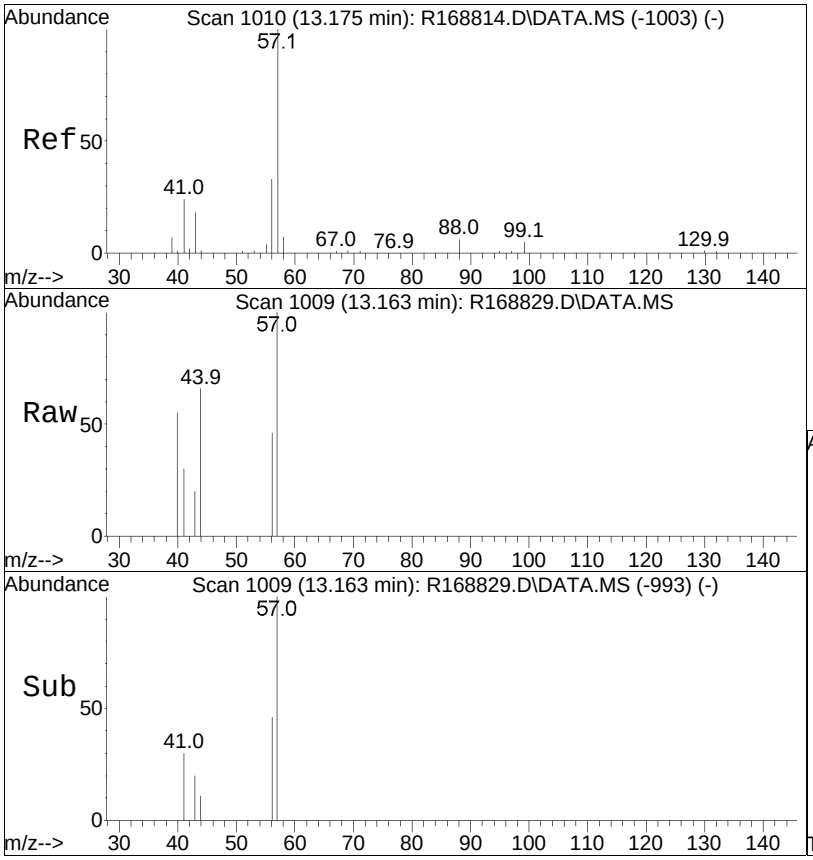


#53
cyclohexane
Concen: 0.04 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 56 Resp: 757

Ion	Ratio	Lower	Upper
56	100		
84	76.1	70.1	105.1
41	45.2	42.6	63.8

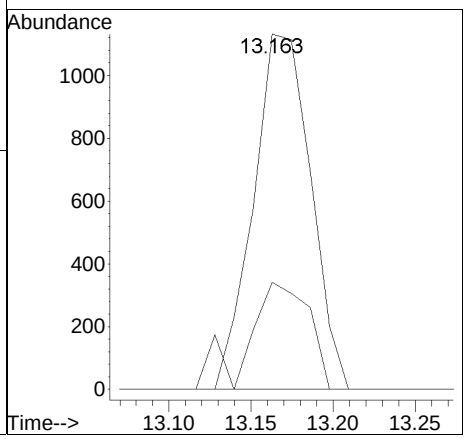


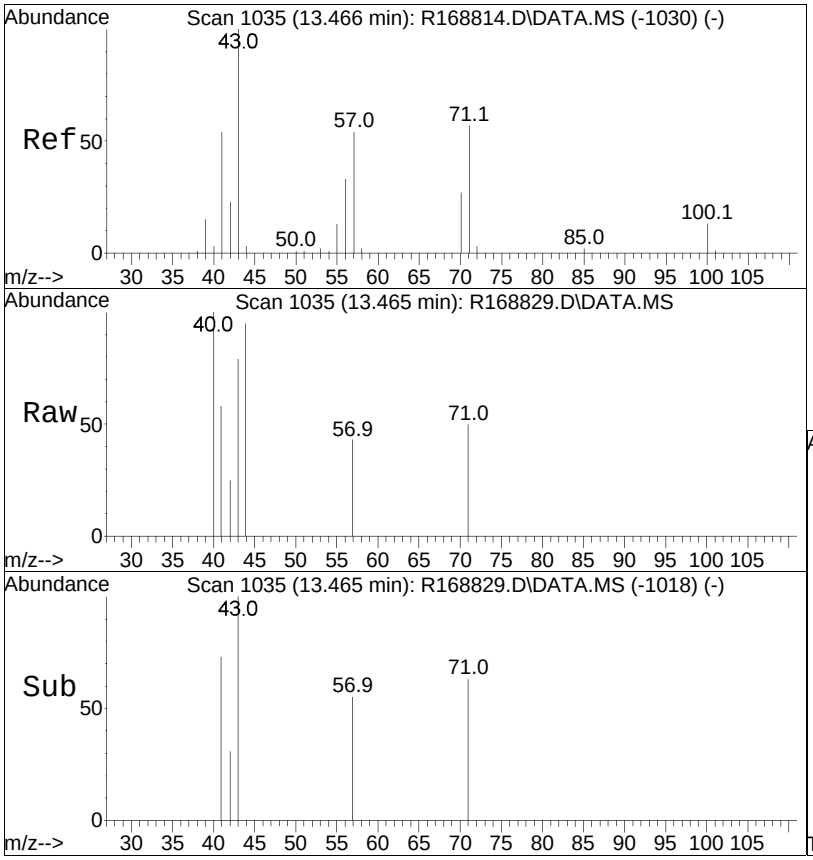


#60
2,2,4-trimethylpentane
Concen: 0.04 ppbV
RT: 13.163 min Scan# 1009
Delta R.T. -0.012 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 57 Resp: 2754

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	30.1	19.3	28.9#

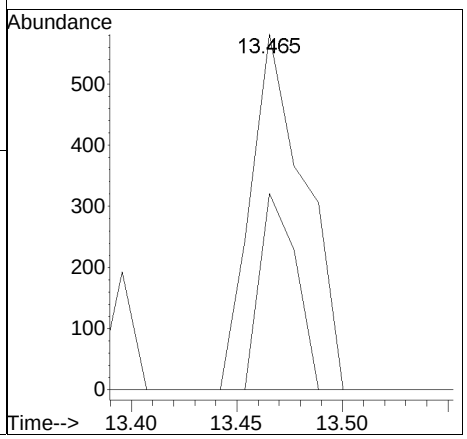


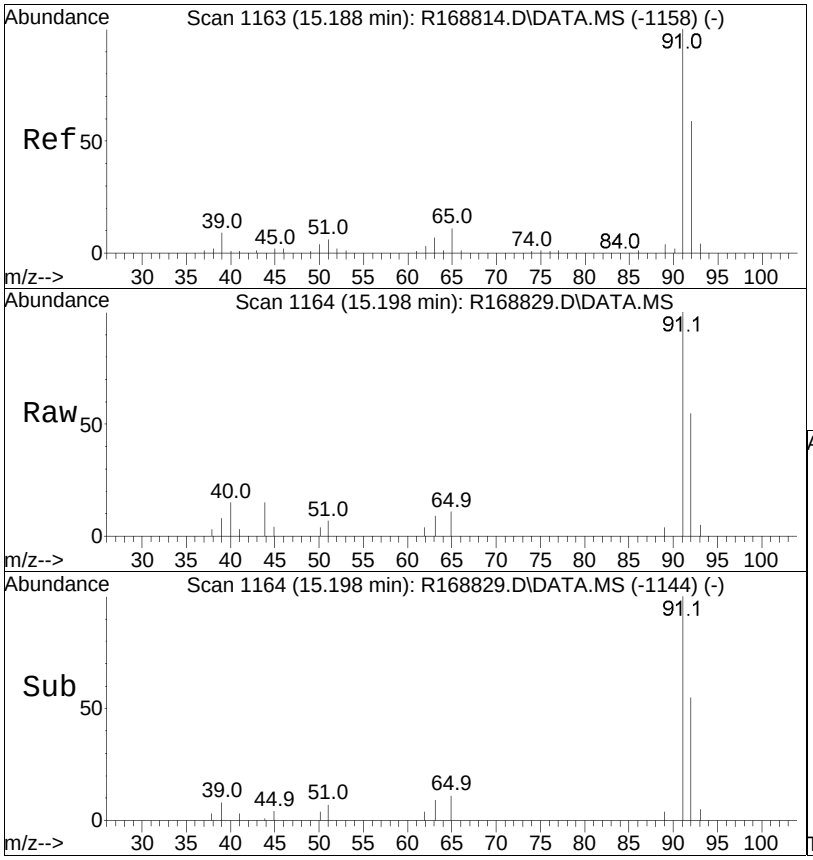


#62
heptane
Concen: 0.04 ppbV
RT: 13.465 min Scan# 1035
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 43 Resp: 1046

Ion	Ratio	Lower	Upper
43	100		
57	55.2	43.4	65.0
100	0.0	11.2	16.8#

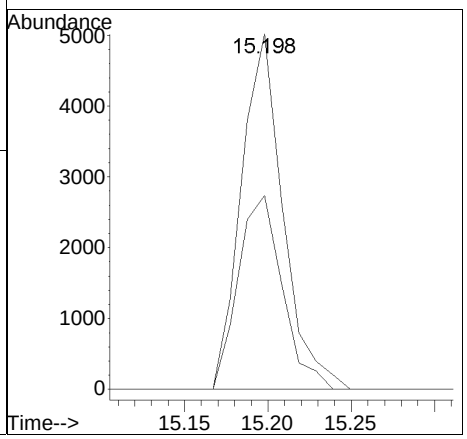


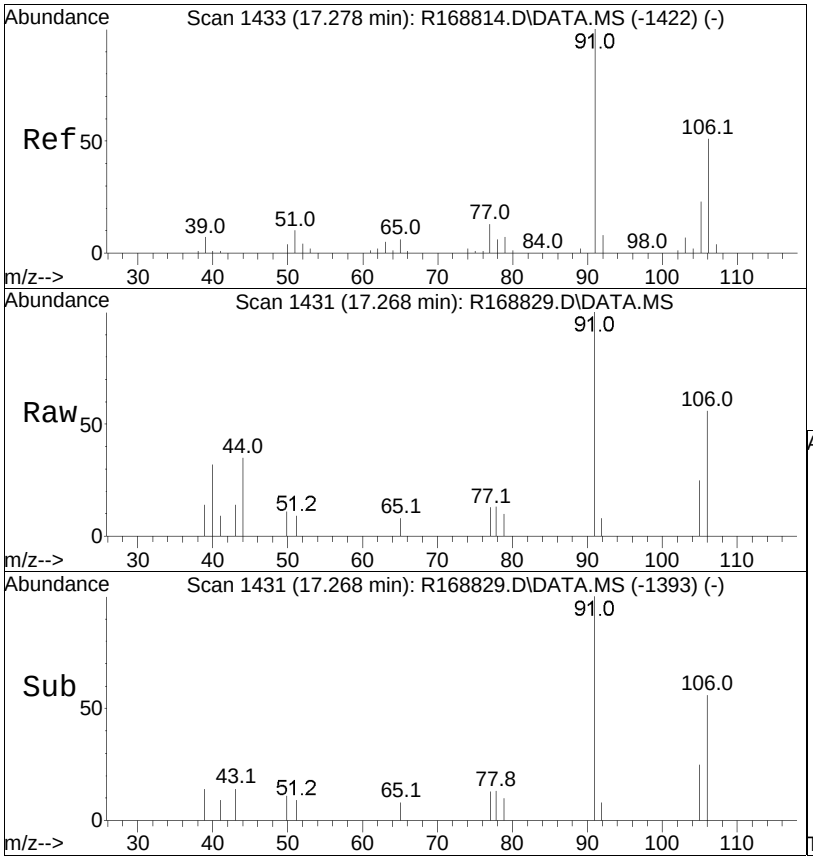


#68
toluene
Concen: 0.16 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 91 Resp: 8742

Ion	Ratio	Lower	Upper
91	100		
92	54.6	47.2	70.8

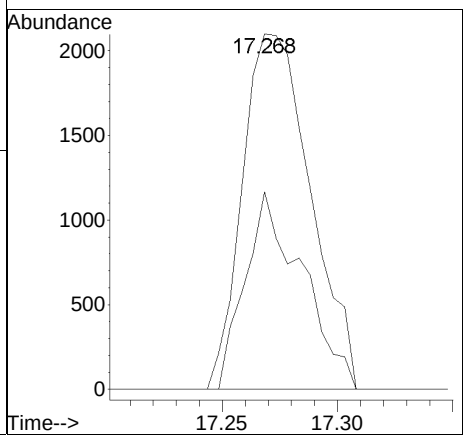


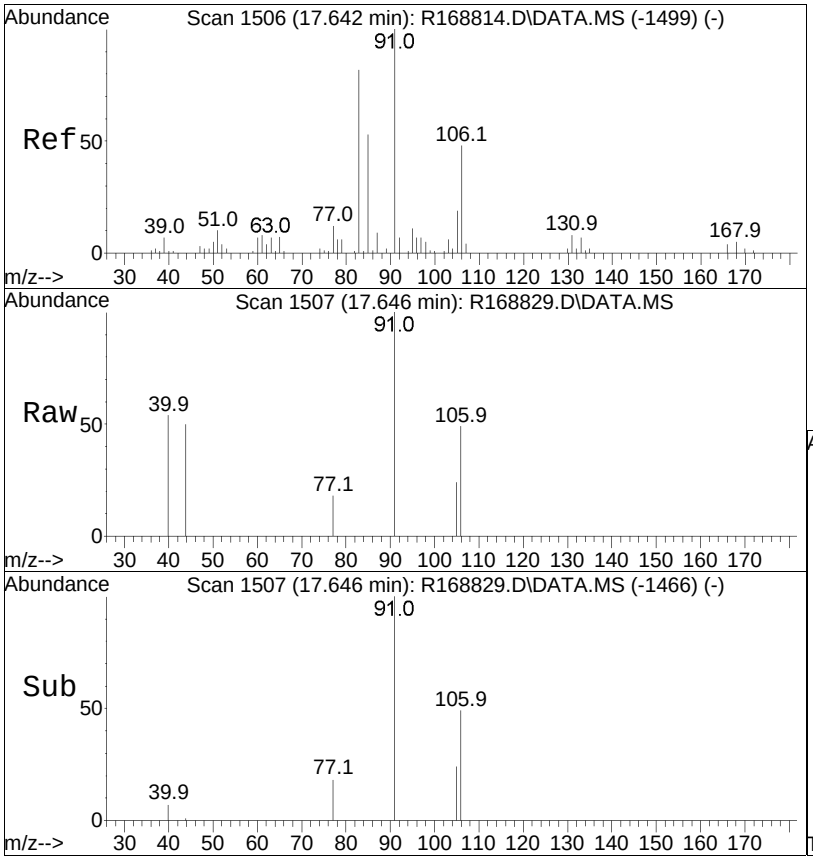


#83
m+p-xylene
Concen: 0.08 ppbV
RT: 17.268 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 91 Resp: 4330

Ion	Ratio	Lower	Upper
91	100		
106	55.6	40.8	61.2

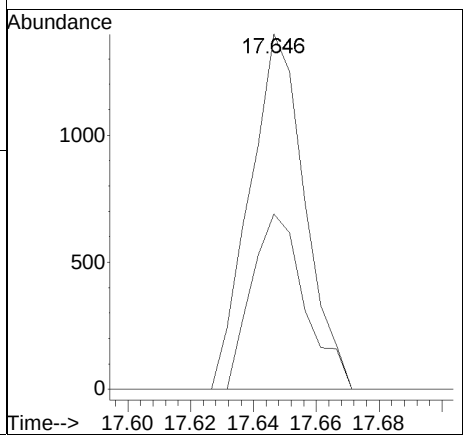


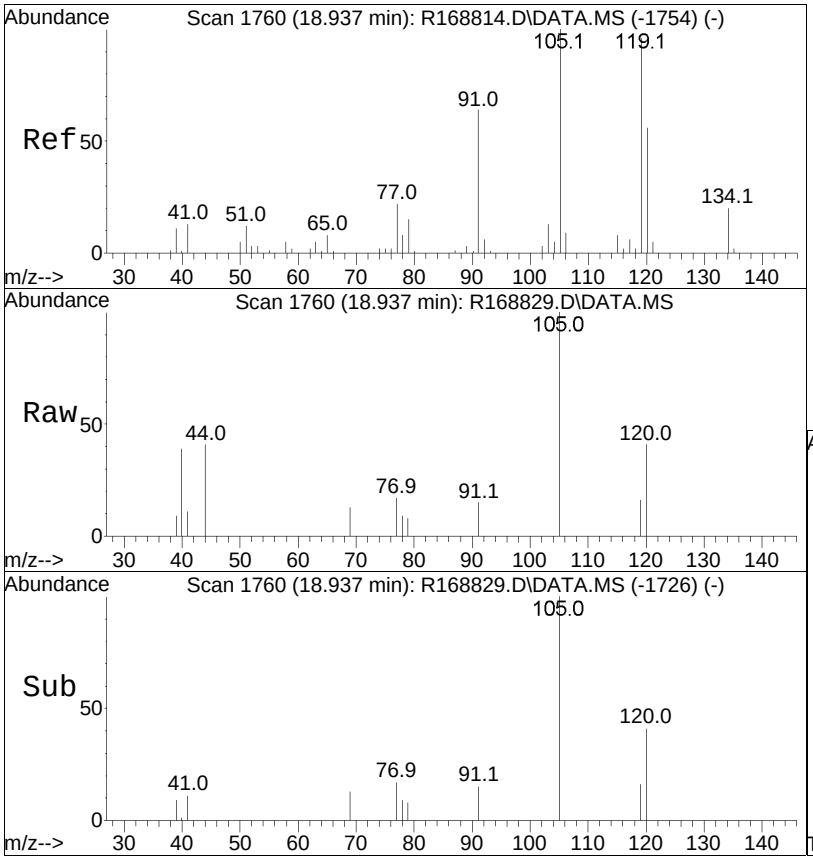


#87
o-xylene
Concen: 0.03 ppbV
RT: 17.646 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion: 91 Resp: 1710

Ion	Ratio	Lower	Upper
91	100		
106	49.4	38.3	57.5

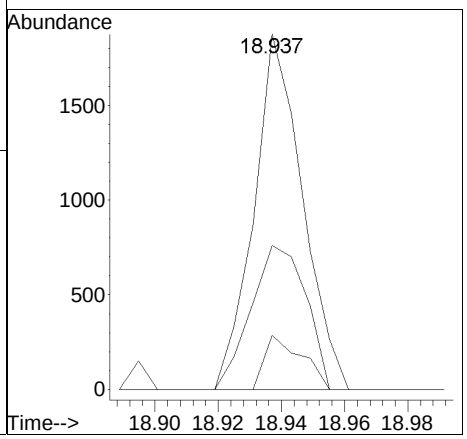




#99
1,2,4-trimethylbenzene
Concen: 0.03 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion:105 Resp: 2006

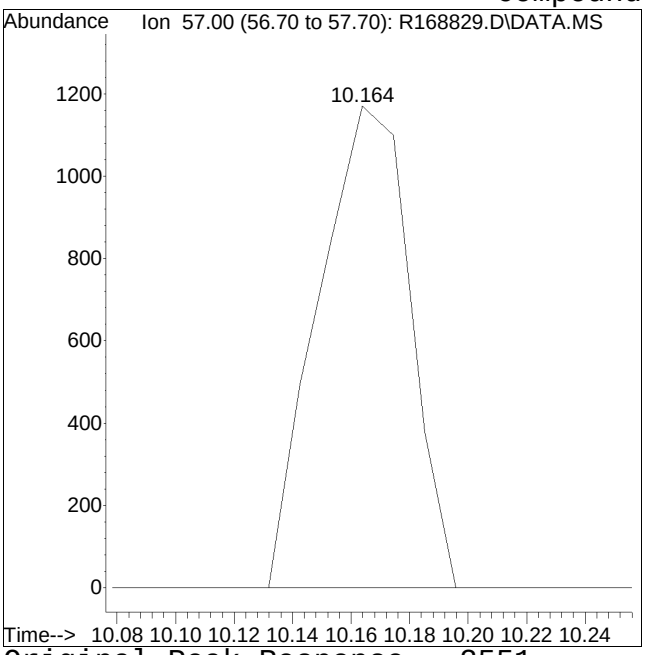
Ion	Ratio	Lower	Upper
105	100		
120	40.5	44.5	66.7#
91	15.2	51.4	77.2#

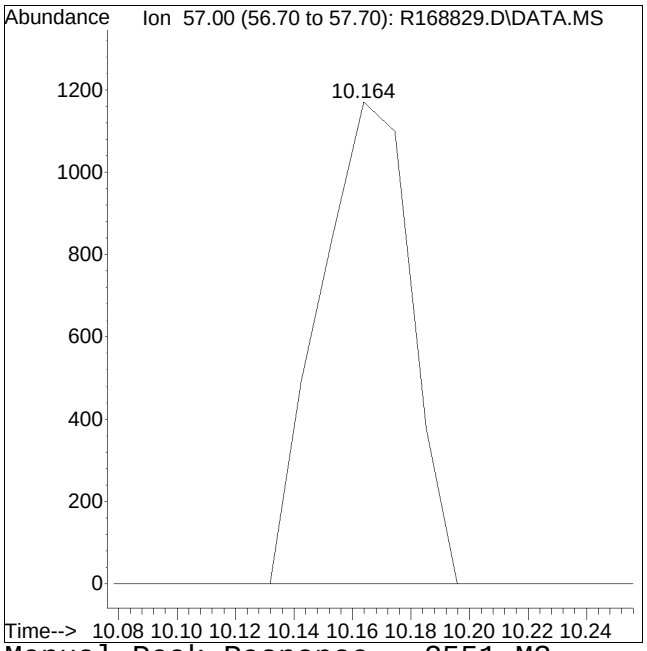


Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TFS1_191023.M
Data File : R168829.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 5:21 pm Instrument : Air Piano 1
Sample : L1948939-07,3,250,250 Quant Date : 10/25/2019 7:48 am

Compound #44: hexane





Original Peak Response = 2551 Manual Peak Response = 2551 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168830.D
Acq On : 24 Oct 2019 5:53 pm
Operator : AIRPIANO1:TS
Sample : L1948939-01,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 25 14:31:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.110	49	284067	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		87.22%	
43) 1,4-difluorobenzene	12.348	114	632201	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		85.26%	
67) chlorobenzene-D5	16.801	54	105118	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		84.98%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	8127	0.298	ppbV	100
6) chloromethane	4.238	50	4739	0.511	ppbV	90
7) Freon-114	4.384		0	N.D.		
10) 1,3-butadiene	4.741	54	3933	0.475	ppbV	98
13) bromomethane	5.115		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.590	31	188151	30.400	ppbV	99
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.242	43	130878	7.666	ppbV #	96
21) trichlorofluoromethane	6.437	101	5762	0.201	ppbV	99
22) isopropyl alcohol	6.632	45	64382	3.408	ppbV	98
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	5395	0.436	ppbV	88
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.796	76	2073	0.057	ppbV #	1
31) Freon 113	7.815	101	992	0.040	ppbV #	94
32) trans-1,2-dichloroethene	8.660	61	1426	0.077	ppbV #	85
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	9.017		0	N.D.		
36) 2-butanone	9.447	43	18692	0.744	ppbV	95
38) Ethyl Acetate	10.239	61	2898	0.506	ppbV #	81
39) chloroform	10.271	83	3341	0.096	ppbV	97
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	10.164	57	4782	0.195	ppbV #	65
50) benzene	11.941	78	7018	0.173	ppbV	97
53) cyclohexane	12.243	56	3088	0.155	ppbV	87

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168830.D
Acq On : 24 Oct 2019 5:53 pm
Operator : AIRPIANO1:TS
Sample : L1948939-01,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 25 14:31:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

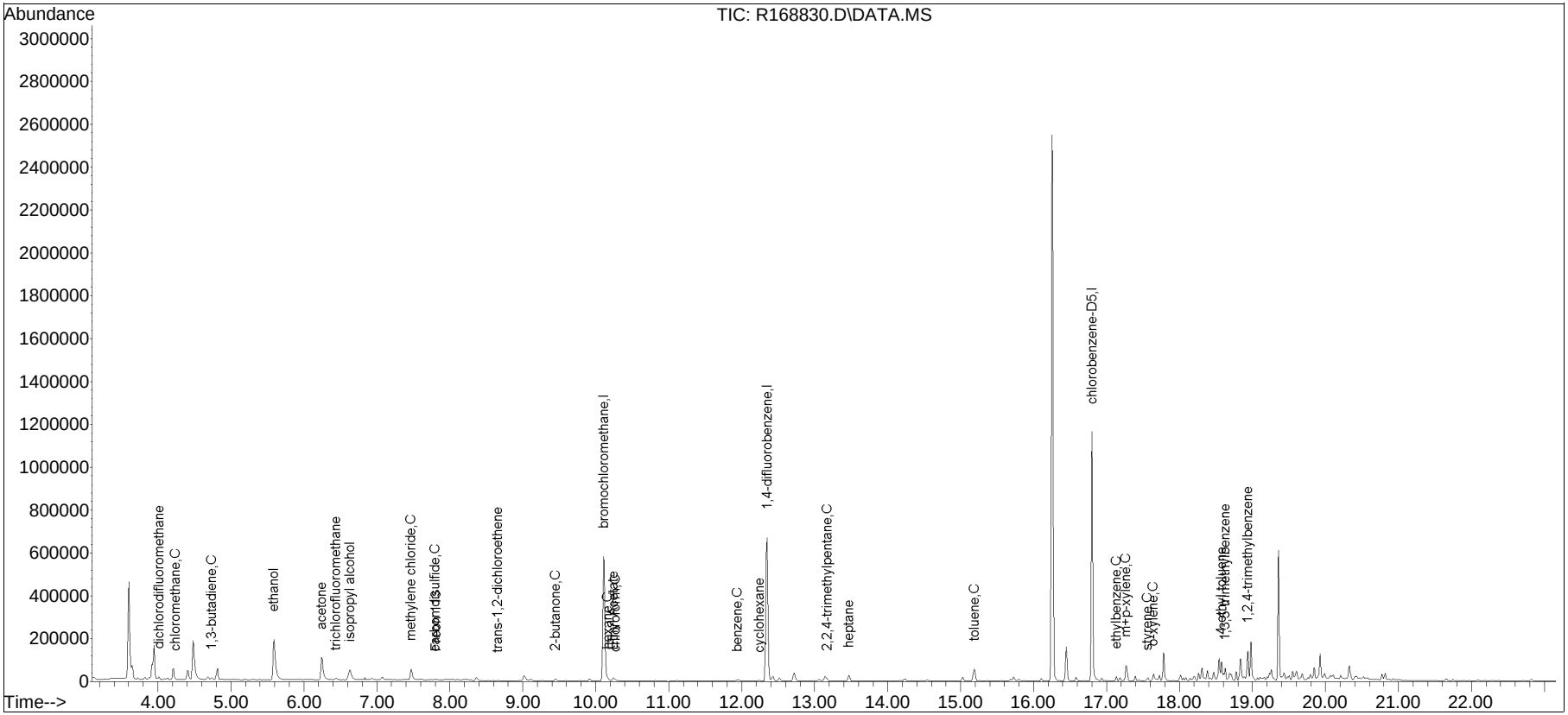
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.			
57)	bromodichloromethane	13.163		0	N.D.			
58)	1,4-dioxane	0.000		0	N.D.			
60)	2,2,4-trimethylpentane	13.174	57	7772	0.125	ppbV	#	75
62)	heptane	13.465	43	14252	0.635	ppbV		96
63)	cis-1,3-dichloropropene	0.000		0	N.D.			
64)	4-methyl-2-pentanone	0.000		0	N.D.		d	
65)	trans-1,3-dichloropropene	0.000		0	N.D.			
66)	1,1,2-trichloroethane	0.000		0	N.D.			
68)	toluene	15.188	91	32500	0.654	ppbV		98
72)	2-hexanone	0.000		0	N.D.		d	
74)	dibromochloromethane	0.000		0	N.D.			
75)	1,2-dibromoethane	0.000		0	N.D.			
80)	chlorobenzene	16.845		0	N.D.			
81)	ethylbenzene	17.134	91	13587	0.216	ppbV		97
83)	m+p-xylene	17.268	91	36952	0.764	ppbV		100
84)	bromoform	0.000		0	N.D.			
85)	styrene	17.562	104	3844	0.099	ppbV		98
86)	1,1,2,2-tetrachloroethane	17.632		0	N.D.			
87)	o-xylene	17.642	91	14313	0.292	ppbV		96
96)	4-ethyl toluene	18.572	105	24523	0.329	ppbV		97
97)	1,3,5-trimethylbenzene	18.627	105	20561	0.350	ppbV		97
99)	1,2,4-trimethylbenzene	18.937	105	48664	0.845	ppbV	#	58
101)	Benzyl Chloride	19.106		0	N.D.			
102)	1,3-dichlorobenzene	19.124		0	N.D.			
103)	1,4-dichlorobenzene	19.124		0	N.D.			
107)	1,2-dichlorobenzene	0.000		0	N.D.			
115)	1,2,4-trichlorobenzene	20.820		0	N.D.			
119)	hexachlorobutadiene	21.240		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

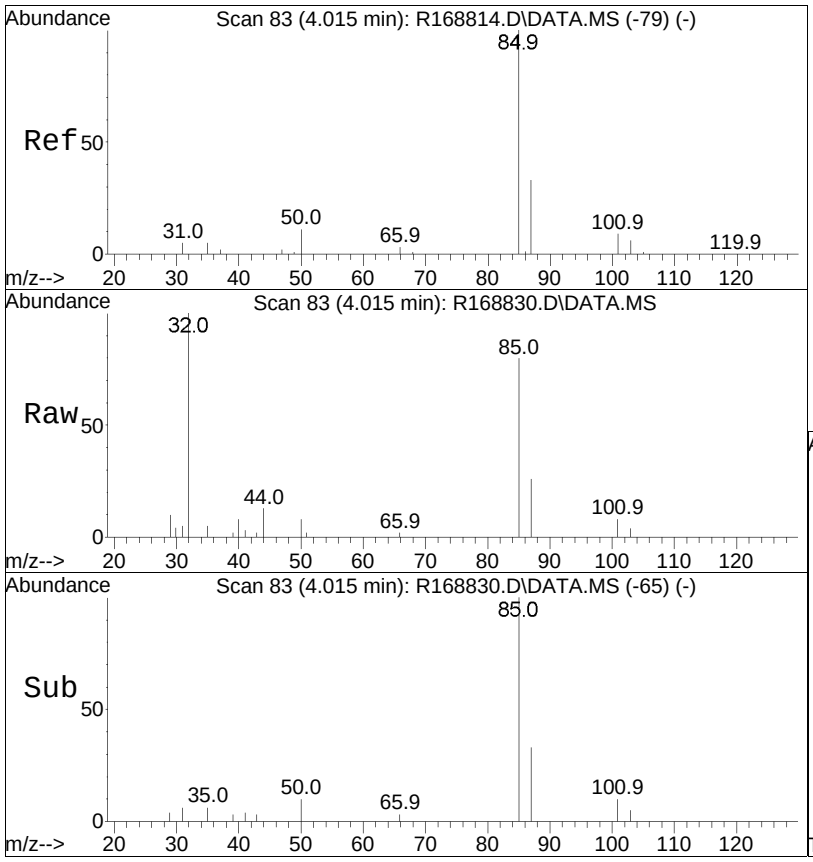
Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168830.D
Acq On : 24 Oct 2019 5:53 pm
Operator : AIRPIANO1:TS
Sample : L1948939-01,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 25 14:31:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration



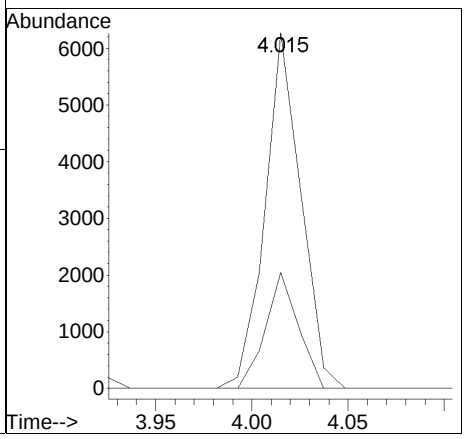
TFS1_191023.M Fri Oct 25 14:53:11 2019 Page: 3

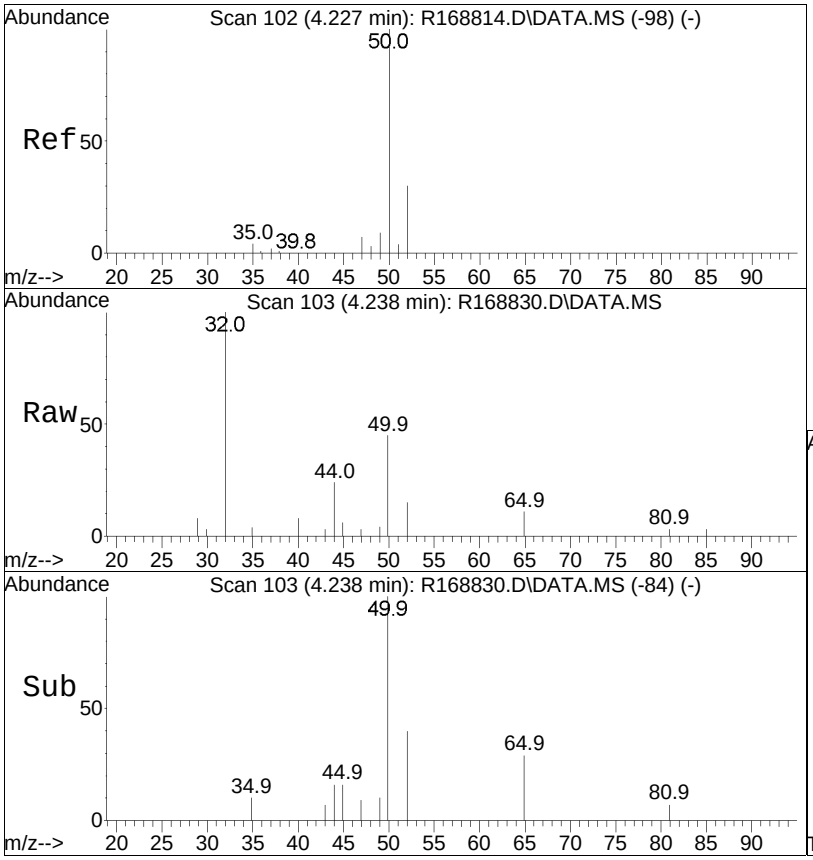


#5
dichlorodifluoromethane
Concen: 0.30 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 85 Resp: 8127

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.1	39.1

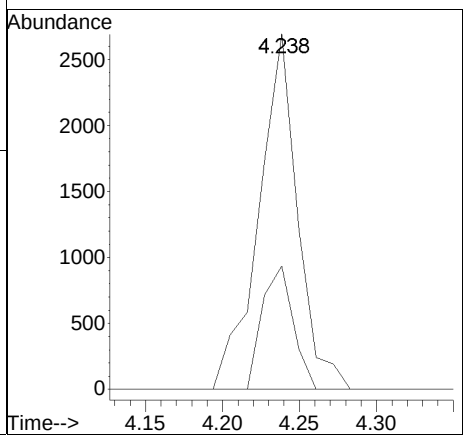


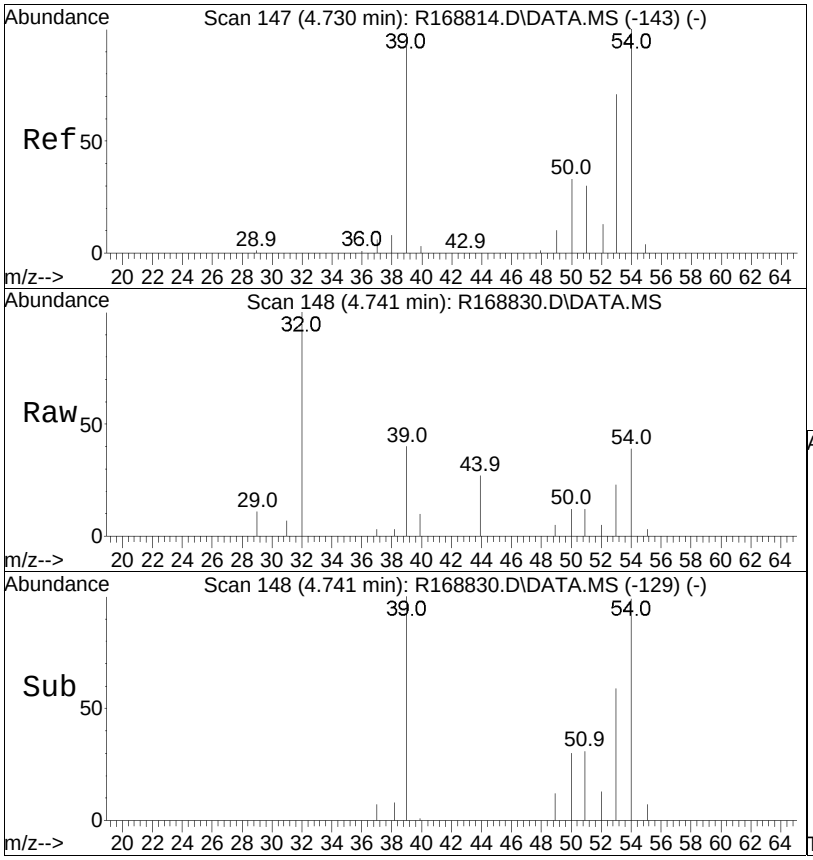


#6
chloromethane
Concen: 0.51 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 50 Resp: 4739

Ion	Ratio	Lower	Upper
50	100		
52	34.7	23.7	35.5

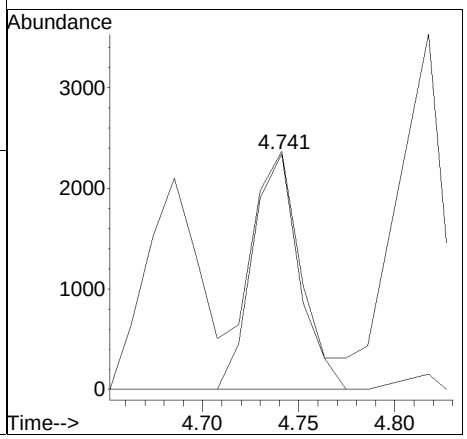


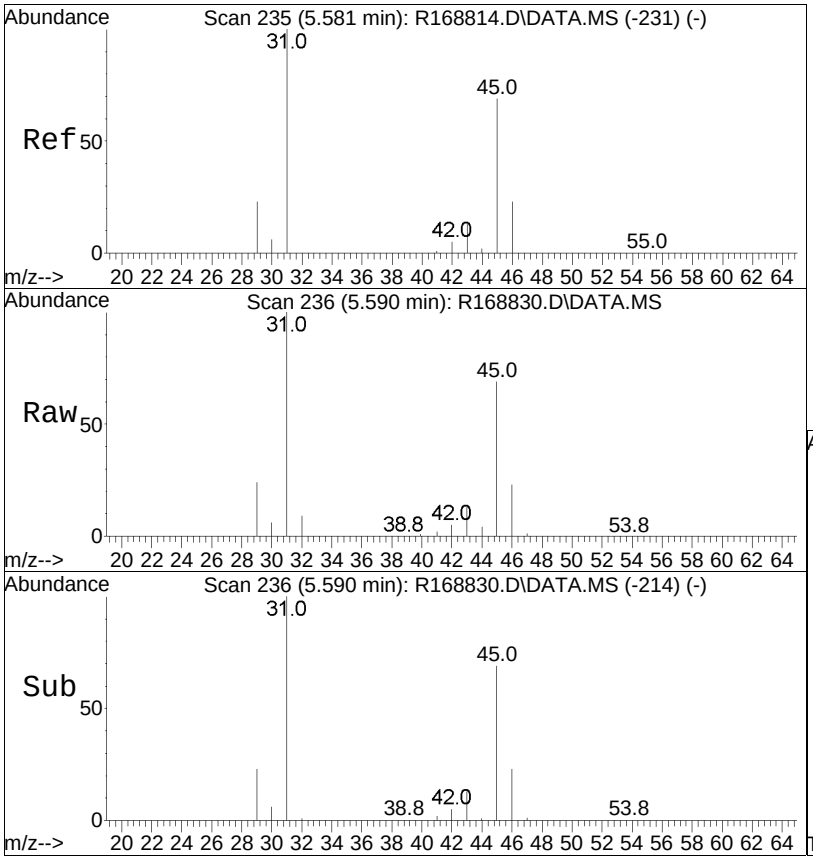


#10
1,3-butadiene
Concen: 0.48 ppbV
RT: 4.741 min Scan# 148
Delta R.T. 0.011 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 54 Resp: 3933

Ion	Ratio	Lower	Upper
54	100		
39	101.2	79.2	118.8

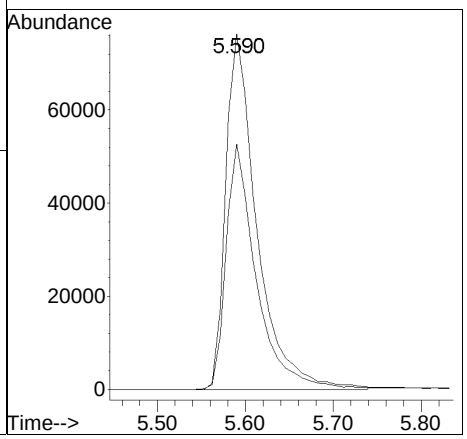


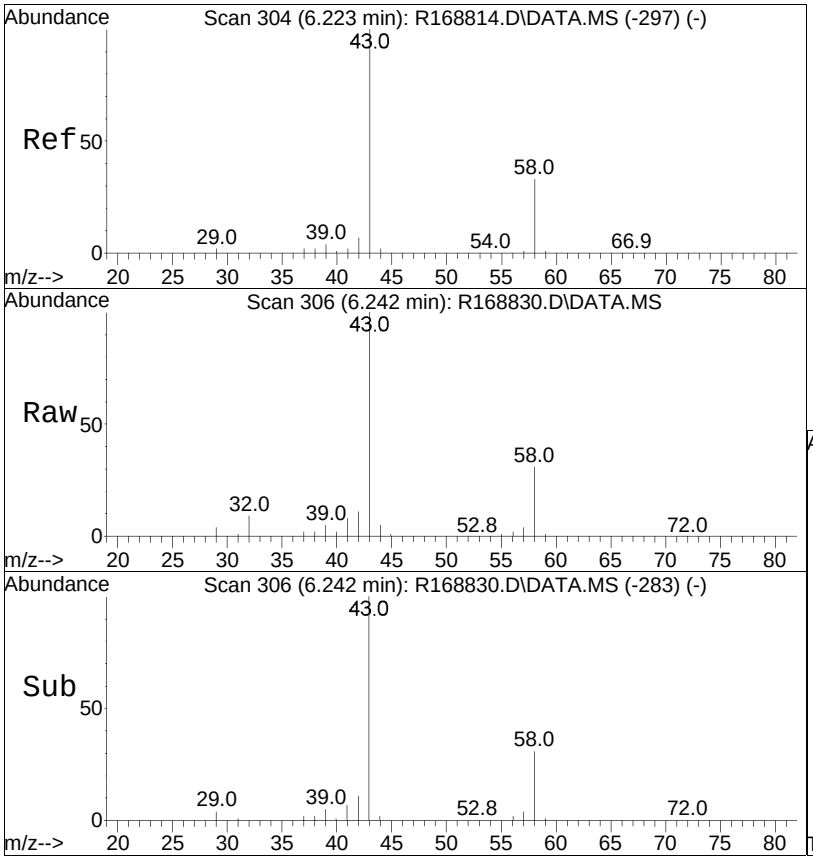


#15
ethanol
Concen: 30.40 ppbV
RT: 5.590 min Scan# 236
Delta R.T. 0.009 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 31 Resp: 188151

Ion	Ratio	Lower	Upper
31	100		
45	69.1	54.3	81.5

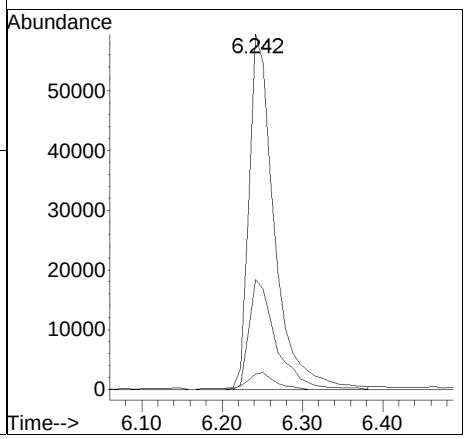


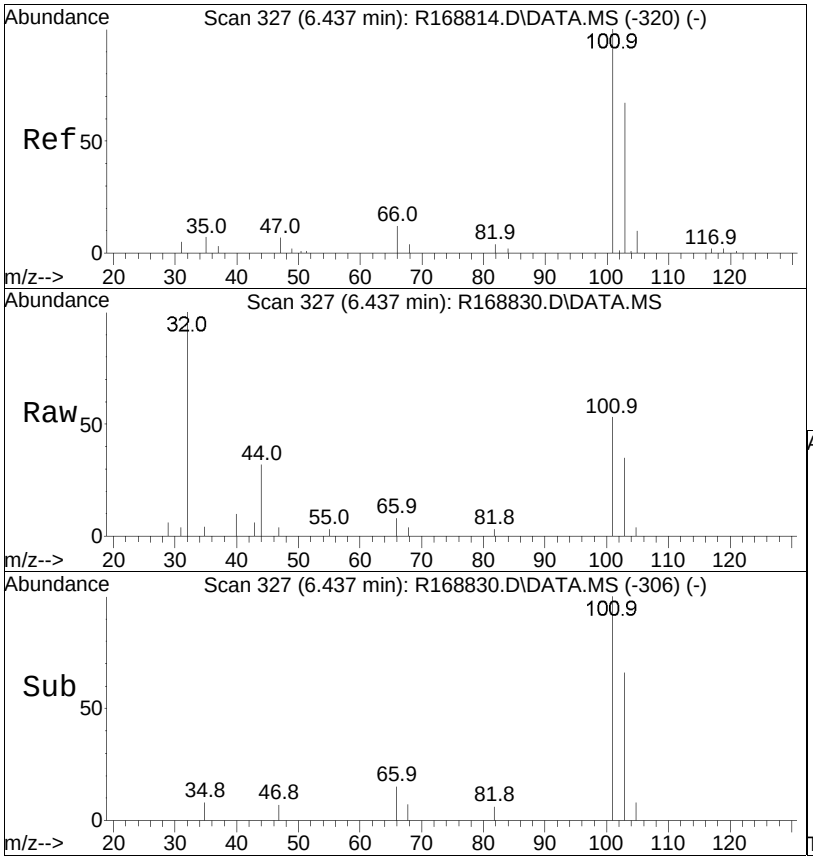


#19
acetone
Concen: 7.67 ppbV
RT: 6.242 min Scan# 306
Delta R.T. 0.019 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 43 Resp: 130878

Ion	Ratio	Lower	Upper
43	100		
58	30.9	26.5	39.7
57	4.3	0.8	1.2#

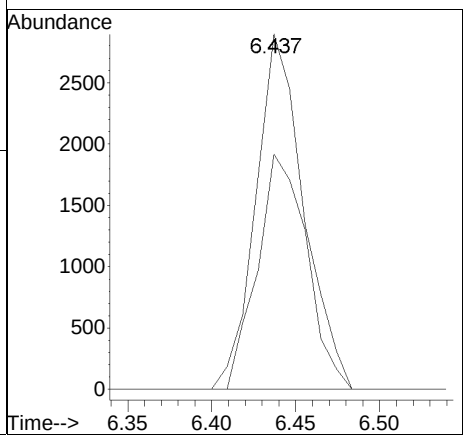


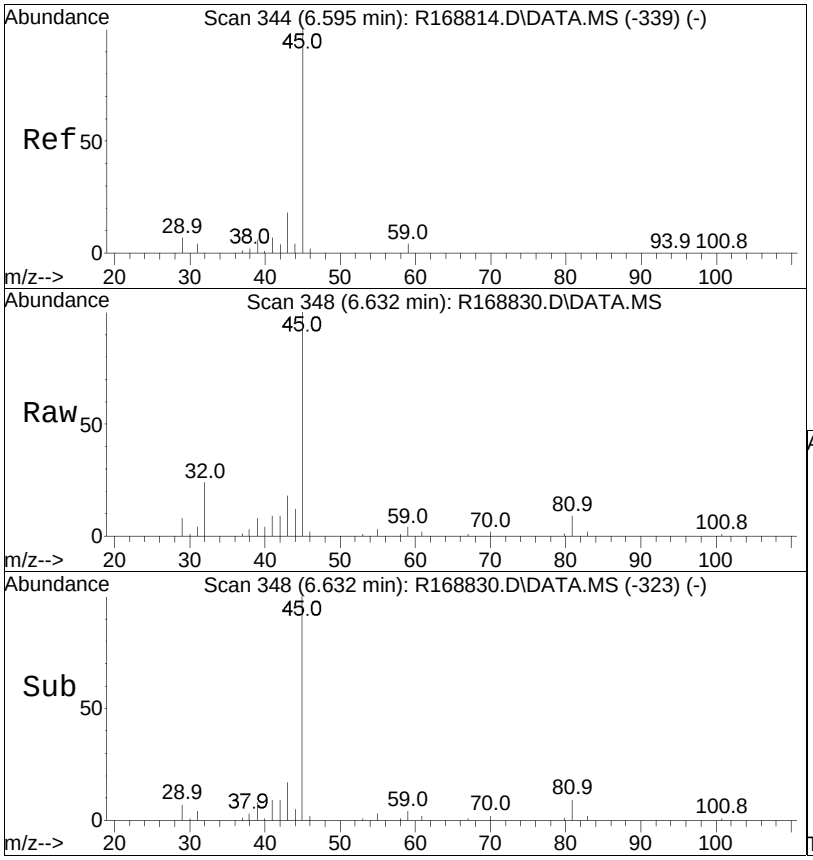


#21
trichlorofluoromethane
Concen: 0.20 ppbV
RT: 6.437 min Scan# 327
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:101 Resp: 5762

Ion	Ratio	Lower	Upper
101	100		
103	66.2	53.4	80.2

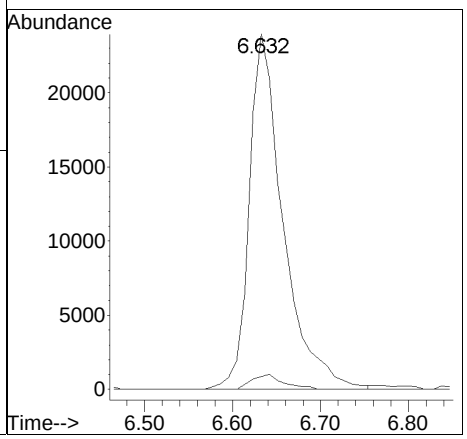


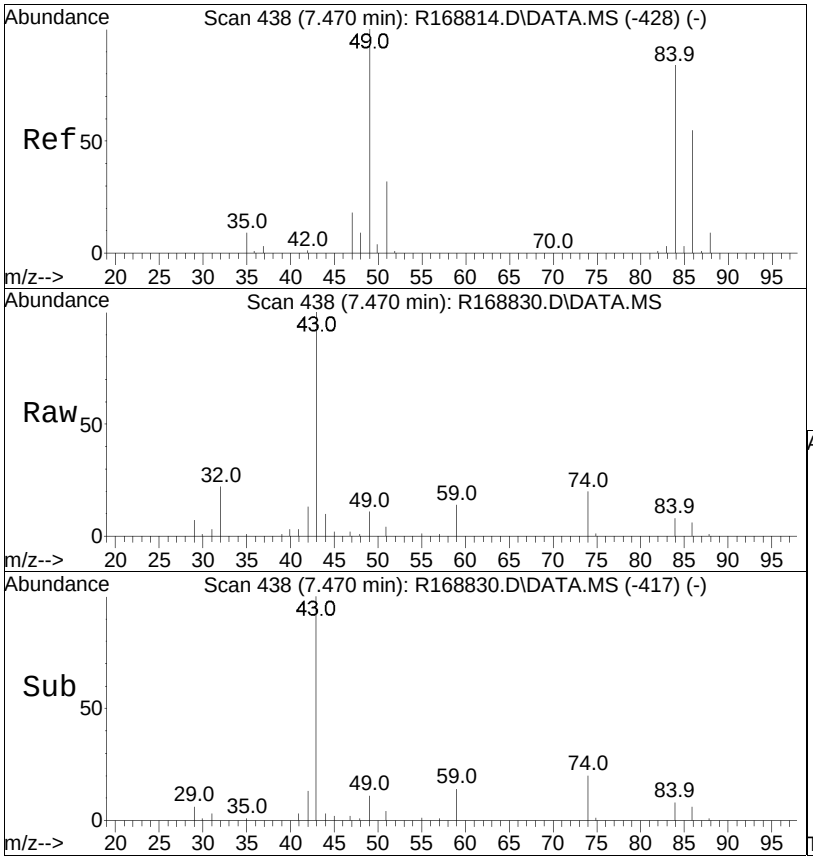


#22
isopropyl alcohol
Concen: 3.41 ppbV
RT: 6.632 min Scan# 348
Delta R.T. 0.037 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 45 Resp: 64382

Ion	Ratio	Lower	Upper
45	100		
59	3.6	3.4	5.0

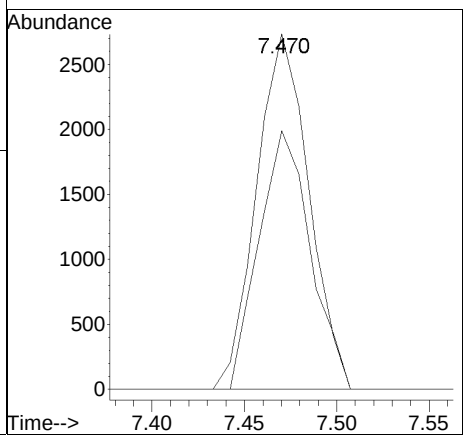


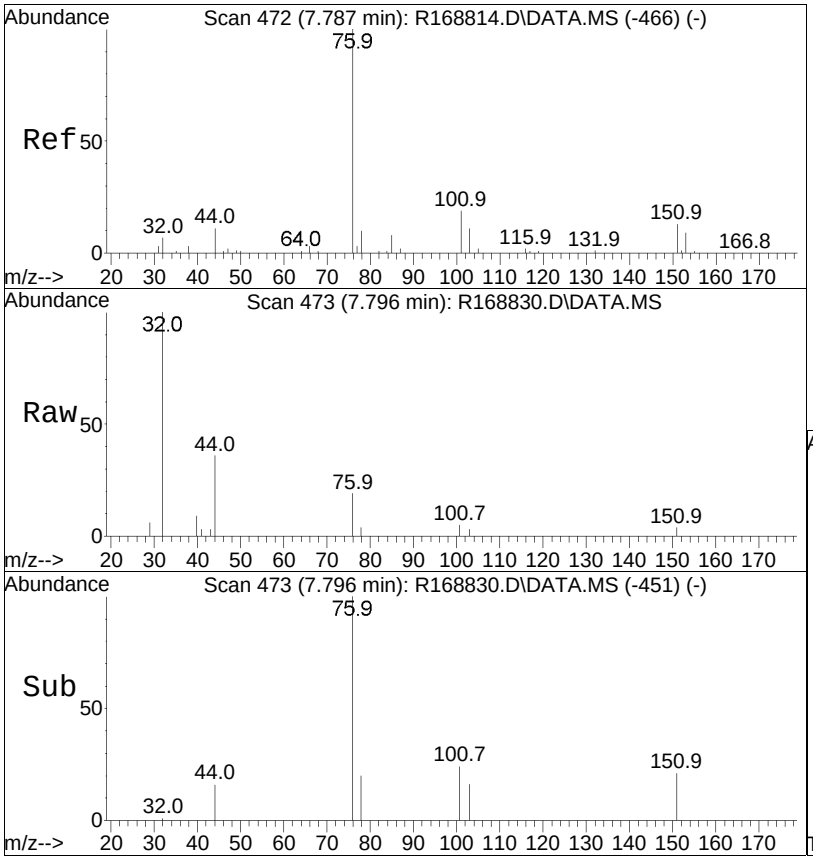


#28
methylene chloride
Concen: 0.44 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 49 Resp: 5395

Ion	Ratio	Lower	Upper
49	100		
84	72.8	67.3	100.9

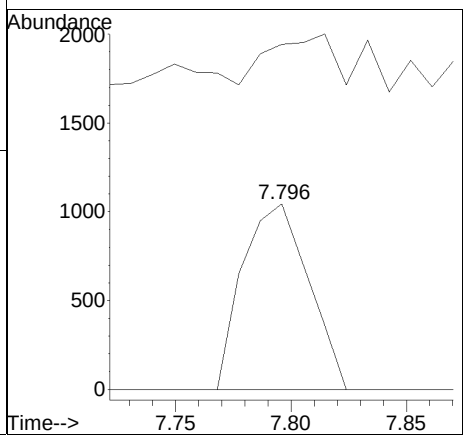


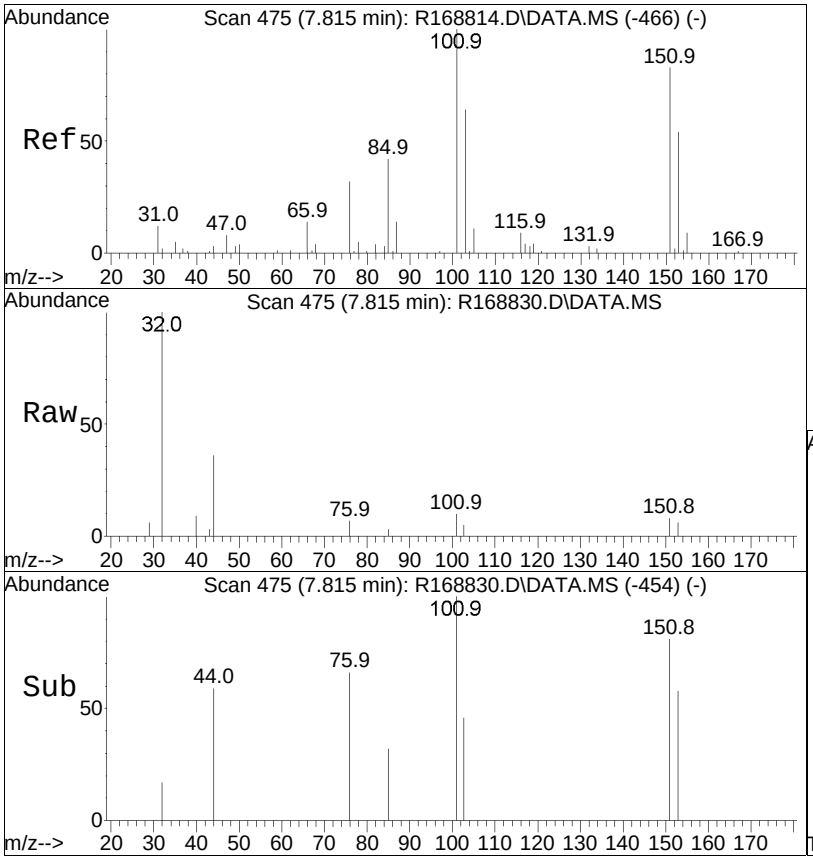


#30
carbon disulfide
Concen: 0.06 ppbV
RT: 7.796 min Scan# 473
Delta R.T. 0.009 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 76 Resp: 2073

Ion	Ratio	Lower	Upper
76	100		
44	185.9	9.3	13.9#

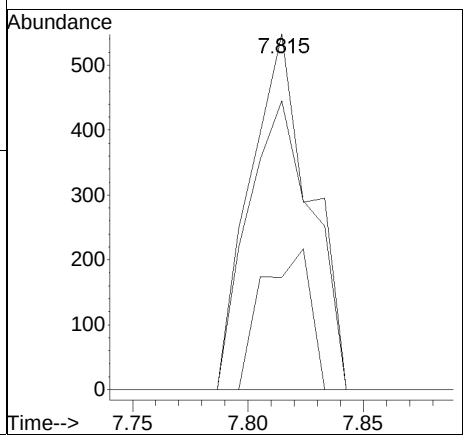


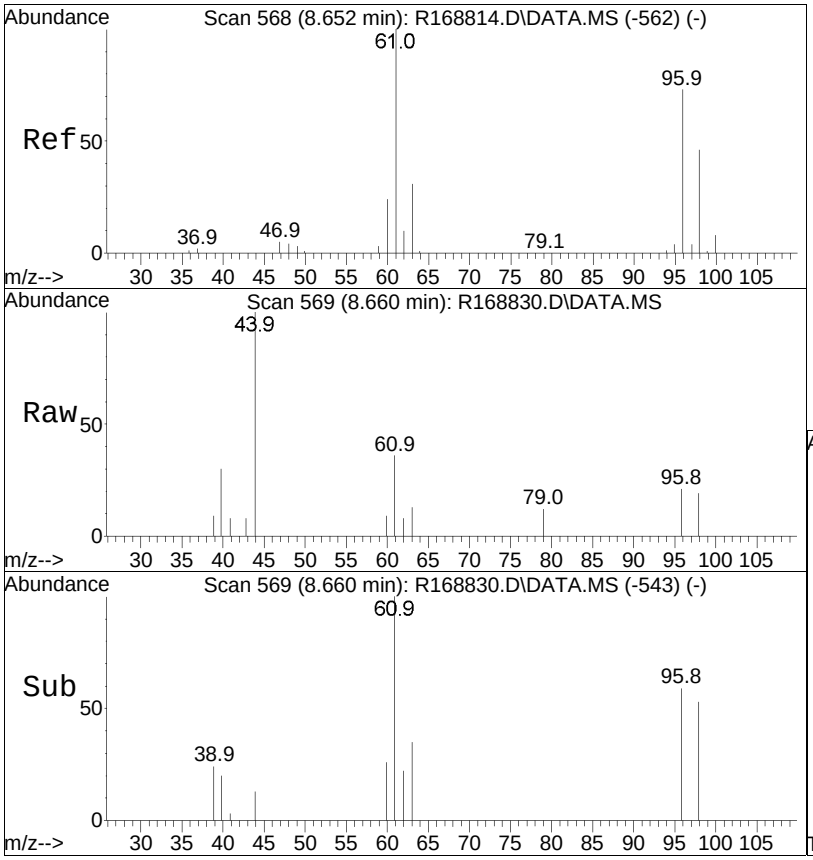


#31
Freon 113
Concen: 0.04 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:101 Resp: 992

Ion	Ratio	Lower	Upper
101	100		
85	31.6	33.2	49.8#
151	81.2	66.2	99.2

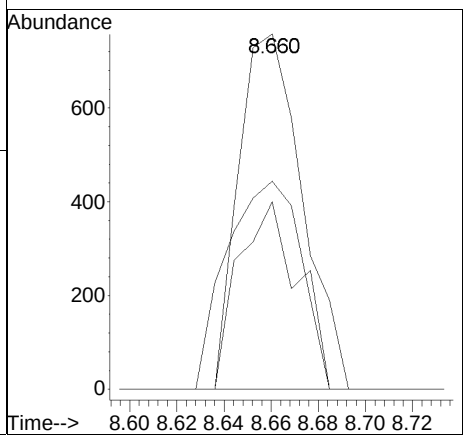


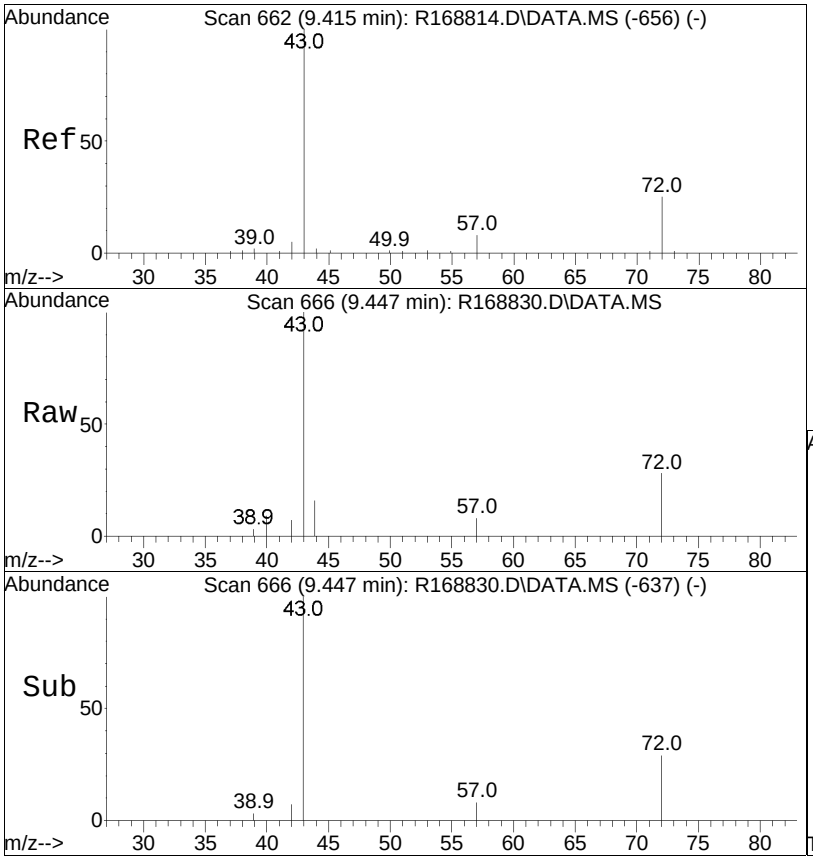


#32
trans-1,2-dichloroethene
Concen: 0.08 ppbV
RT: 8.660 min Scan# 569
Delta R.T. 0.008 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 61 Resp: 1426

Ion	Ratio	Lower	Upper
61	100		
96	58.6	58.7	88.1#
98	52.8	36.7	55.1

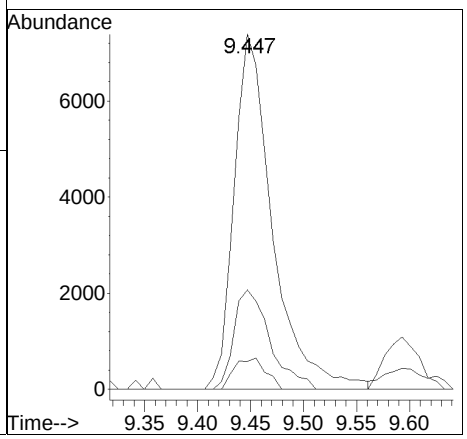


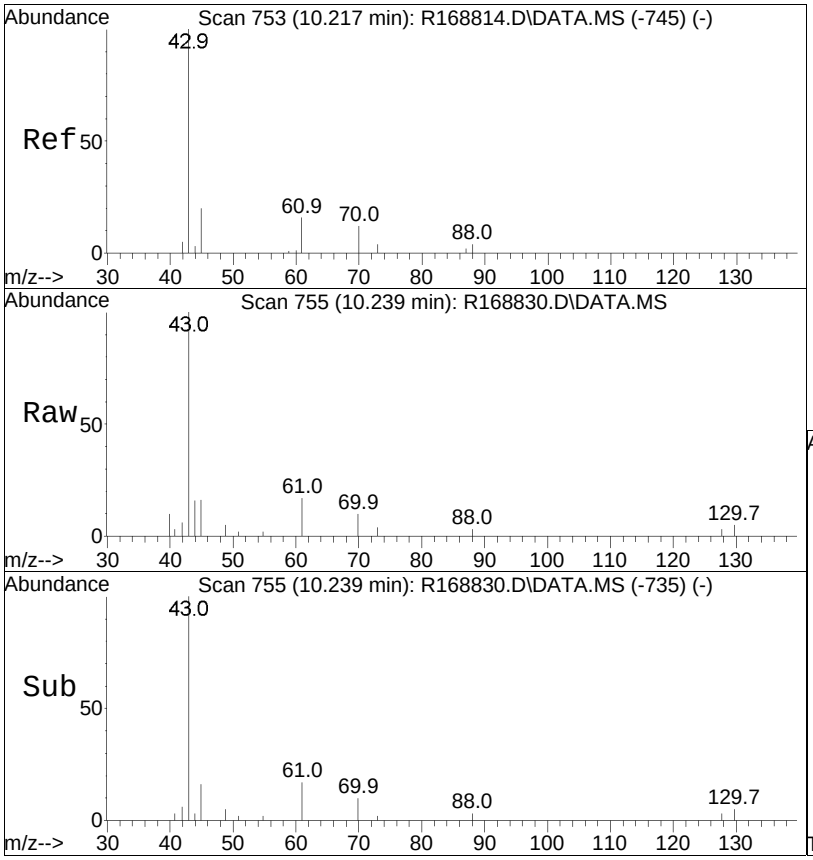


#36
2-butanone
Concen: 0.74 ppbV
RT: 9.447 min Scan# 666
Delta R.T. 0.032 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 43 Resp: 18692

Ion	Ratio	Lower	Upper
43	100		
72	28.0	20.0	30.0
57	7.9	6.3	9.5

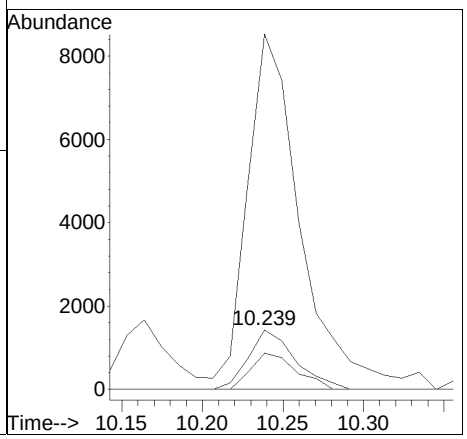


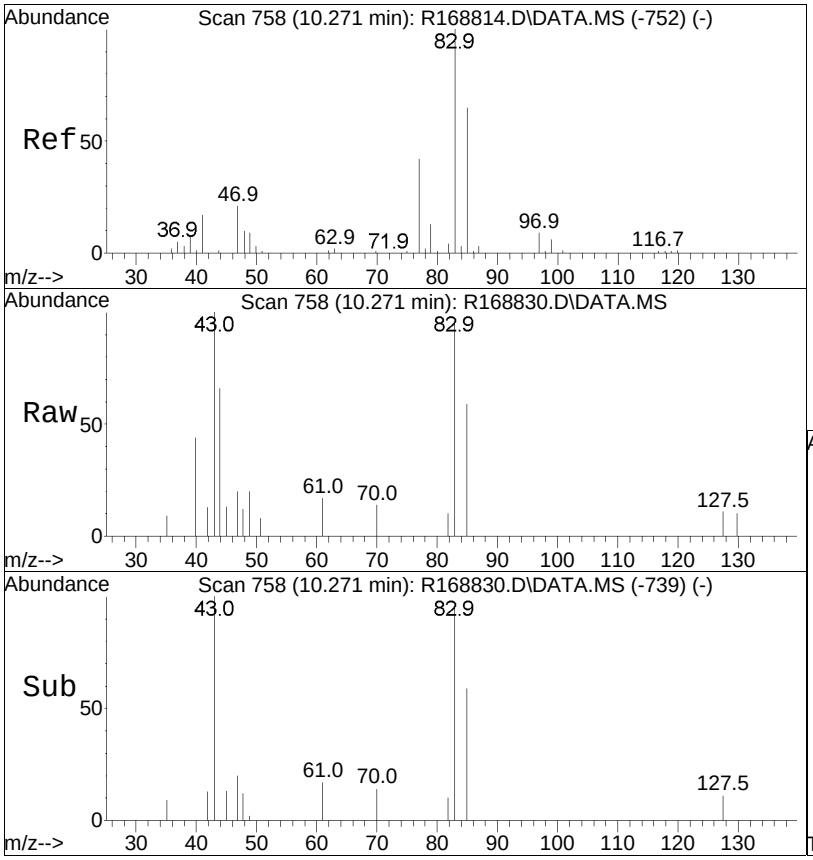


#38
Ethyl Acetate
Concen: 0.51 ppbV
RT: 10.239 min Scan# 755
Delta R.T. 0.021 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 61 Resp: 2898

Ion	Ratio	Lower	Upper
61	100		
70	60.9	61.0	91.4#
43	597.8	528.6	793.0

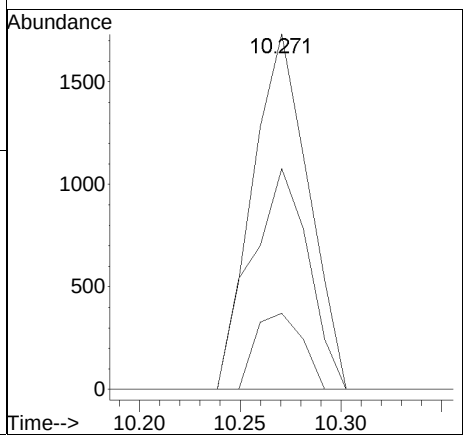


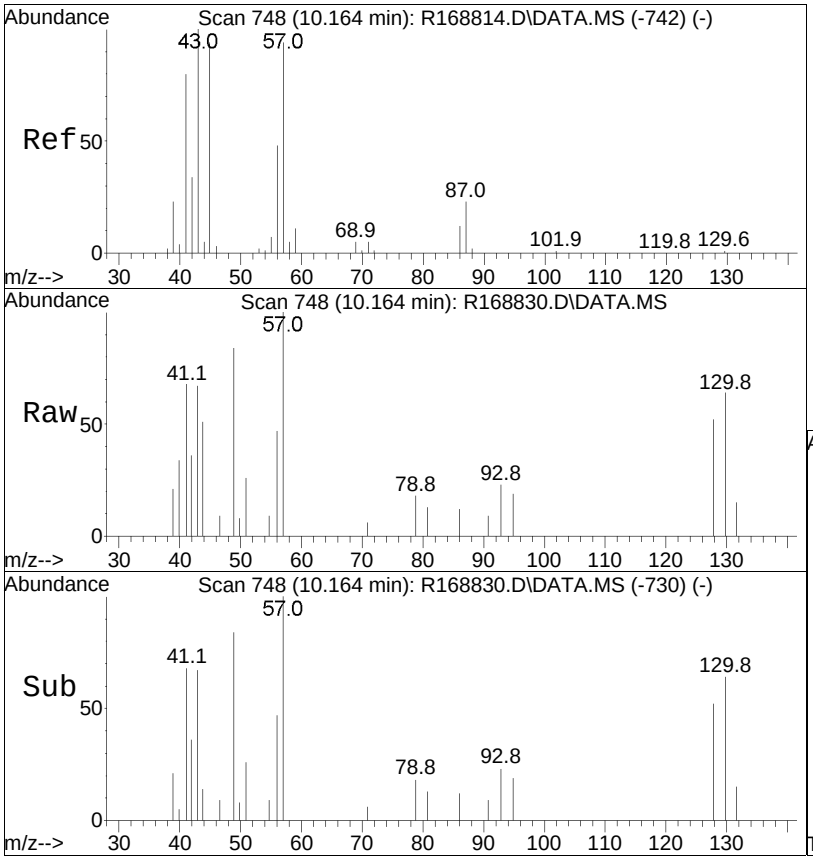


#39
chloroform
Concen: 0.10 ppbV
RT: 10.271 min Scan# 758
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 83 Resp: 3341

Ion	Ratio	Lower	Upper
83	100		
85	62.1	52.1	78.1
47	21.4	17.3	25.9

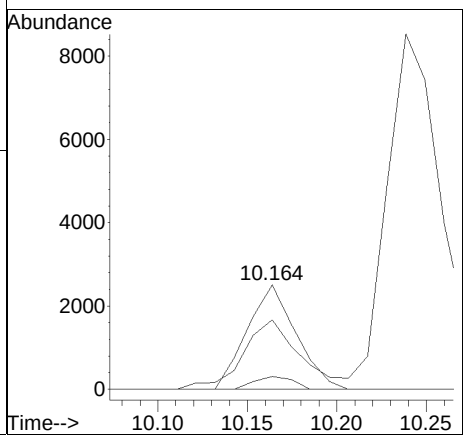


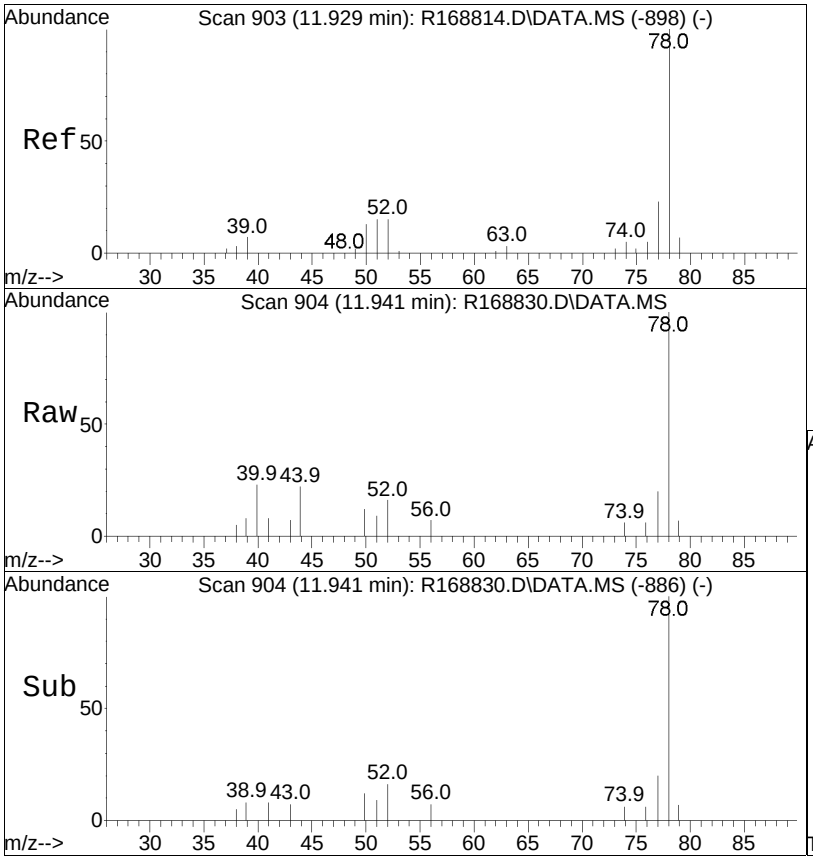


#44
hexane
Concen: 0.20 ppbV
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 57 Resp: 4782

Ion	Ratio	Lower	Upper
57	100		
43	66.7	85.5	128.3#
86	12.4	10.5	15.7

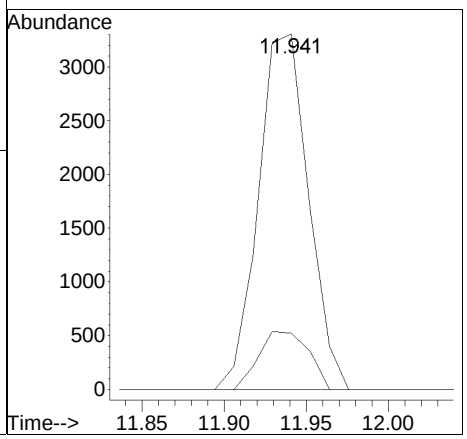


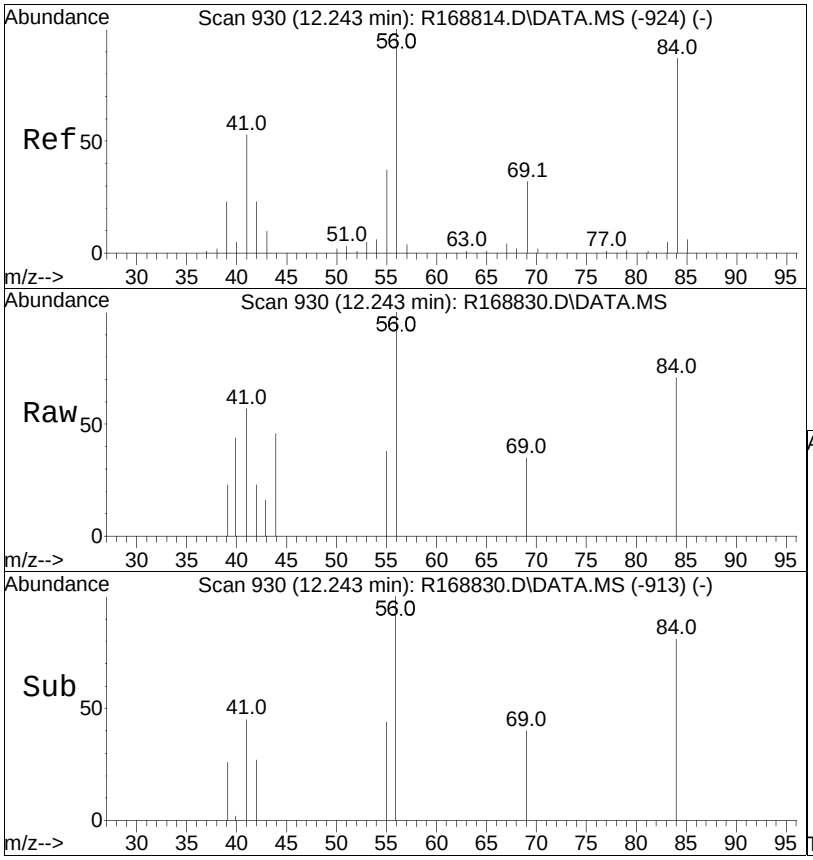


#50
benzene
Concen: 0.17 ppbV
RT: 11.941 min Scan# 904
Delta R.T. 0.012 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 78 Resp: 7018

Ion	Ratio	Lower	Upper
78	100		
52	15.8	11.7	17.5

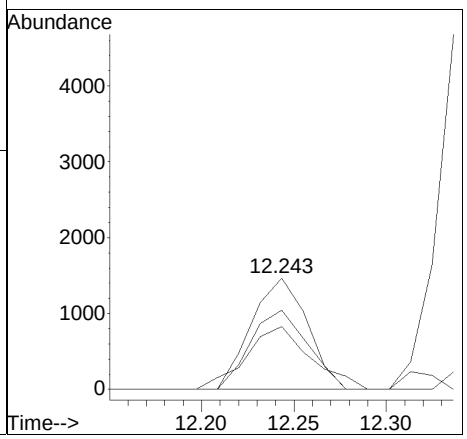


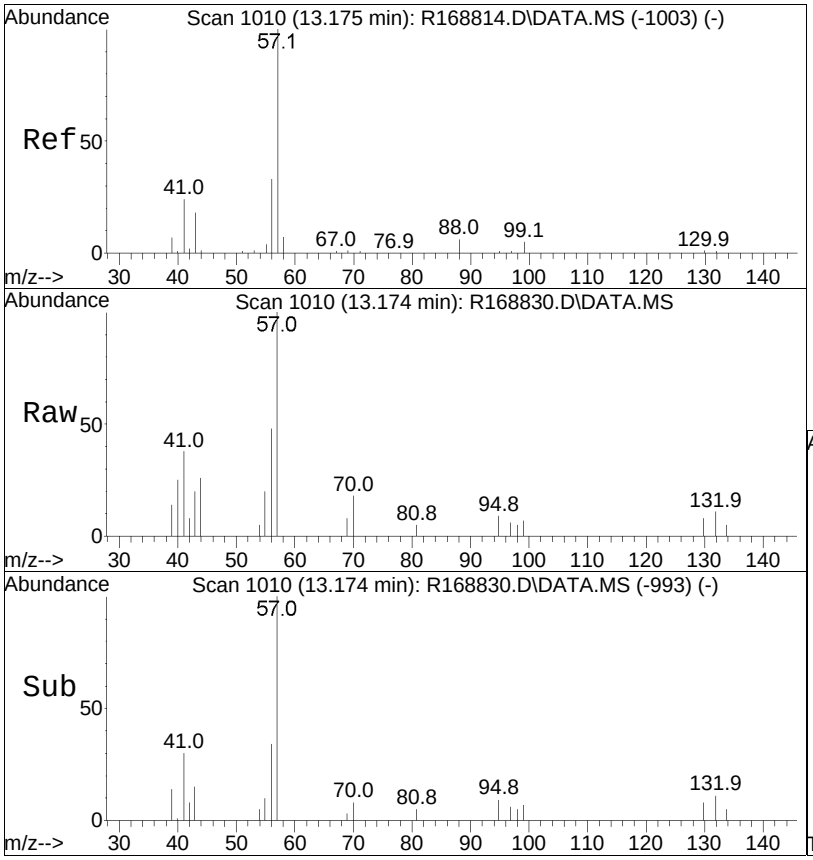


#53
cyclohexane
Concen: 0.15 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 56 Resp: 3088

Ion	Ratio	Lower	Upper
56	100		
84	71.2	70.1	105.1
41	56.5	42.6	63.8

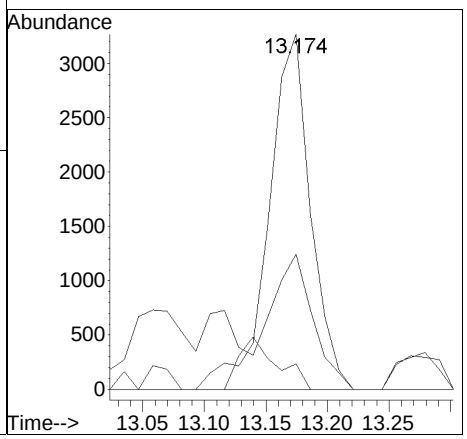


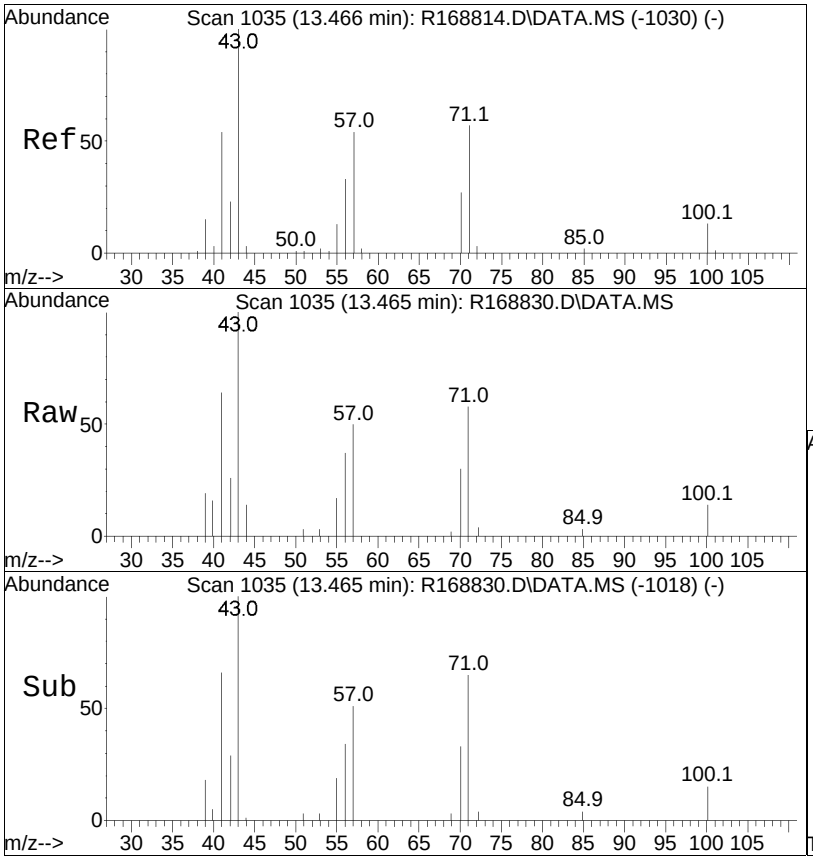


#60
2,2,4-trimethylpentane
Concen: 0.12 ppbV
RT: 13.174 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 57 Resp: 7772

Ion	Ratio	Lower	Upper
57	100		
99	7.2	3.9	5.9#
41	38.1	19.3	28.9#

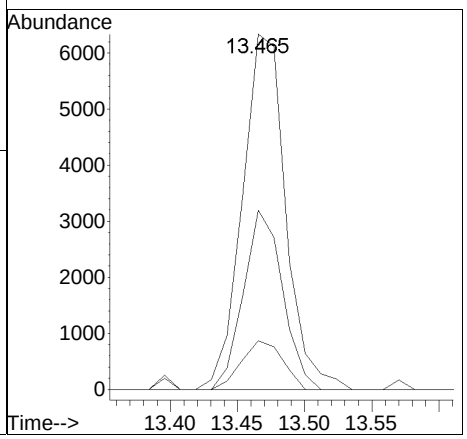


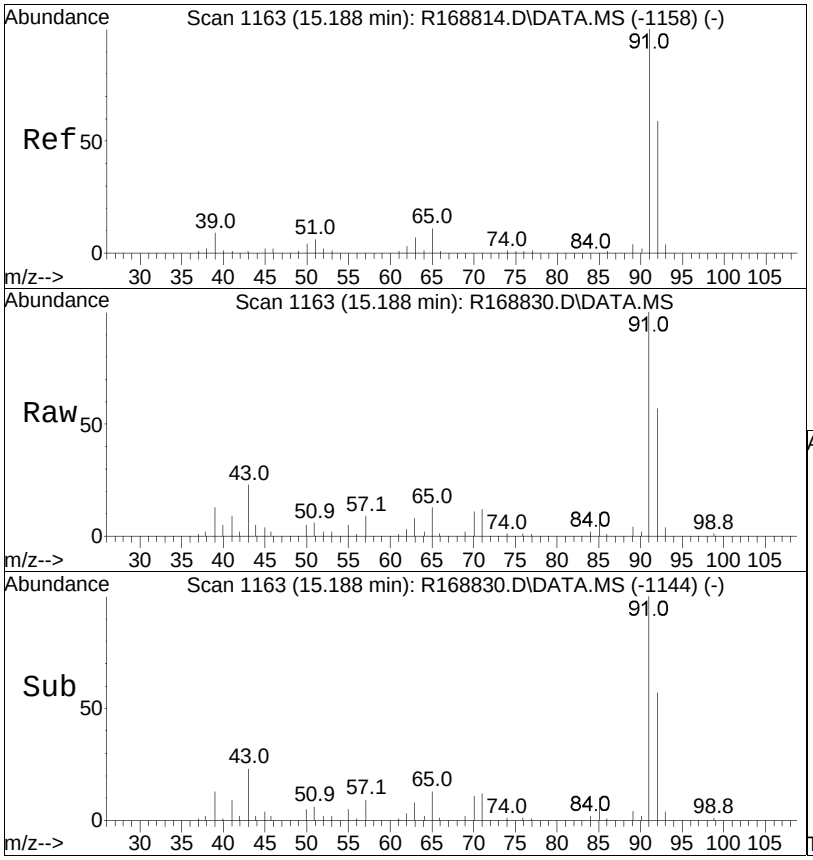


#62
heptane
Concen: 0.63 ppbV
RT: 13.465 min Scan# 1035
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 43 Resp: 14252

Ion	Ratio	Lower	Upper
43	100		
57	50.4	43.4	65.0
100	13.7	11.2	16.8

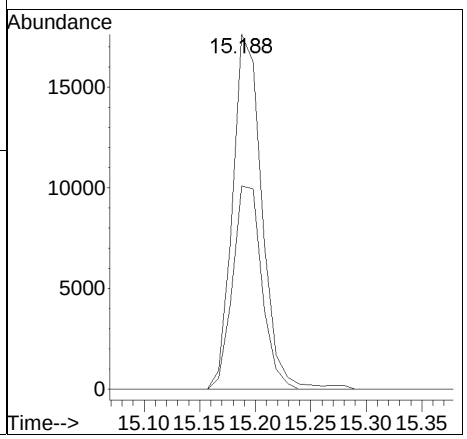


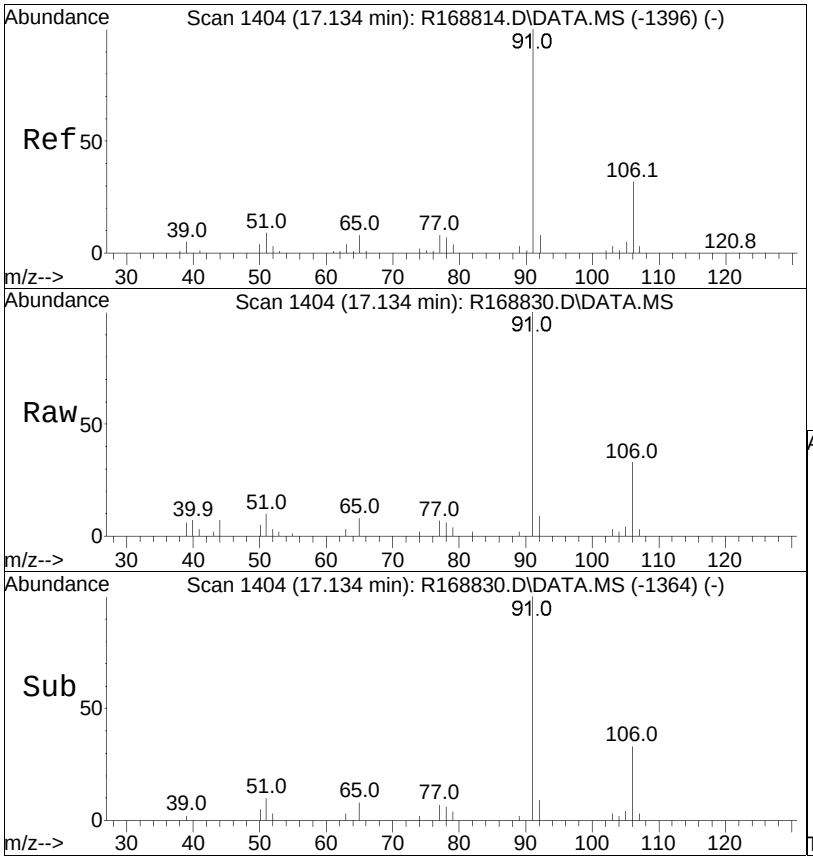


#68
toluene
Concen: 0.65 ppbV
RT: 15.188 min Scan# 1163
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 91 Resp: 32500

Ion	Ratio	Lower	Upper
91	100		
92	57.3	47.2	70.8

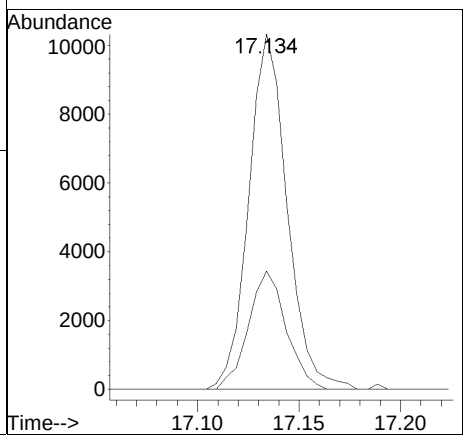


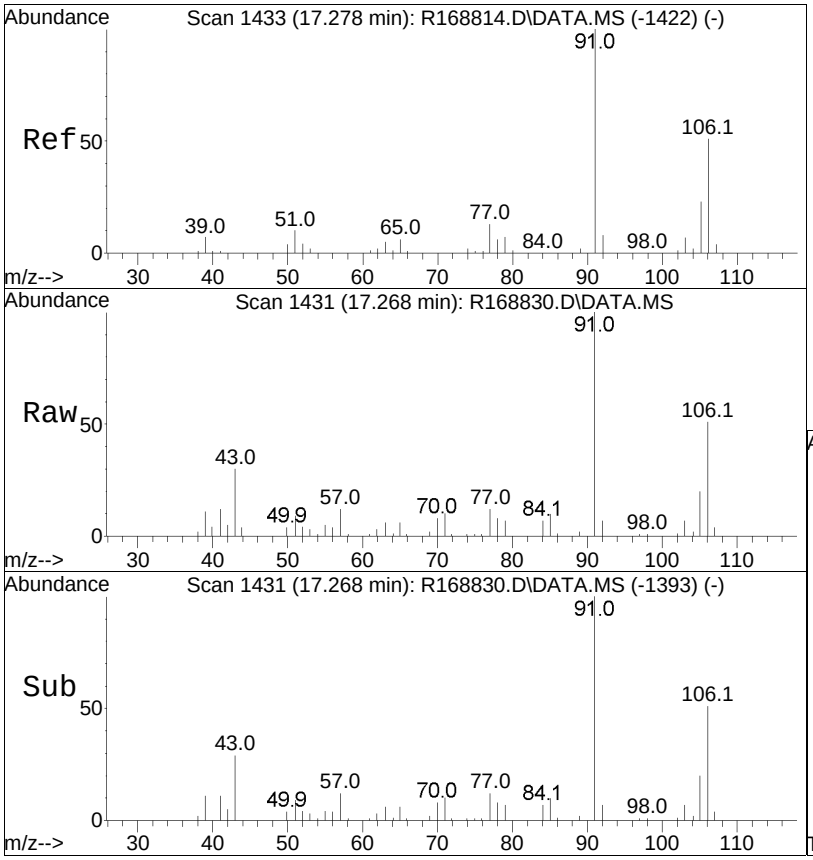


#81
ethylbenzene
Concen: 0.22 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 91 Resp: 13587

Ion	Ratio	Lower	Upper
91	100		
106	33.3	25.3	37.9

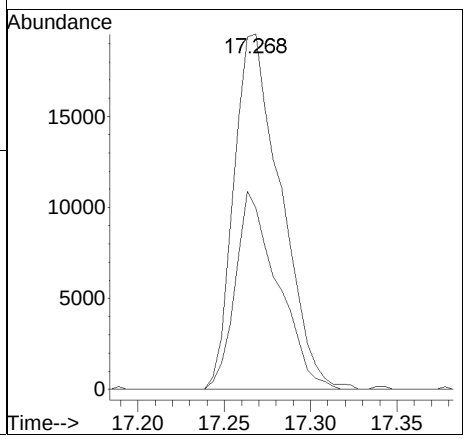


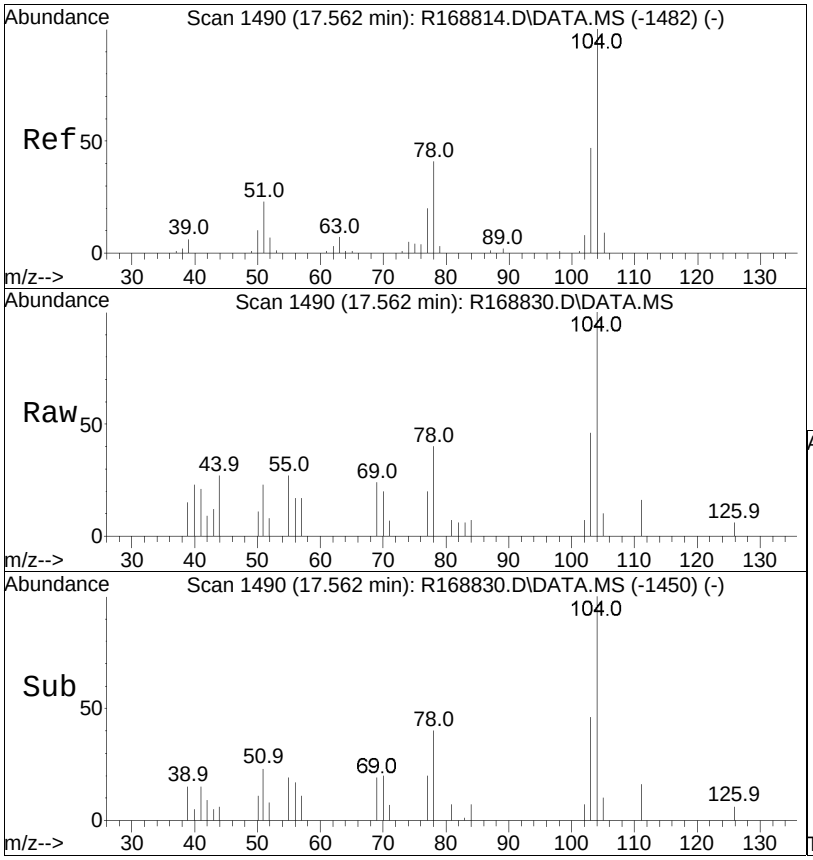


#83
m+p-xylene
Concen: 0.76 ppbV
RT: 17.268 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 91 Resp: 36952

Ion	Ratio	Lower	Upper
91	100		
106	51.0	40.8	61.2

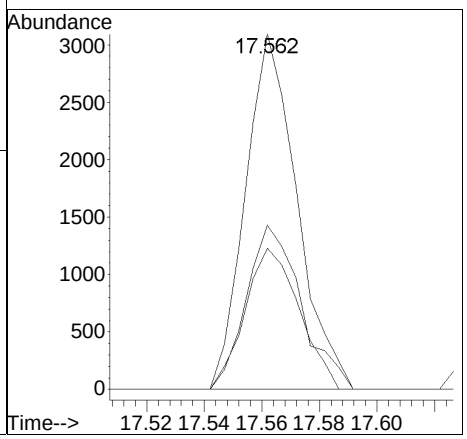


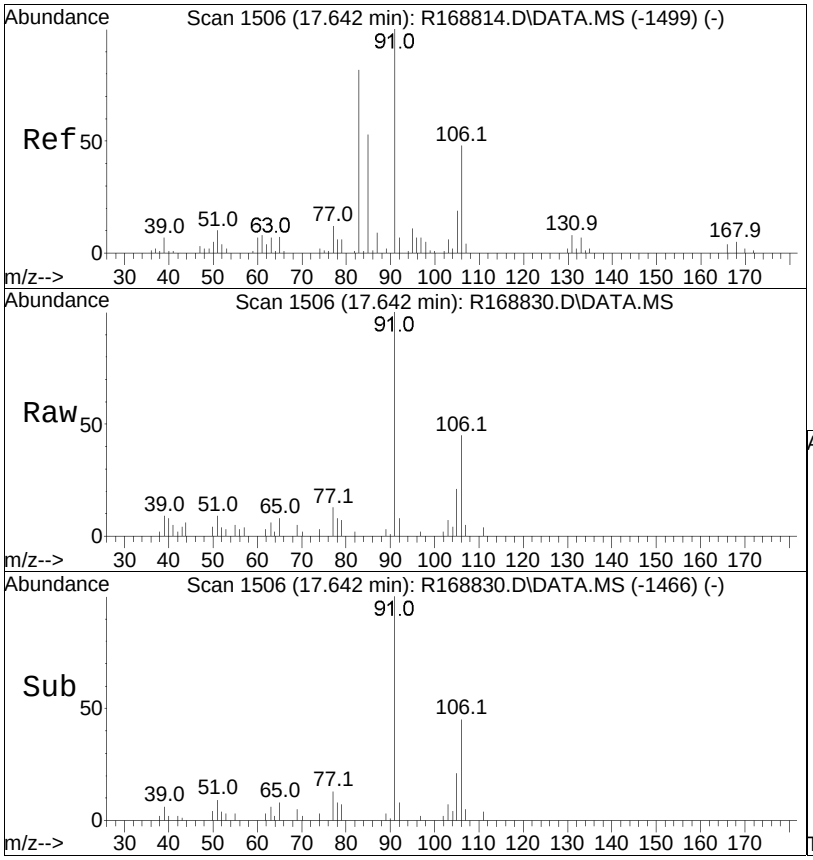


#85
styrene
Concen: 0.10 ppbV
RT: 17.562 min Scan# 1490
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:104 Resp: 3844

Ion	Ratio	Lower	Upper
104	100		
103	46.2	37.8	56.6
78	39.7	32.9	49.3

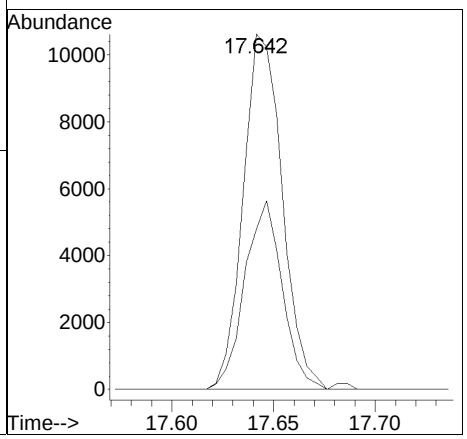


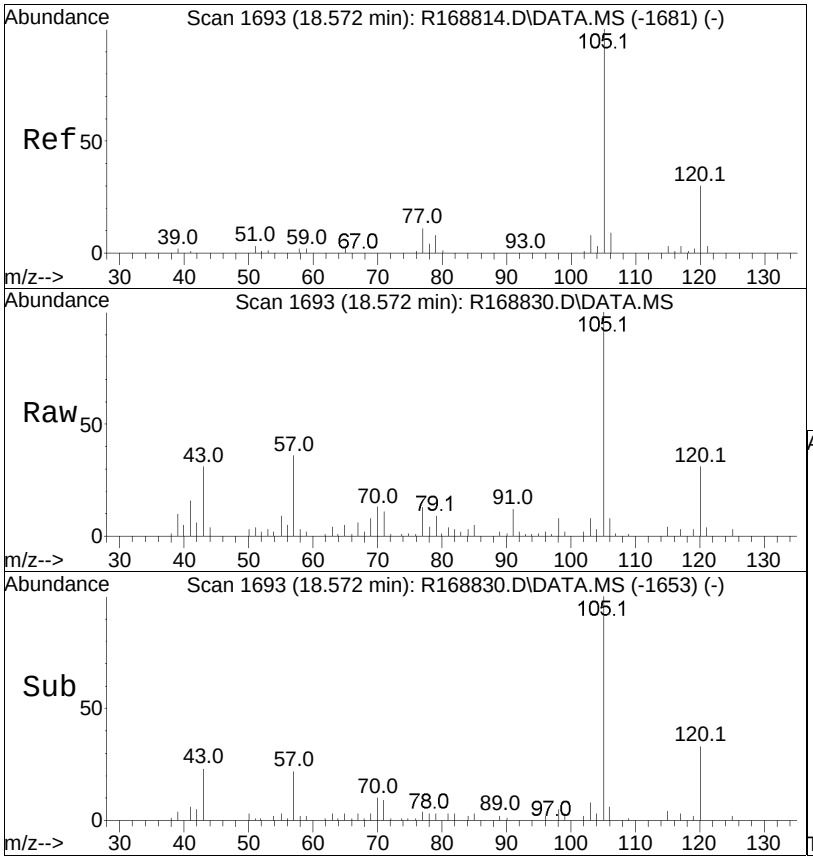


#87
o-xylene
Concen: 0.29 ppbV
RT: 17.642 min Scan# 1506
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 91 Resp: 14313

Ion	Ratio	Lower	Upper
91	100		
106	45.1	38.3	57.5

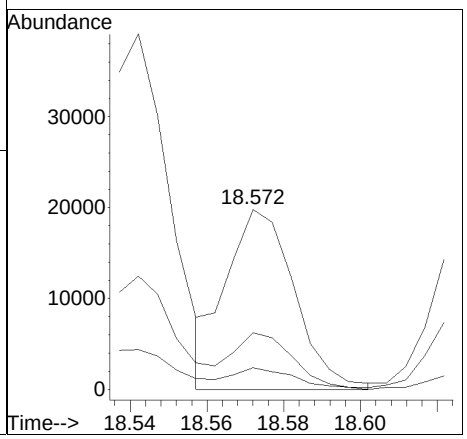


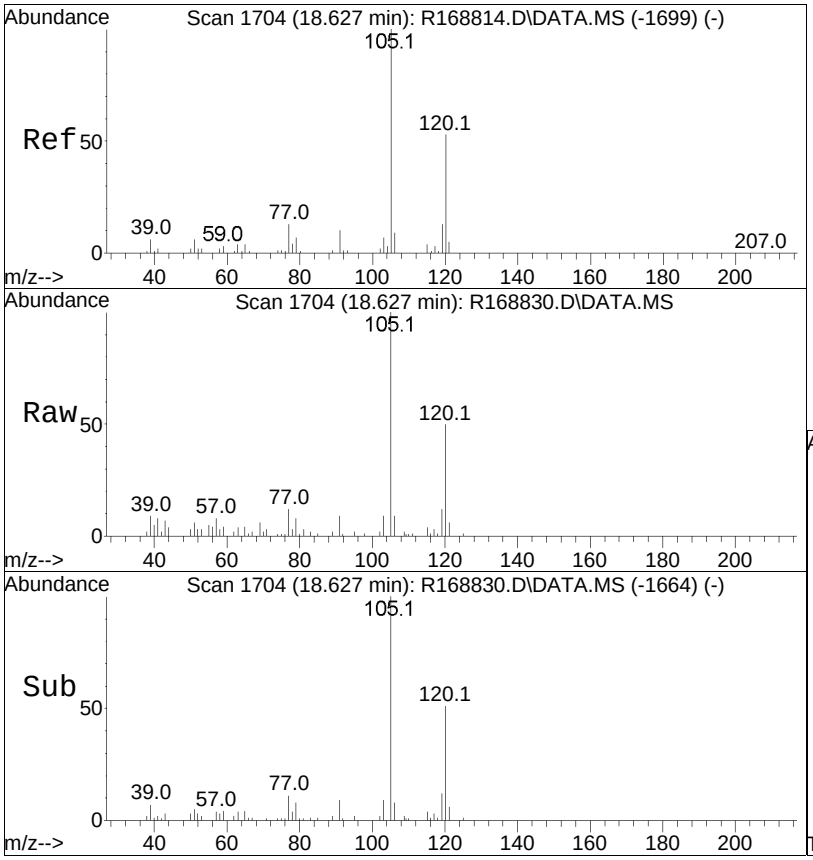


#96
4-ethyl toluene
Concen: 0.33 ppbV
RT: 18.572 min Scan# 1693
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:105 Resp: 24523

Ion	Ratio	Lower	Upper
105	100		
120	31.5	24.0	36.0
91	12.1	8.4	12.6

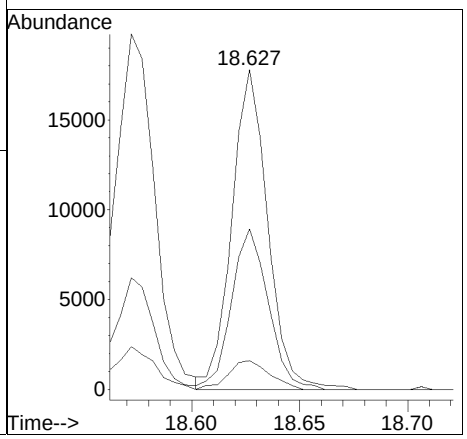


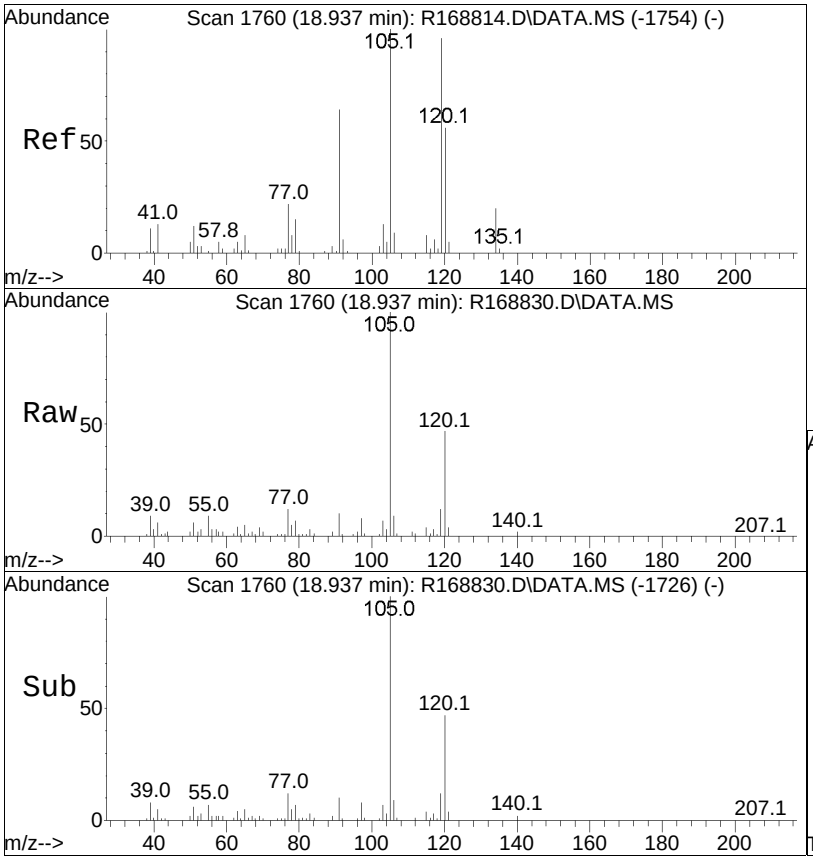


#97
1,3,5-trimethylbenzene
Concen: 0.35 ppbV
RT: 18.627 min Scan# 1704
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:105 Resp: 20561

Ion	Ratio	Lower	Upper
105	100		
120	50.2	41.9	62.9
91	9.0	8.0	12.0

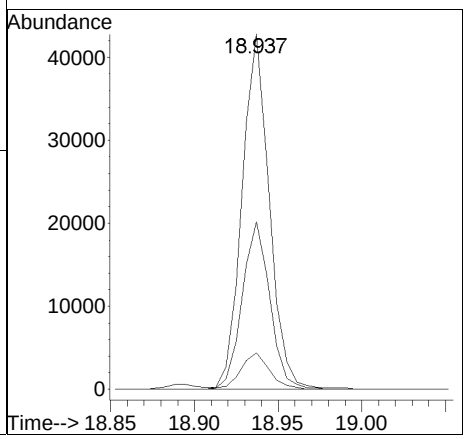




#99
1,2,4-trimethylbenzene
Concen: 0.84 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:105 Resp: 48664

Ion	Ratio	Lower	Upper
105	100		
120	47.2	44.5	66.7
91	10.3	51.4	77.2#



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TFS1_191023.M
Data File	: R168830.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 5:53 pm	Instrument	: Air Piano 1
Sample	: L1948939-01,3,250,250	Quant Date	: 10/25/2019 7:48 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168831.D
Acq On : 24 Oct 2019 6:25 pm
Operator : AIRPIANO1:TS
Sample : L1948939-02,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 25 14:39:35 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.110	49	285197	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		87.56%	
43) 1,4-difluorobenzene	12.348	114	628212	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		84.72%	
67) chlorobenzene-D5	16.801	54	101273	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		81.87%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	7936	0.290	ppbV	95
6) chloromethane	4.238	50	5056	0.543	ppbV	90
7) Freon-114	4.384		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.	d	
13) bromomethane	5.255		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.599	31	86598	13.936	ppbV	97
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.260	43	62000	3.617	ppbV #	97
21) trichlorofluoromethane	6.437	101	27758	0.965	ppbV	99
22) isopropyl alcohol	6.651	45	53661	2.829	ppbV	99
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	4348	0.350	ppbV	89
29) 3-chloropropene	7.610		0	N.D.		
30) carbon disulfide	7.796	76	2871	0.079	ppbV #	1
31) Freon 113	7.815	101	1149	0.047	ppbV	89
32) trans-1,2-dichloroethene	8.547		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	9.017		0	N.D.		
36) 2-butanone	9.463	43	5811	0.230	ppbV	96
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	10.271	83	1627	0.047	ppbV	94
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	11.126		0	N.D.		
44) hexane	10.164	57	2536M6	0.104	ppbV	
50) benzene	11.941	78	3364	0.084	ppbV #	88
53) cyclohexane	12.243	56	845	0.043	ppbV #	75

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168831.D
Acq On : 24 Oct 2019 6:25 pm
Operator : AIRPIANO1:TS
Sample : L1948939-02,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 25 14:39:35 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

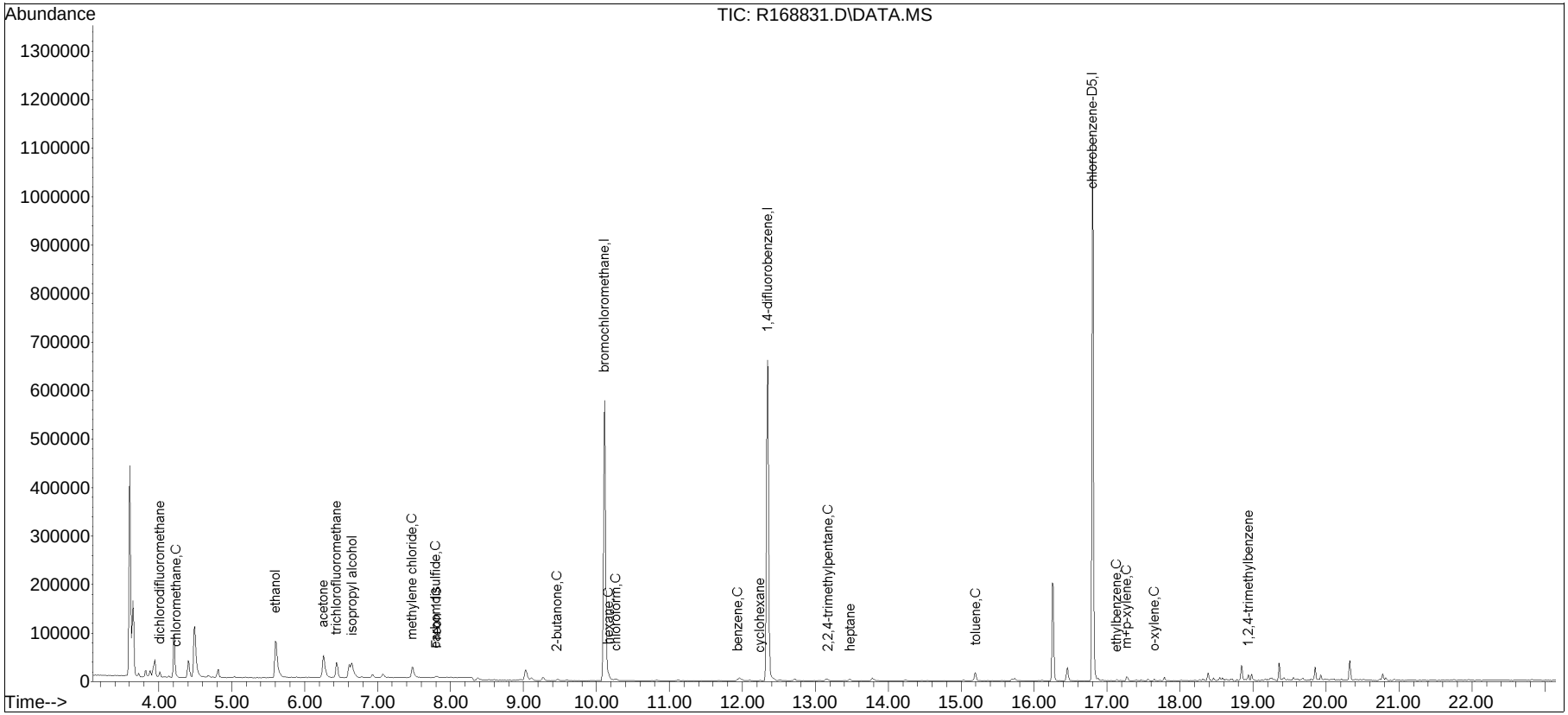
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	13.174	57	2929	0.047	ppbV #	93
62) heptane	13.477	43	2051	0.092	ppbV #	79
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	14.243		0	N.D.		
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	15.198	91	13603	0.284	ppbV	99
72) 2-hexanone	15.415		0	N.D.		
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	0.000		0	N.D.		
81) ethylbenzene	17.134	91	2236	0.037	ppbV	98
83) m+p-xylene	17.268	91	5732	0.123	ppbV	91
84) bromoform	0.000		0	N.D.		
85) styrene	17.567		0	N.D.		
86) 1,1,2,2-tetrachloroethane	17.656		0	N.D.		
87) o-xylene	17.647	91	2184	0.046	ppbV	89
96) 4-ethyl toluene	18.577		0	N.D.		
97) 1,3,5-trimethylbenzene	18.632		0	N.D.		
99) 1,2,4-trimethylbenzene	18.937	105	3663	0.066	ppbV #	58
101) Benzyl Chloride	19.058		0	N.D.		
102) 1,3-dichlorobenzene	19.118		0	N.D.		
103) 1,4-dichlorobenzene	19.118		0	N.D.		
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	20.814		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

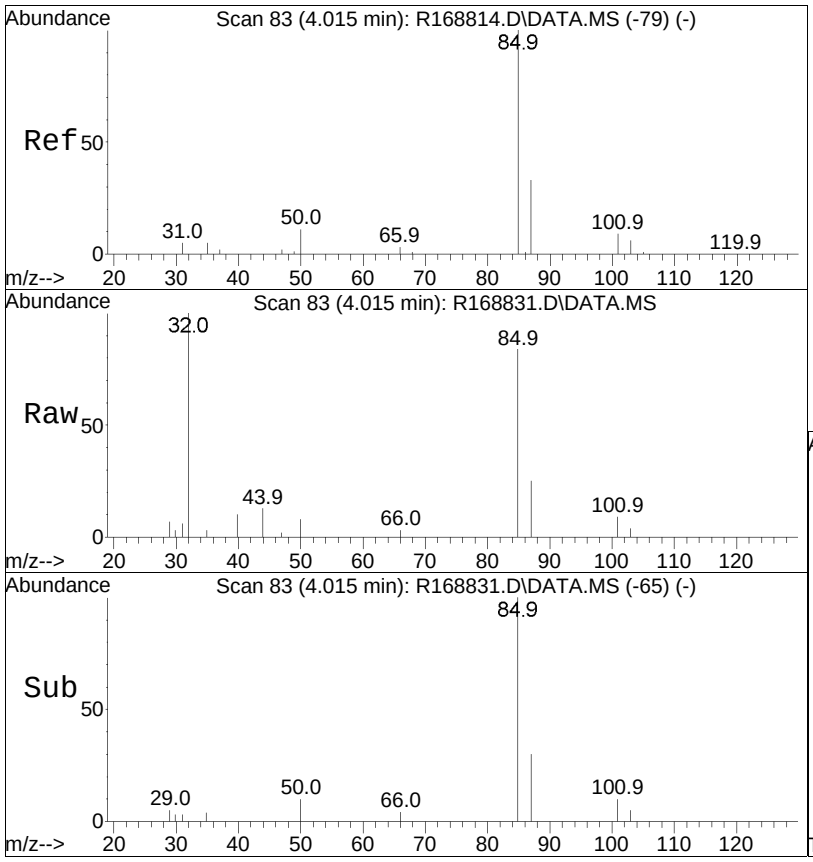
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168831.D
Acq On : 24 Oct 2019 6:25 pm
Operator : AIRPIANO1:TS
Sample : L1948939-02,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 25 14:39:35 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

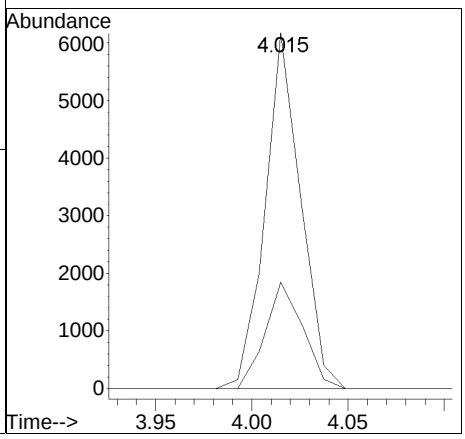


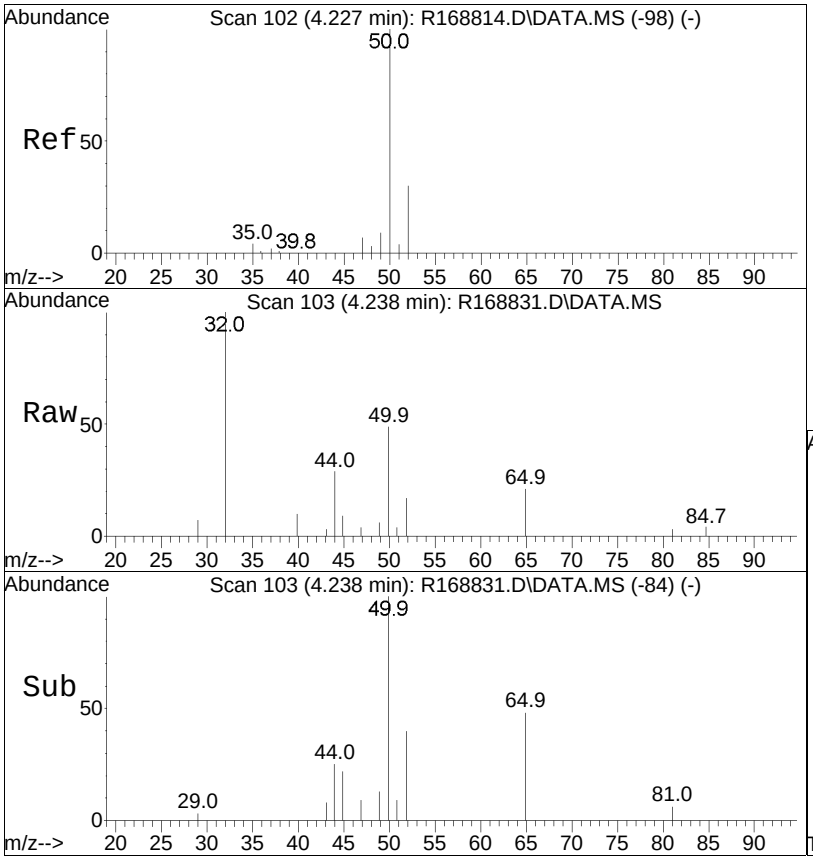


#5
dichlorodifluoromethane
Concen: 0.29 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 85 Resp: 7936

Ion	Ratio	Lower	Upper
85	100		
87	29.9	26.1	39.1

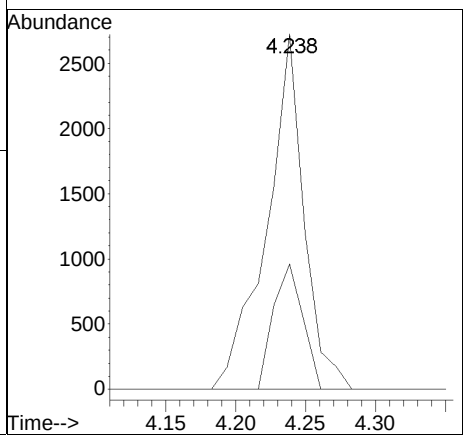


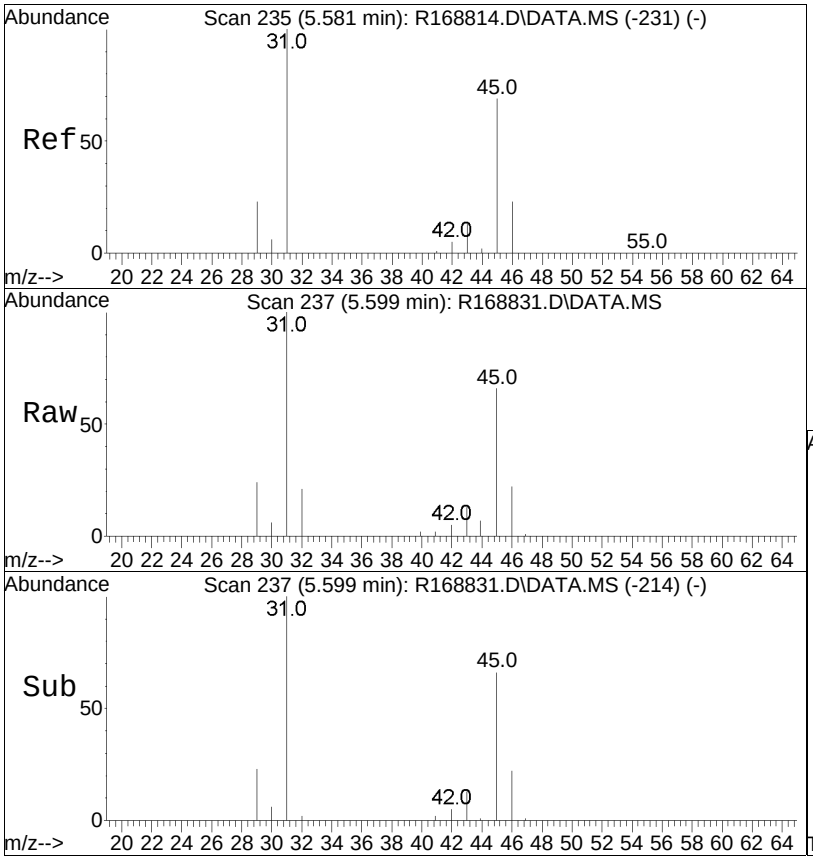


#6
chloromethane
Concen: 0.54 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 50 Resp: 5056

Ion	Ratio	Lower	Upper
50	100		
52	35.3	23.7	35.5

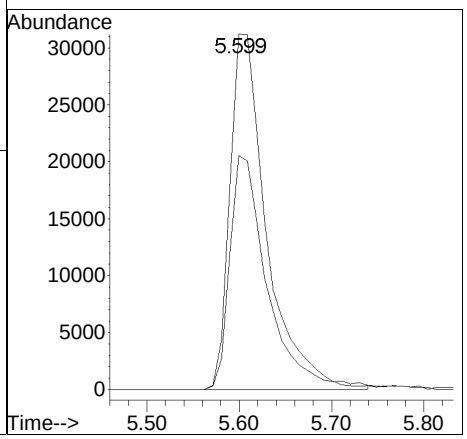


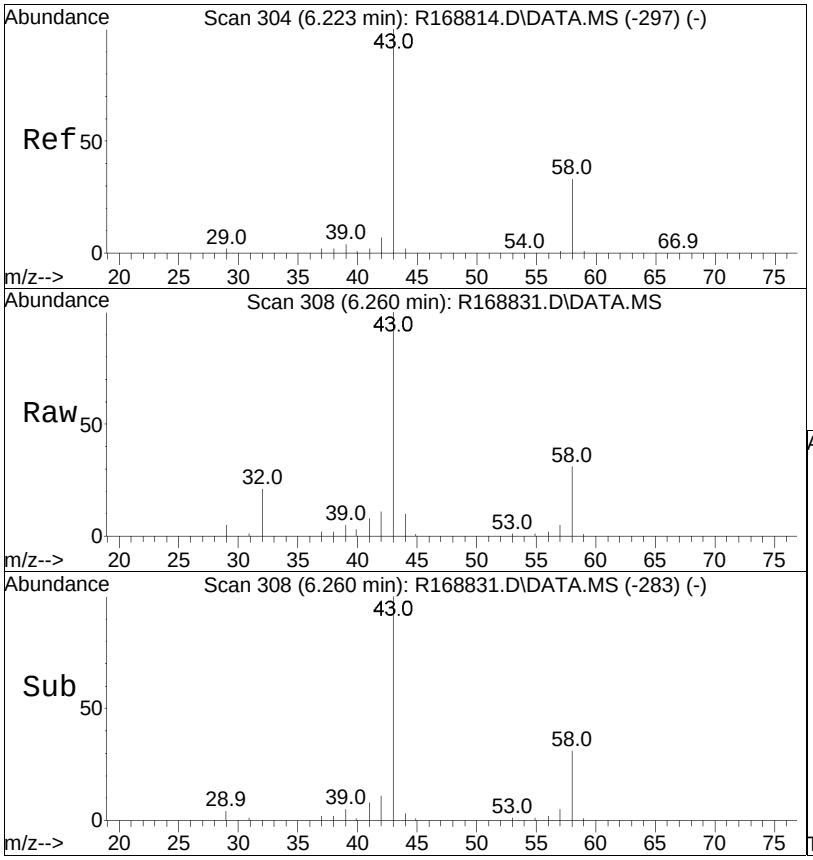


#15
ethanol
Concen: 13.94 ppbV
RT: 5.599 min Scan# 237
Delta R.T. 0.019 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 31 Resp: 86598

Ion	Ratio	Lower	Upper
31	100		
45	65.8	54.3	81.5

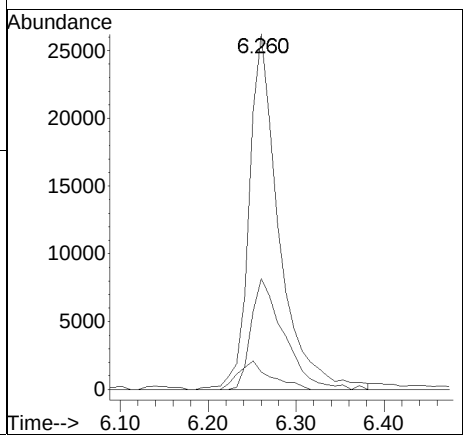


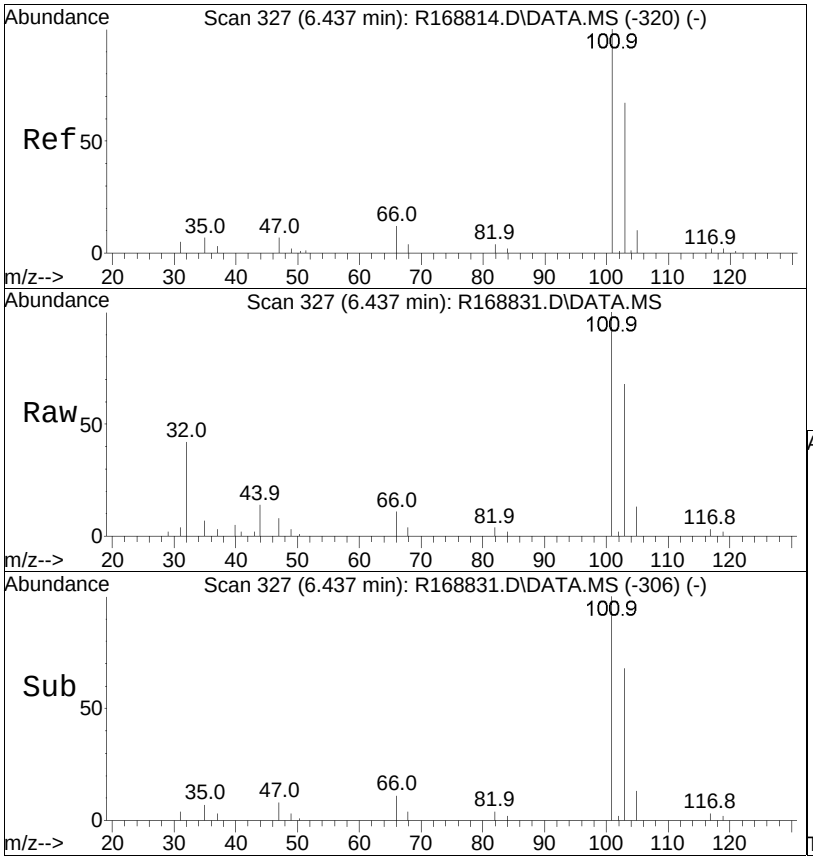


#19
acetone
Concen: 3.62 ppbV
RT: 6.260 min Scan# 308
Delta R.T. 0.037 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 43 Resp: 62000

Ion	Ratio	Lower	Upper
43	100		
58	31.2	26.5	39.7
57	4.9	0.8	1.2#

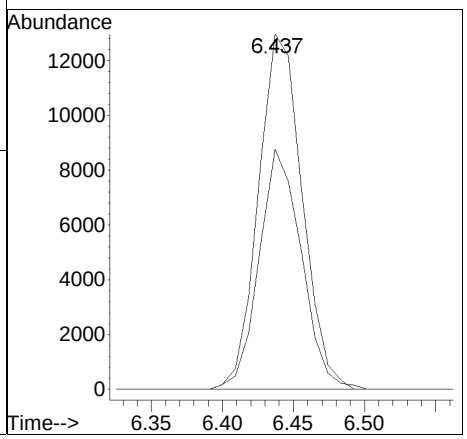


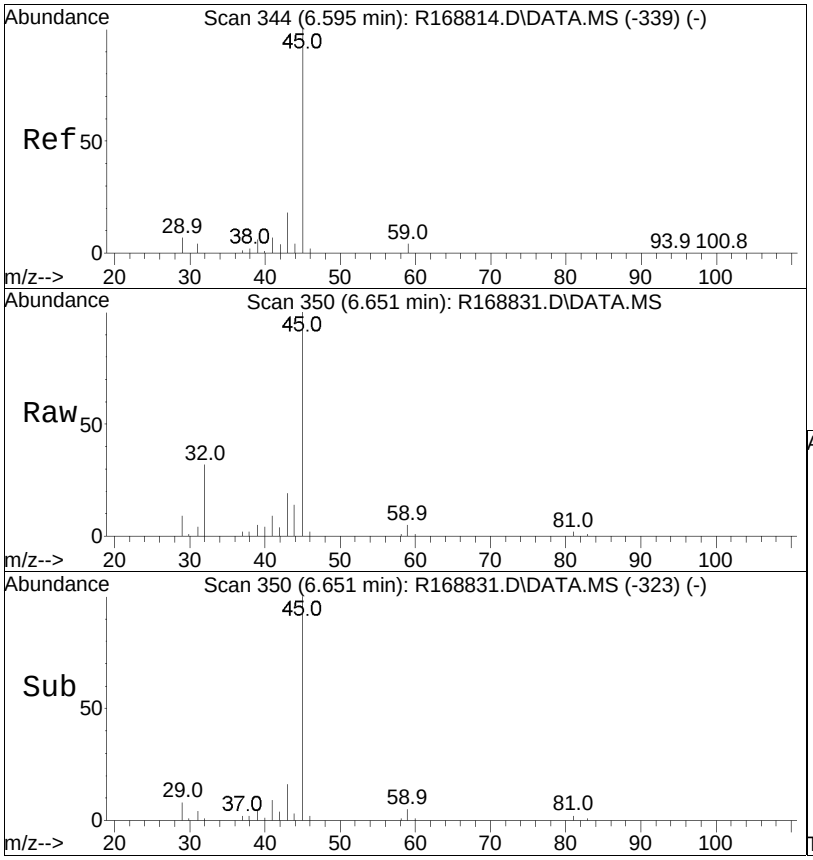


#21
trichlorofluoromethane
Concen: 0.96 ppbV
RT: 6.437 min Scan# 327
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:101 Resp: 27758

Ion	Ratio	Lower	Upper
101	100		
103	67.6	53.4	80.2

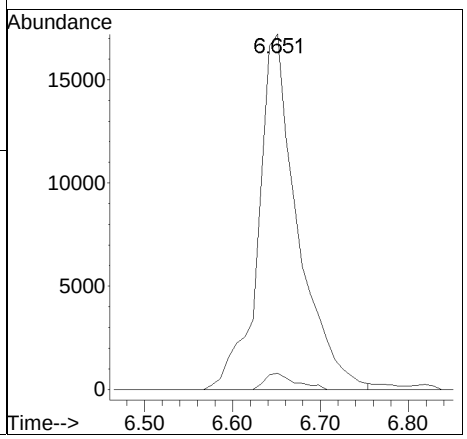


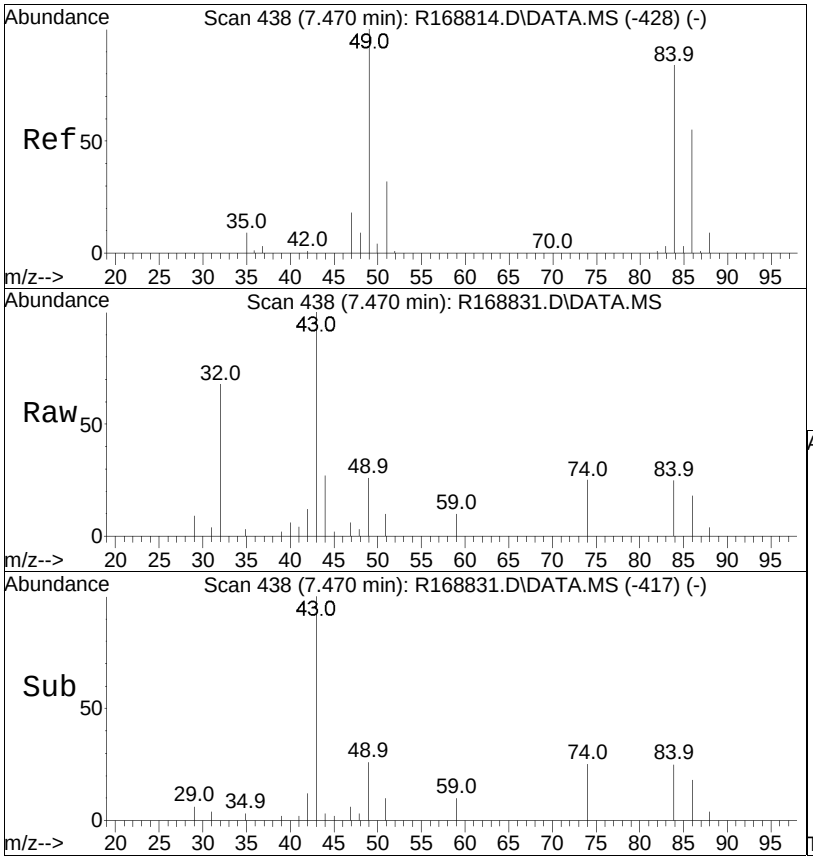


#22
isopropyl alcohol
Concen: 2.83 ppbV
RT: 6.651 min Scan# 350
Delta R.T. 0.056 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 45 Resp: 53661

Ion	Ratio	Lower	Upper
45	100		
59	4.6	3.4	5.0

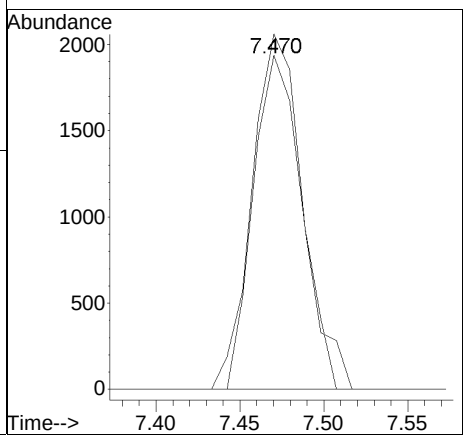


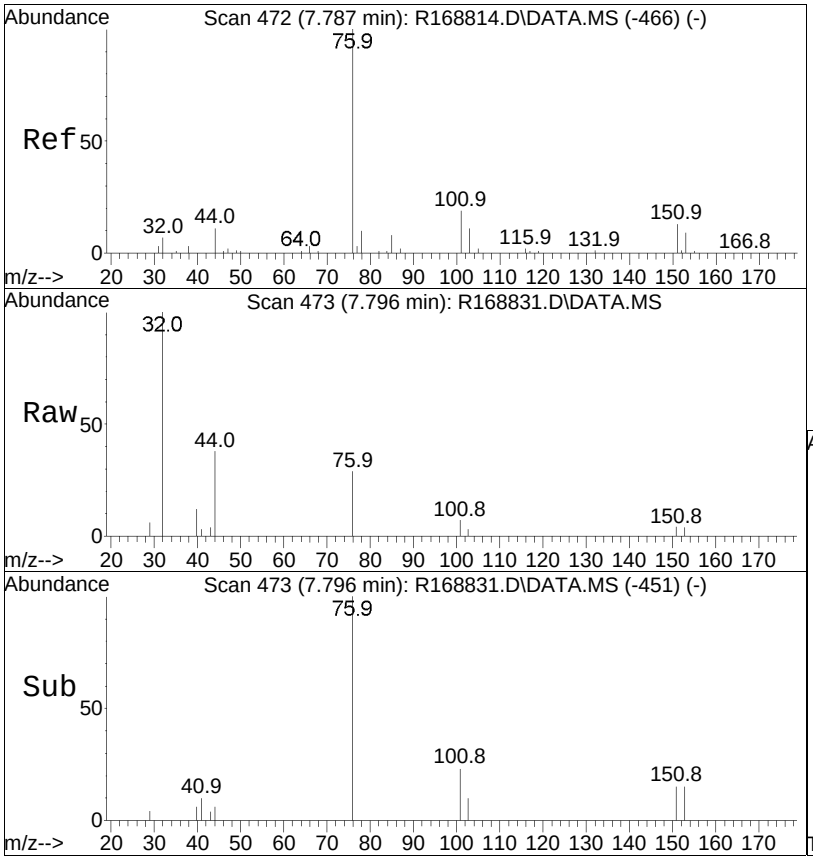


#28
methylene chloride
Concen: 0.35 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 49 Resp: 4348

Ion	Ratio	Lower	Upper
49	100		
84	94.0	67.3	100.9

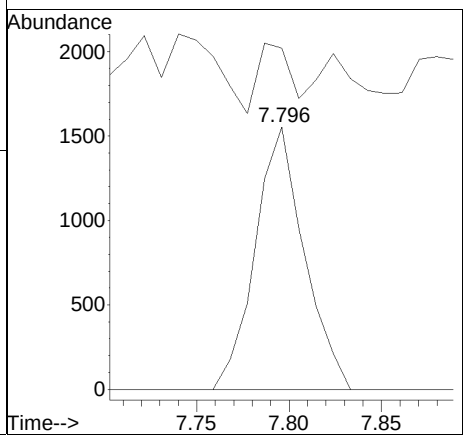


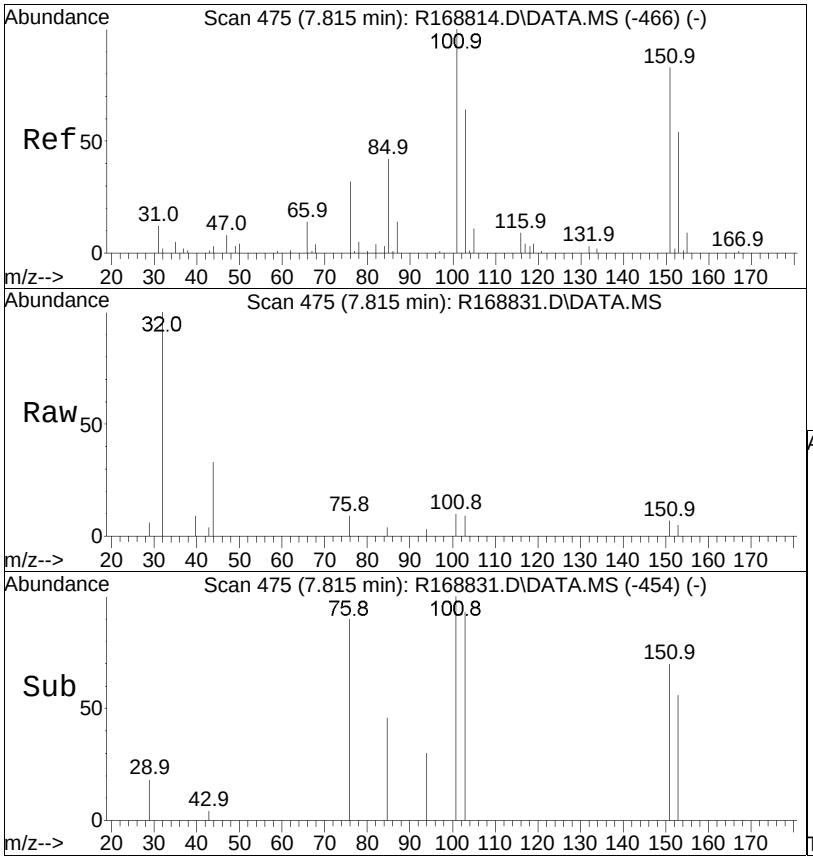


#30
carbon disulfide
Concen: 0.08 ppbV
RT: 7.796 min Scan# 473
Delta R.T. 0.009 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 76 Resp: 2871

Ion	Ratio	Lower	Upper
76	100		
44	130.2	9.3	13.9#

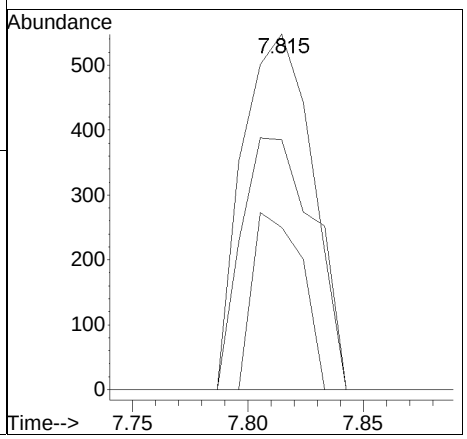


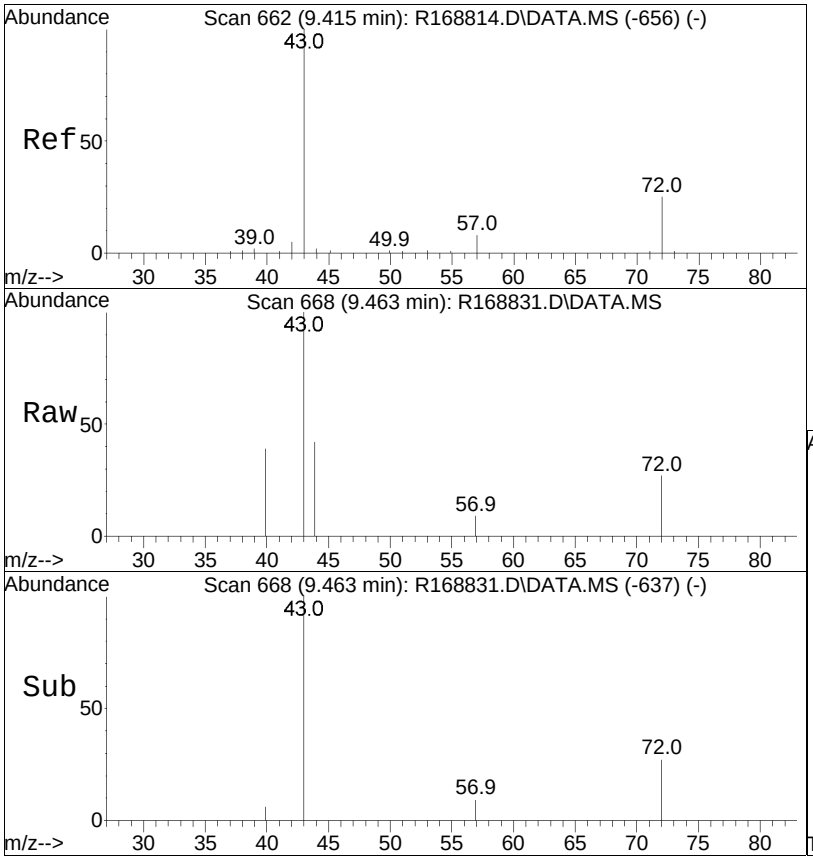


#31
Freon 113
Concen: 0.05 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:101 Resp: 1149

Ion	Ratio	Lower	Upper
101	100		
85	45.6	33.2	49.8
151	70.3	66.2	99.2

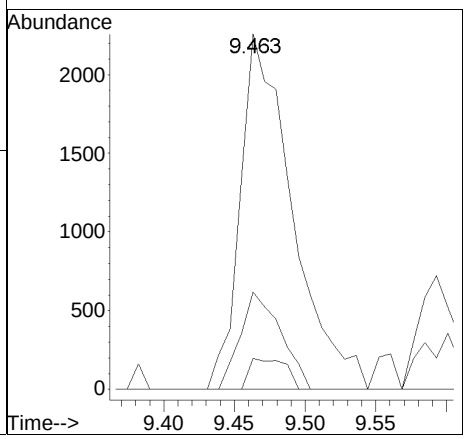


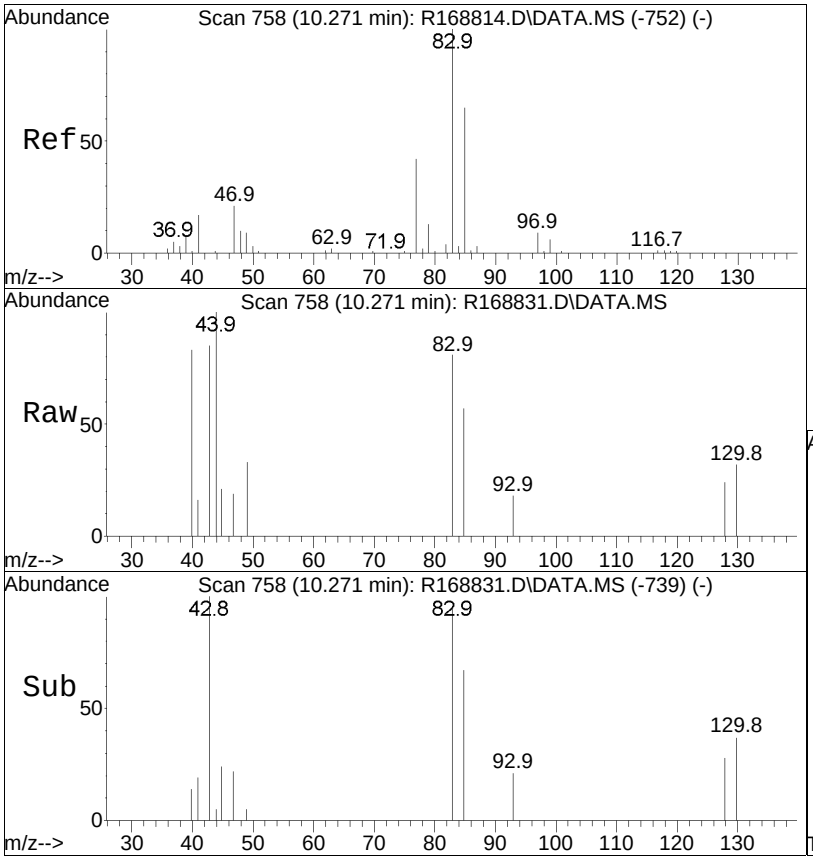


#36
2-butanone
Concen: 0.23 ppbV
RT: 9.463 min Scan# 668
Delta R.T. 0.049 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 43 Resp: 5811

Ion	Ratio	Lower	Upper
43	100		
72	27.4	20.0	30.0
57	8.7	6.3	9.5

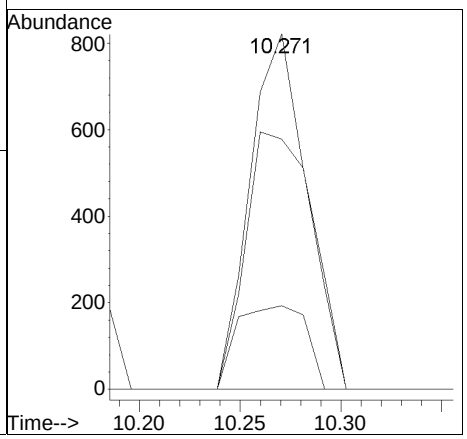


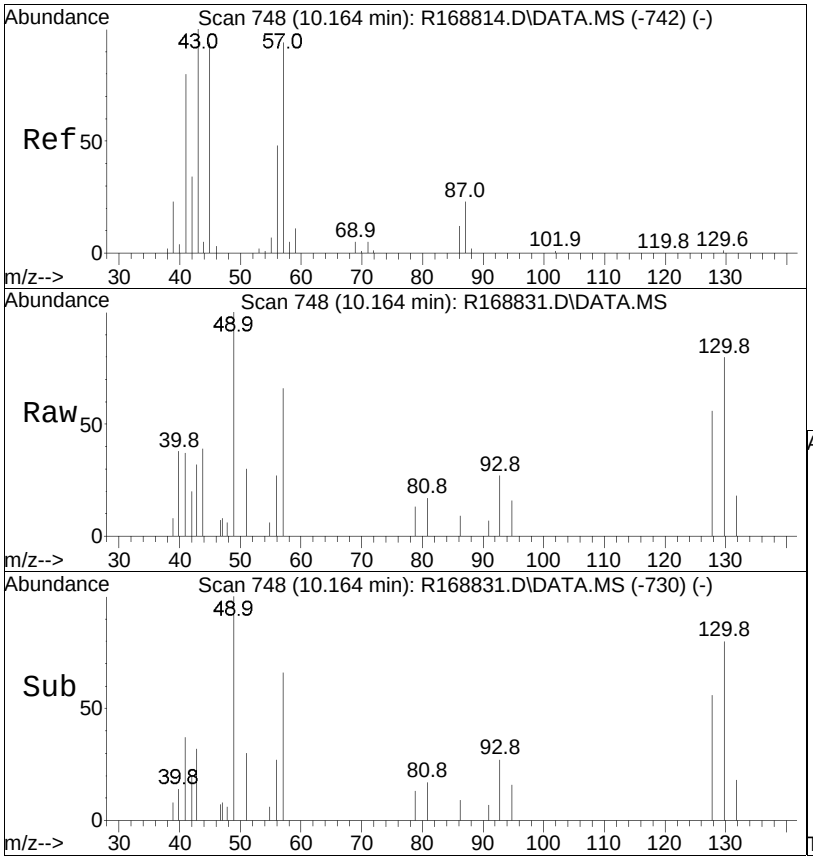


#39
chloroform
Concen: 0.05 ppbV
RT: 10.271 min Scan# 758
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 83 Resp: 1627

Ion	Ratio	Lower	Upper
83	100		
85	70.4	52.1	78.1
47	23.5	17.3	25.9

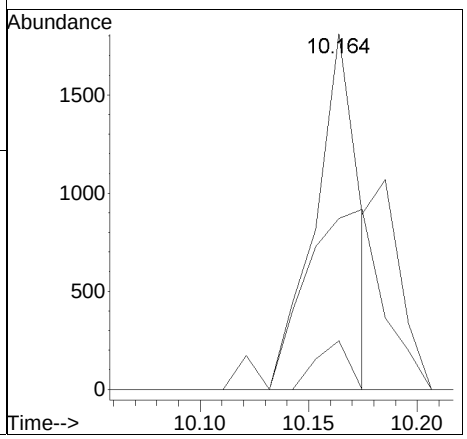


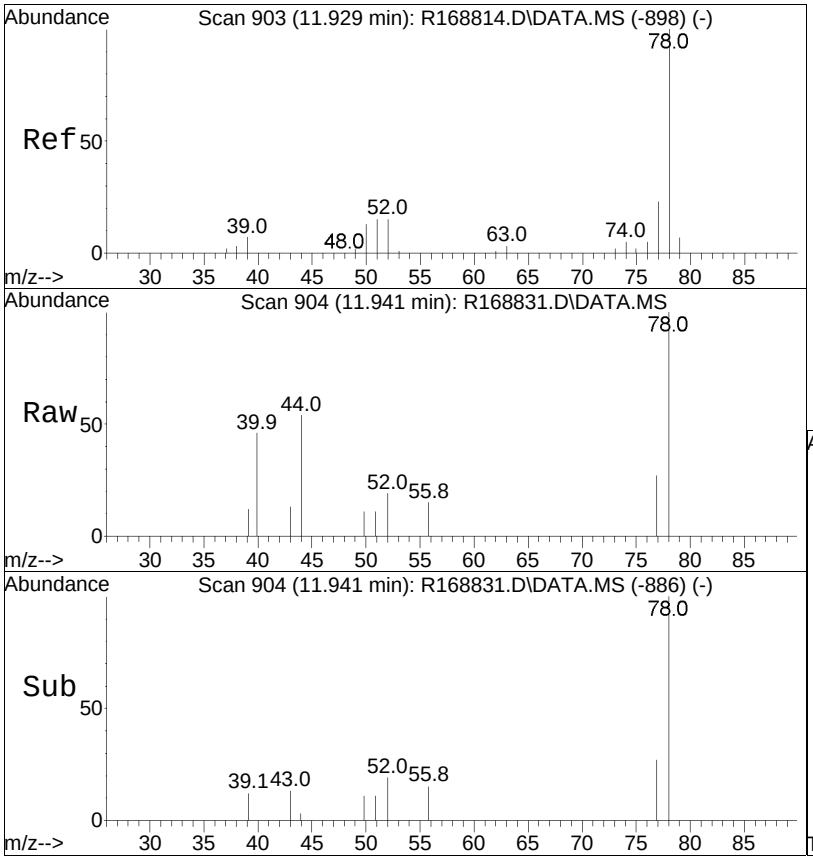


#44
hexane
Concen: 0.10 ppbV m
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 57 Resp: 2536

Ion	Ratio	Lower	Upper
57	100		
43	48.1	85.5	128.3#
86	13.7	10.5	15.7

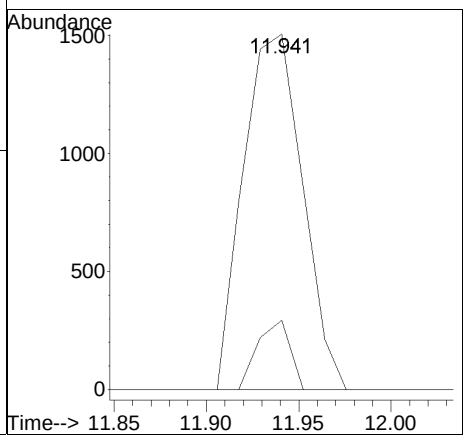


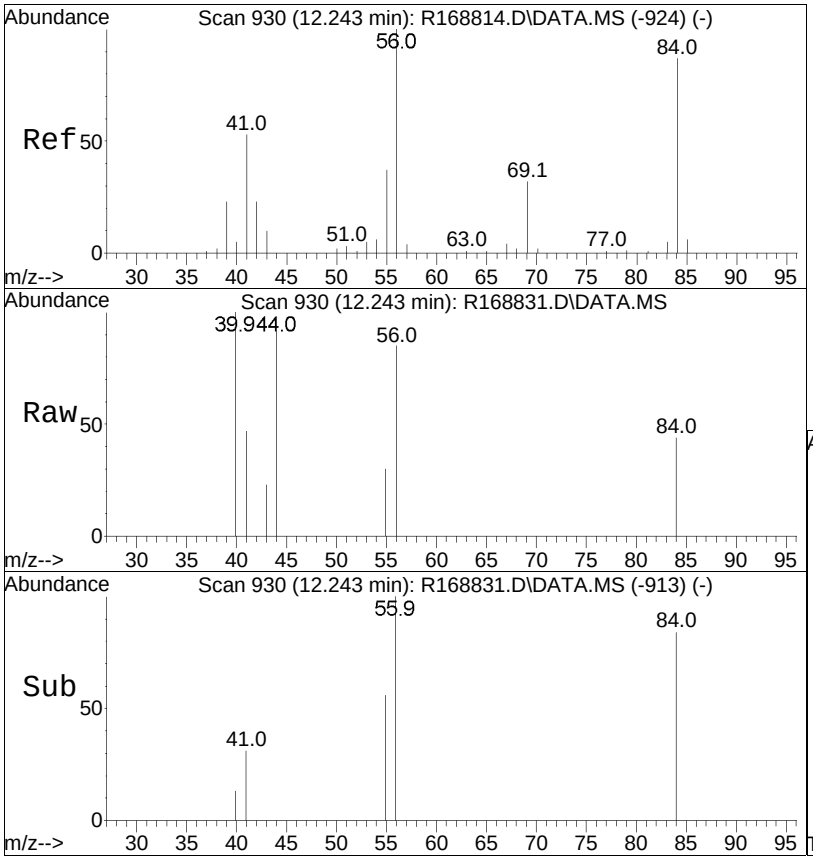


#50
benzene
Concen: 0.08 ppbV
RT: 11.941 min Scan# 904
Delta R.T. 0.012 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 78 Resp: 3364

Ion	Ratio	Lower	Upper
78	100		
52	19.5	11.7	17.5#

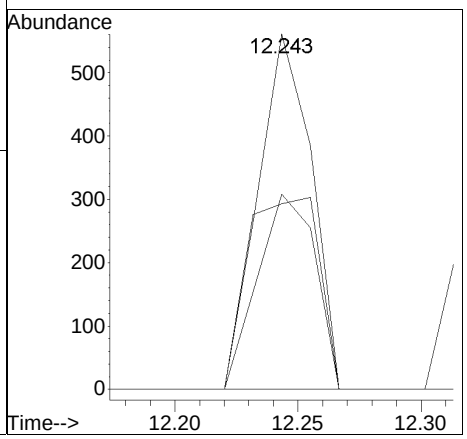


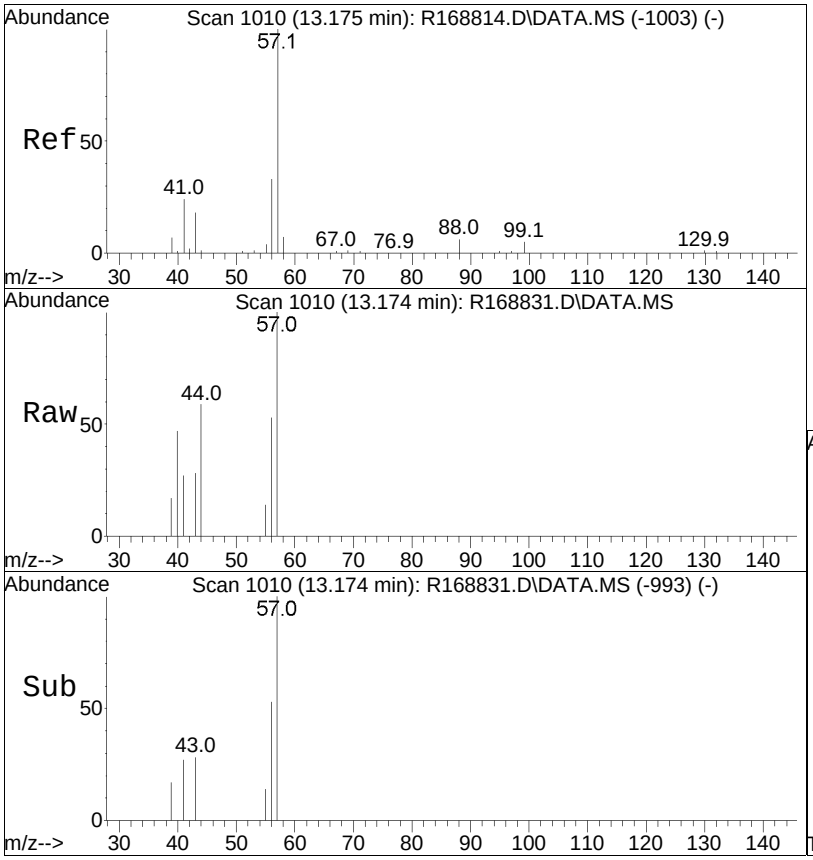


#53
cyclohexane
Concen: 0.04 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 56 Resp: 845

Ion	Ratio	Lower	Upper
56	100		
84	52.2	70.1	105.1#
41	54.9	42.6	63.8

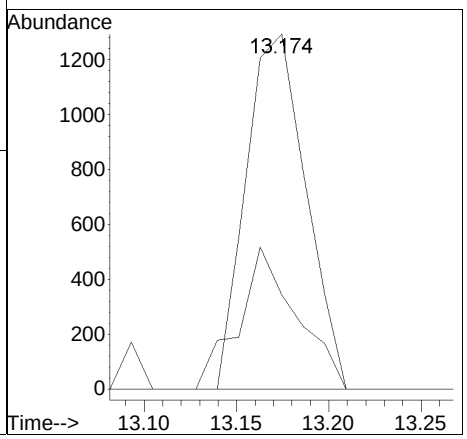


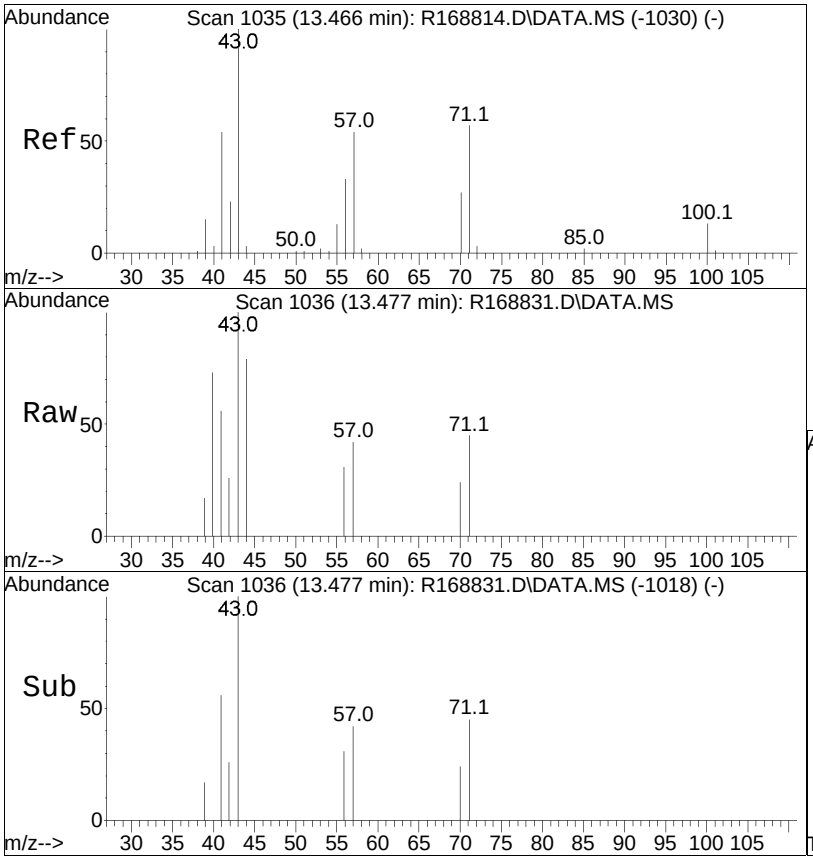


#60
2,2,4-trimethylpentane
Concen: 0.05 ppbV
RT: 13.174 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 57 Resp: 2929

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	26.6	19.3	28.9

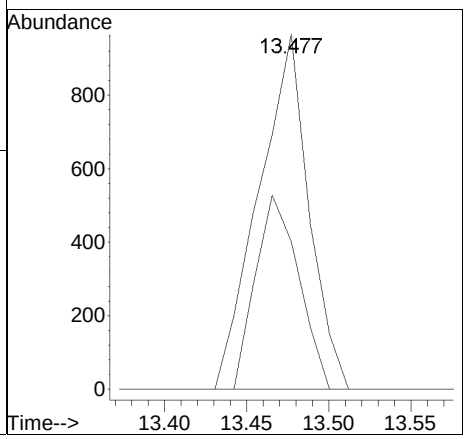


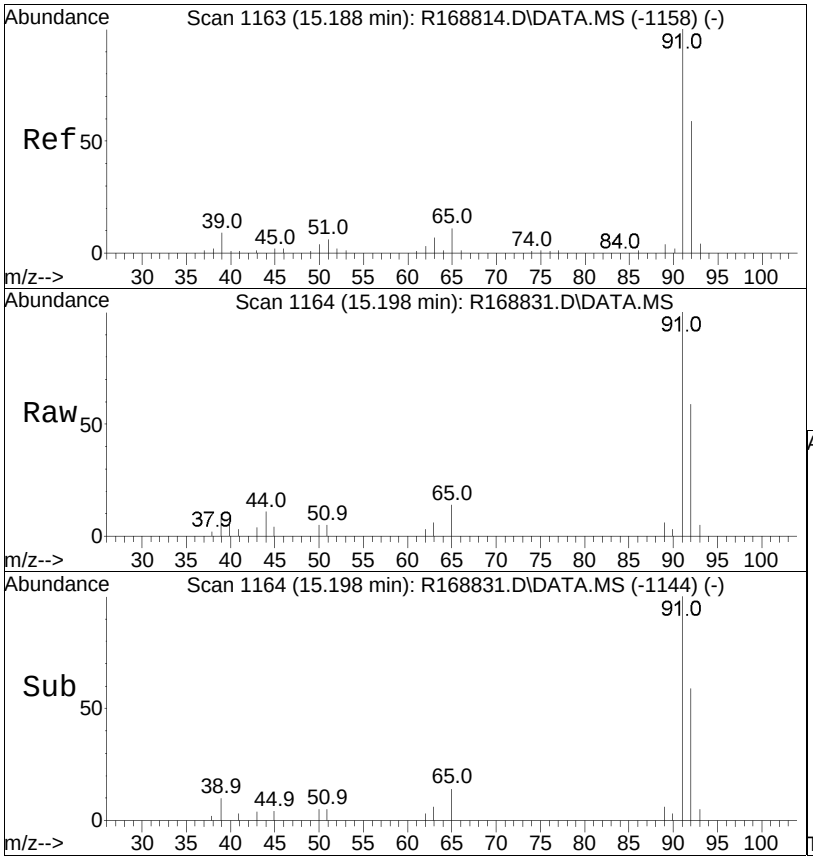


#62
heptane
Concen: 0.09 ppbV
RT: 13.477 min Scan# 1036
Delta R.T. 0.012 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 43 Resp: 2051

Ion	Ratio	Lower	Upper
43	100		
57	41.6	43.4	65.0#
100	0.0	11.2	16.8#

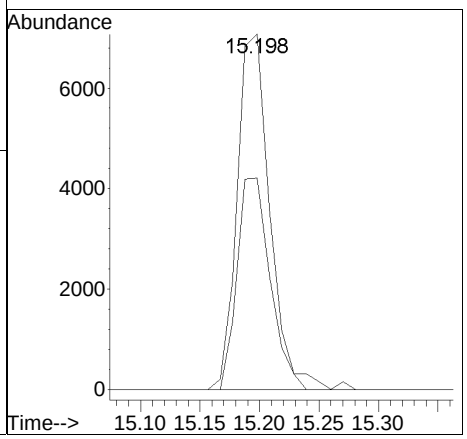


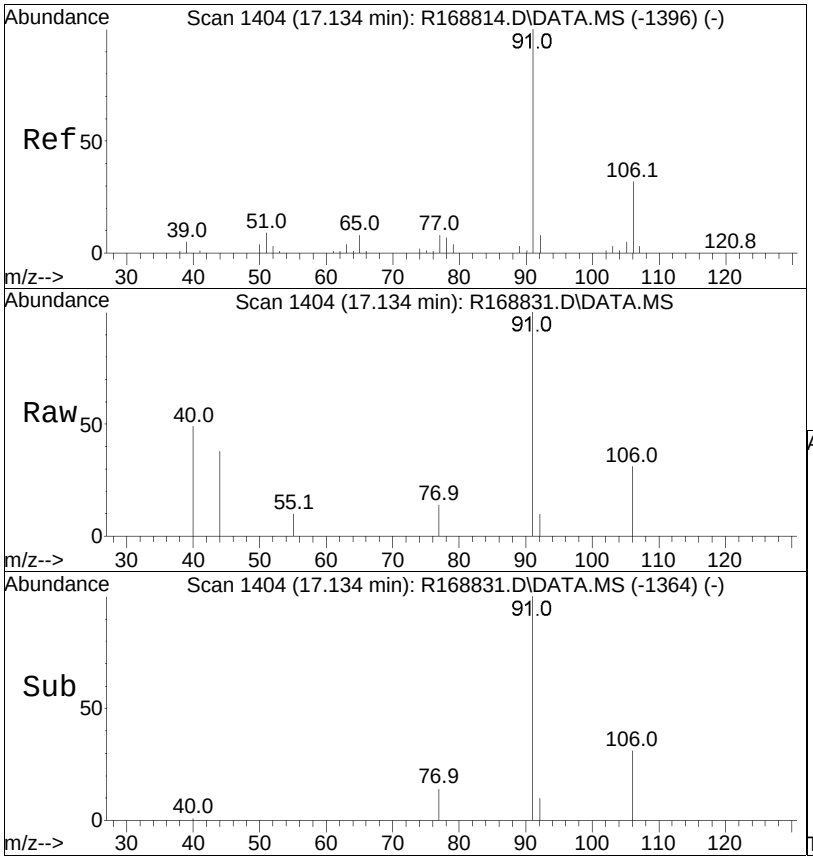


#68
toluene
Concen: 0.28 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 91 Resp: 13603

Ion	Ratio	Lower	Upper
91	100		
92	59.4	47.2	70.8

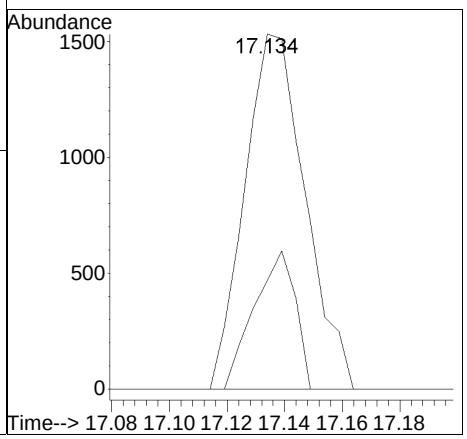


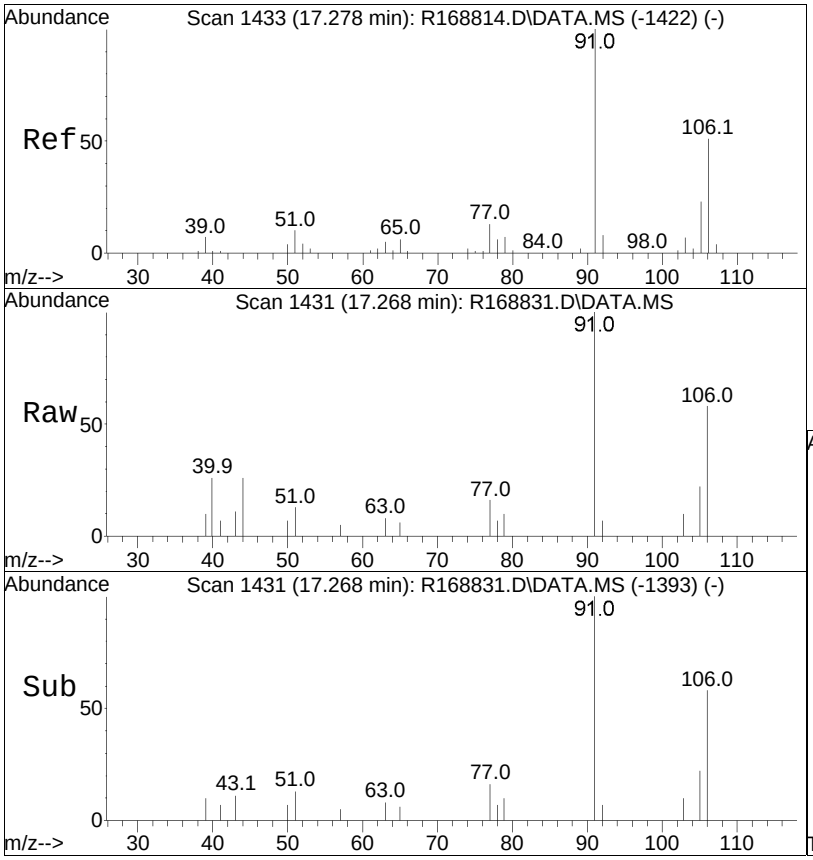


#81
ethylbenzene
Concen: 0.04 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 91 Resp: 2236

Ion	Ratio	Lower	Upper
91	100		
106	30.7	25.3	37.9

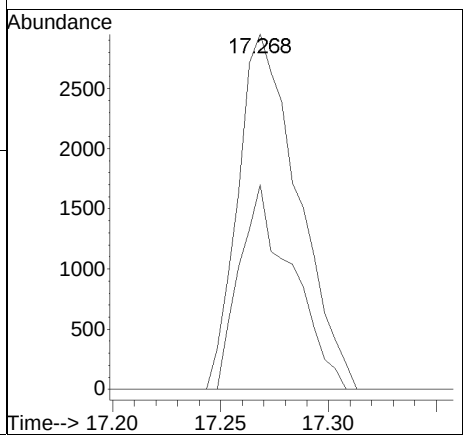


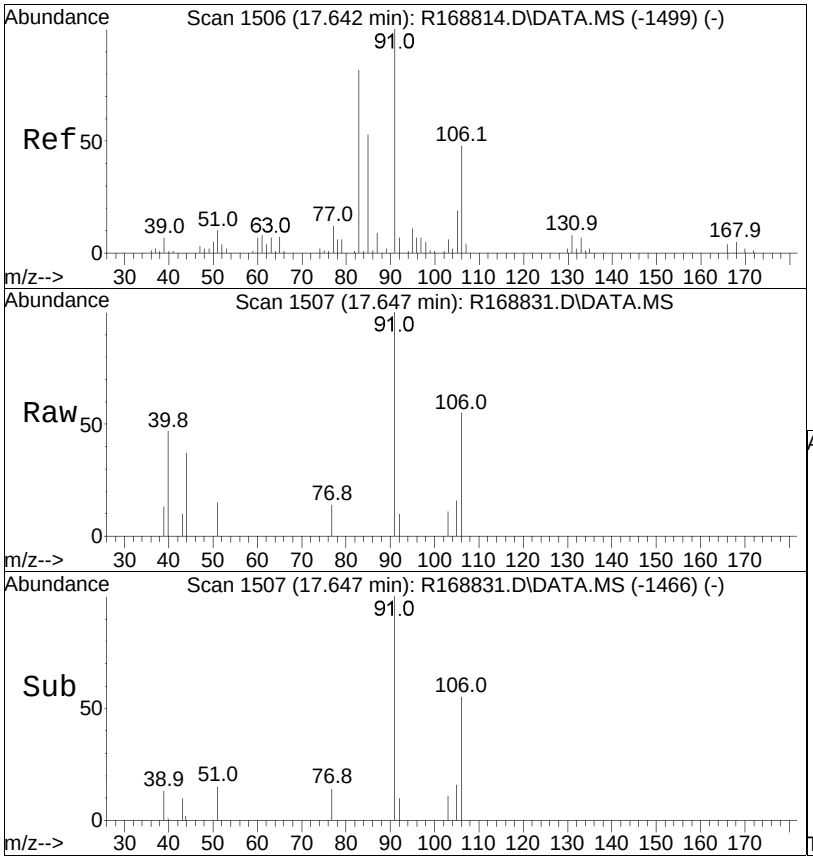


#83
m+p-xylene
Concen: 0.12 ppbV
RT: 17.268 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 91 Resp: 5732

Ion	Ratio	Lower	Upper
91	100		
106	57.6	40.8	61.2

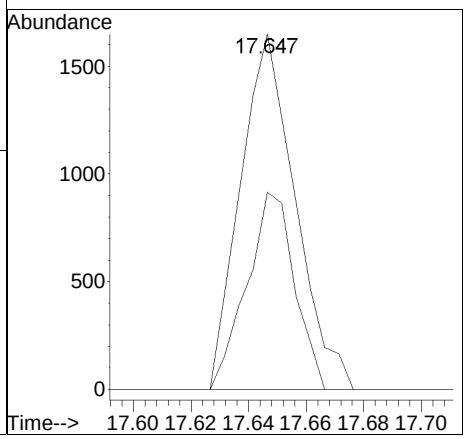


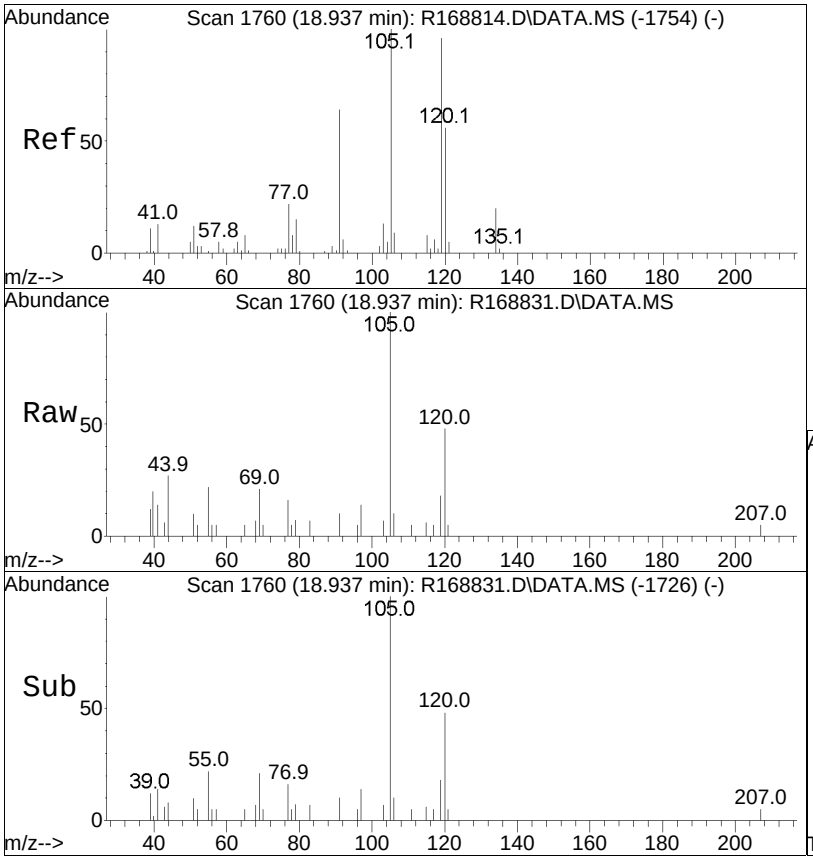


#87
o-xylene
Concen: 0.05 ppbV
RT: 17.647 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 91 Resp: 2184

Ion	Ratio	Lower	Upper
91	100		
106	55.5	38.3	57.5

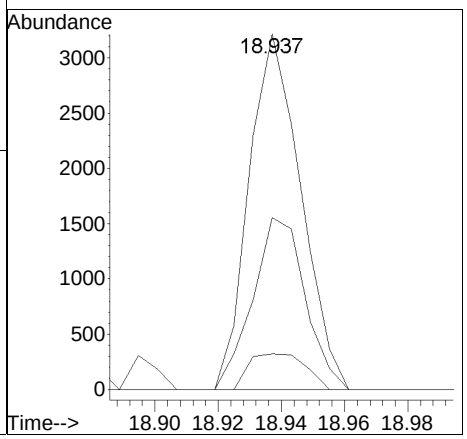




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:105 Resp: 3663

Ion	Ratio	Lower	Upper
105	100		
120	48.3	44.5	66.7
91	10.0	51.4	77.2#

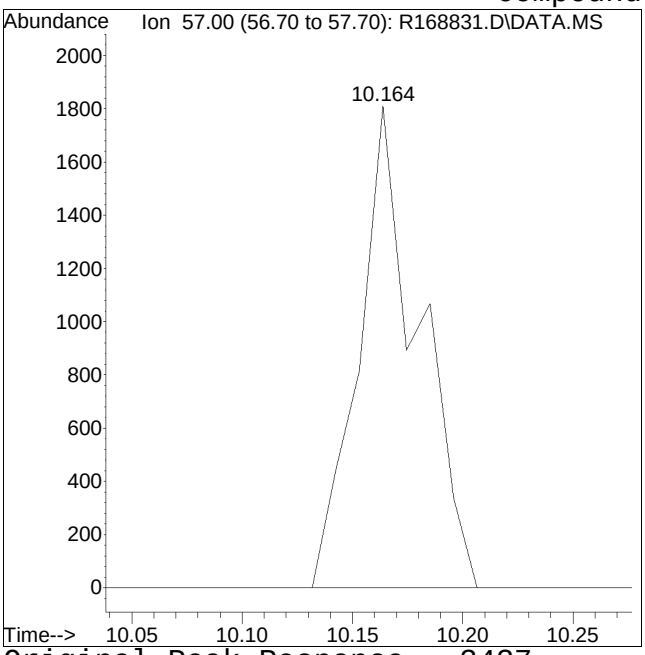


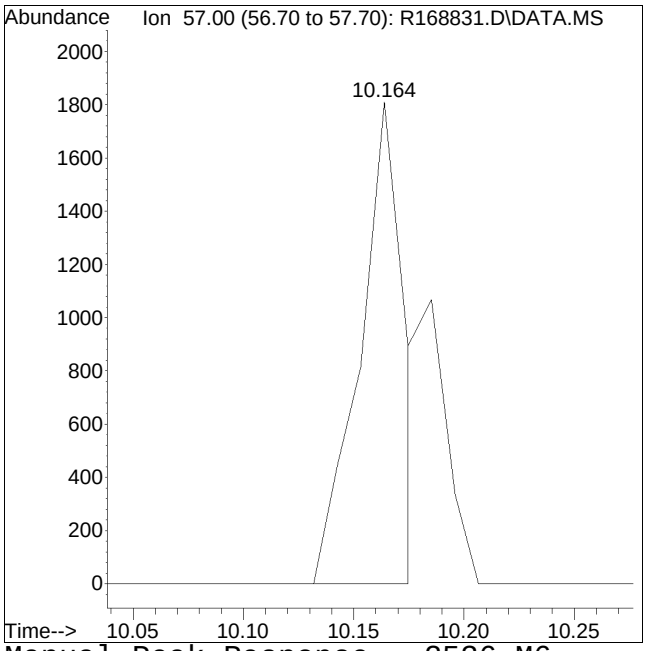
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168831.D
Date Inj'd : 10/24/2019 6:25 pm
Sample : L1948939-02,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/25/2019 7:48 am

Compound #44: hexane





Original Peak Response = 3437 Manual Peak Response = 2536 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168832.D
Acq On : 24 Oct 2019 6:58 pm
Operator : AIRPIANO1:TS
Sample : L1948939-03,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:33:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.110	49	283107	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		86.92%	
43) 1,4-difluorobenzene	12.348	114	635898	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		85.76%	
67) chlorobenzene-D5	16.801	54	106124	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		85.79%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	8984	0.331	ppbV	97
6) chloromethane	4.238	50	5043	0.546	ppbV	90
7) Freon-114	4.384		0	N.D.		
10) 1,3-butadiene	4.730	54	274	0.033	ppbV	98
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.599	31	84343	13.674	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.260	43	53501	3.144	ppbV #	94
21) trichlorofluoromethane	6.437	101	6988	0.245	ppbV	97
22) isopropyl alcohol	6.651	45	31746	1.686	ppbV	99
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	2694	0.218	ppbV	85
29) 3-chloropropene	7.601		0	N.D.		
30) carbon disulfide	7.796	76	1297	0.036	ppbV #	1
31) Freon 113	7.815	101	1386	0.057	ppbV #	90
32) trans-1,2-dichloroethene	0.000		0	N.D.	d	
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	9.366		0	N.D.		
38) Ethyl Acetate	10.260		0	N.D.		
39) chloroform	10.260	83	1070	0.031	ppbV #	78
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	10.164	57	2922	0.118	ppbV #	56
50) benzene	11.929	78	4379	0.107	ppbV #	86
53) cyclohexane	12.243	56	1074	0.054	ppbV #	75

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168832.D
Acq On : 24 Oct 2019 6:58 pm
Operator : AIRPIANO1:TS
Sample : L1948939-03,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:33:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

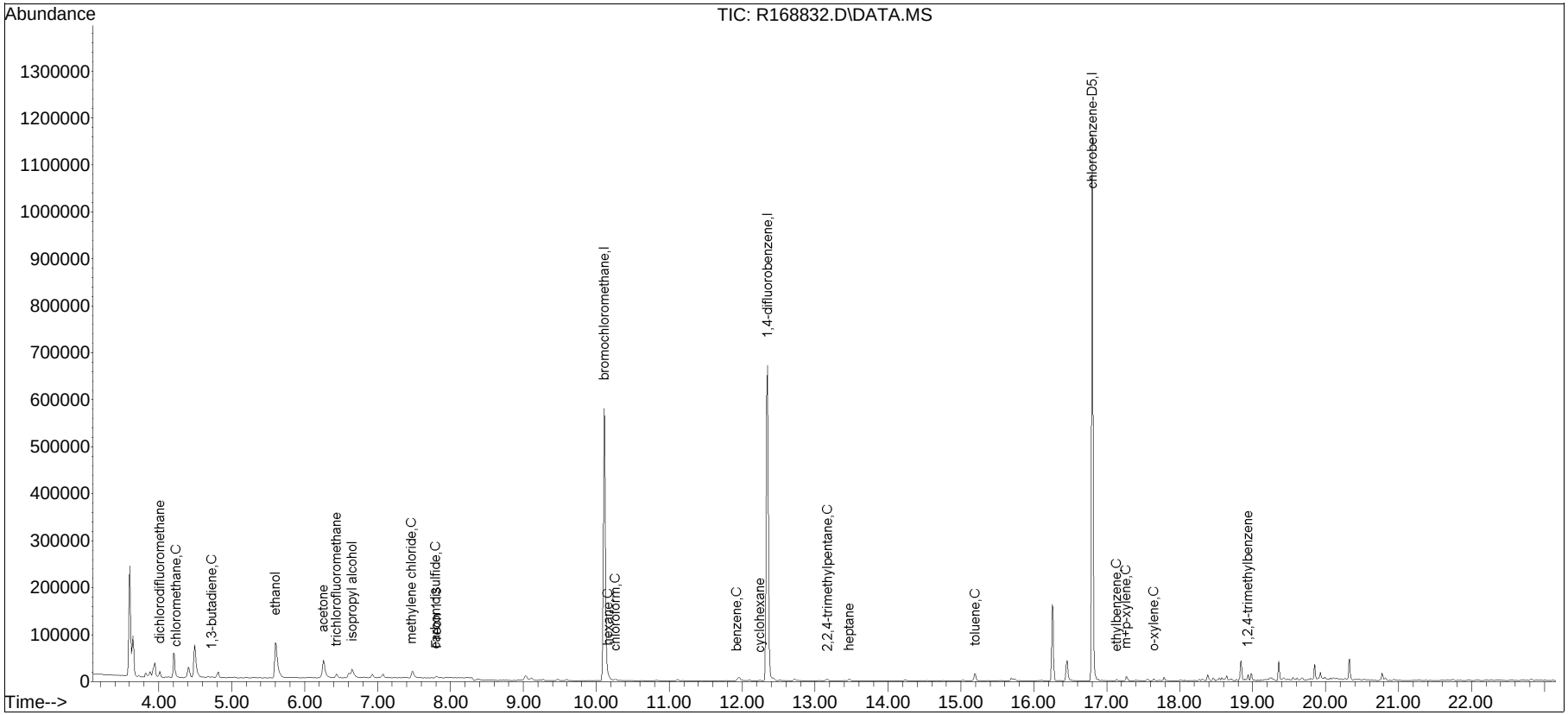
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	13.174	57	3362	0.054	ppbV #	93
62)	heptane	13.465	43	2105	0.093	ppbV #	90
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	14.243		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	15.198	91	12780	0.255	ppbV	98
72)	2-hexanone	15.415		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.134	91	2382	0.038	ppbV	97
83)	m+p-xylene	17.268	91	5855	0.120	ppbV	100
84)	bromoform	0.000		0	N.D.		
85)	styrene	17.567		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.647	91	2356	0.048	ppbV	91
96)	4-ethyl toluene	18.577		0	N.D.		
97)	1,3,5-trimethylbenzene	18.627		0	N.D.		
99)	1,2,4-trimethylbenzene	18.937	105	4235	0.073	ppbV #	63
101)	Benzyl Chloride	18.937		0	N.D.		
102)	1,3-dichlorobenzene	19.124		0	N.D.		
103)	1,4-dichlorobenzene	19.124		0	N.D.		
107)	1,2-dichlorobenzene	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	20.820		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

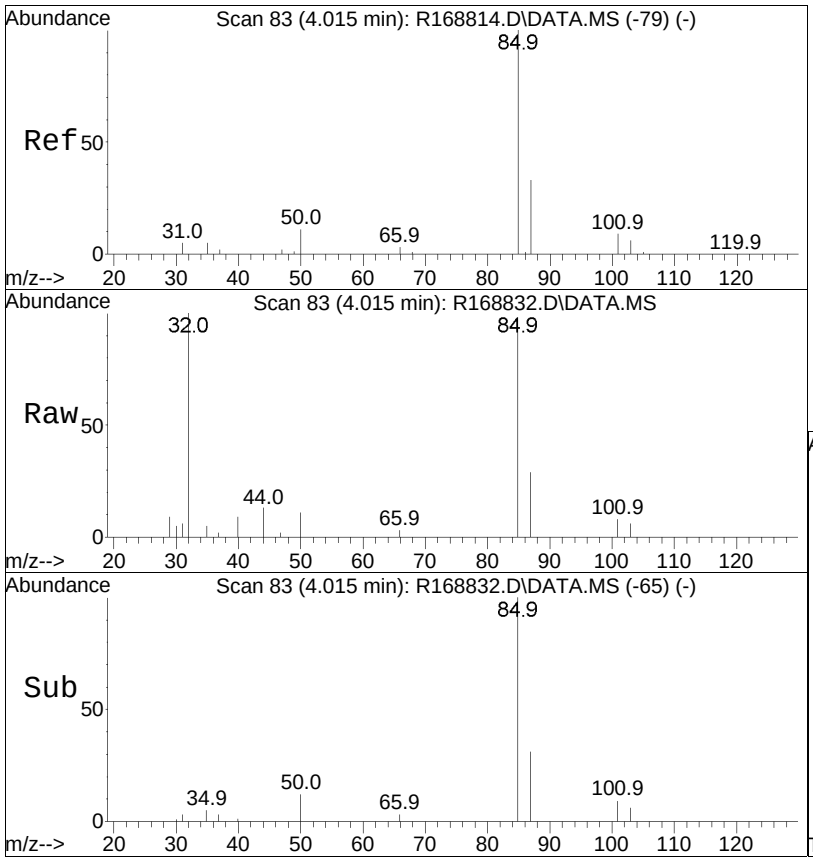
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168832.D
Acq On : 24 Oct 2019 6:58 pm
Operator : AIRPIANO1:TS
Sample : L1948939-03,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:33:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

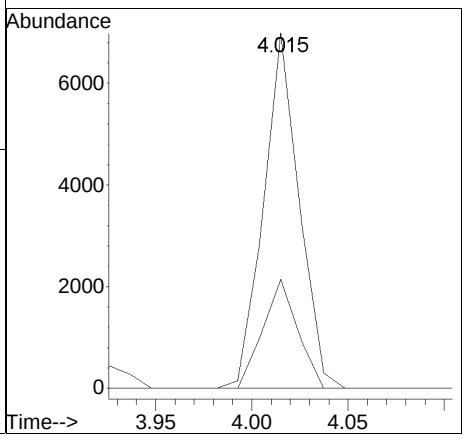


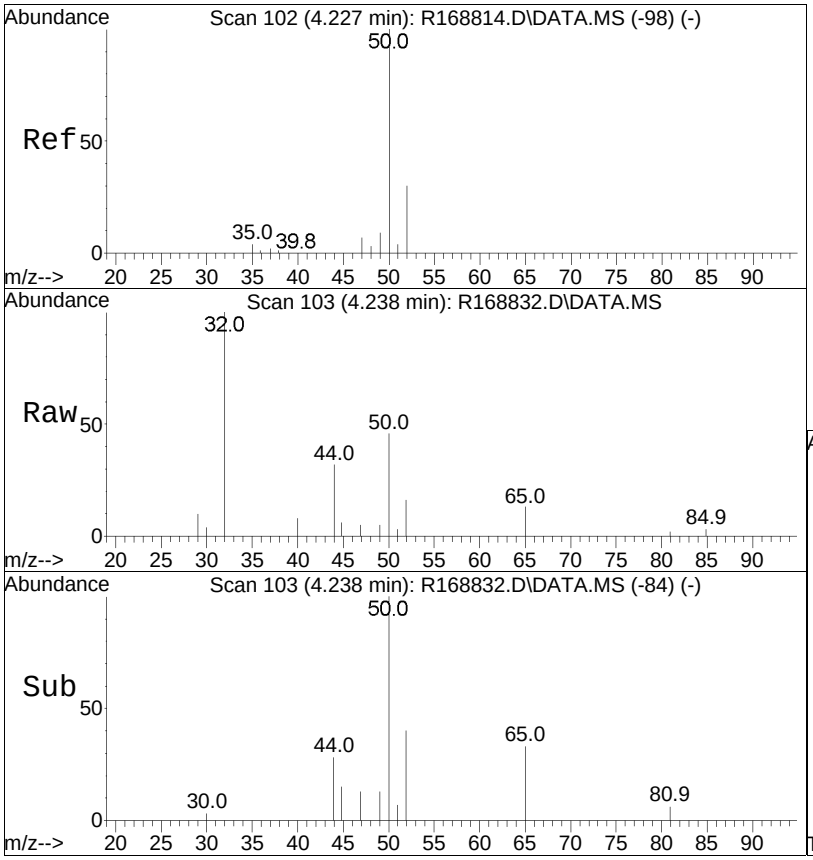


#5
dichlorodifluoromethane
Concen: 0.33 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 85 Resp: 8984

Ion	Ratio	Lower	Upper
85	100		
87	30.7	26.1	39.1

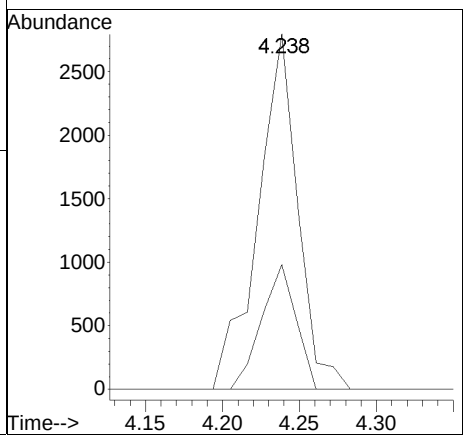


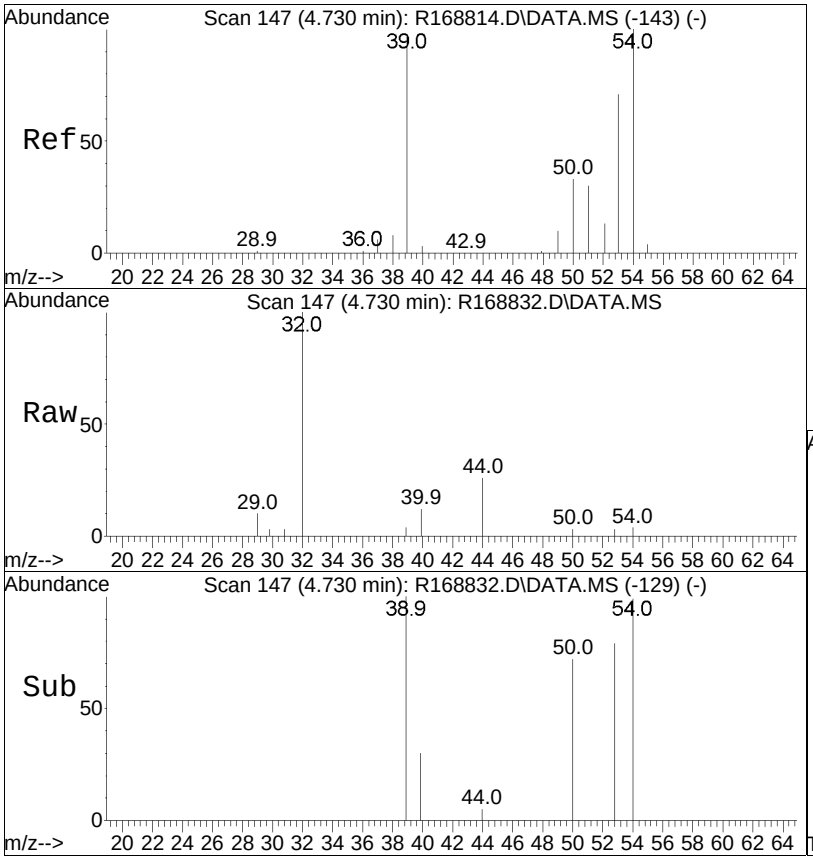


#6
chloromethane
Concen: 0.55 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 50 Resp: 5043

Ion	Ratio	Lower	Upper
50	100		
52	35.1	23.7	35.5

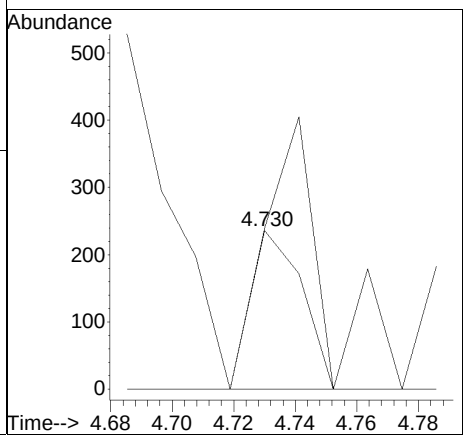


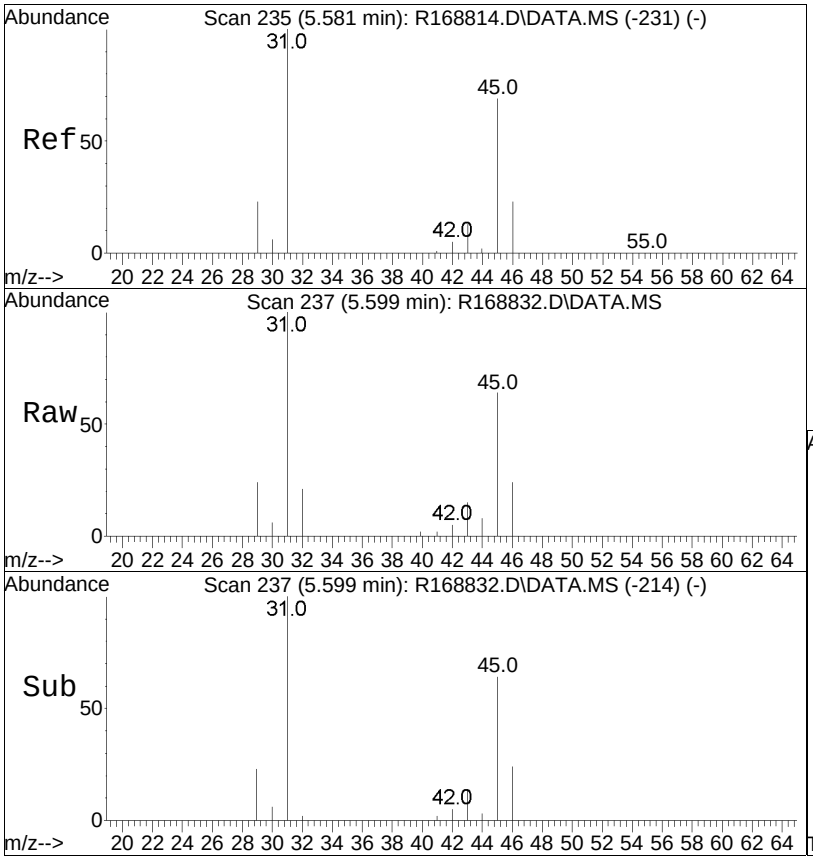


#10
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.730 min Scan# 147
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 54 Resp: 274

Ion	Ratio	Lower	Upper
54	100		
39	101.3	79.2	118.8

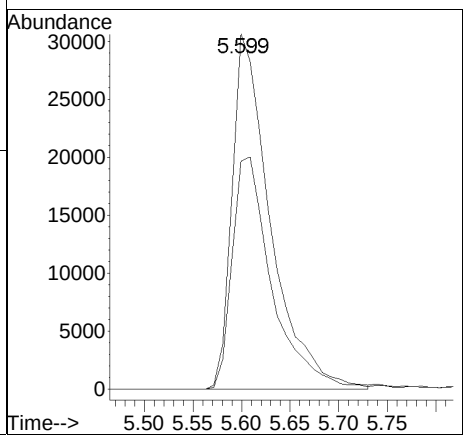


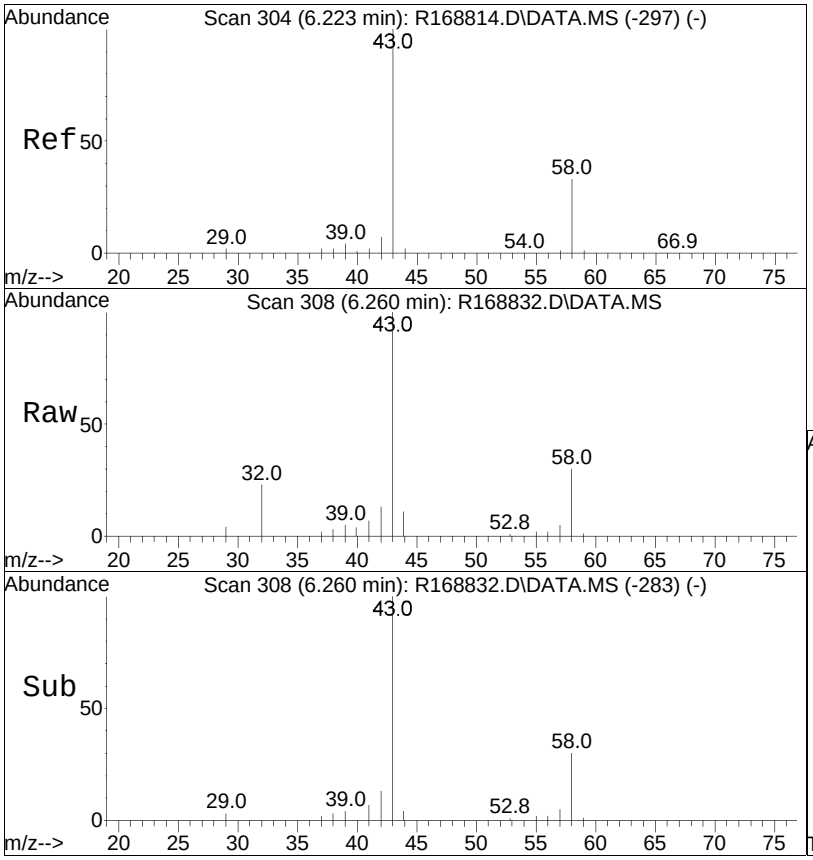


#15
ethanol
Concen: 13.67 ppbV
RT: 5.599 min Scan# 237
Delta R.T. 0.019 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 31 Resp: 84343

Ion	Ratio	Lower	Upper
31	100		
45	64.2	54.3	81.5

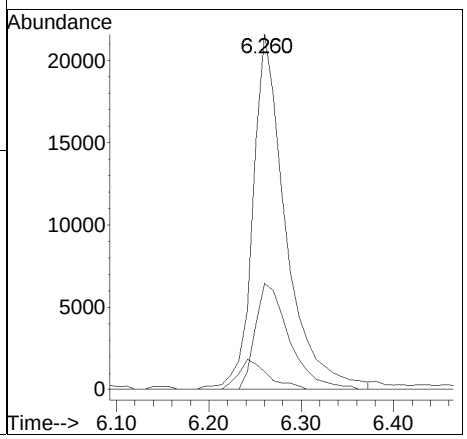


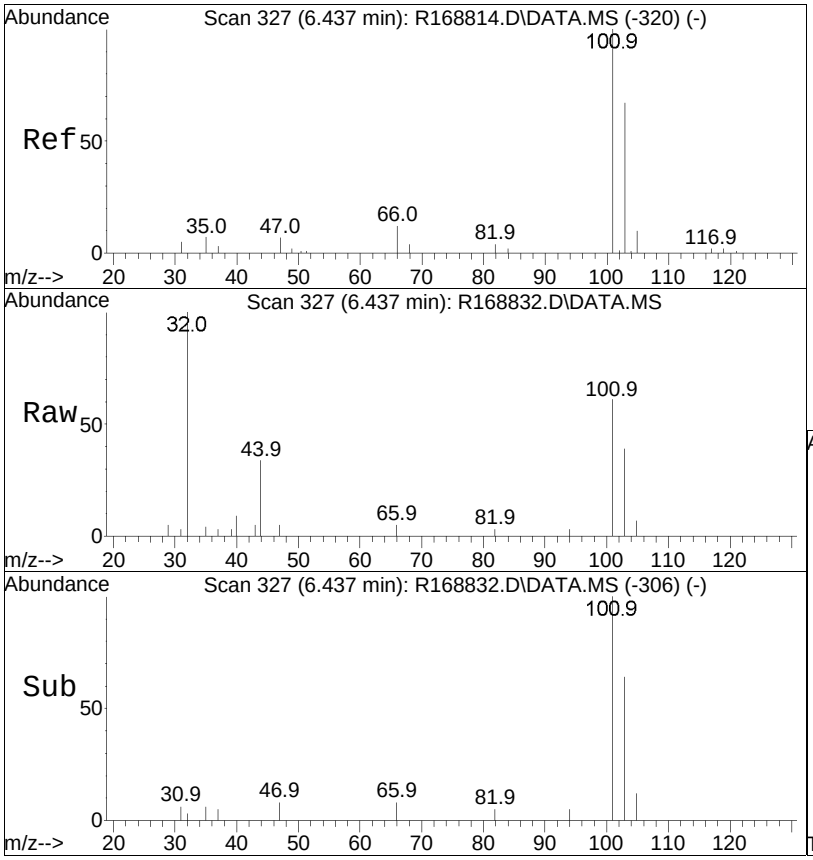


#19
acetone
Concen: 3.14 ppbV
RT: 6.260 min Scan# 308
Delta R.T. 0.037 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 43 Resp: 53501

Ion	Ratio	Lower	Upper
43	100		
58	29.9	26.5	39.7
57	5.0	0.8	1.2#

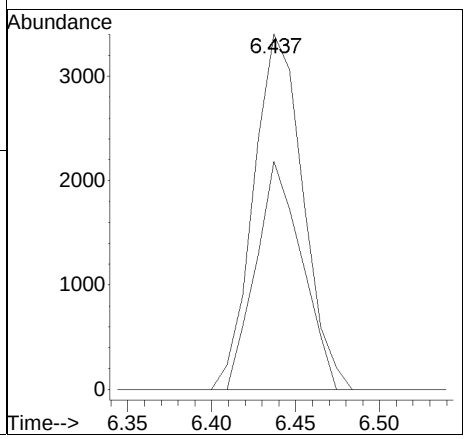


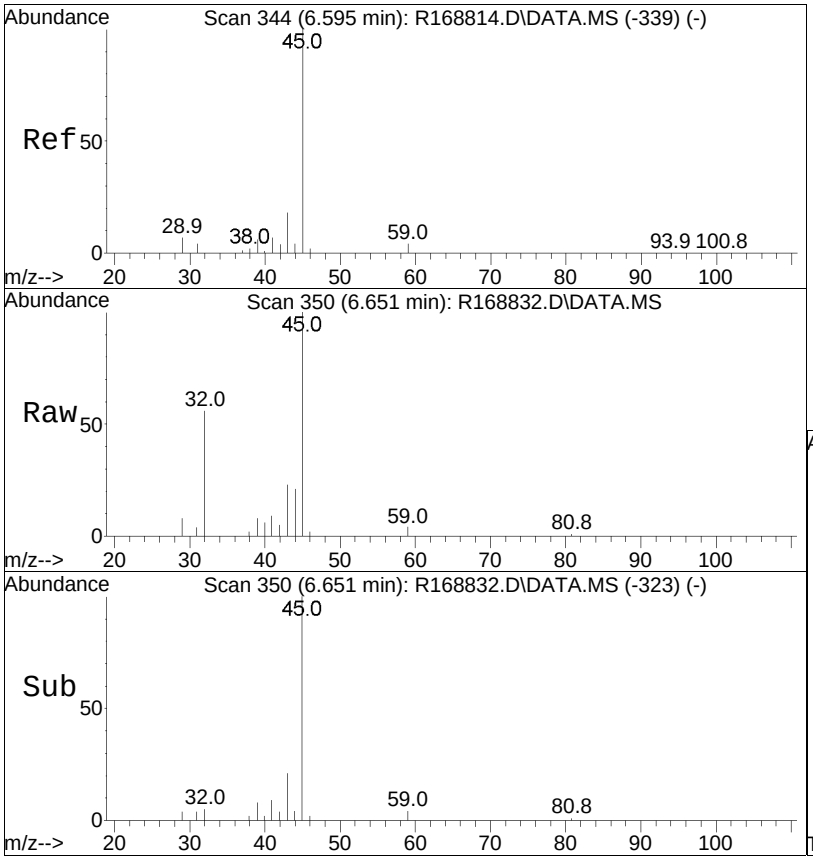


#21
trichlorofluoromethane
Concen: 0.24 ppbV
RT: 6.437 min Scan# 327
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:101 Resp: 6988

Ion	Ratio	Lower	Upper
101	100		
103	64.1	53.4	80.2

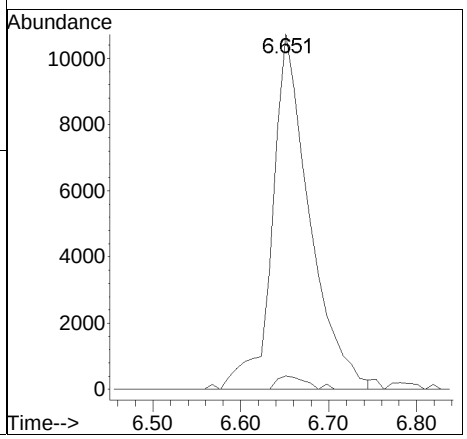


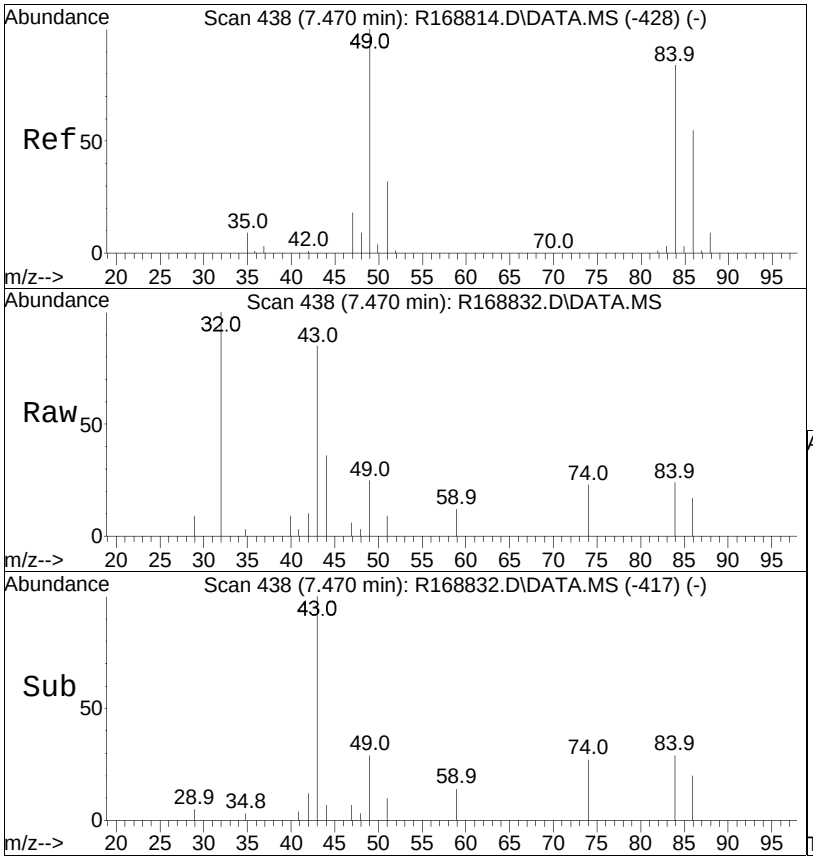


#22
isopropyl alcohol
Concen: 1.69 ppbV
RT: 6.651 min Scan# 350
Delta R.T. 0.056 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 45 Resp: 31746

Ion	Ratio	Lower	Upper
45	100		
59	3.8	3.4	5.0

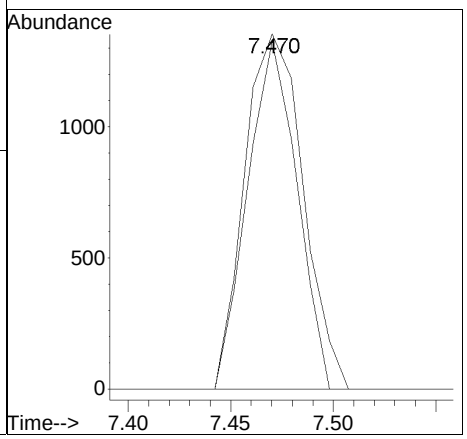


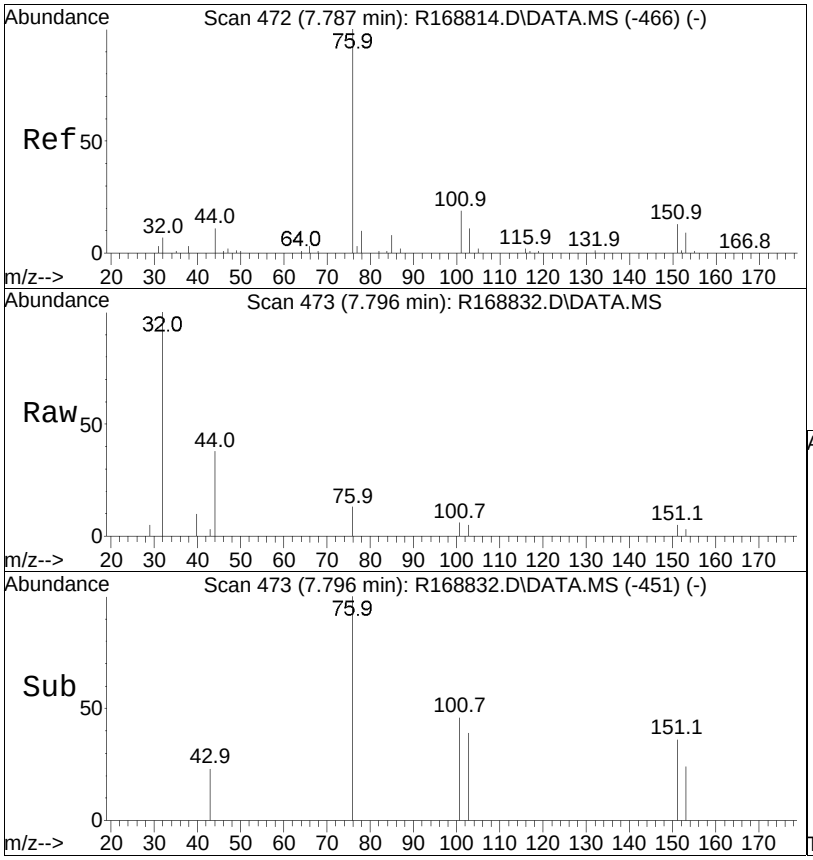


#28
methylene chloride
Concen: 0.22 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 49 Resp: 2694

Ion	Ratio	Lower	Upper
49	100		
84	98.1	67.3	100.9

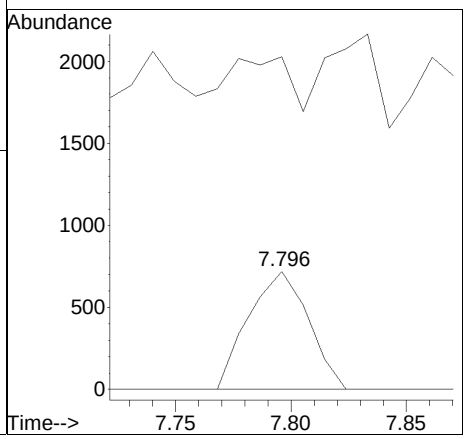


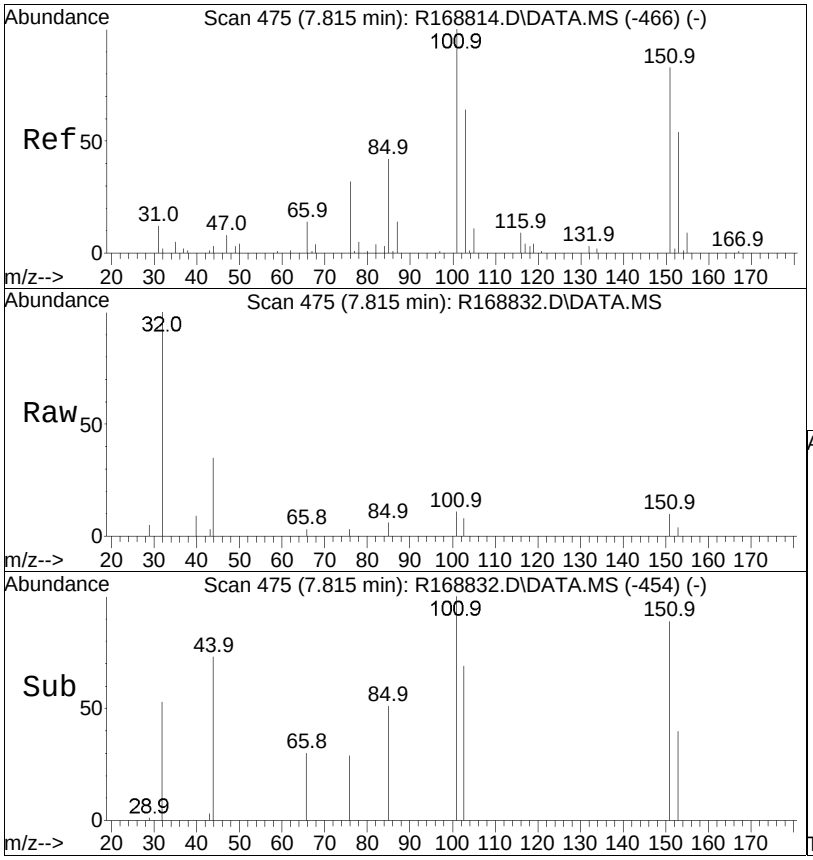


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.796 min Scan# 473
Delta R.T. 0.009 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 76 Resp: 1297

Ion	Ratio	Lower	Upper
76	100		
44	282.1	9.3	13.9#

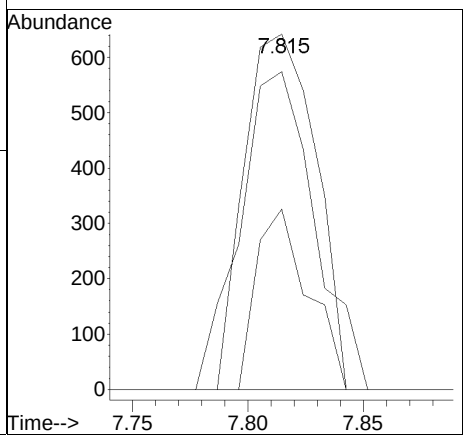


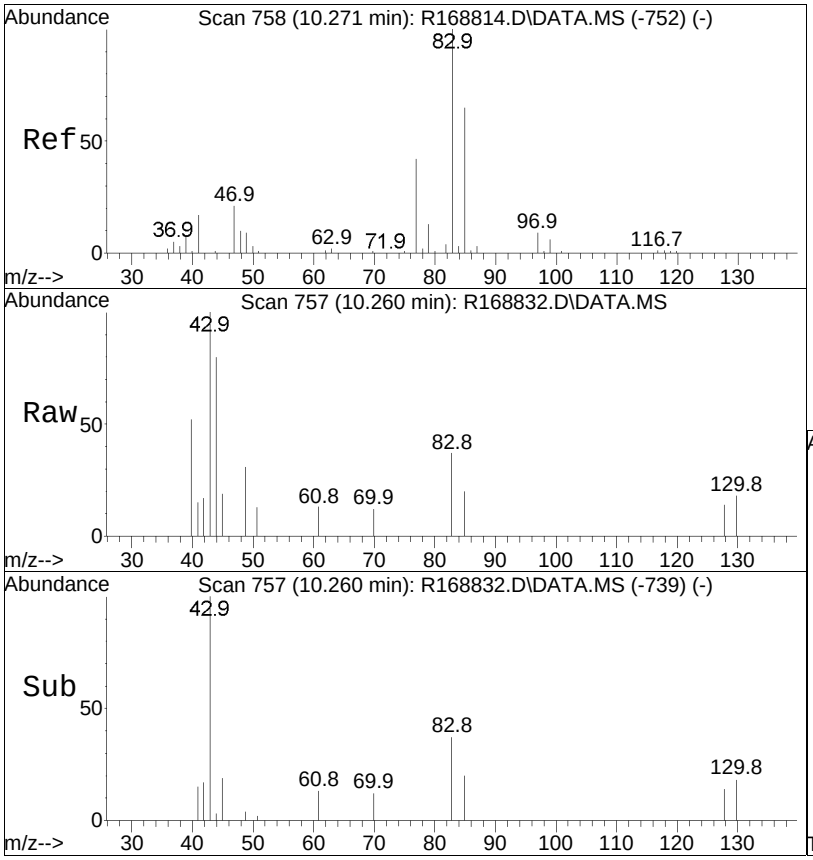


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:101 Resp: 1386

Ion	Ratio	Lower	Upper
101	100		
85	50.8	33.2	49.8#
151	89.4	66.2	99.2

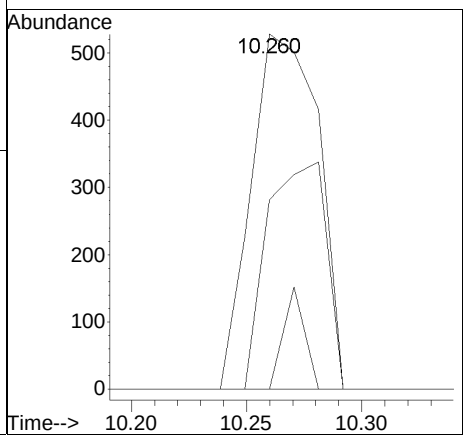


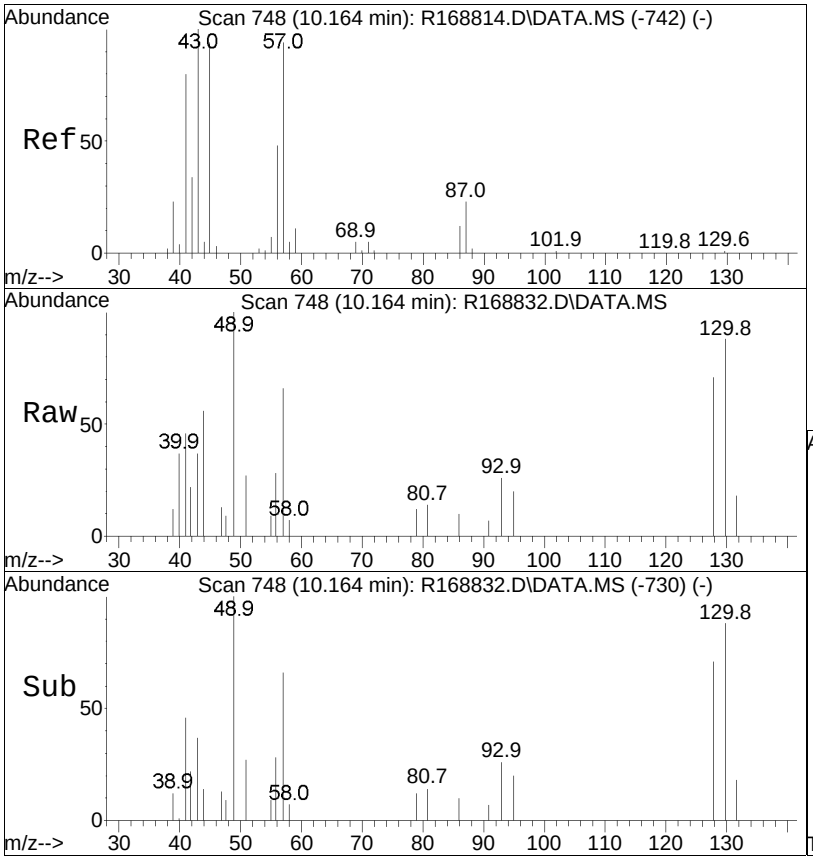


#39
chloroform
Concen: 0.03 ppbV
RT: 10.260 min Scan# 757
Delta R.T. -0.011 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 83 Resp: 1070

Ion	Ratio	Lower	Upper
83	100		
85	53.4	52.1	78.1
47	0.0	17.3	25.9#

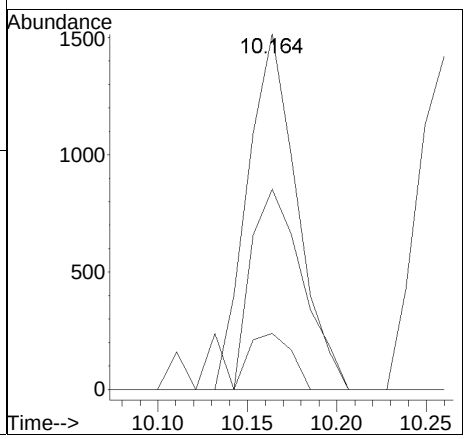


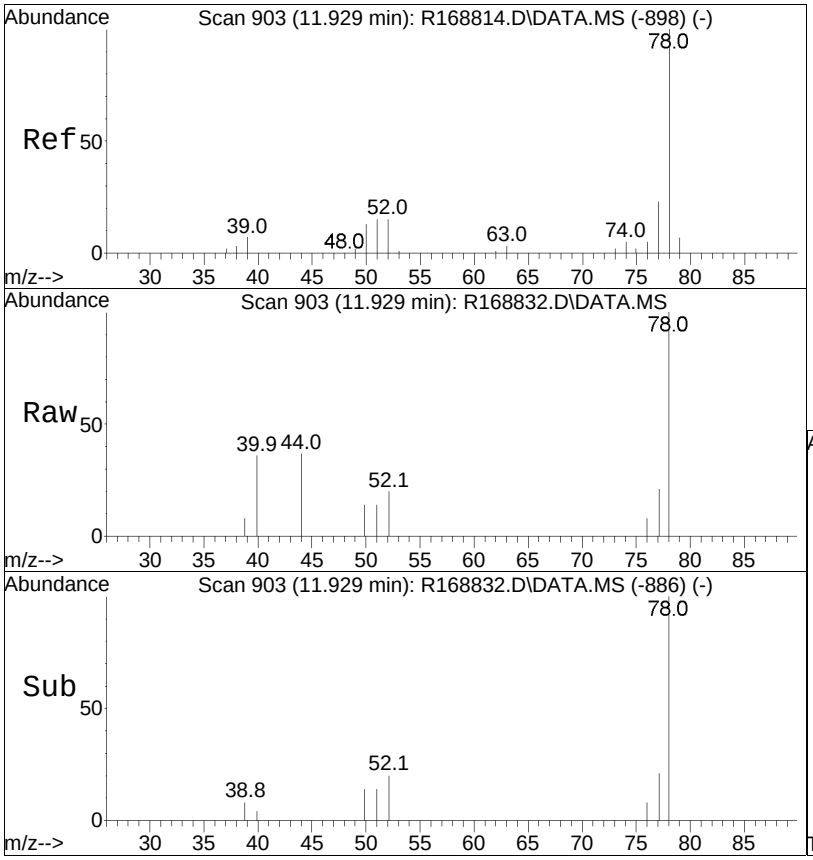


#44
hexane
Concen: 0.12 ppbV
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 57 Resp: 2922

Ion	Ratio	Lower	Upper
57	100		
43	56.4	85.5	128.3#
86	15.8	10.5	15.7#

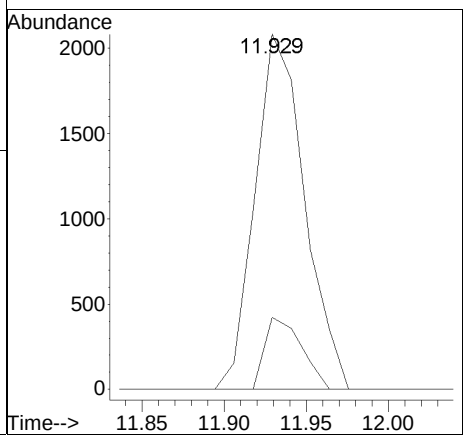


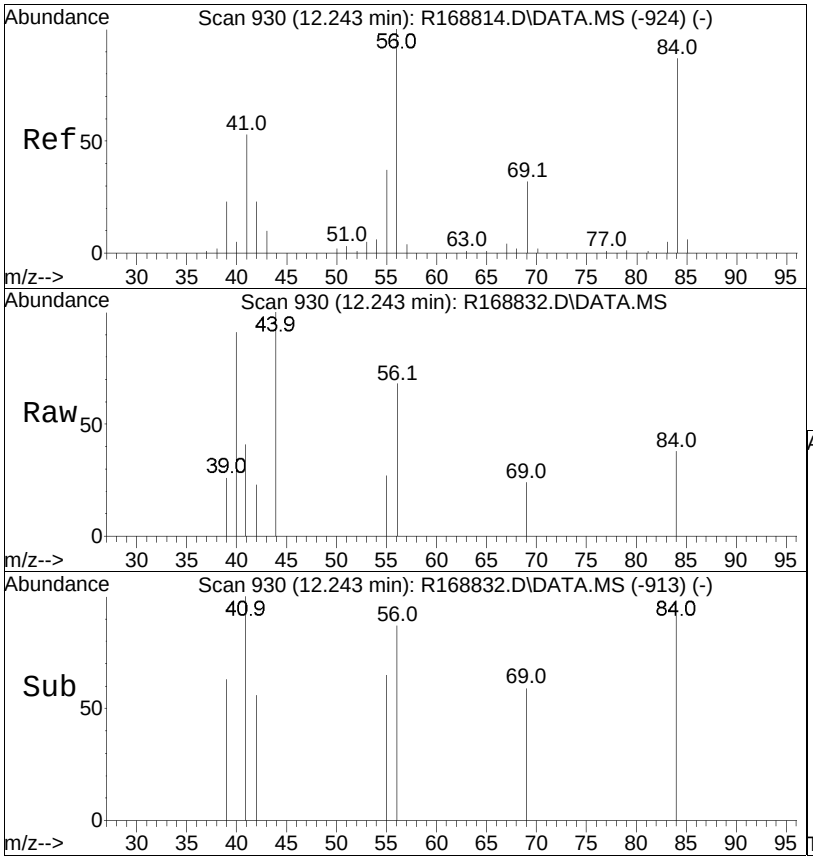


#50
benzene
Concen: 0.11 ppbV
RT: 11.929 min Scan# 903
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 78 Resp: 4379

Ion	Ratio	Lower	Upper
78	100		
52	20.2	11.7	17.5#

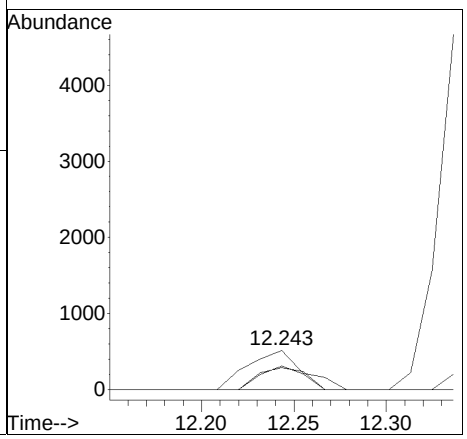


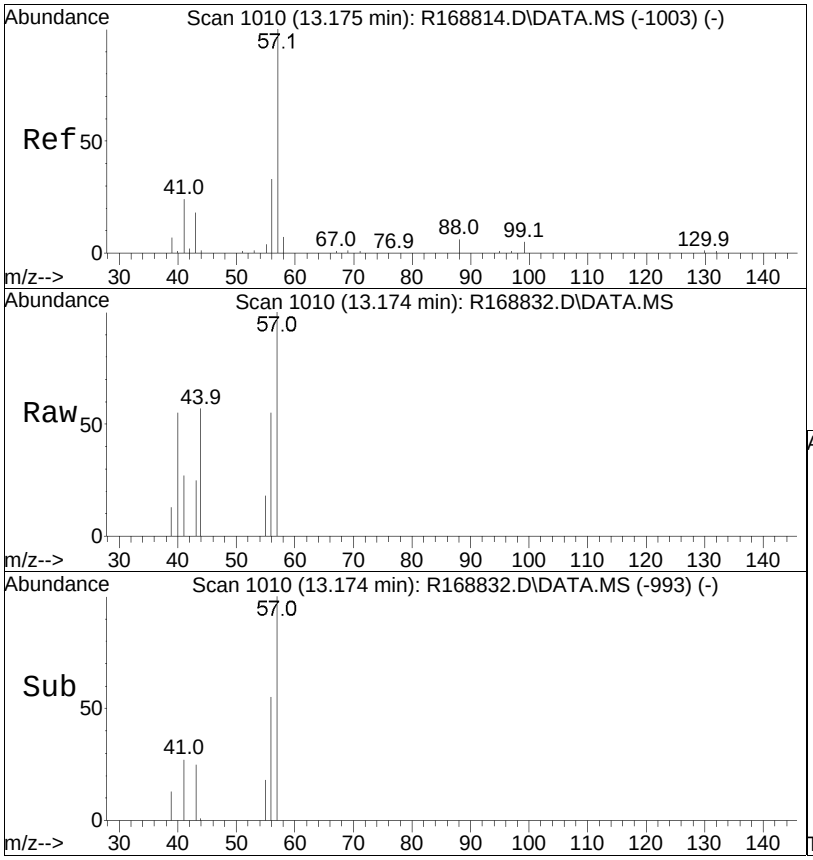


#53
cyclohexane
Concen: 0.05 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 56 Resp: 1074

Ion	Ratio	Lower	Upper
56	100		
84	55.9	70.1	105.1#
41	60.2	42.6	63.8

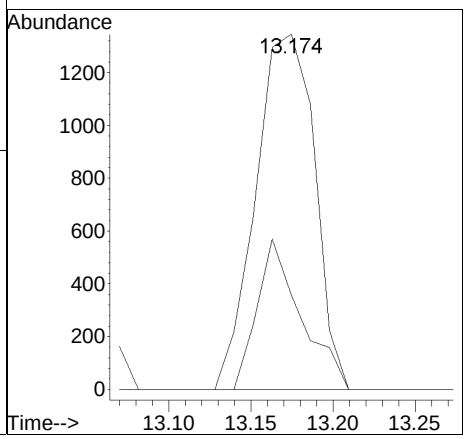


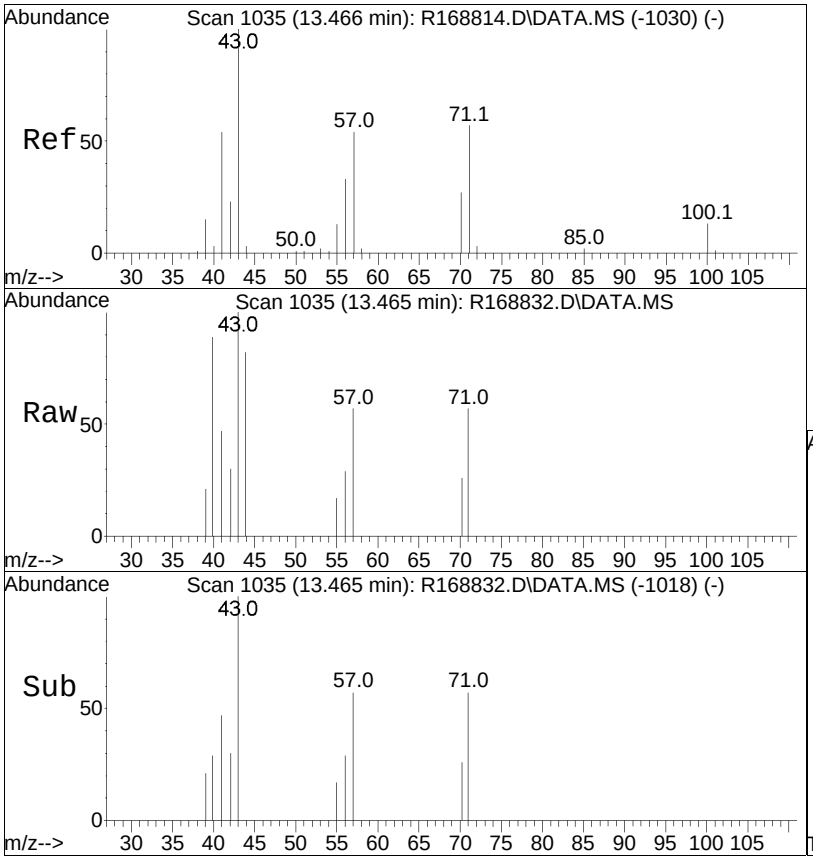


#60
2,2,4-trimethylpentane
Concen: 0.05 ppbV
RT: 13.174 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 57 Resp: 3362

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	26.6	19.3	28.9

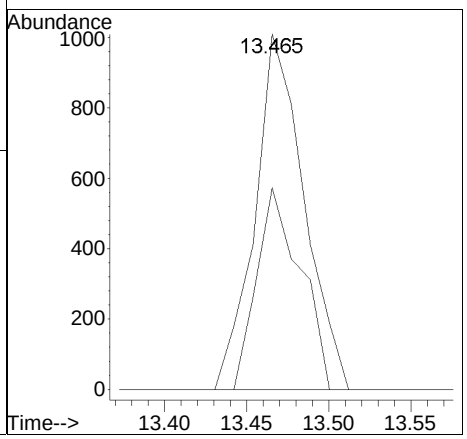


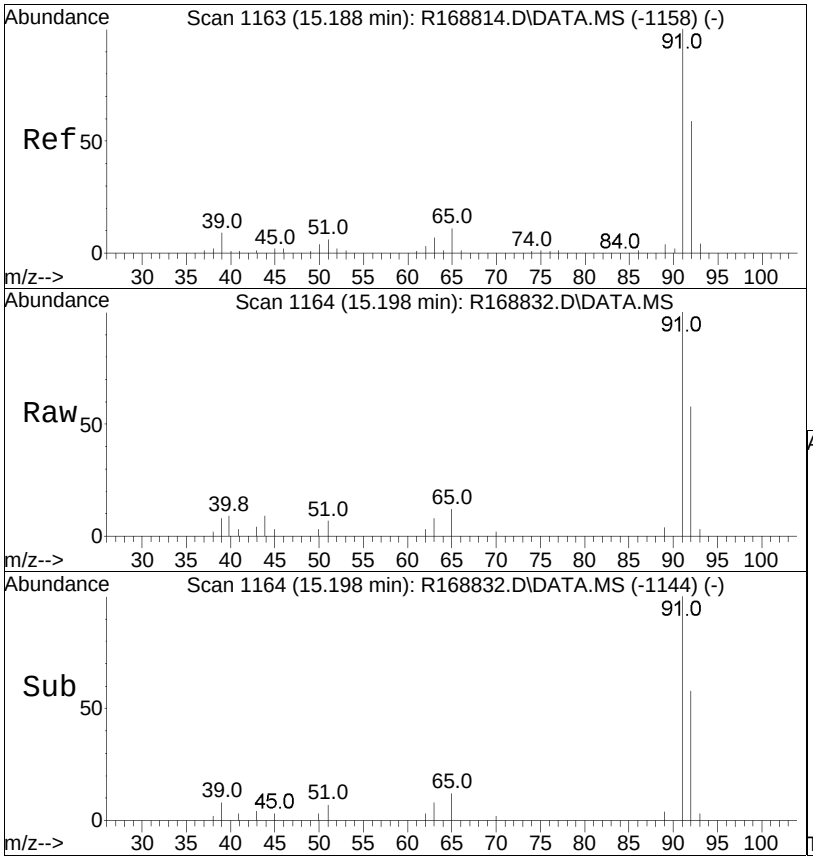


#62
heptane
Concen: 0.09 ppbV
RT: 13.465 min Scan# 1035
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 43 Resp: 2105

Ion	Ratio	Lower	Upper
43	100		
57	56.7	43.4	65.0
100	0.0	11.2	16.8#

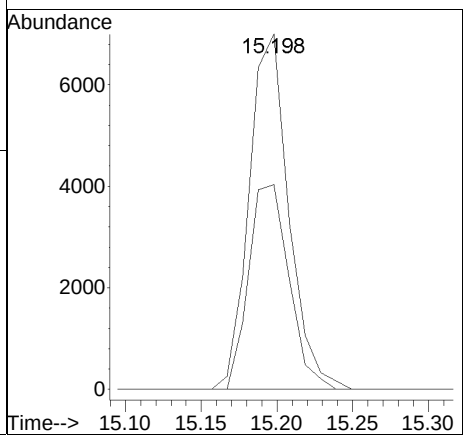


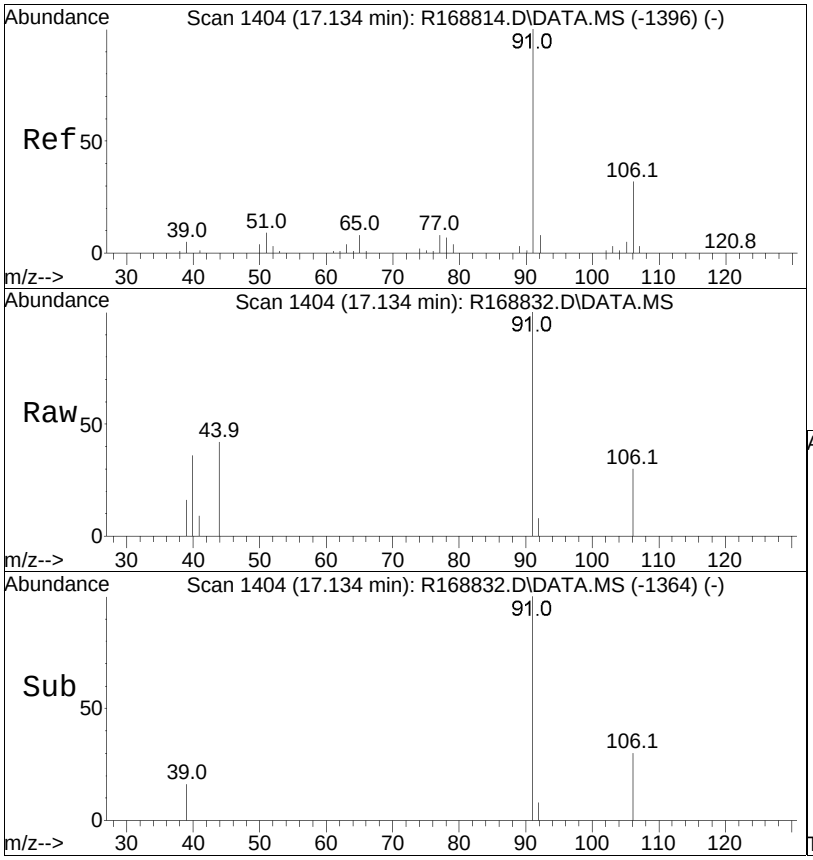


#68
toluene
Concen: 0.25 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 91 Resp: 12780

Ion	Ratio	Lower	Upper
91	100		
92	57.6	47.2	70.8

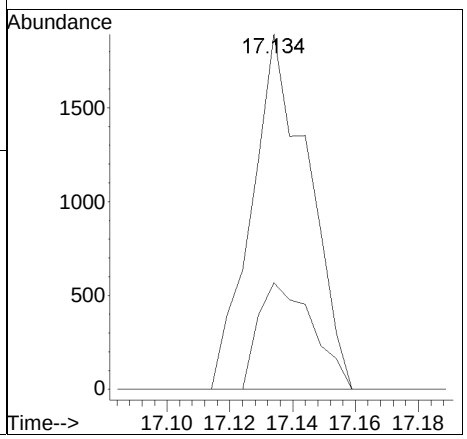


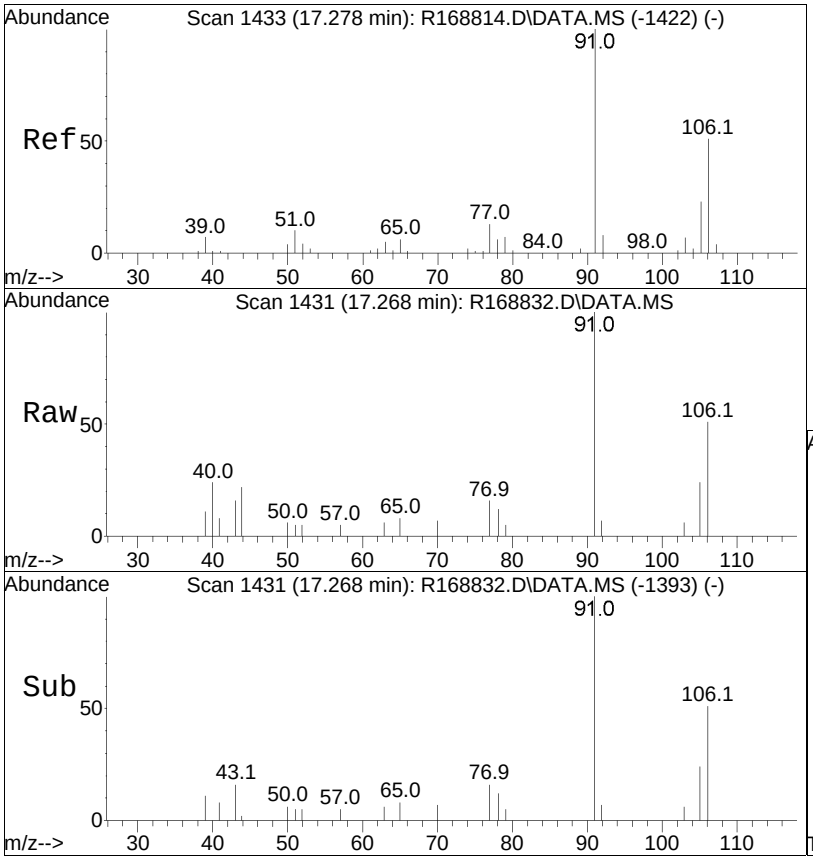


#81
ethylbenzene
Concen: 0.04 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 91 Resp: 2382

Ion	Ratio	Lower	Upper
91	100		
106	30.0	25.3	37.9

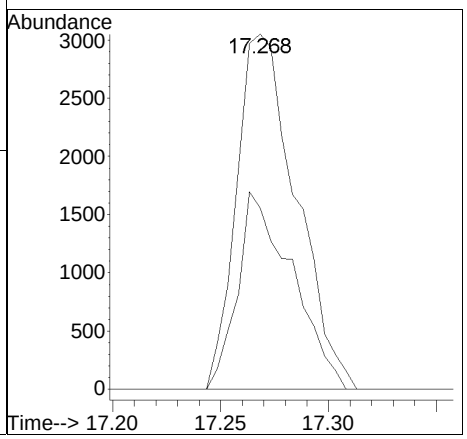


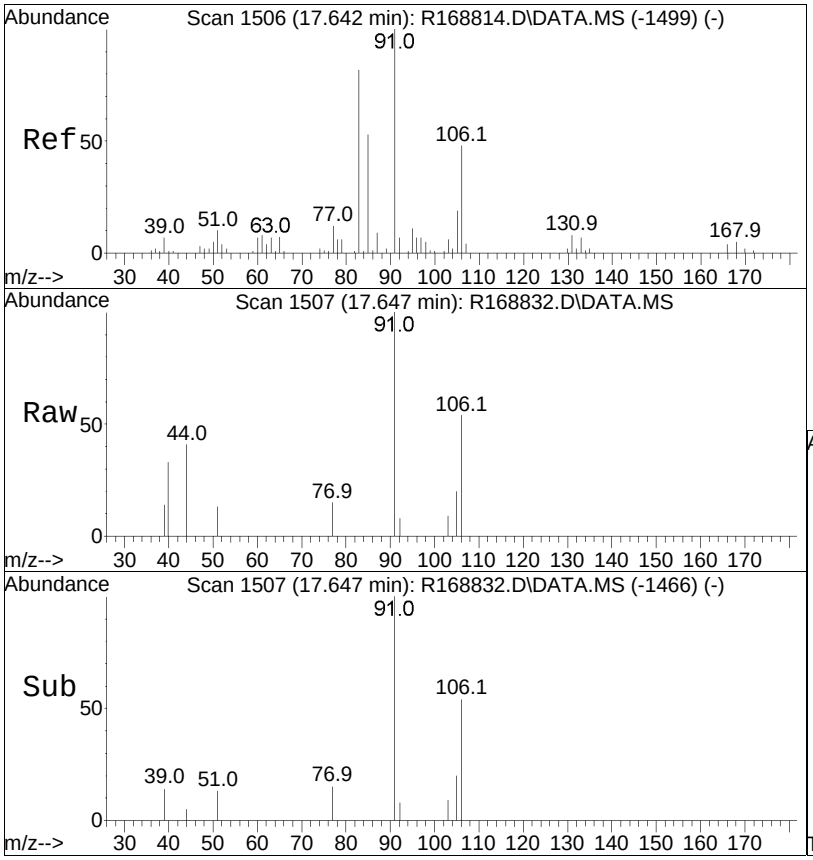


#83
m+p-xylene
Concen: 0.12 ppbV
RT: 17.268 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 91 Resp: 5855

Ion	Ratio	Lower	Upper
91	100		
106	51.0	40.8	61.2

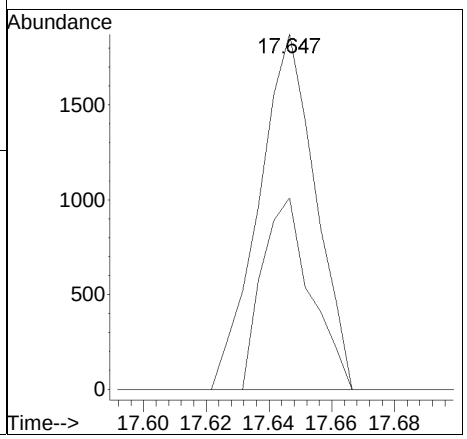


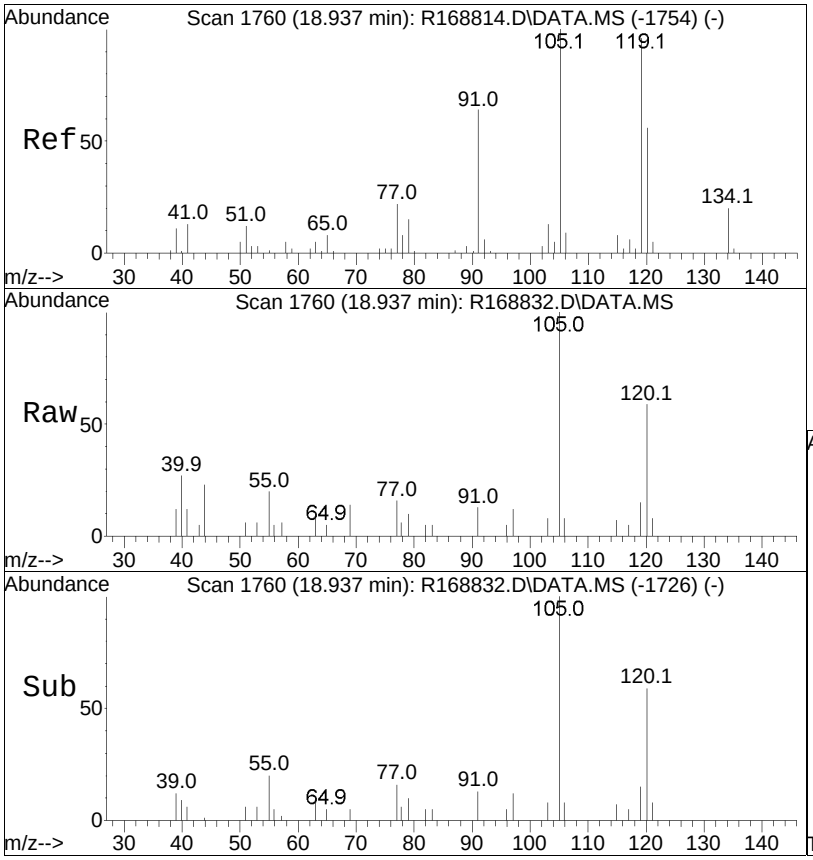


#87
o-xylene
Concen: 0.05 ppbV
RT: 17.647 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 91 Resp: 2356

Ion	Ratio	Lower	Upper
91	100		
106	53.9	38.3	57.5

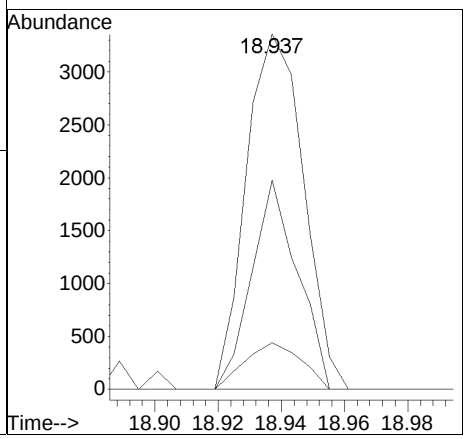




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:105 Resp: 4235

Ion	Ratio	Lower	Upper
105	100		
120	58.9	44.5	66.7
91	13.1	51.4	77.2#



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TFS1_191023.M
Data File	: R168832.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 6:58 pm	Instrument	: Air Piano 1
Sample	: L1948939-03,3,250,250	Quant Date	: 10/25/2019 7:48 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168834.D
Acq On : 24 Oct 2019 8:02 pm
Operator : AIRPIANO1:TS
Sample : L1948939-04,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 25 14:40:30 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	272591	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		83.69%	
43) 1,4-difluorobenzene	12.348	114	552611	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		74.53%	
67) chlorobenzene-D5	16.801	54	103598	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		83.75%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	7832	0.299	ppbV	100
6) chloromethane	4.238	50	4115	0.462	ppbV	95
7) Freon-114	4.373		0	N.D.		
10) 1,3-butadiene	4.730	54	392	0.049	ppbV #	64
13) bromomethane	5.125		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.599	31	101411	17.075	ppbV	98
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.260	43	68810	4.200	ppbV #	96
21) trichlorofluoromethane	6.437	101	5471	0.199	ppbV	92
22) isopropyl alcohol	6.642	45	57415	3.167	ppbV #	97
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	2652	0.223	ppbV	88
29) 3-chloropropene	7.628		0	N.D.		
30) carbon disulfide	7.796		0	N.D.		
31) Freon 113	7.815	101	1330	0.057	ppbV #	84
32) trans-1,2-dichloroethene	8.539		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	9.025		0	N.D.		
36) 2-butanone	9.455	43	7319	0.304	ppbV #	98
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	10.271	83	1502	0.045	ppbV	97
40) Tetrahydrofuran	10.816	42	2186	0.151	ppbV #	87
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	10.164	57	4720M6	0.220	ppbV	
50) benzene	11.929	78	5617	0.159	ppbV	93
53) cyclohexane	12.243	56	2264	0.130	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168834.D
Acq On : 24 Oct 2019 8:02 pm
Operator : AIRPIANO1:TS
Sample : L1948939-04,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 25 14:40:30 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

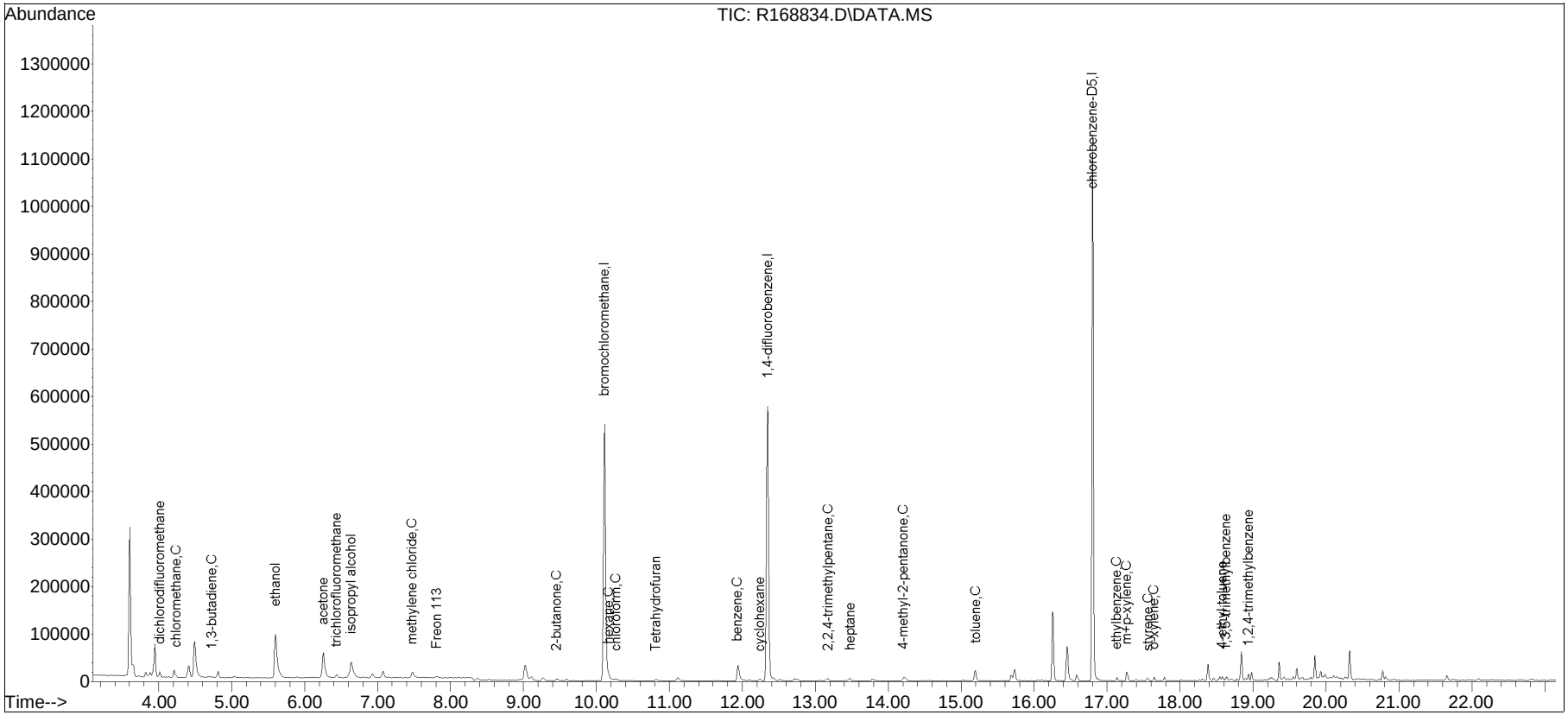
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	13.175	57	4559	0.084	ppbV #	90
62)	heptane	13.477	43	3206	0.163	ppbV #	85
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	14.209	43	7970	0.315	ppbV #	87
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	15.198	91	16964	0.346	ppbV	98
72)	2-hexanone	15.466		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.134	91	4985	0.080	ppbV	99
83)	m+p-xylene	17.263	91	11101	0.233	ppbV	99
84)	bromoform	0.000		0	N.D.		
85)	styrene	17.562	104	1261	0.033	ppbV #	87
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.642	91	4014	0.083	ppbV	88
96)	4-ethyl toluene	18.577	105	2303	0.031	ppbV #	96
97)	1,3,5-trimethylbenzene	18.627	105	2096	0.036	ppbV #	96
99)	1,2,4-trimethylbenzene	18.937	105	5169	0.091	ppbV #	64
101)	Benzyl Chloride	18.937		0	N.D.		
102)	1,3-dichlorobenzene	19.118		0	N.D.		
103)	1,4-dichlorobenzene	19.118		0	N.D.		
107)	1,2-dichlorobenzene	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	0.000		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

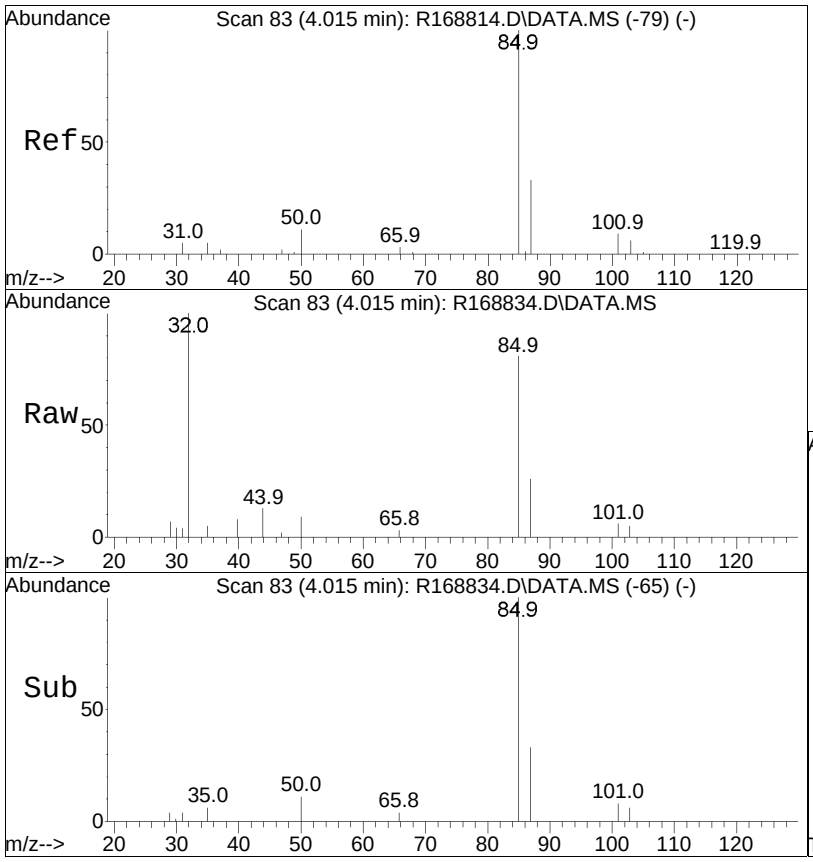
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168834.D
Acq On : 24 Oct 2019 8:02 pm
Operator : AIRPIANO1:TS
Sample : L1948939-04,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 25 14:40:30 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

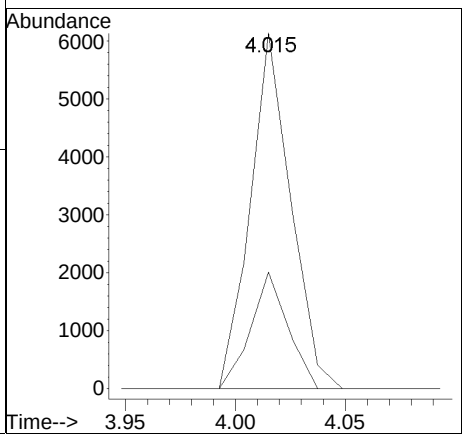


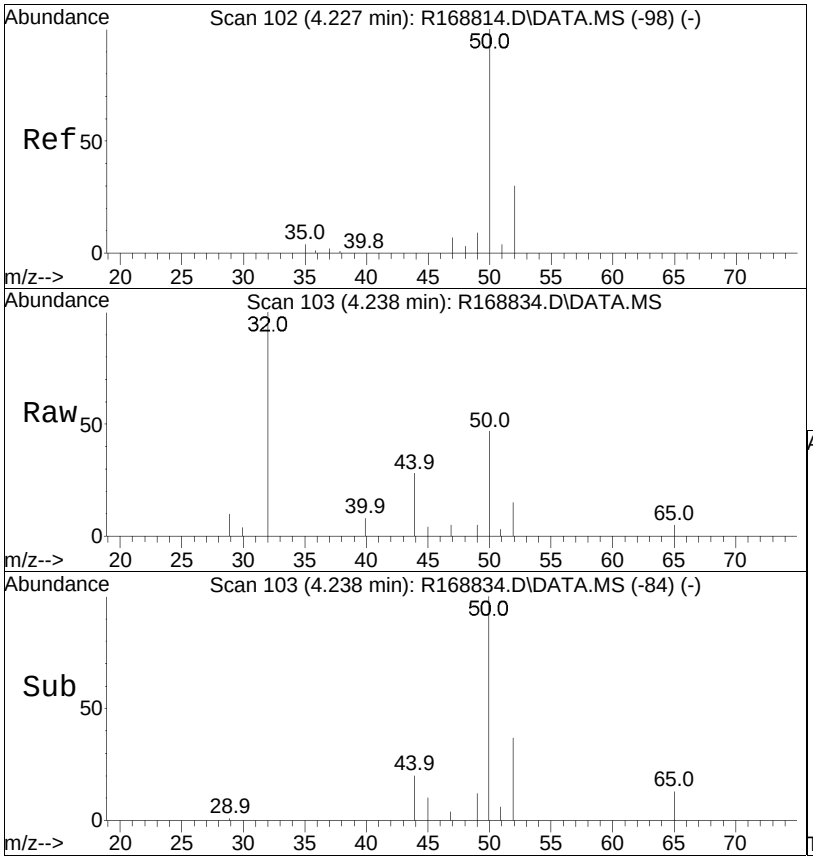


#5
dichlorodifluoromethane
Concen: 0.30 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 85 Resp: 7832

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.1	39.1

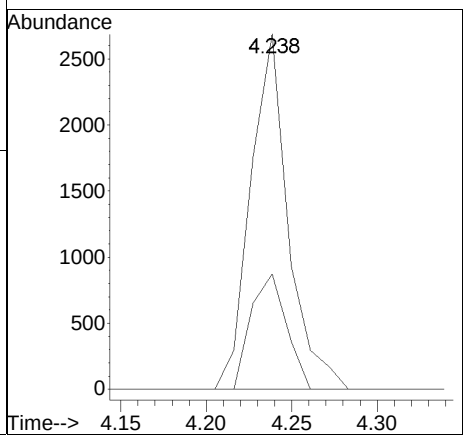


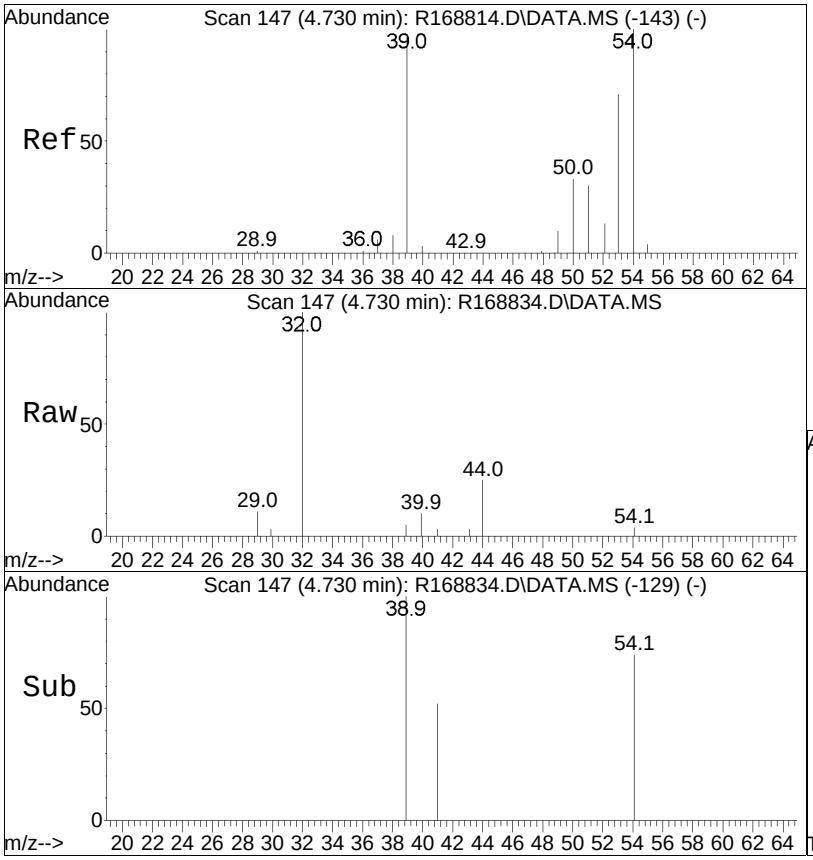


#6
chloromethane
Concen: 0.46 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 50 Resp: 4115

Ion	Ratio	Lower	Upper
50	100		
52	32.5	23.7	35.5

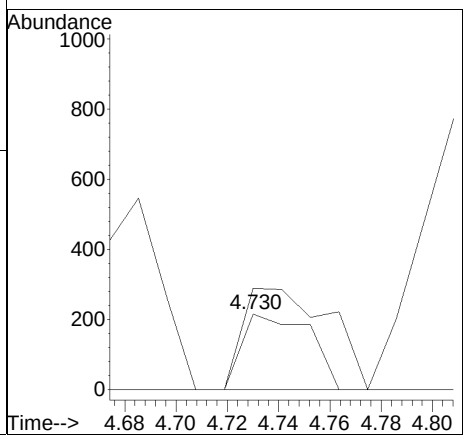


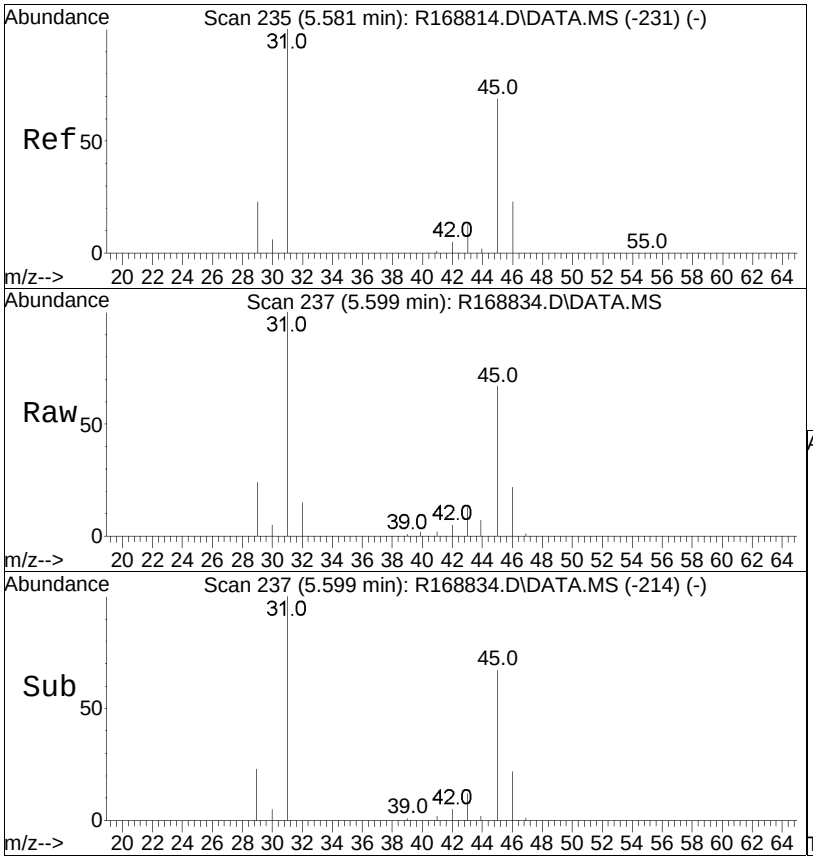


#10
1,3-butadiene
Concen: 0.05 ppbV
RT: 4.730 min Scan# 147
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 54 Resp: 392

Ion	Ratio	Lower	Upper
54	100		
39	134.4	79.2	118.8#

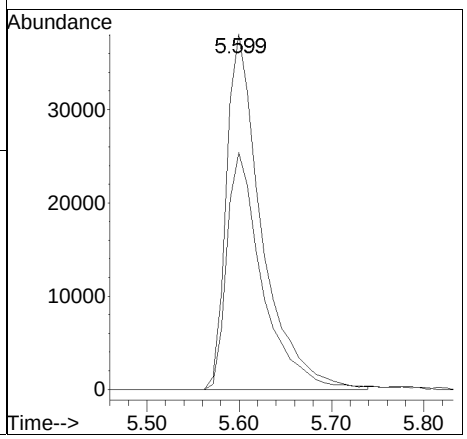


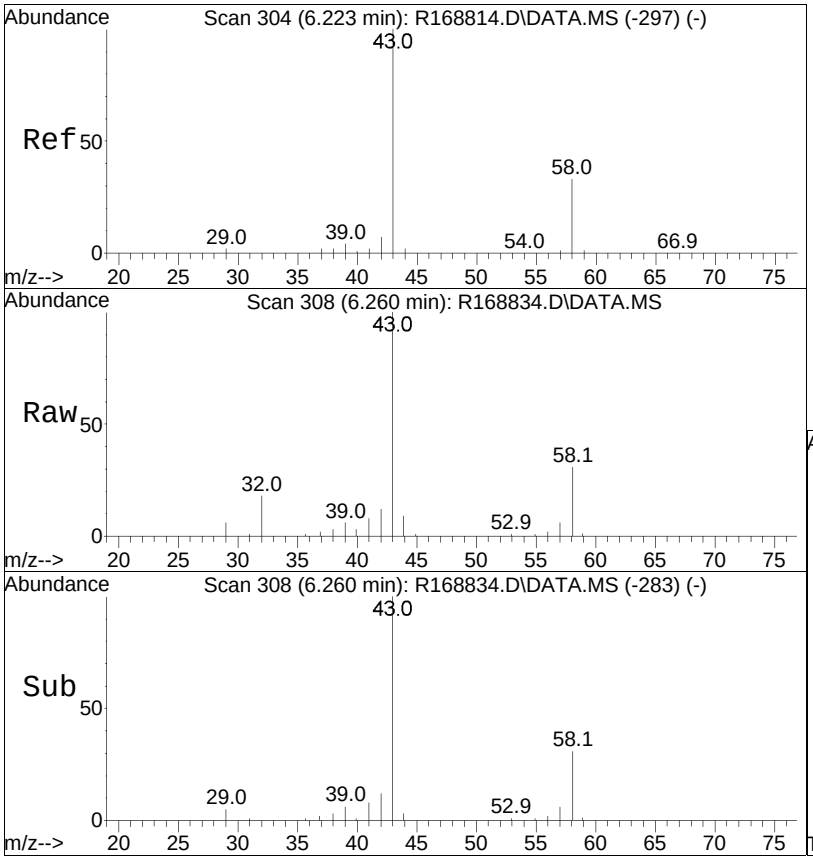


#15
ethanol
Concen: 17.07 ppbV
RT: 5.599 min Scan# 237
Delta R.T. 0.019 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 31 Resp: 101411

Ion	Ratio	Lower	Upper
31	100		
45	66.7	54.3	81.5

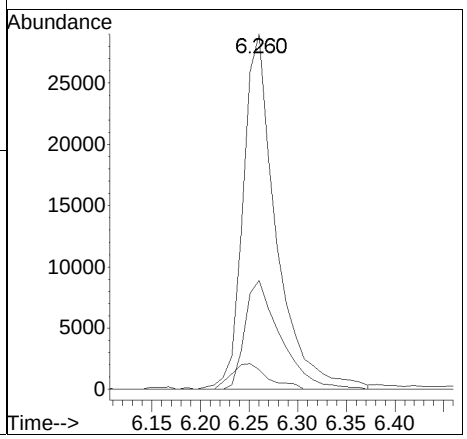


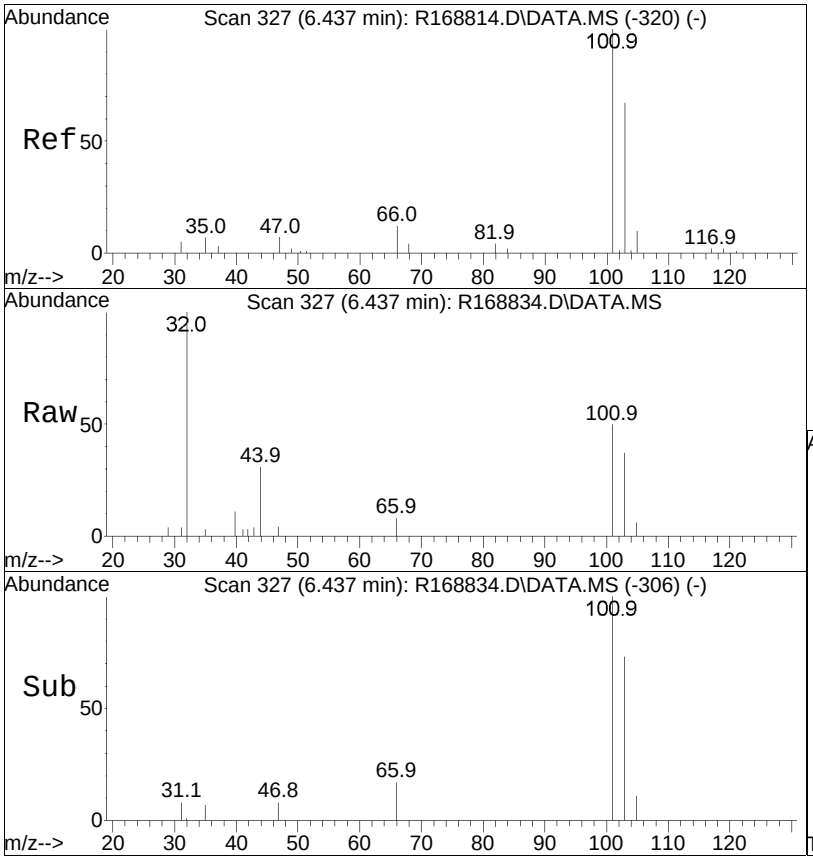


#19
acetone
Concen: 4.20 ppbV
RT: 6.260 min Scan# 308
Delta R.T. 0.037 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 43 Resp: 68810

Ion	Ratio	Lower	Upper
43	100		
58	30.7	26.5	39.7
57	5.6	0.8	1.2#

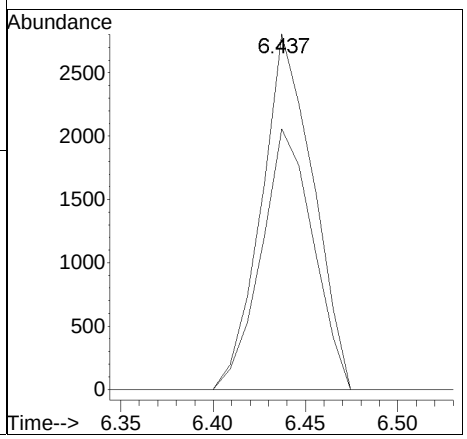


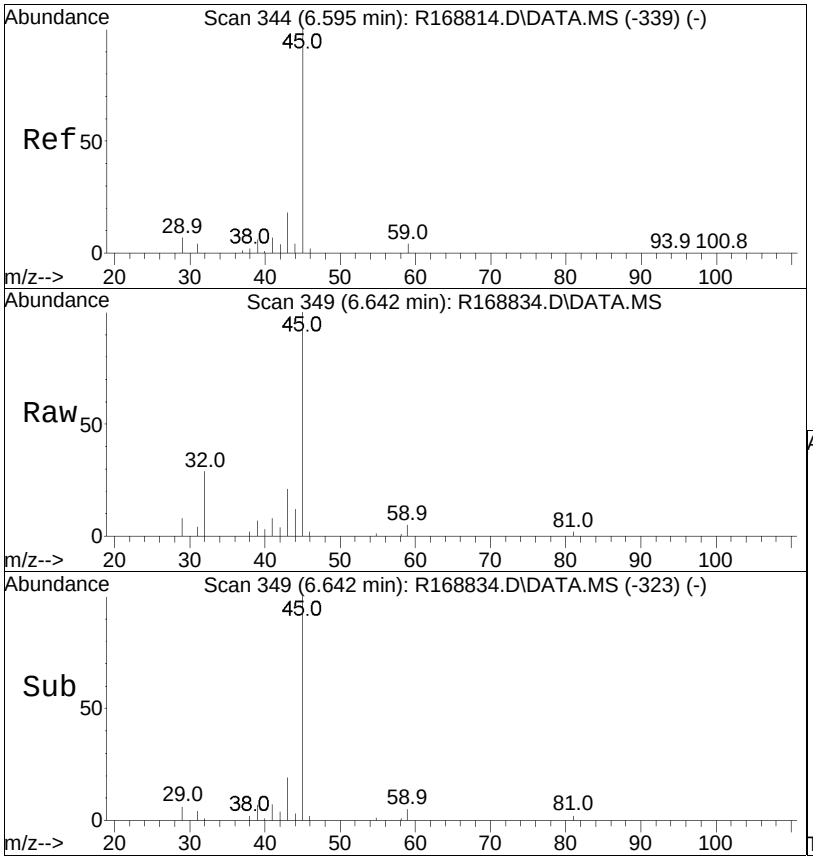


#21
trichlorofluoromethane
Concen: 0.20 ppbV
RT: 6.437 min Scan# 327
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:101 Resp: 5471

Ion	Ratio	Lower	Upper
101	100		
103	73.3	53.4	80.2

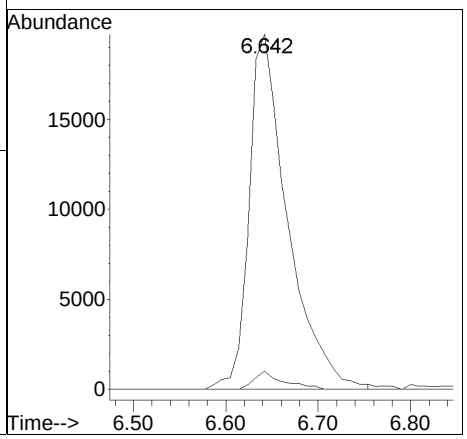


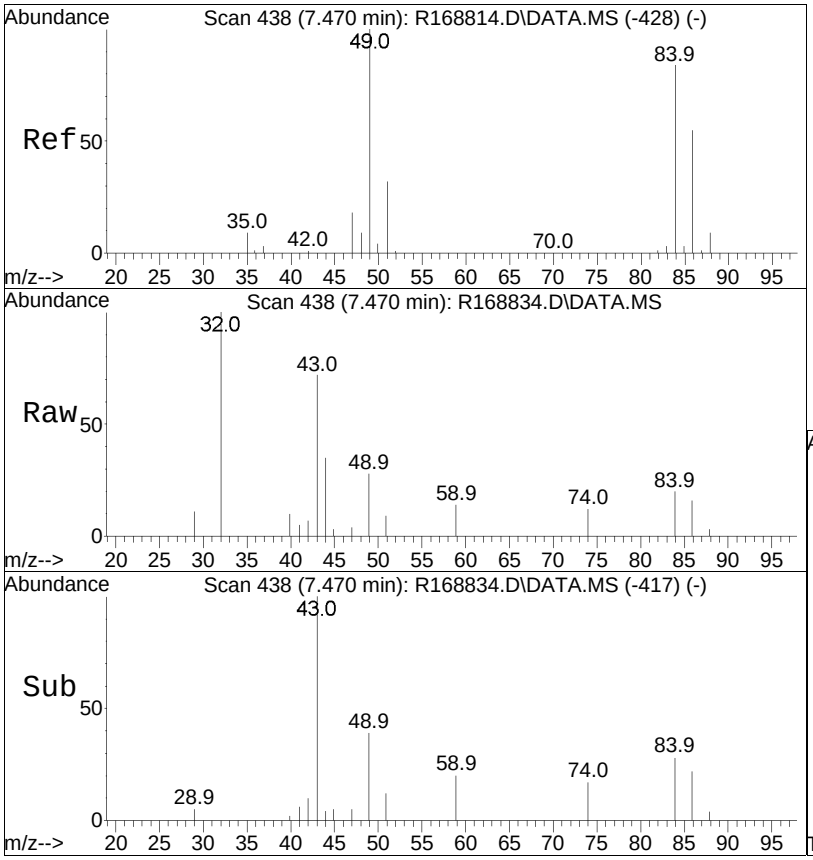


#22
isopropyl alcohol
Concen: 3.17 ppbV
RT: 6.642 min Scan# 349
Delta R.T. 0.046 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 45 Resp: 57415

Ion	Ratio	Lower	Upper
45	100		
59	5.1	3.4	5.0#

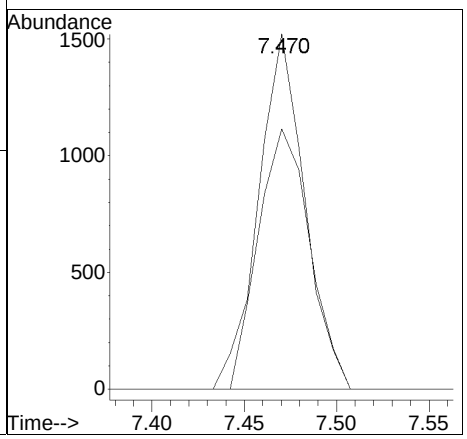


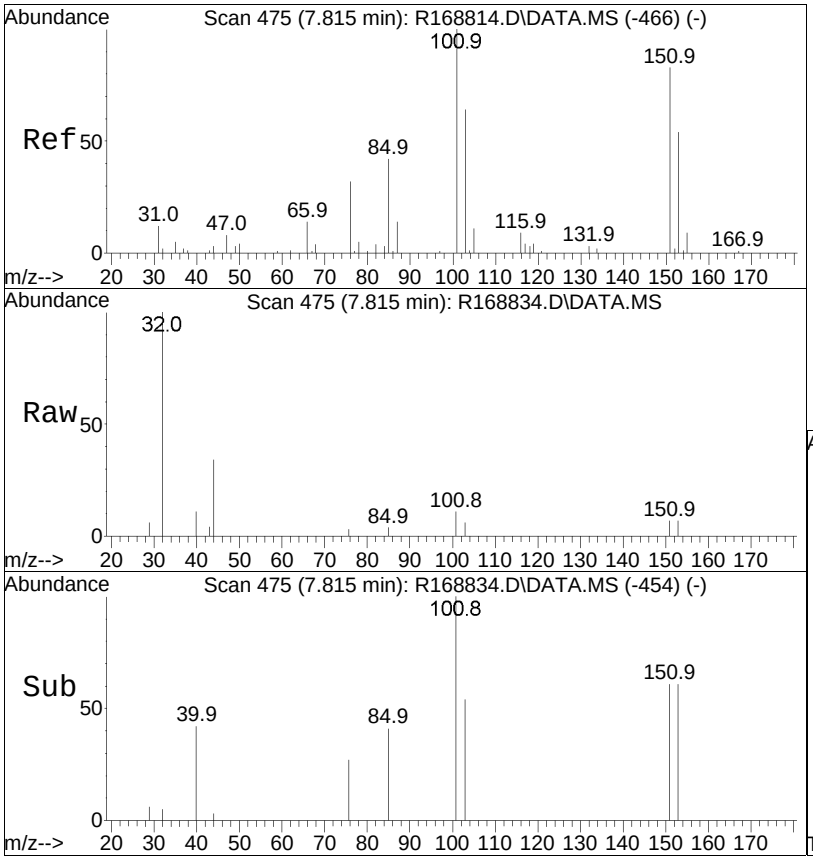


#28
methylene chloride
Concen: 0.22 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 49 Resp: 2652

Ion	Ratio	Lower	Upper
49	100		
84	73.3	67.3	100.9

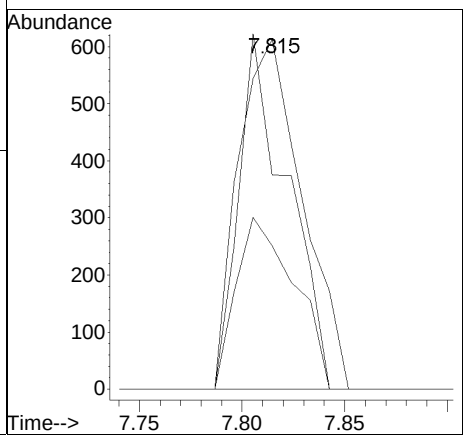


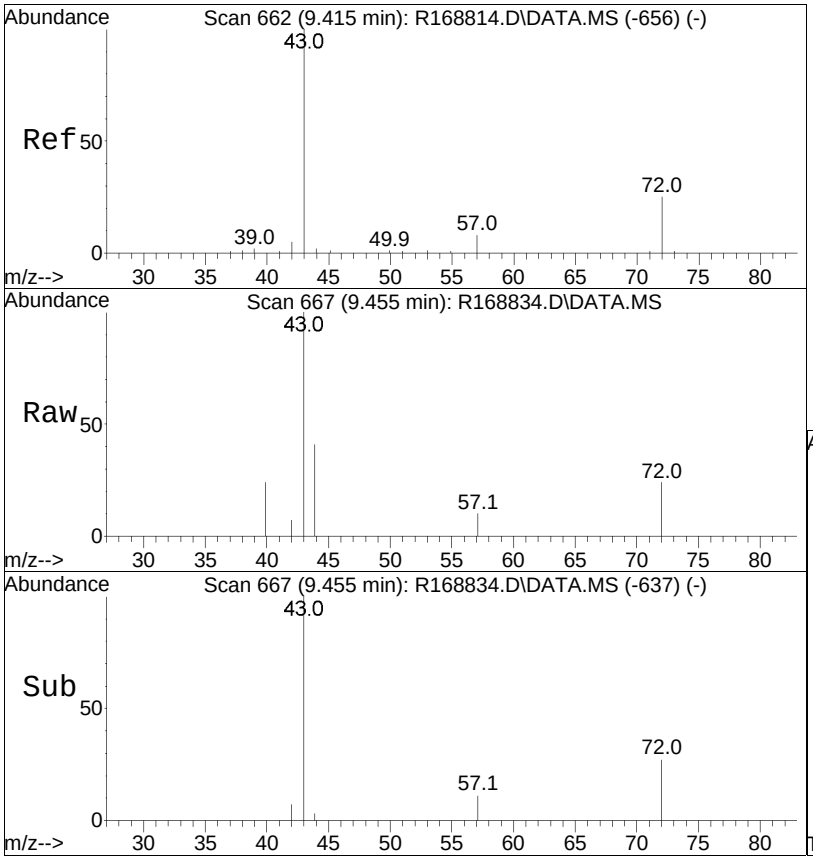


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:101 Resp: 1330

Ion	Ratio	Lower	Upper
101	100		
85	40.9	33.2	49.8
151	61.2	66.2	99.2#

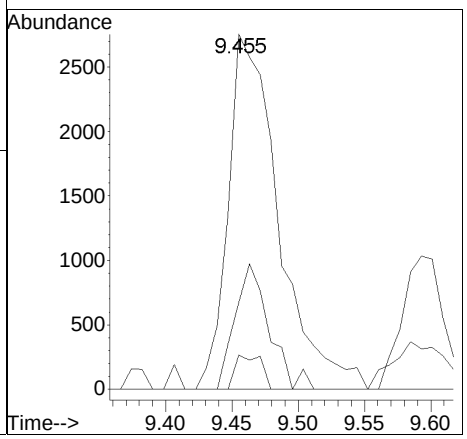


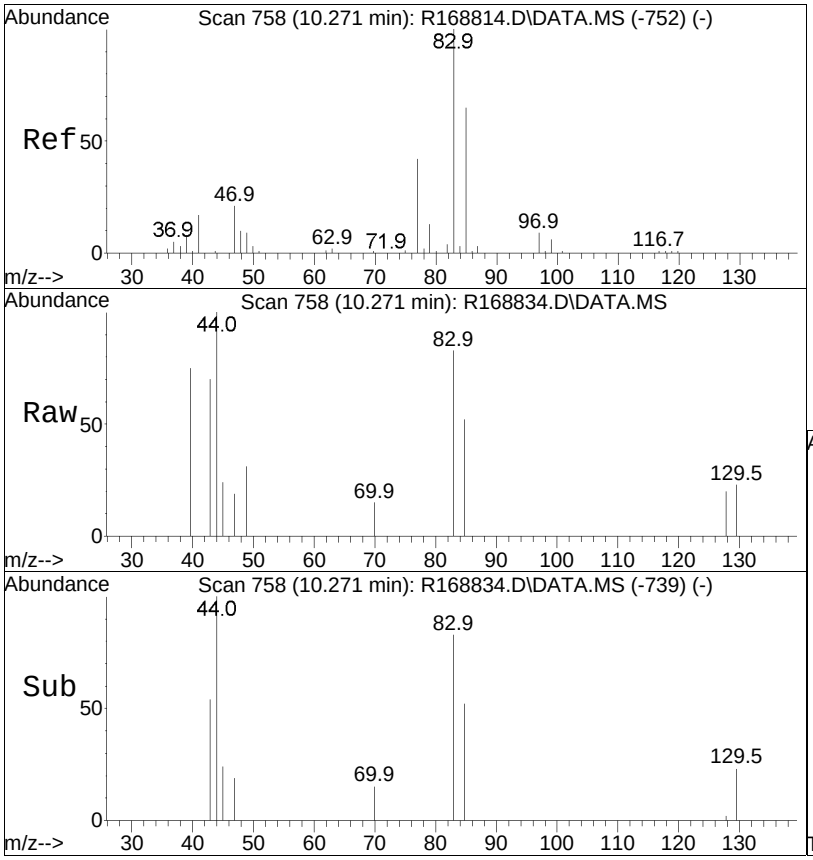


#36
2-butanone
Concen: 0.30 ppbV
RT: 9.455 min Scan# 667
Delta R.T. 0.041 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 43 Resp: 7319

Ion	Ratio	Lower	Upper
43	100		
72	24.5	20.0	30.0
57	9.6	6.3	9.5#

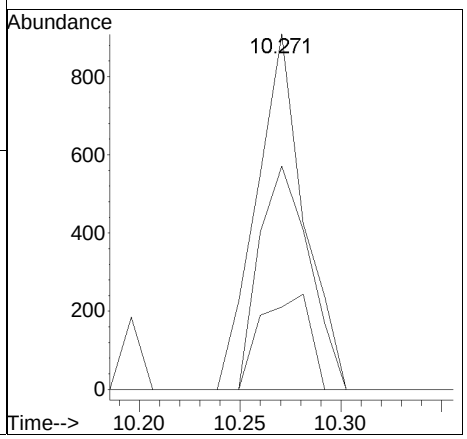


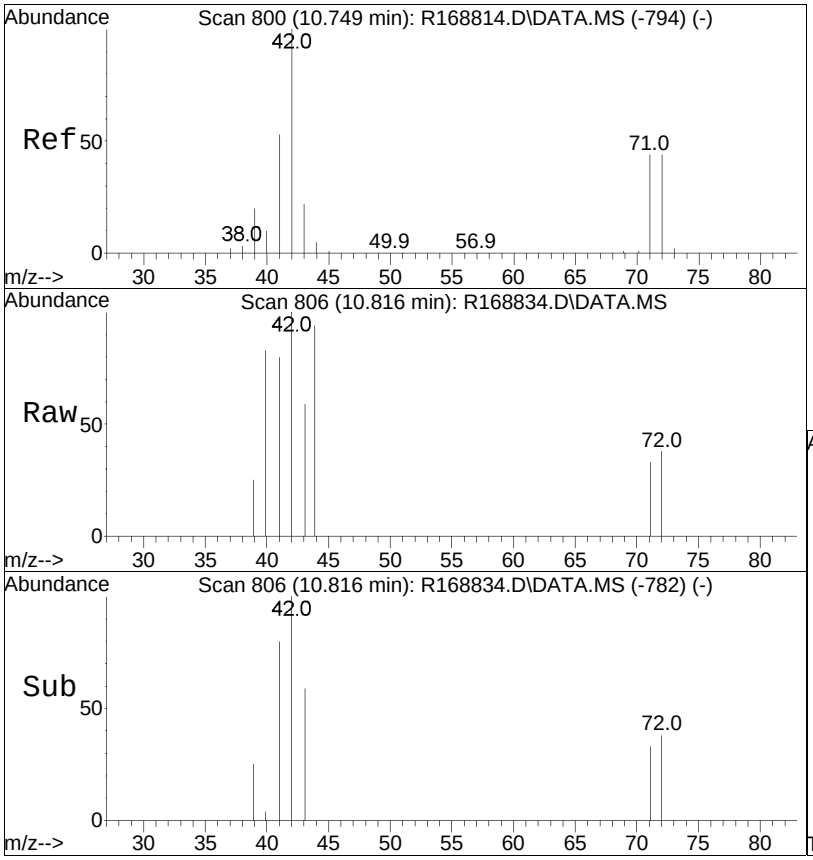


#39
chloroform
Concen: 0.04 ppbV
RT: 10.271 min Scan# 758
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 83 Resp: 1502

Ion	Ratio	Lower	Upper
83	100		
85	62.8	52.1	78.1
47	23.2	17.3	25.9

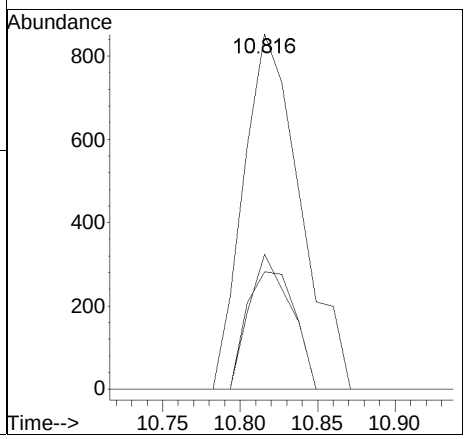


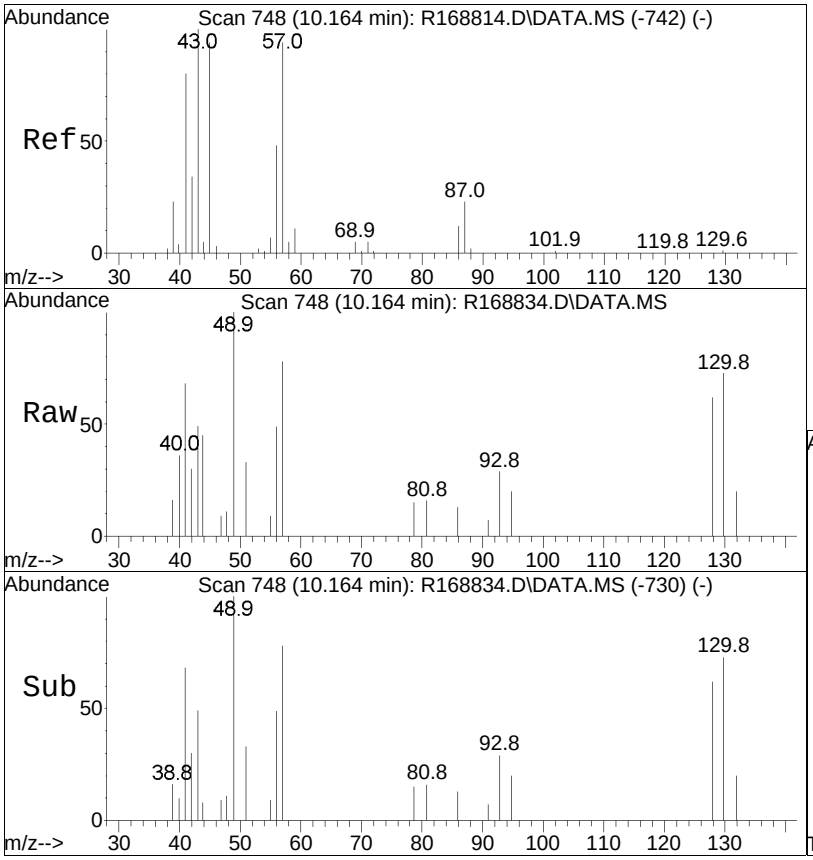


#40
Tetrahydrofuran
Concen: 0.15 ppbV
RT: 10.816 min Scan# 806
Delta R.T. 0.067 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 42 Resp: 2186

Ion	Ratio	Lower	Upper
42	100		
71	33.1	35.0	52.4#
72	38.0	35.5	53.3

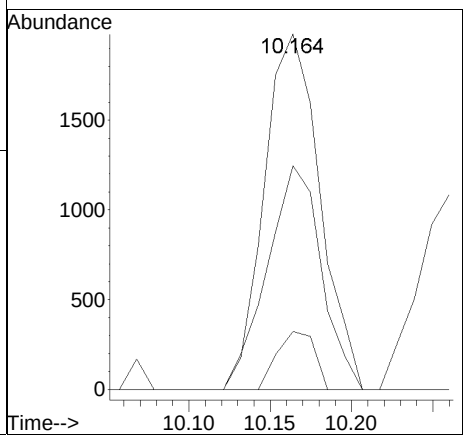


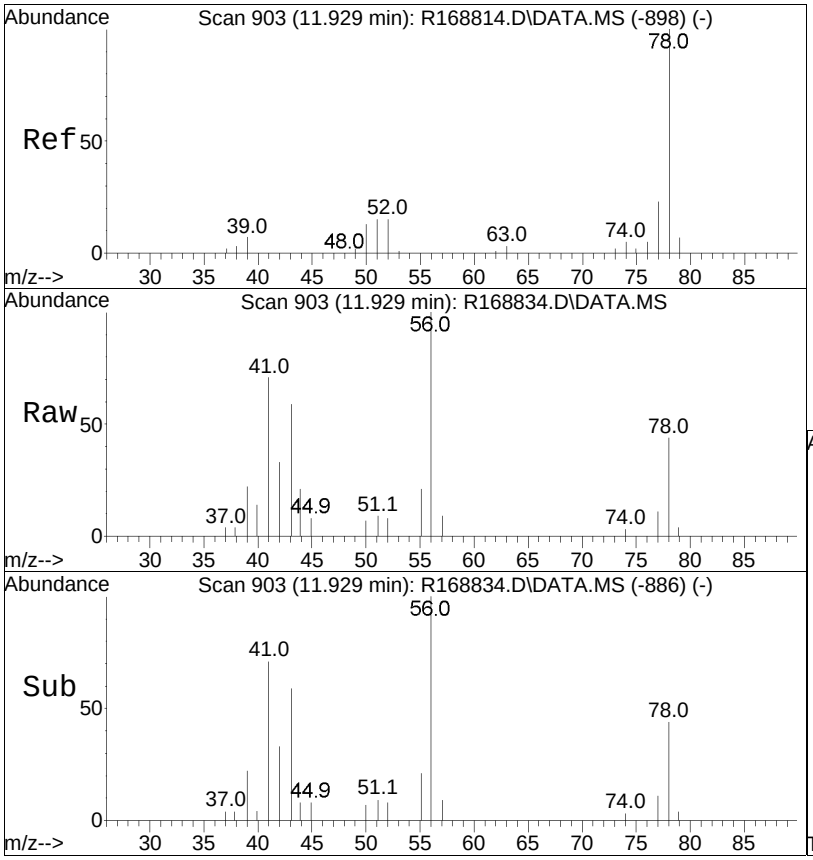


#44
hexane
Concen: 0.22 ppbV m
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 57 Resp: 4720

Ion	Ratio	Lower	Upper
57	100		
43	62.9	85.5	128.3#
86	16.3	10.5	15.7#

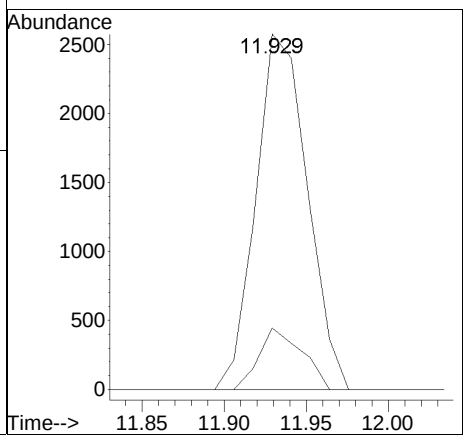


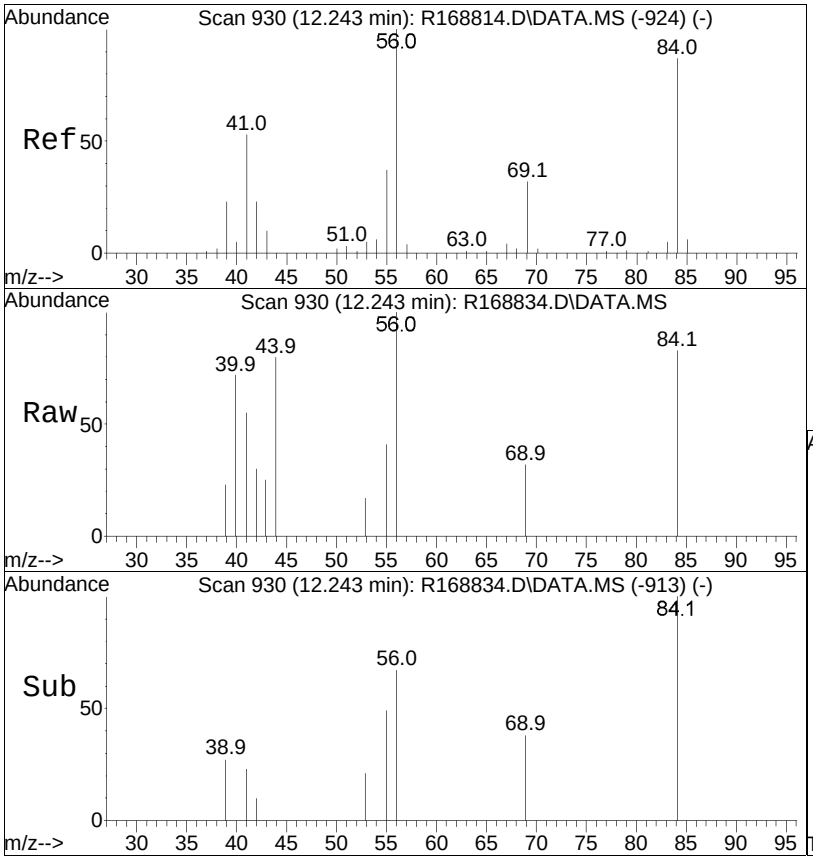


#50
benzene
Concen: 0.16 ppbV
RT: 11.929 min Scan# 903
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 78 Resp: 5617

Ion	Ratio	Lower	Upper
78	100		
52	17.3	11.7	17.5

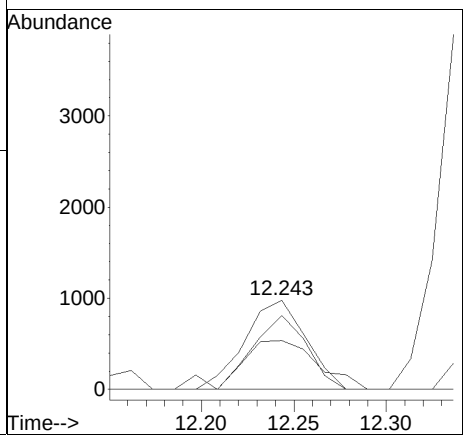


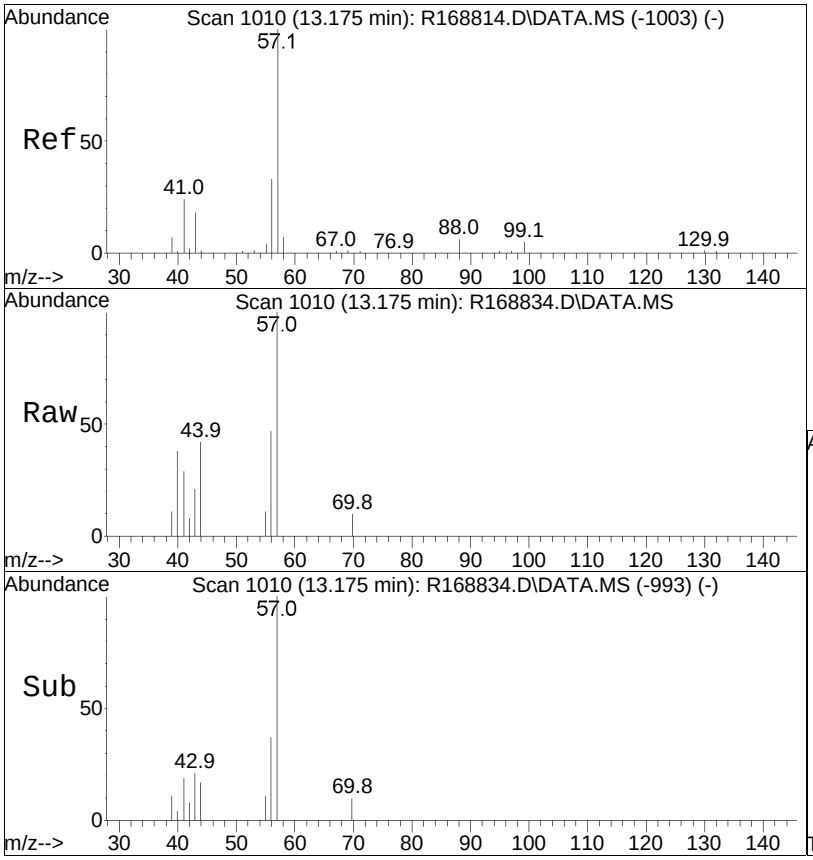


#53
cyclohexane
Concen: 0.13 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 56 Resp: 2264

Ion	Ratio	Lower	Upper
56	100		
84	82.9	70.1	105.1
41	54.9	42.6	63.8

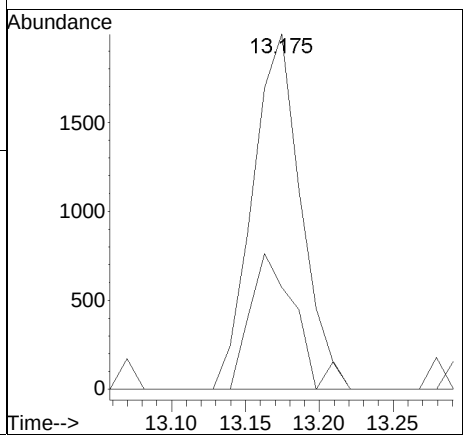


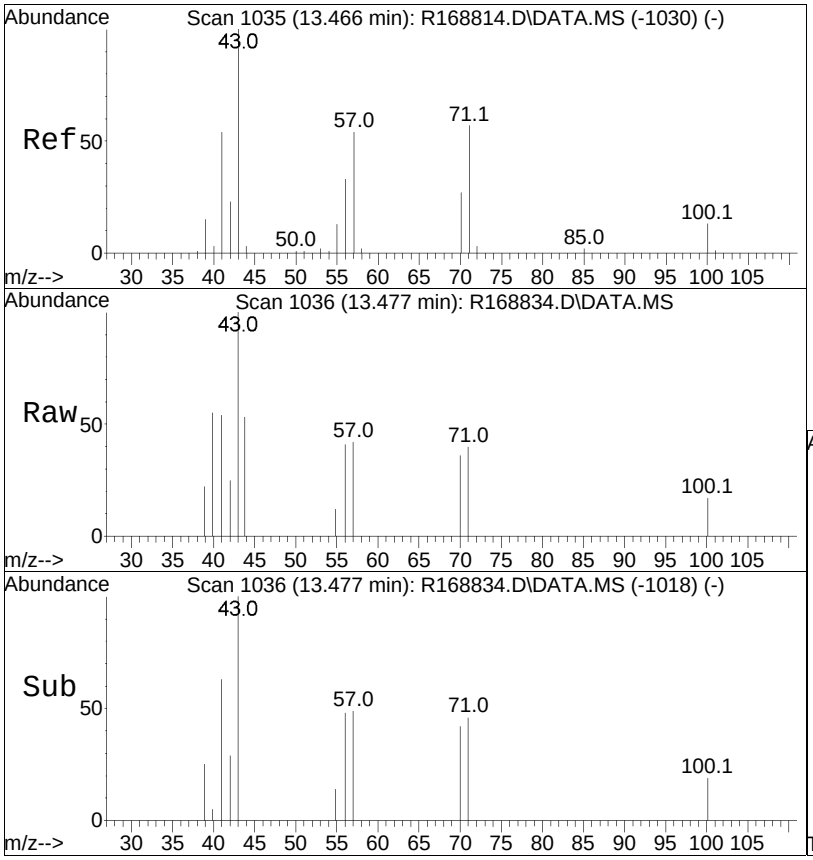


#60
2,2,4-trimethylpentane
Concen: 0.08 ppbV
RT: 13.175 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 57 Resp: 4559

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	28.8	19.3	28.9

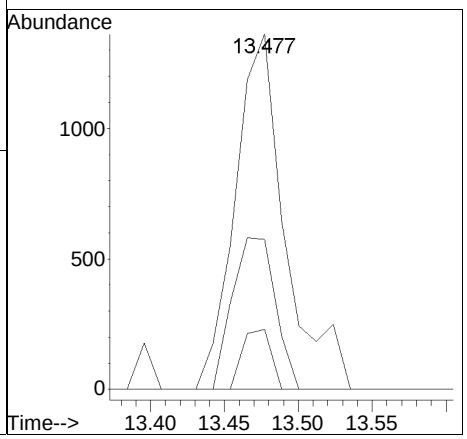


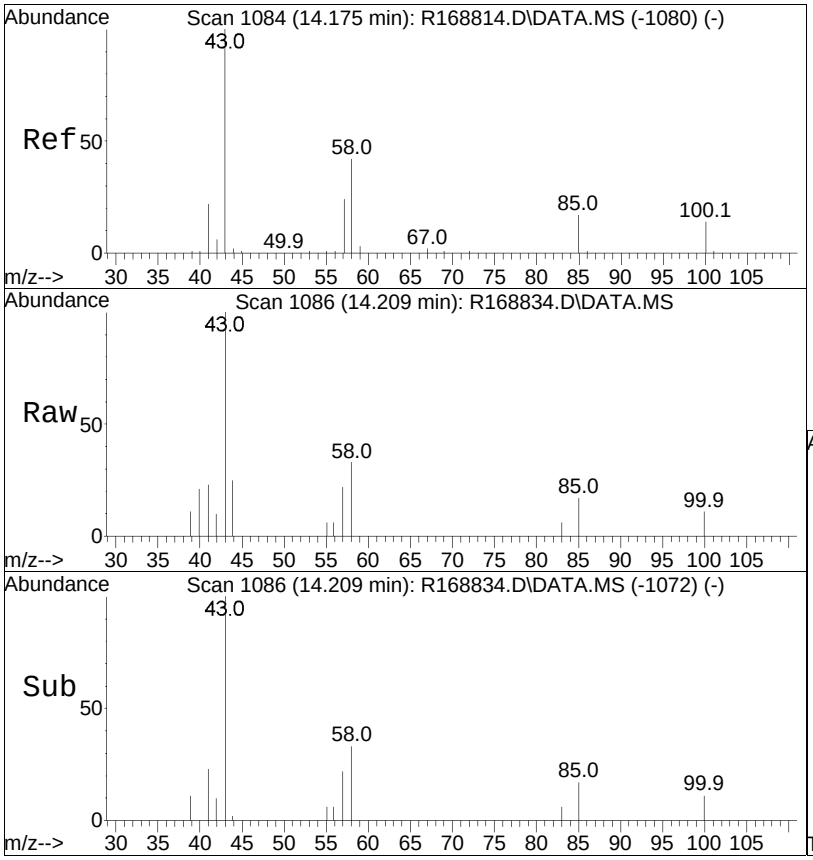


#62
heptane
Concen: 0.16 ppbV
RT: 13.477 min Scan# 1036
Delta R.T. 0.012 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 43 Resp: 3206

Ion	Ratio	Lower	Upper
43	100		
57	42.2	43.4	65.0#
100	16.9	11.2	16.8#

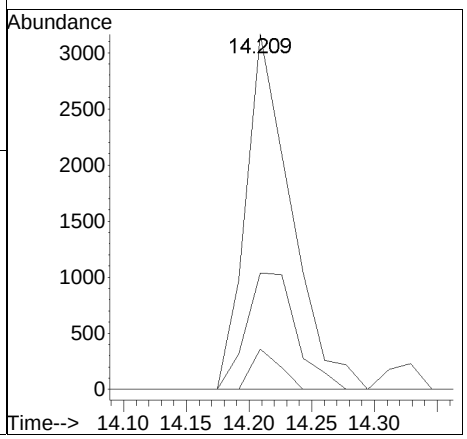


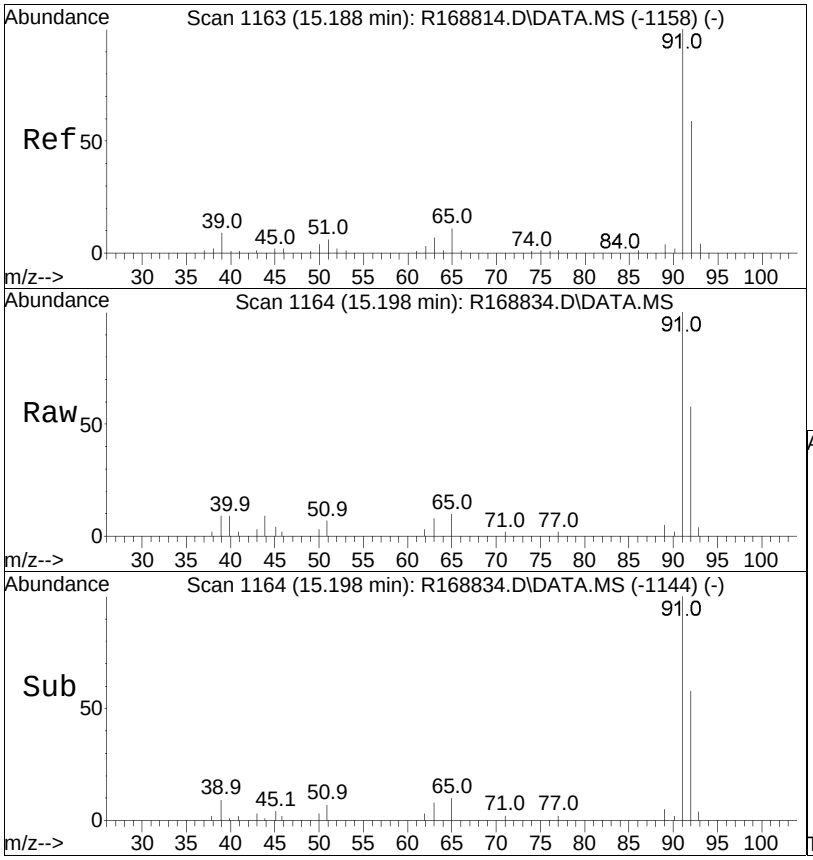


#64
4-methyl-2-pentanone
Concen: 0.31 ppbV
RT: 14.209 min Scan# 1086
Delta R.T. 0.034 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 43 Resp: 7970

Ion	Ratio	Lower	Upper
43	100		
58	32.8	33.7	50.5#
100	11.4	11.1	16.7

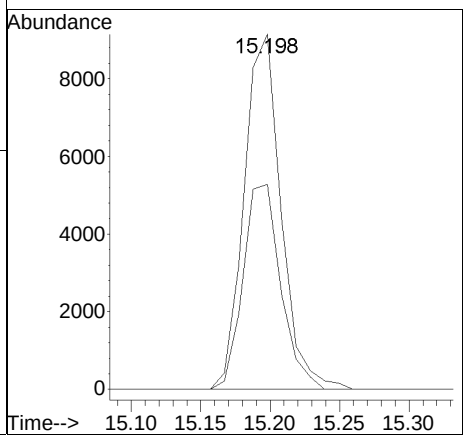


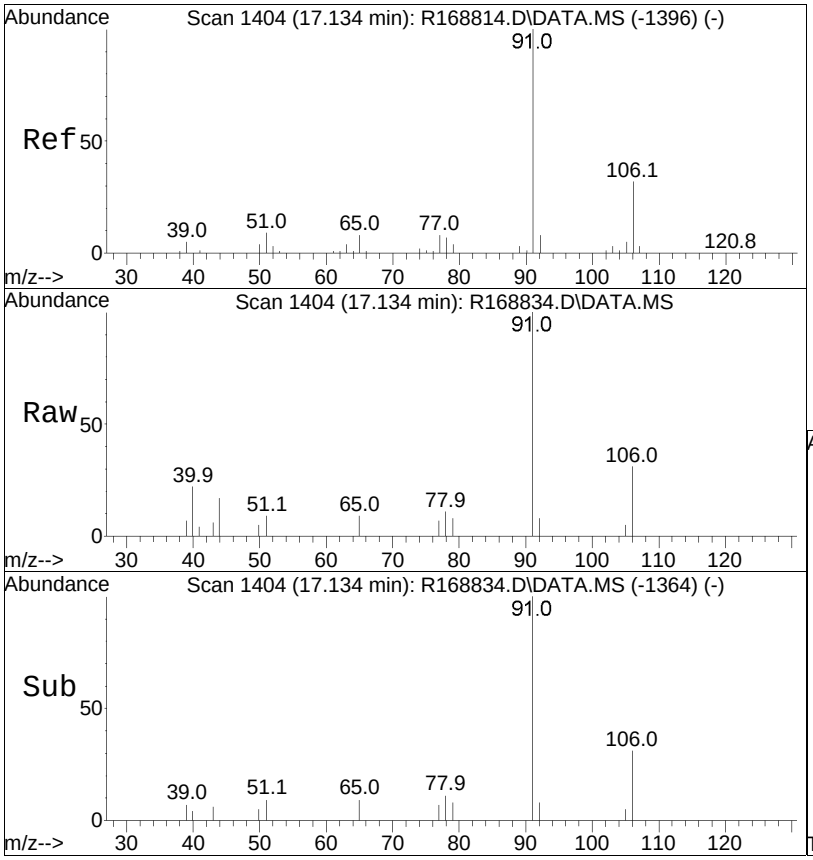


#68
toluene
Concen: 0.35 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 91 Resp: 16964

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.2	70.8

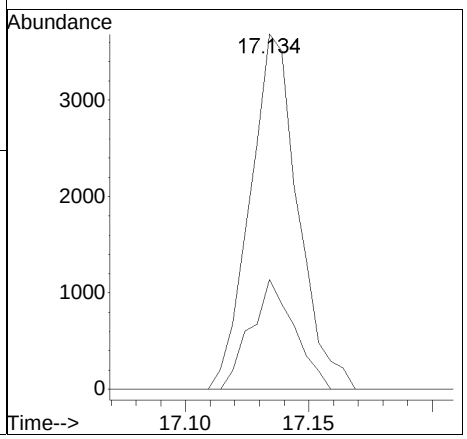


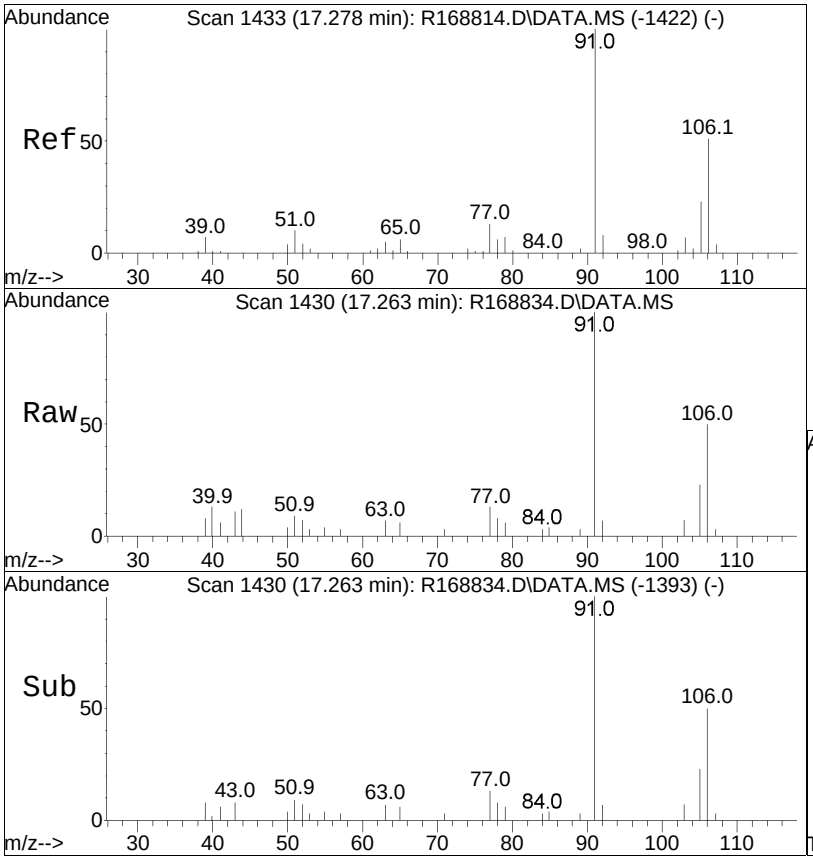


#81
ethylbenzene
Concen: 0.08 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 91 Resp: 4985

Ion	Ratio	Lower	Upper
91	100		
106	31.0	25.3	37.9

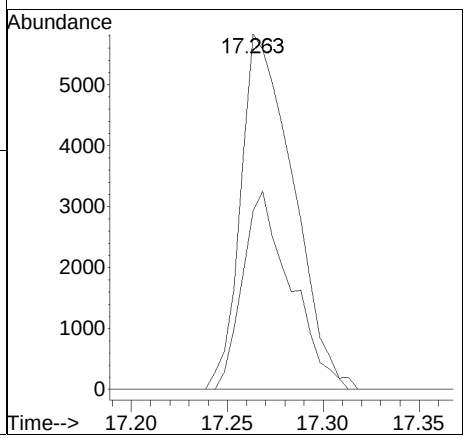


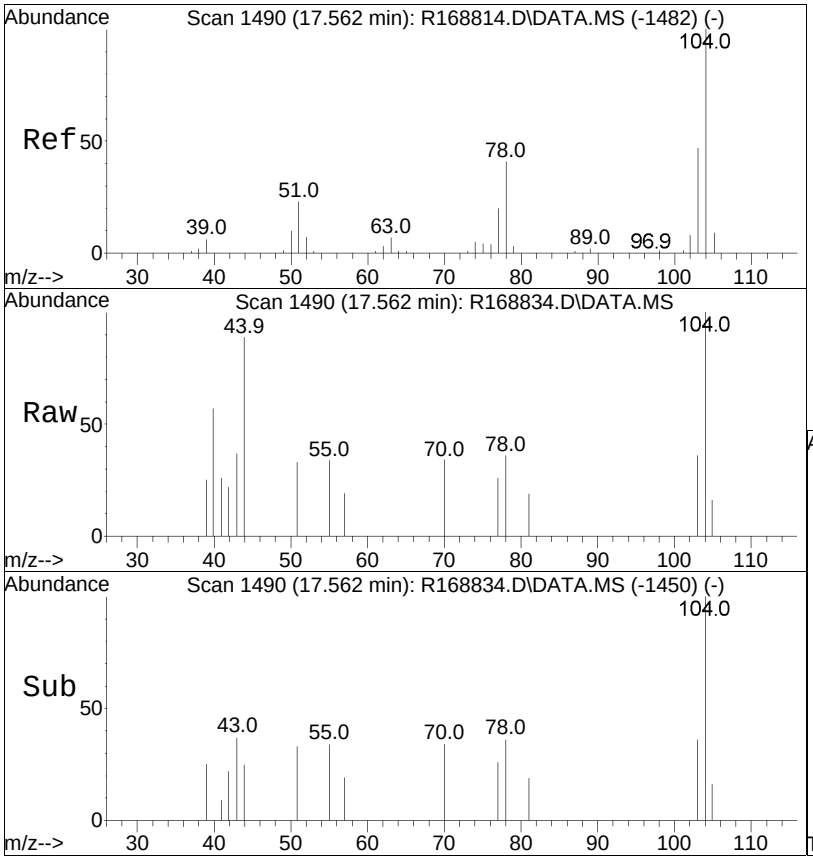


#83
m+p-xylene
Concen: 0.23 ppbV
RT: 17.263 min Scan# 1430
Delta R.T. -0.015 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 91 Resp: 11101

Ion	Ratio	Lower	Upper
91	100		
106	50.2	40.8	61.2

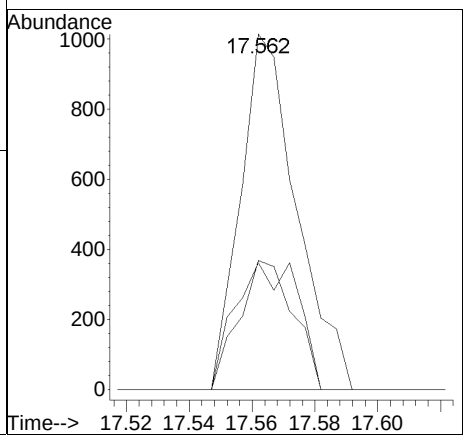


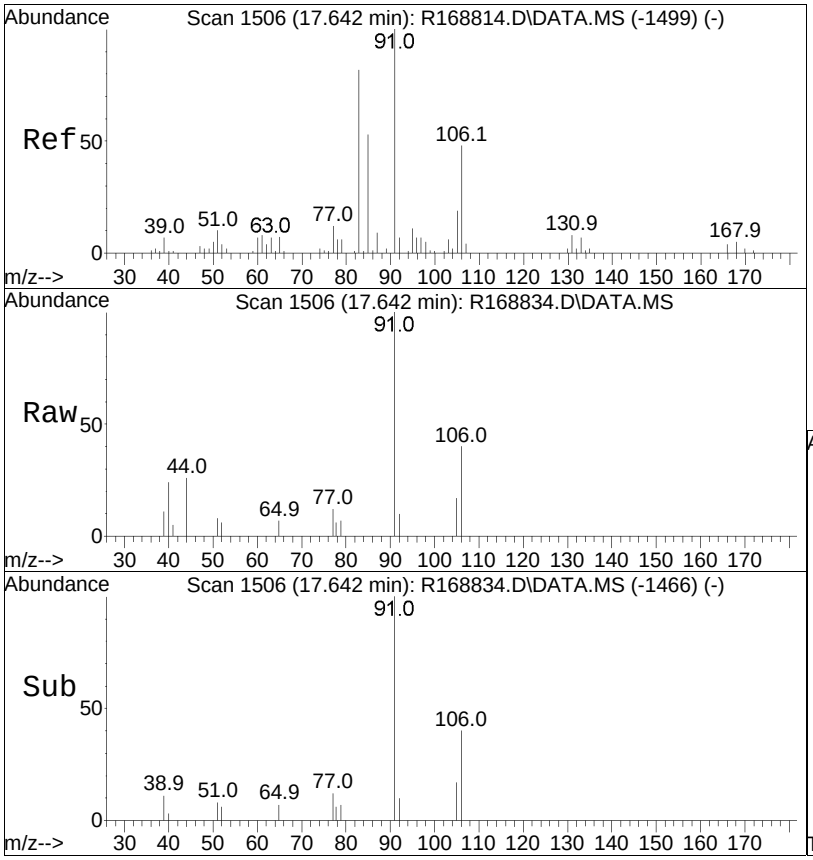


#85
styrene
Concen: 0.03 ppbV
RT: 17.562 min Scan# 1490
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:104 Resp: 1261

Ion	Ratio	Lower	Upper
104	100		
103	35.7	37.8	56.6#
78	36.3	32.9	49.3

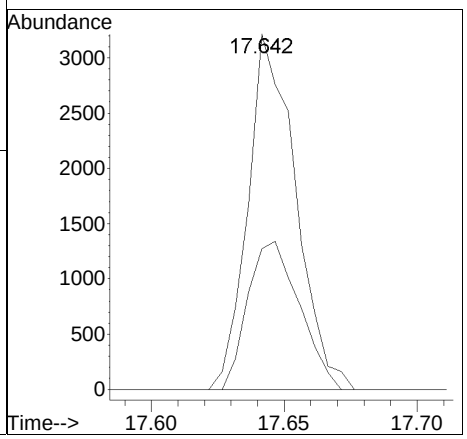


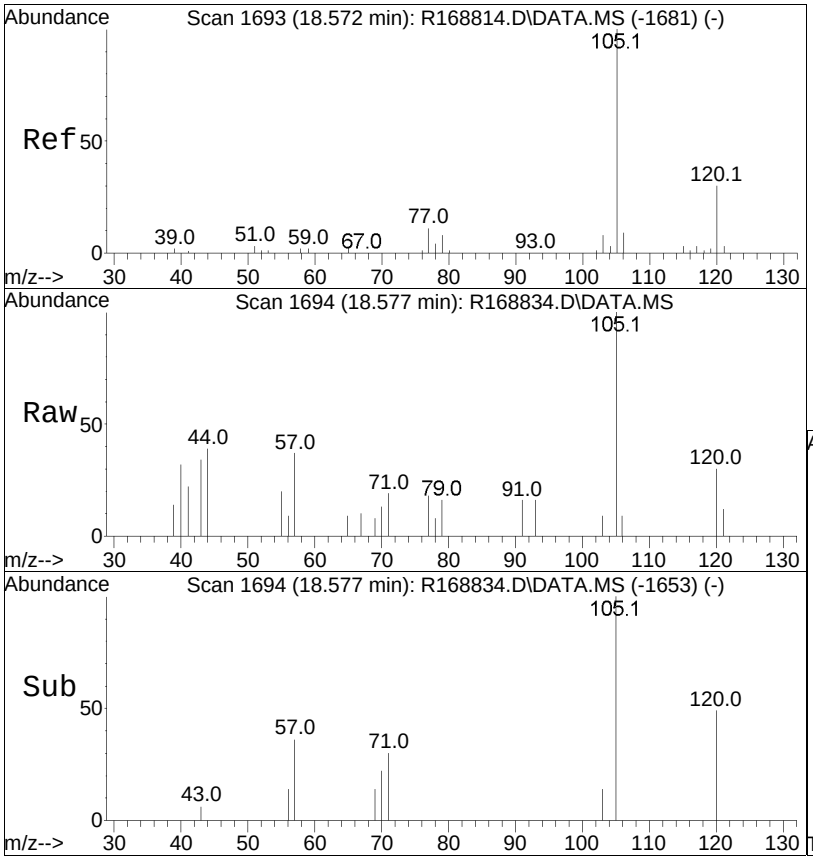


#87
o-xylene
Concen: 0.08 ppbV
RT: 17.642 min Scan# 1506
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 91 Resp: 4014

Ion	Ratio	Lower	Upper
91	100		
106	39.6	38.3	57.5

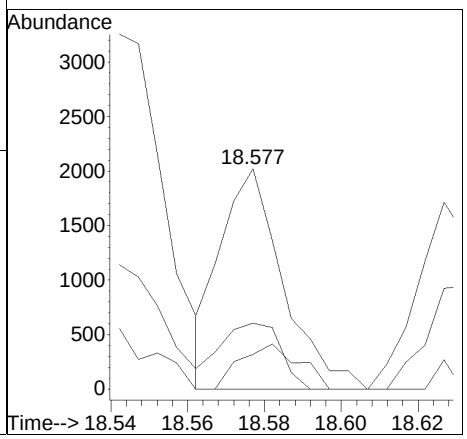


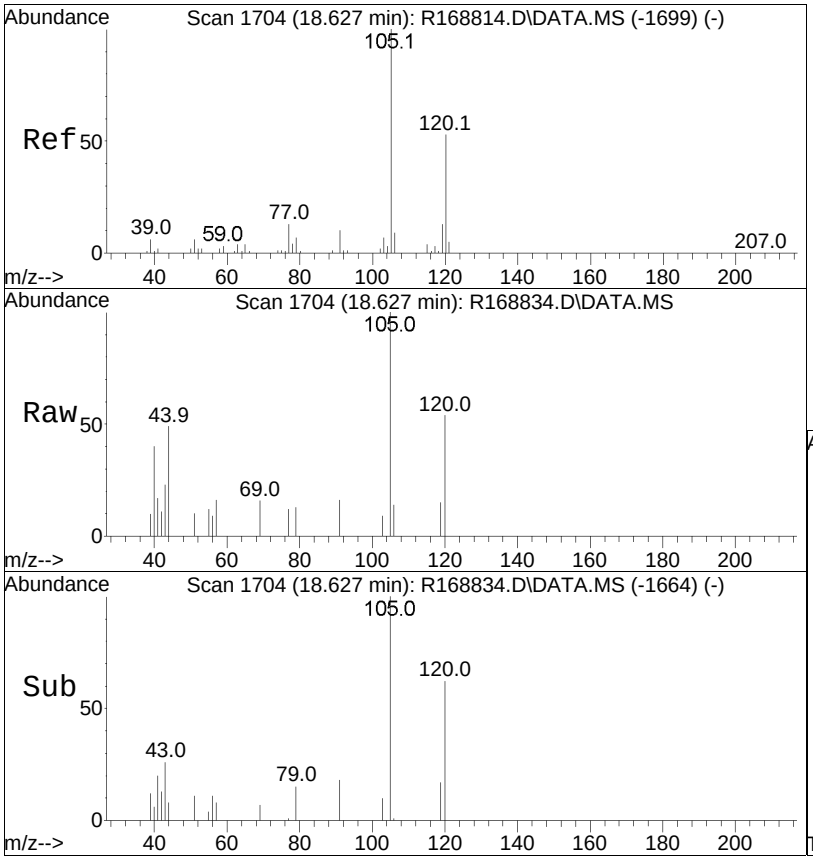


#96
4-ethyl toluene
Concen: 0.03 ppbV
RT: 18.577 min Scan# 1694
Delta R.T. 0.005 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:105 Resp: 2303

Ion	Ratio	Lower	Upper
105	100		
120	30.0	24.0	36.0
91	15.9	8.4	12.6#

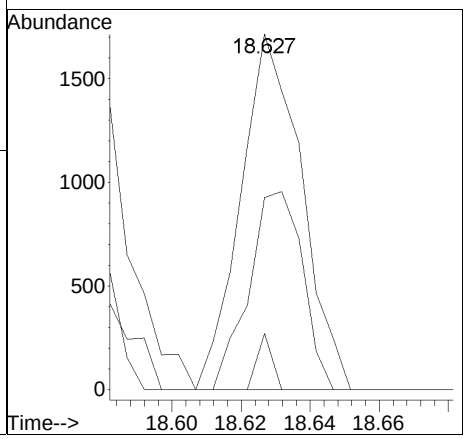


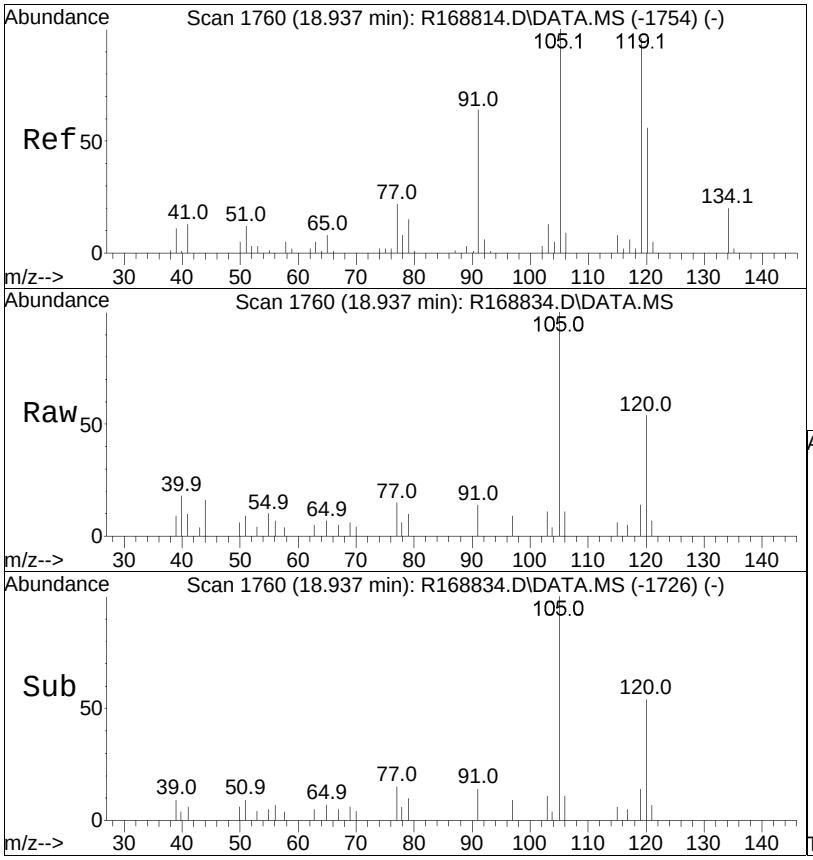


#97
1,3,5-trimethylbenzene
Concen: 0.04 ppbV
RT: 18.627 min Scan# 1704
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:105 Resp: 2096

Ion	Ratio	Lower	Upper
105	100		
120	54.0	41.9	62.9
91	15.8	8.0	12.0#

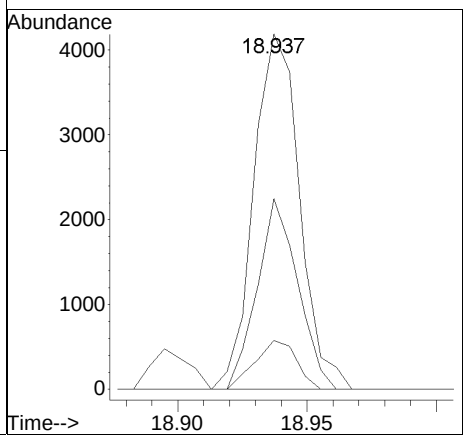




#99
1,2,4-trimethylbenzene
Concen: 0.09 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:105 Resp: 5169

Ion	Ratio	Lower	Upper
105	100		
120	53.7	44.5	66.7
91	13.8	51.4	77.2#

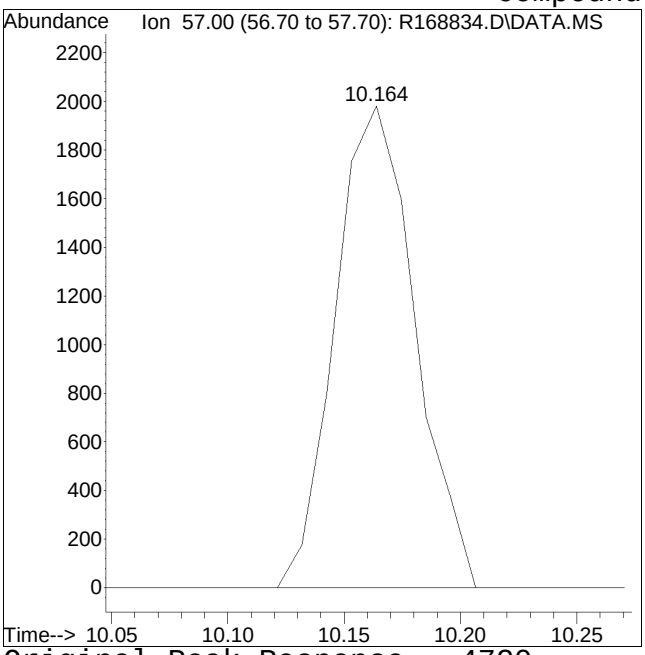


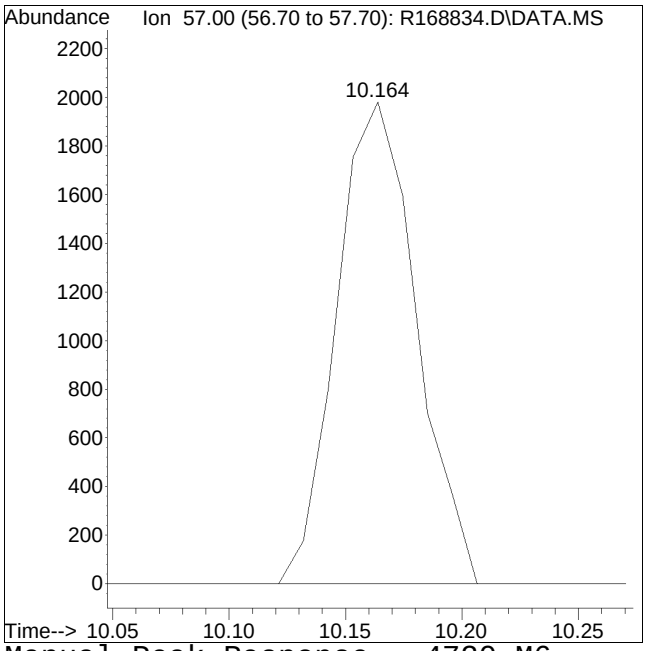
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168834.D
Date Inj'd : 10/24/2019 8:02 pm
Sample : L1948939-04,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/25/2019 7:50 am

Compound #44: hexane





Original Peak Response = 4720
Manual Peak Response = 4720 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168835.D
Acq On : 24 Oct 2019 8:35 pm
Operator : AIRPIANO1:TS
Sample : L1948939-05,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 25 14:40:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	280194	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		86.03%	
43) 1,4-difluorobenzene	12.348	114	607301	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		81.90%	
67) chlorobenzene-D5	16.801	54	103651	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		83.79%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	8351	0.311	ppbV	93
6) chloromethane	4.238	50	4936	0.540	ppbV	93
7) Freon-114	4.373		0	N.D.		
10) 1,3-butadiene	4.741		0	N.D.		
13) bromomethane	5.125		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.581	31	561356	91.953	ppbV	99
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.242	43	172129	10.221	ppbV #	96
21) trichlorofluoromethane	6.437	101	5817	0.206	ppbV	95
22) isopropyl alcohol	6.605	45	4110826	220.604	ppbV	100
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	1965	0.161	ppbV	100
29) 3-chloropropene	7.610		0	N.D.		
30) carbon disulfide	7.796	76	1110	0.031	ppbV #	1
31) Freon 113	7.805	101	1157	0.048	ppbV	89
32) trans-1,2-dichloroethene	0.000		0	N.D.	d	
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	9.431	43	7360	0.297	ppbV #	91
38) Ethyl Acetate	10.228	61	1552	0.275	ppbV #	85
39) chloroform	10.271	83	3272	0.095	ppbV	97
40) Tetrahydrofuran	10.771	42	2210M6	0.148	ppbV	
42) 1,2-dichloroethane	11.127		0	N.D.		
44) hexane	10.164	57	2849M6	0.121	ppbV	
50) benzene	11.929	78	3250	0.083	ppbV	96
53) cyclohexane	12.243	56	1391	0.073	ppbV #	80

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168835.D
Acq On : 24 Oct 2019 8:35 pm
Operator : AIRPIANO1:TS
Sample : L1948939-05,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 25 14:40:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

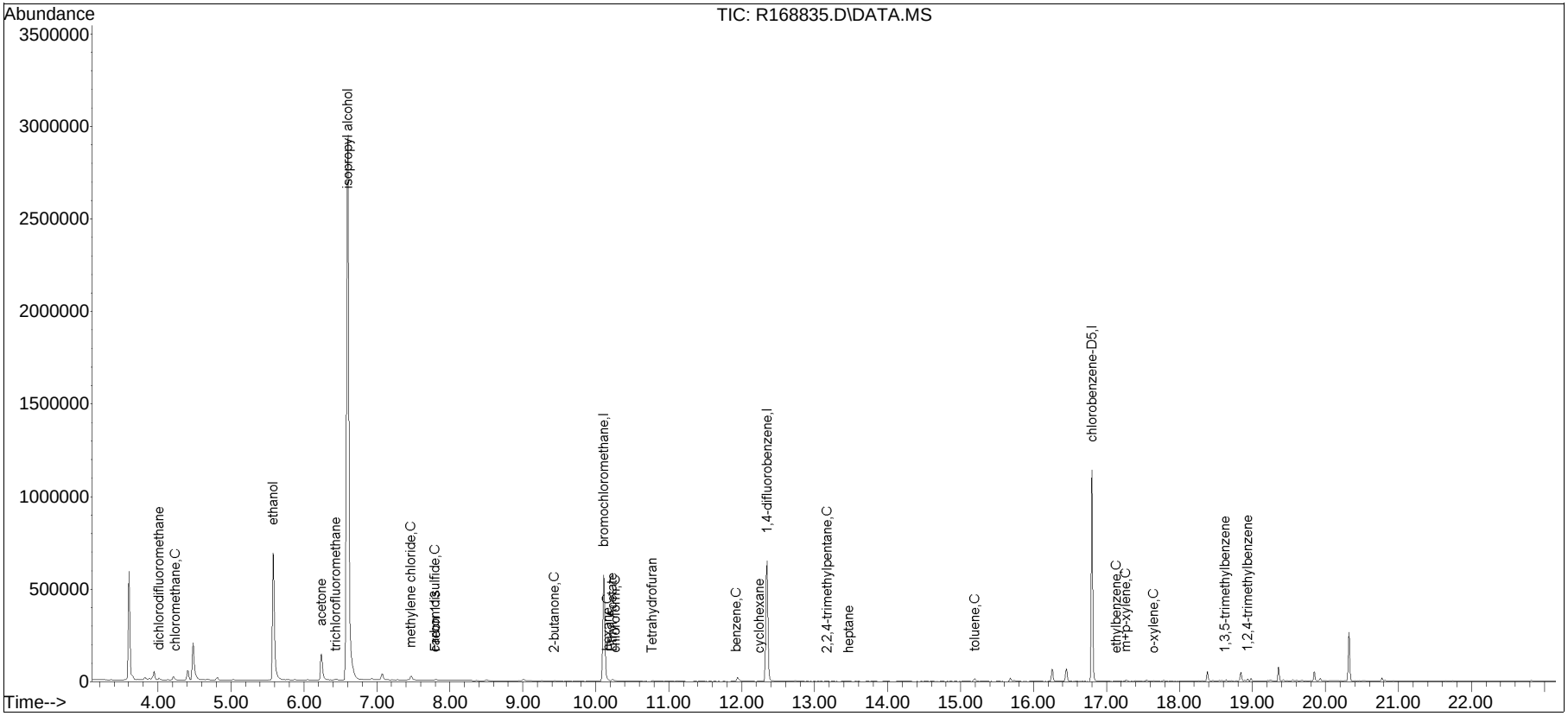
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.			
57)	bromodichloromethane	0.000		0	N.D.			
58)	1,4-dioxane	0.000		0	N.D.			
60)	2,2,4-trimethylpentane	13.175	57	2328	0.039	ppbV	#	67
62)	heptane	13.466	43	1949	0.090	ppbV	#	82
63)	cis-1,3-dichloropropene	0.000		0	N.D.			
64)	4-methyl-2-pentanone	0.000		0	N.D.	d		
65)	trans-1,3-dichloropropene	0.000		0	N.D.			
66)	1,1,2-trichloroethane	0.000		0	N.D.			
68)	toluene	15.198	91	12317	0.251	ppbV		99
72)	2-hexanone	15.415		0	N.D.			
74)	dibromochloromethane	0.000		0	N.D.			
75)	1,2-dibromoethane	0.000		0	N.D.			
80)	chlorobenzene	0.000		0	N.D.			
81)	ethylbenzene	17.134	91	2207	0.036	ppbV	#	86
83)	m+p-xylene	17.263	91	5410	0.113	ppbV		91
84)	bromoform	0.000		0	N.D.			
85)	styrene	17.562		0	N.D.			
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.			
87)	o-xylene	17.647	91	2101	0.044	ppbV		90
96)	4-ethyl toluene	18.577		0	N.D.			
97)	1,3,5-trimethylbenzene	18.627	105	1752	0.030	ppbV	#	95
99)	1,2,4-trimethylbenzene	18.937	105	4426	0.078	ppbV	#	58
101)	Benzyl Chloride	19.106		0	N.D.			
102)	1,3-dichlorobenzene	19.118		0	N.D.			
103)	1,4-dichlorobenzene	19.118		0	N.D.			
107)	1,2-dichlorobenzene	0.000		0	N.D.			
115)	1,2,4-trichlorobenzene	0.000		0	N.D.			
119)	hexachlorobutadiene	0.000		0	N.D.			

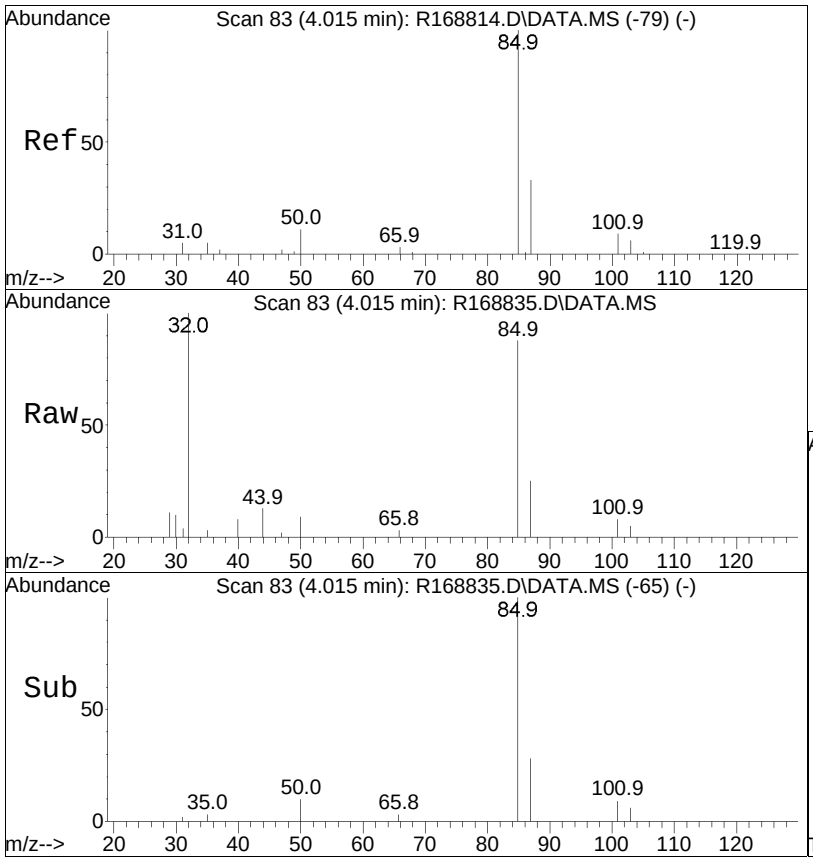
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168835.D
Acq On : 24 Oct 2019 8:35 pm
Operator : AIRPIANO1:TS
Sample : L1948939-05,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 25 14:40:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

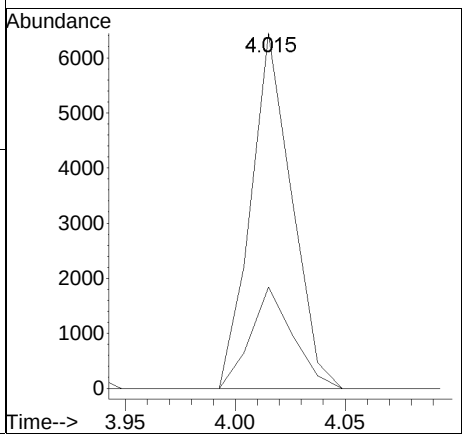


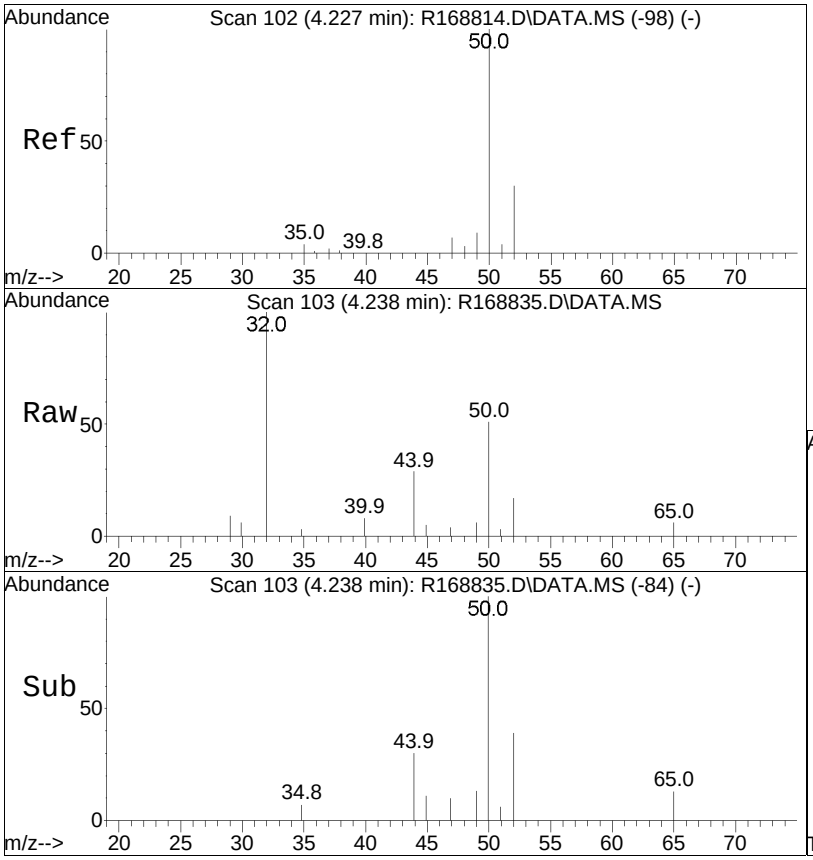


#5
dichlorodifluoromethane
Concen: 0.31 ppbV
RT: 4.015 min Scan# 83
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 85 Resp: 8351

Ion	Ratio	Lower	Upper
85	100		
87	28.5	26.1	39.1

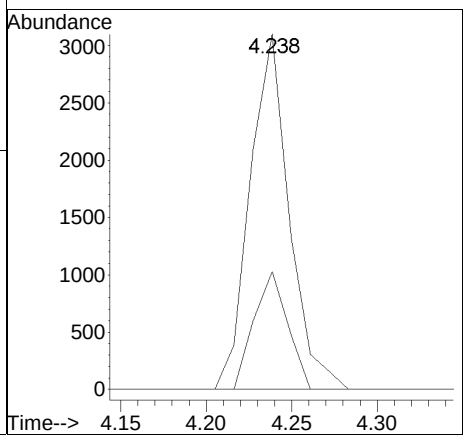


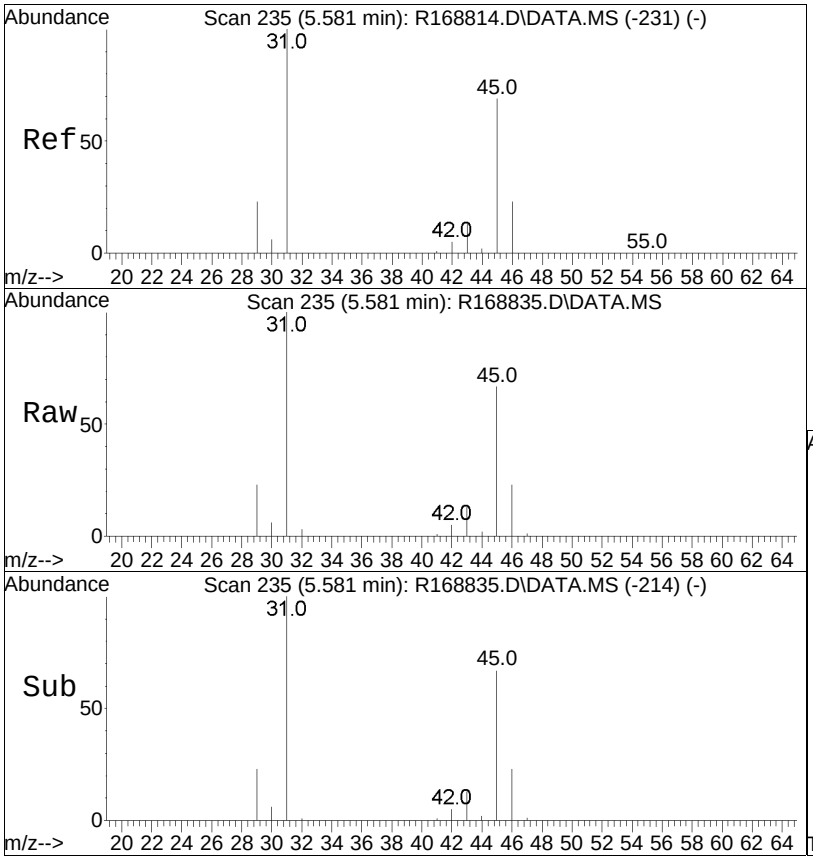


#6
chloromethane
Concen: 0.54 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 50 Resp: 4936

Ion	Ratio	Lower	Upper
50	100		
52	33.2	23.7	35.5

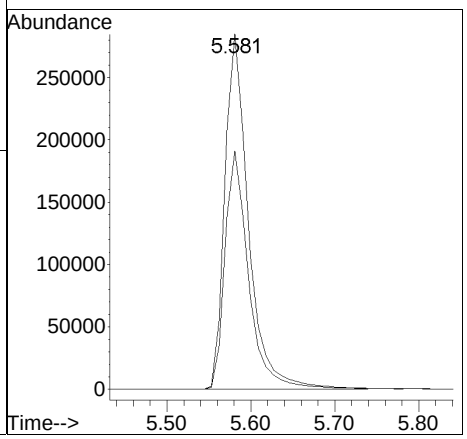


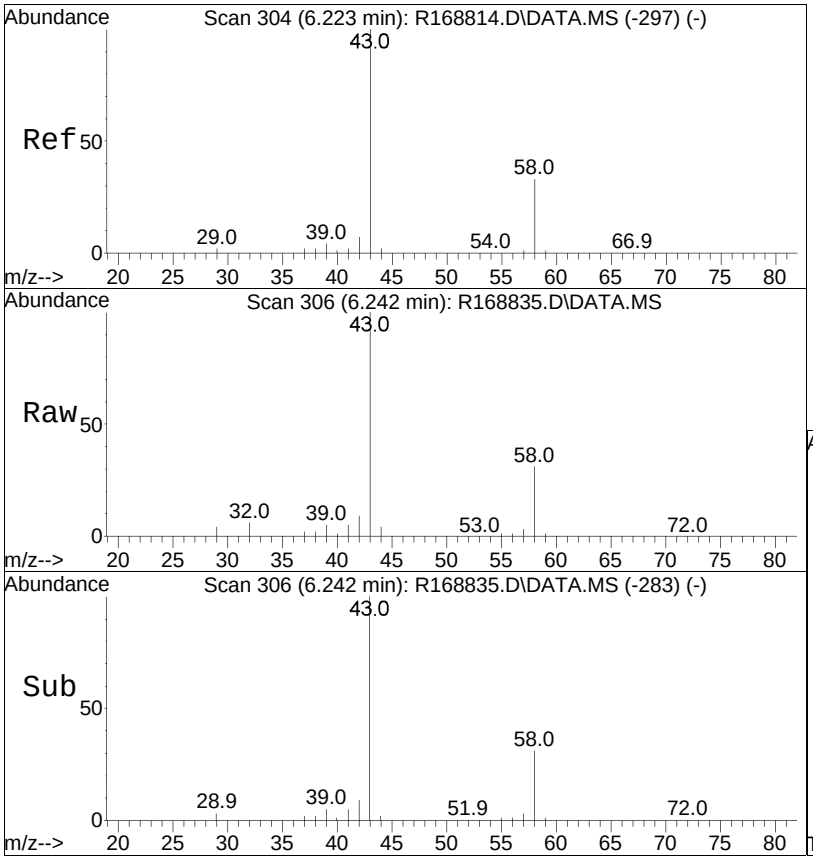


#15
ethanol
Concen: 91.95 ppbV
RT: 5.581 min Scan# 235
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 31 Resp: 561356

Ion	Ratio	Lower	Upper
31	100		
45	67.1	54.3	81.5

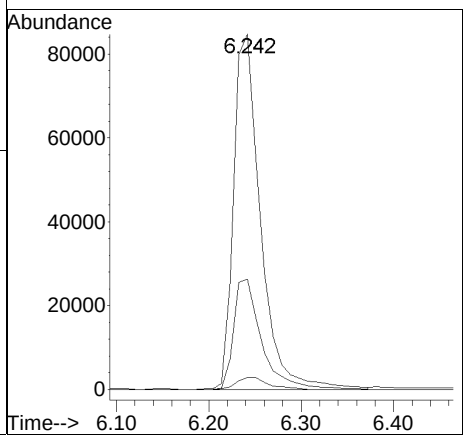


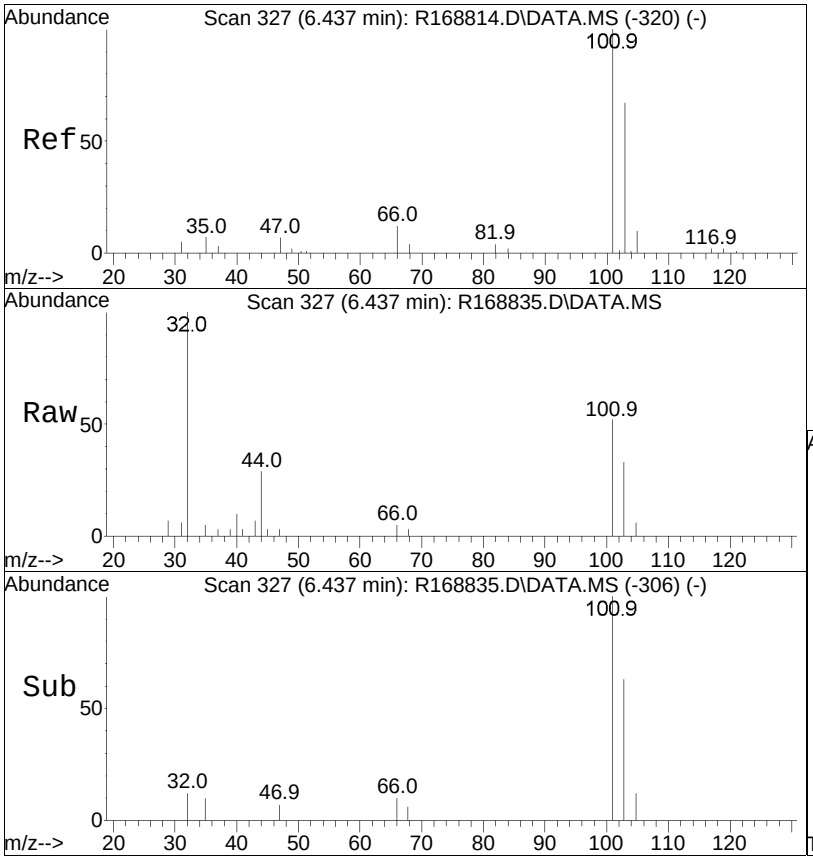


#19
acetone
Concen: 10.22 ppbV
RT: 6.242 min Scan# 306
Delta R.T. 0.019 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 43 Resp: 172129

Ion	Ratio	Lower	Upper
43	100		
58	31.1	26.5	39.7
57	3.4	0.8	1.2#

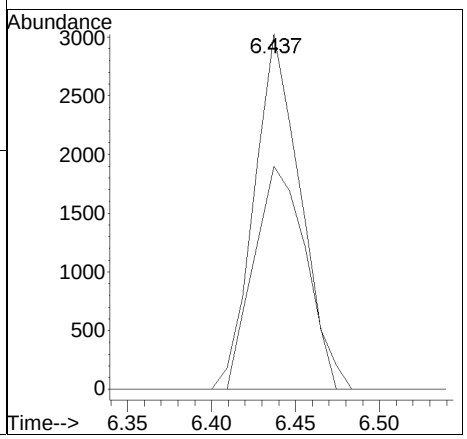


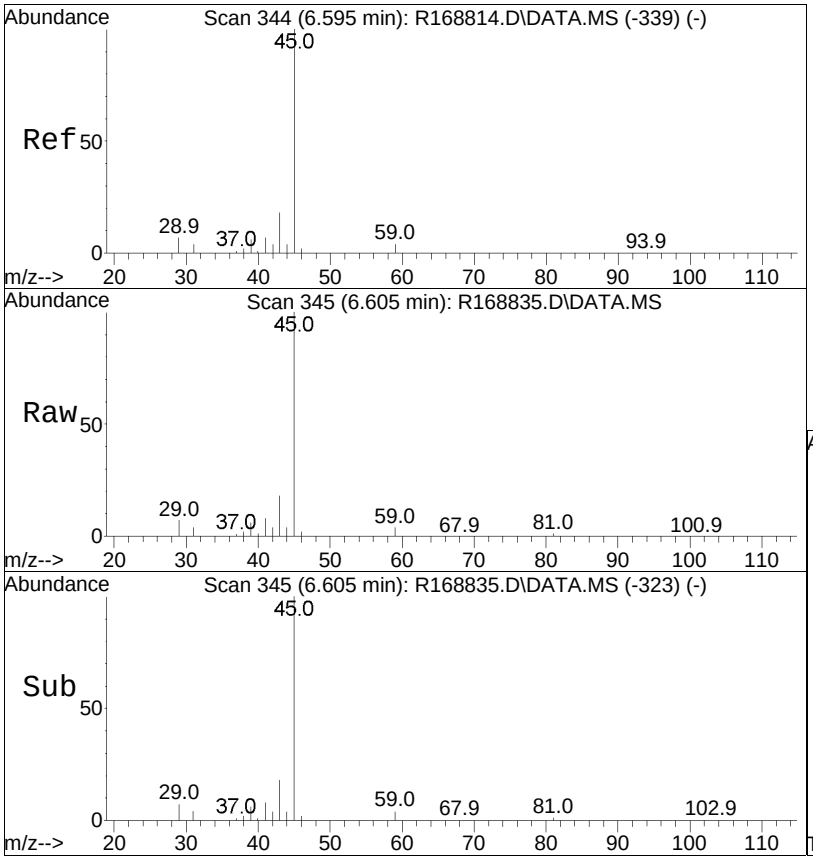


#21
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 6.437 min Scan# 327
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:101 Resp: 5817

Ion	Ratio	Lower	Upper
101	100		
103	62.8	53.4	80.2

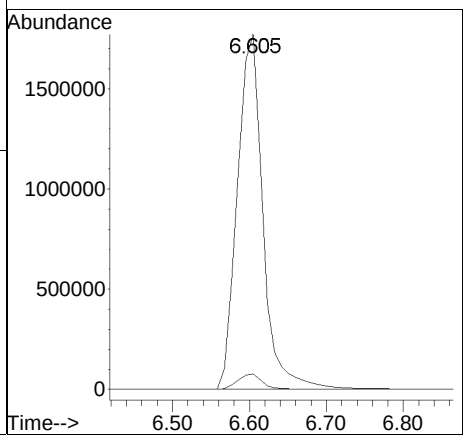


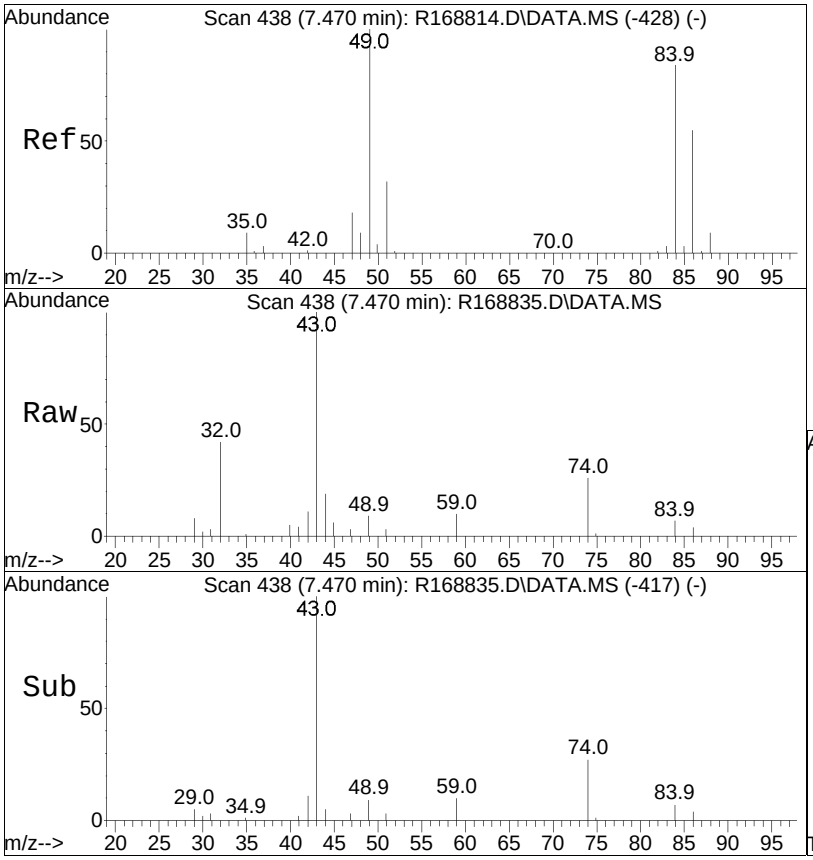


#22
isopropyl alcohol
Concen: 220.60 ppbV
RT: 6.605 min Scan# 345
Delta R.T. 0.009 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 45 Resp: 4110826

Ion	Ratio	Lower	Upper
45	100		
59	4.4	3.4	5.0

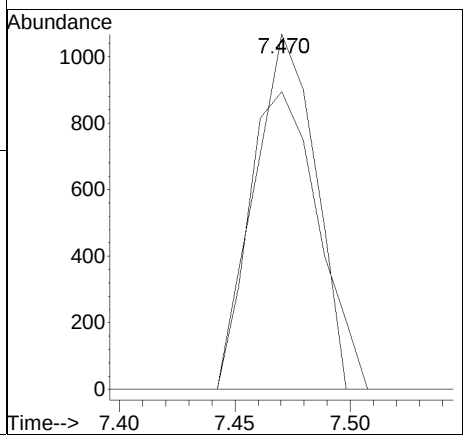


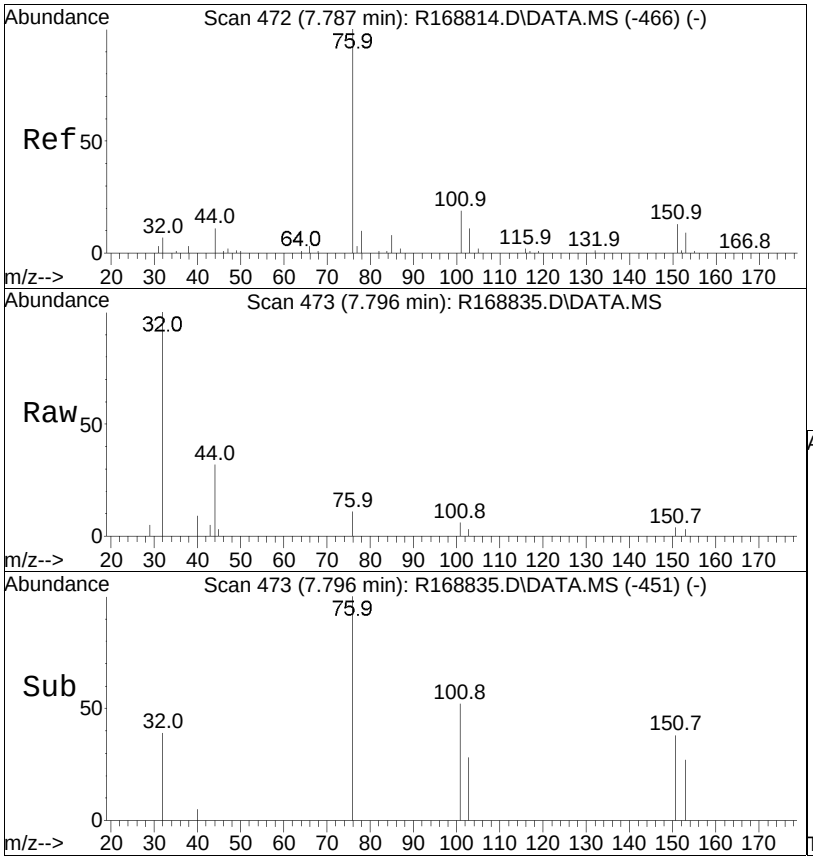


#28
methylene chloride
Concen: 0.16 ppbV
RT: 7.470 min Scan# 438
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 49 Resp: 1965

Ion	Ratio	Lower	Upper
49	100		
84	83.8	67.3	100.9

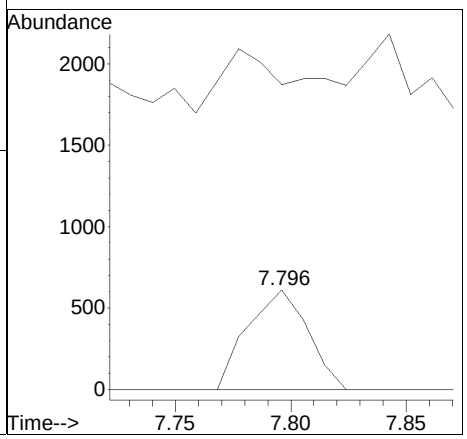


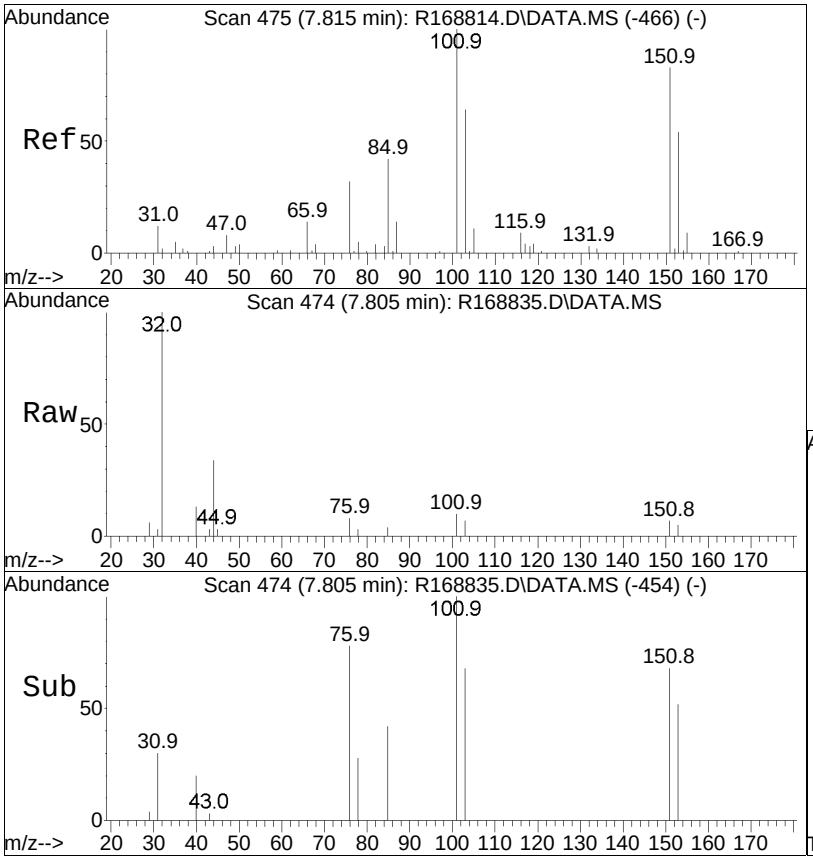


#30
carbon disulfide
Concen: 0.03 ppbV
RT: 7.796 min Scan# 473
Delta R.T. 0.009 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 76 Resp: 1110

Ion	Ratio	Lower	Upper
76	100		
44	306.4	9.3	13.9#

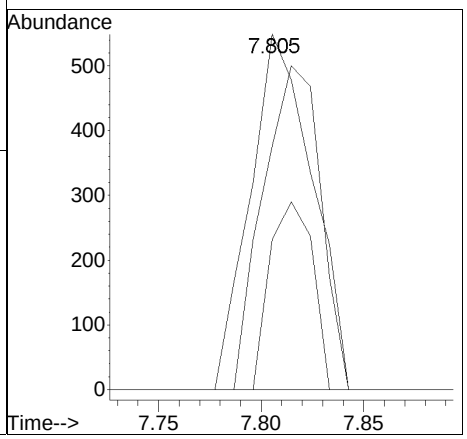


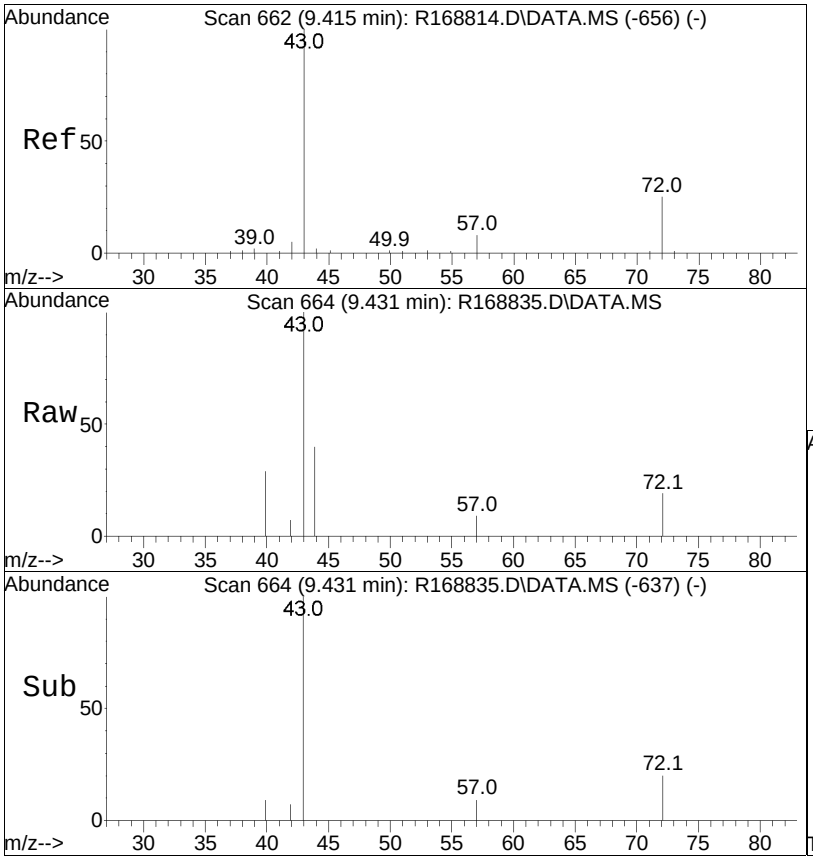


#31
Freon 113
Concen: 0.05 ppbV
RT: 7.805 min Scan# 474
Delta R.T. -0.009 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:101 Resp: 1157

Ion	Ratio	Lower	Upper
101	100		
85	42.3	33.2	49.8
151	68.5	66.2	99.2

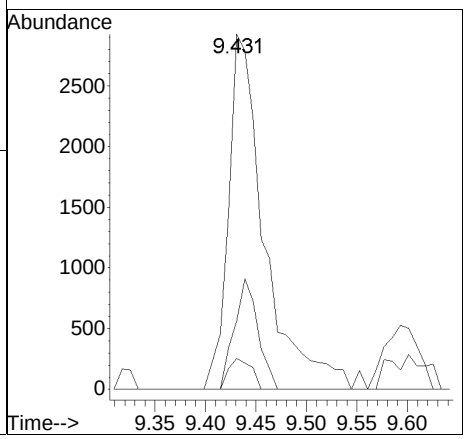


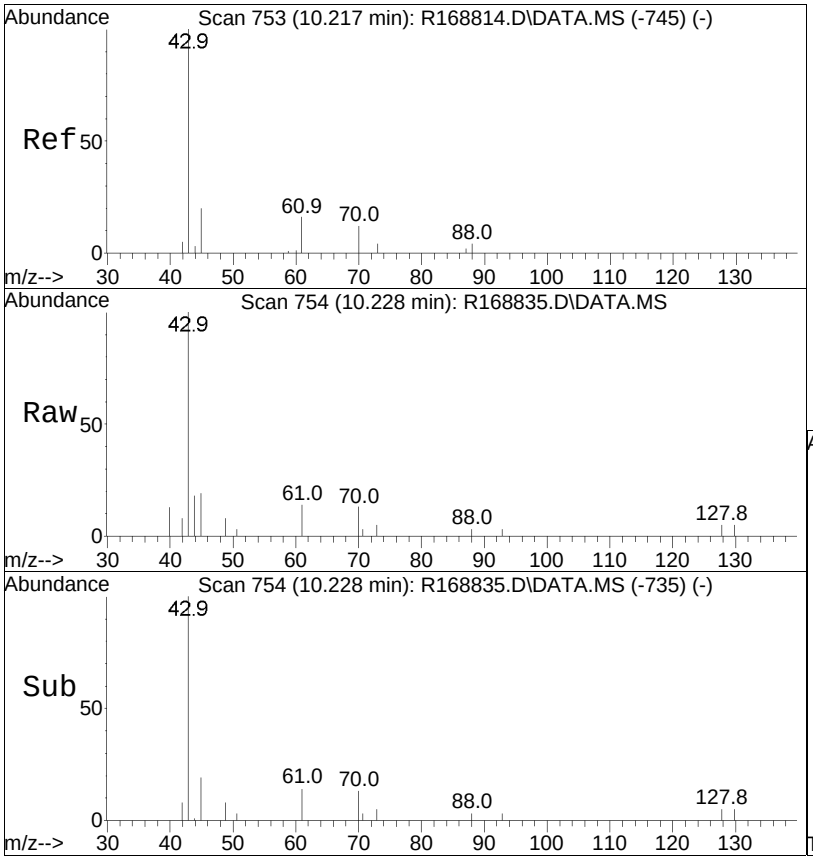


#36
2-butanone
Concen: 0.30 ppbV
RT: 9.431 min Scan# 664
Delta R.T. 0.016 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 43 Resp: 7360

Ion	Ratio	Lower	Upper
43	100		
72	19.3	20.0	30.0#
57	8.7	6.3	9.5

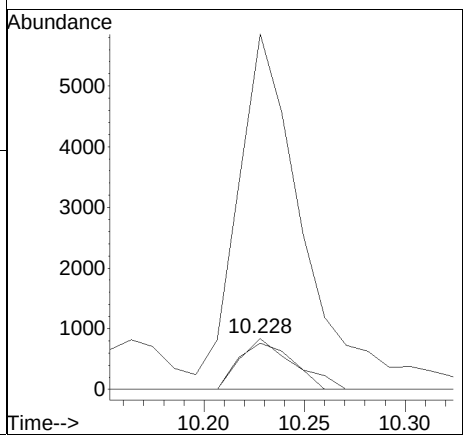


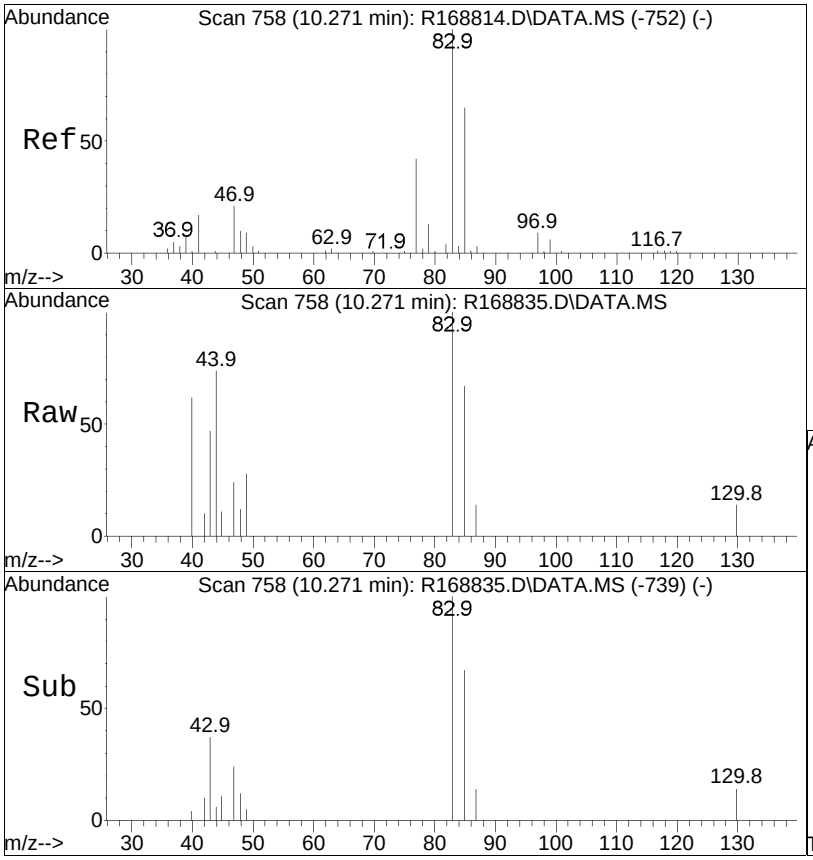


#38
Ethyl Acetate
Concen: 0.27 ppbV
RT: 10.228 min Scan# 754
Delta R.T. 0.011 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 61 Resp: 1552

Ion	Ratio	Lower	Upper
61	100		
70	114.2	61.0	91.4#
43	700.6	528.6	793.0

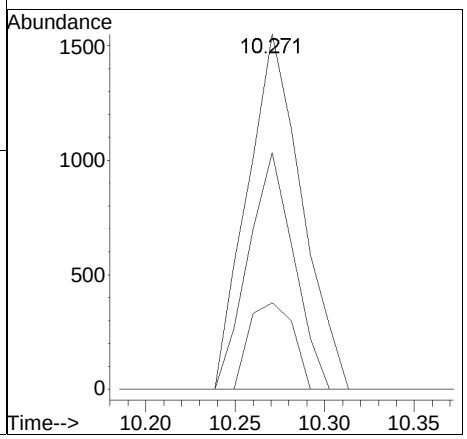


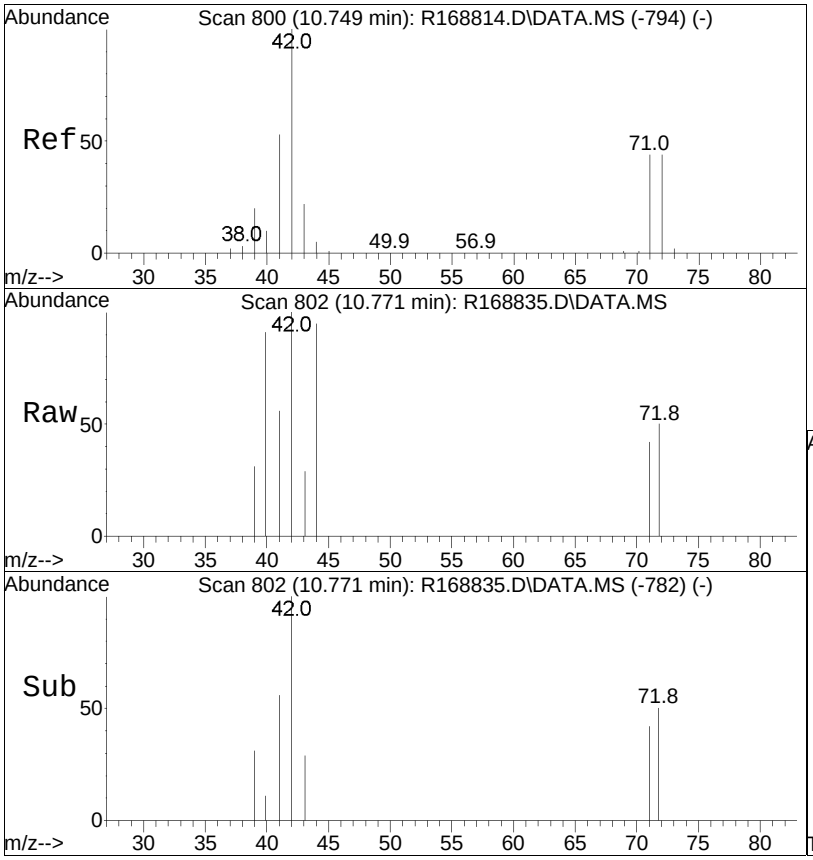


#39
chloroform
Concen: 0.10 ppbV
RT: 10.271 min Scan# 758
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 83 Resp: 3272

Ion	Ratio	Lower	Upper
83	100		
85	66.6	52.1	78.1
47	24.4	17.3	25.9

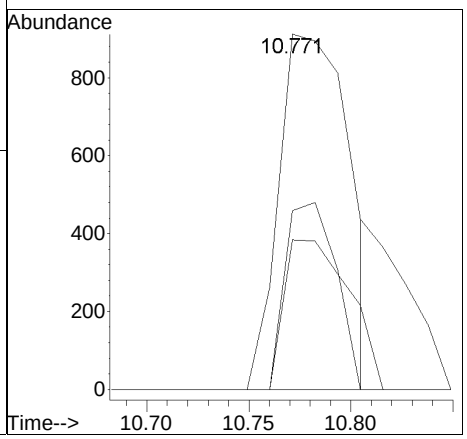


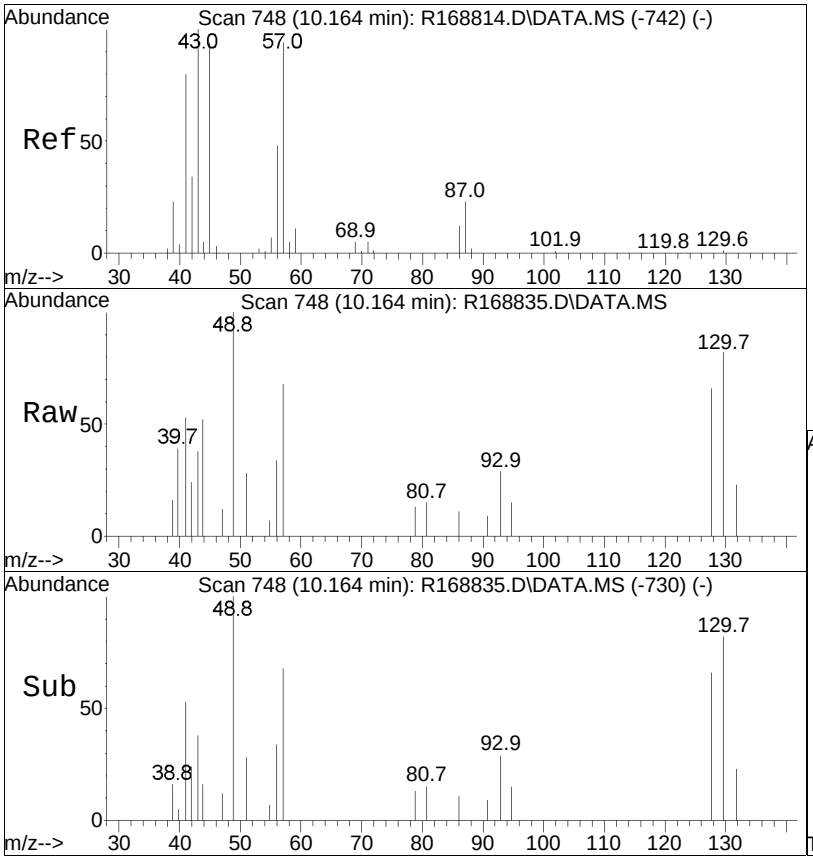


#40
Tetrahydrofuran
Concen: 0.15 ppbV m
RT: 10.771 min Scan# 802
Delta R.T. 0.022 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 42 Resp: 2210

Ion	Ratio	Lower	Upper
42	100		
71	42.1	35.0	52.4
72	50.3	35.5	53.3

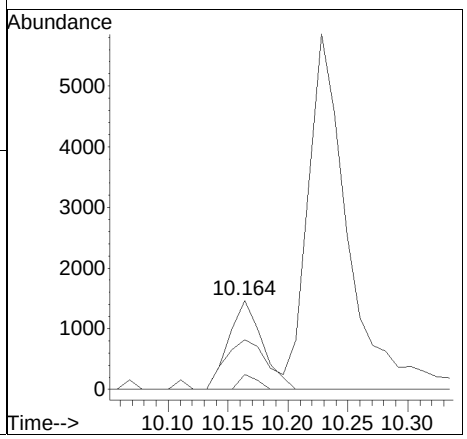


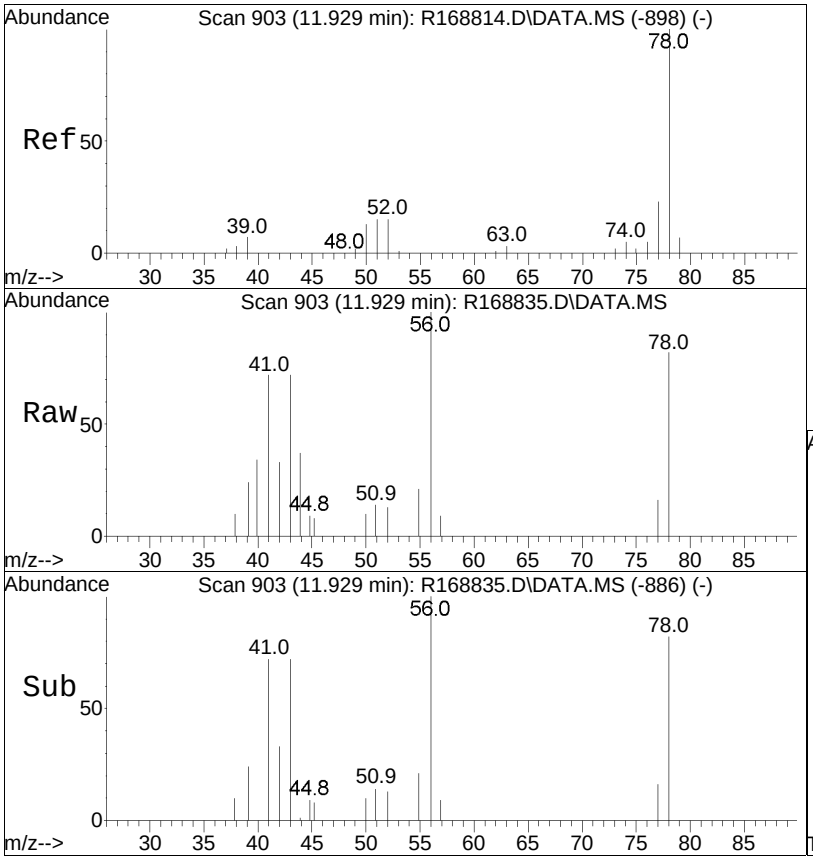


#44
hexane
Concen: 0.12 ppbV m
RT: 10.164 min Scan# 748
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 57 Resp: 2849

Ion	Ratio	Lower	Upper
57	100		
43	56.0	85.5	128.3#
86	16.8	10.5	15.7#

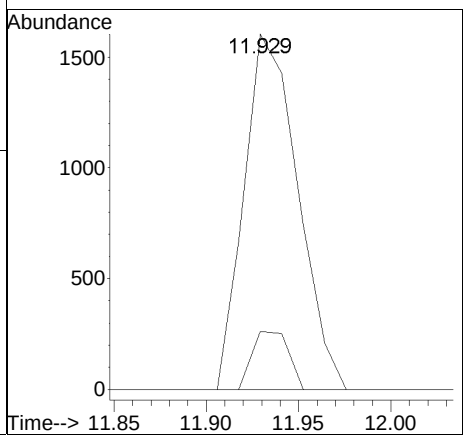


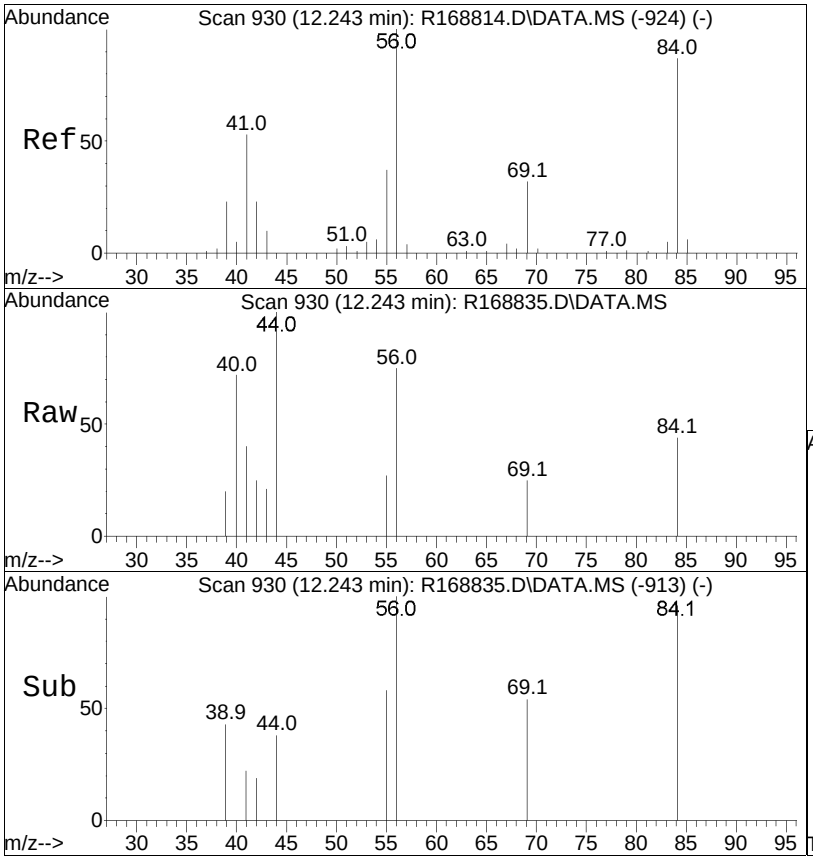


#50
benzene
Concen: 0.08 ppbV
RT: 11.929 min Scan# 903
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 78 Resp: 3250

Ion	Ratio	Lower	Upper
78	100		
52	16.3	11.7	17.5

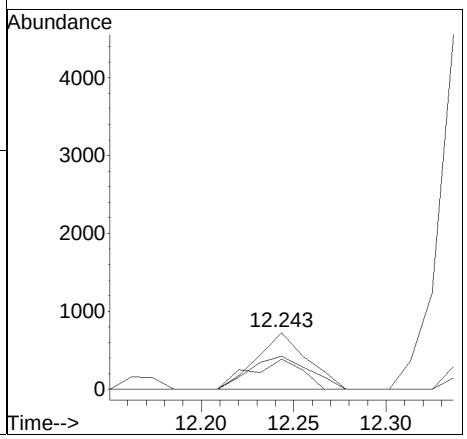


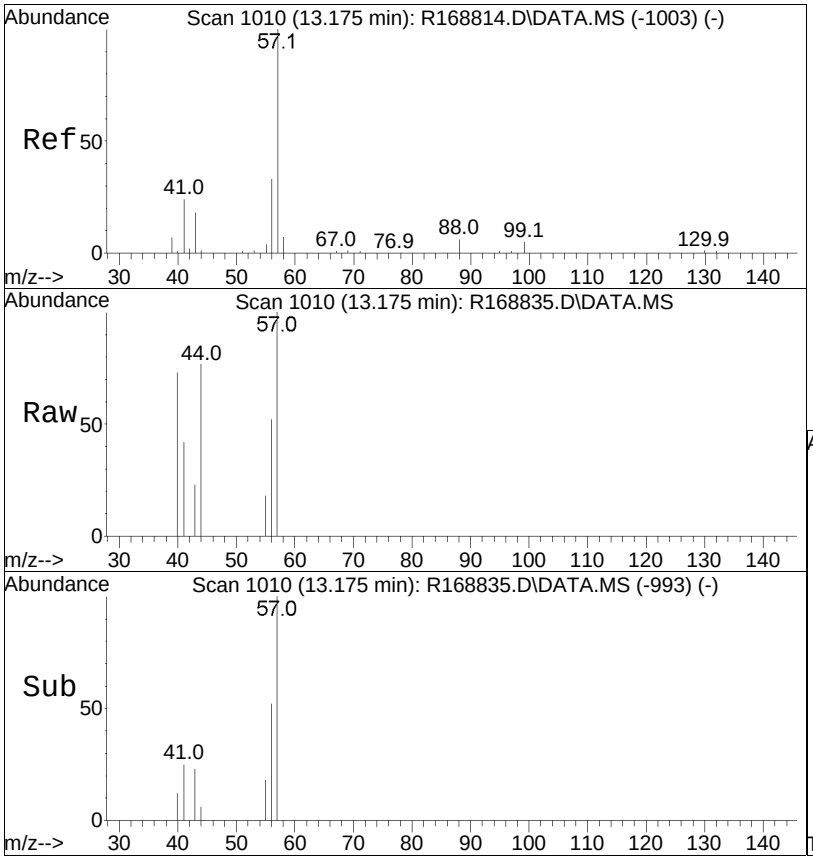


#53
cyclohexane
Concen: 0.07 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 56 Resp: 1391

Ion	Ratio	Lower	Upper
56	100		
84	58.8	70.1	105.1#
41	53.5	42.6	63.8

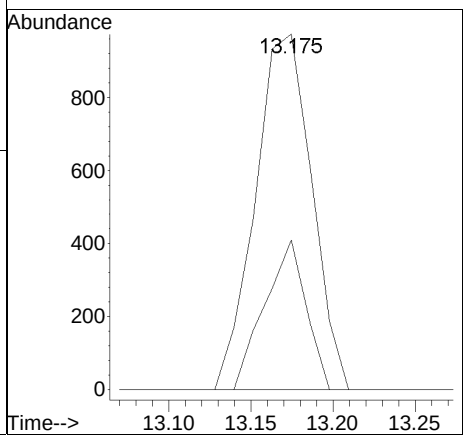


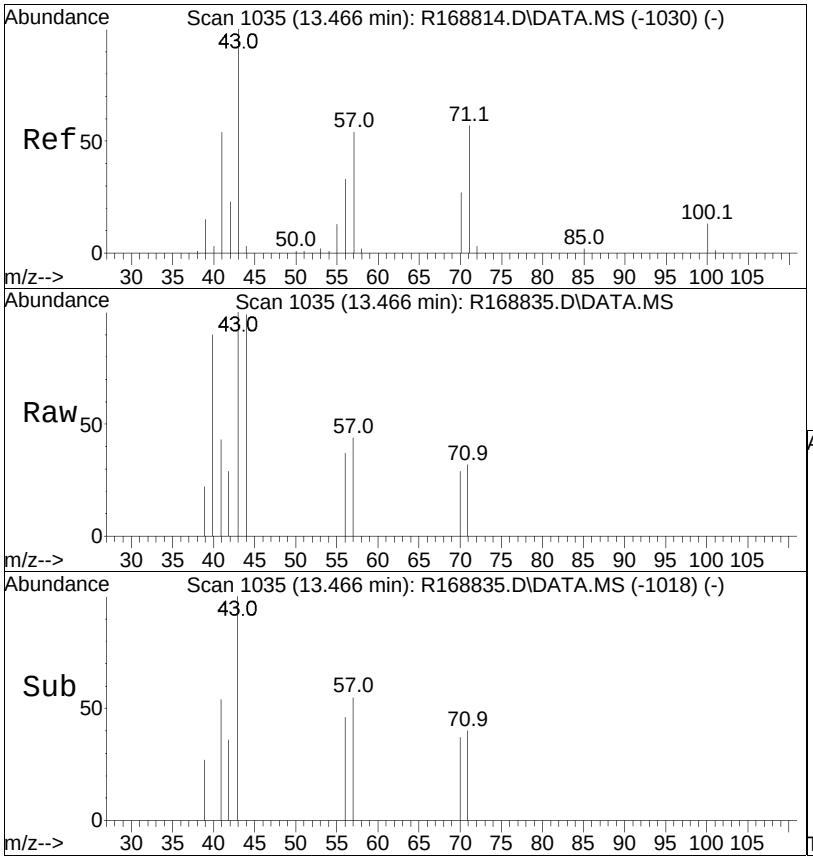


#60
2,2,4-trimethylpentane
Concen: 0.04 ppbV
RT: 13.175 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 57 Resp: 2328

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	42.1	19.3	28.9#

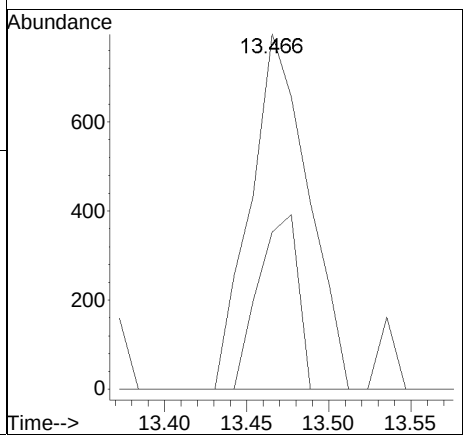


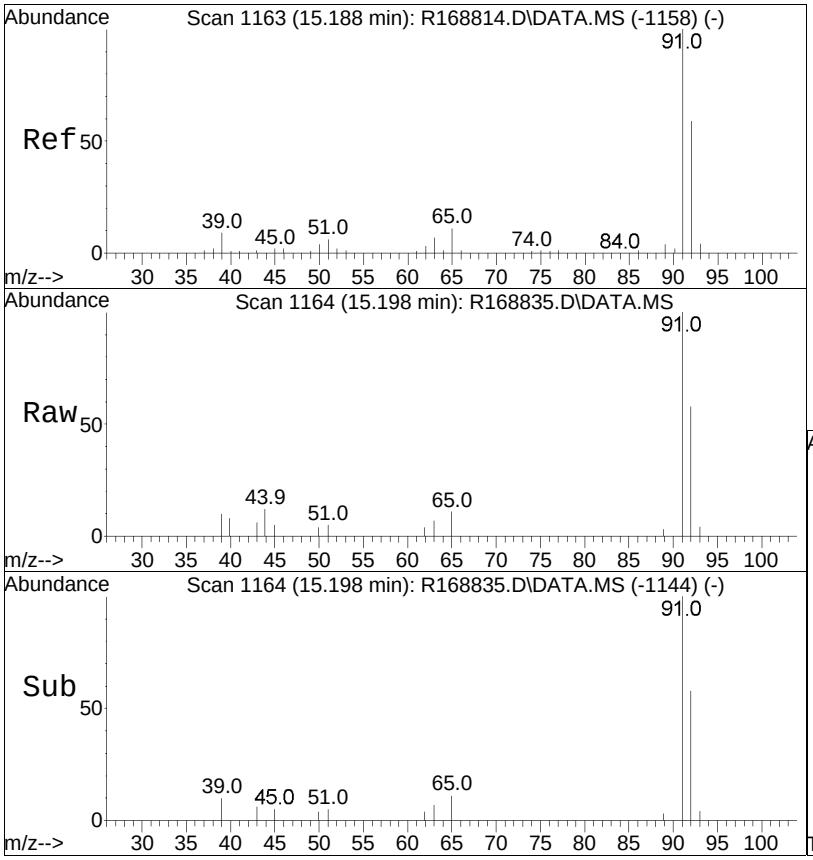


#62
heptane
Concen: 0.09 ppbV
RT: 13.466 min Scan# 1035
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 43 Resp: 1949

Ion	Ratio	Lower	Upper
43	100		
57	44.3	43.4	65.0
100	0.0	11.2	16.8#

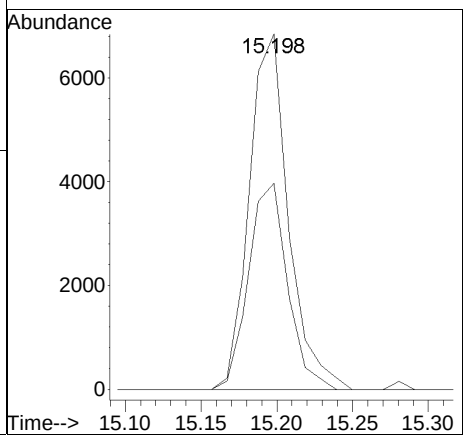


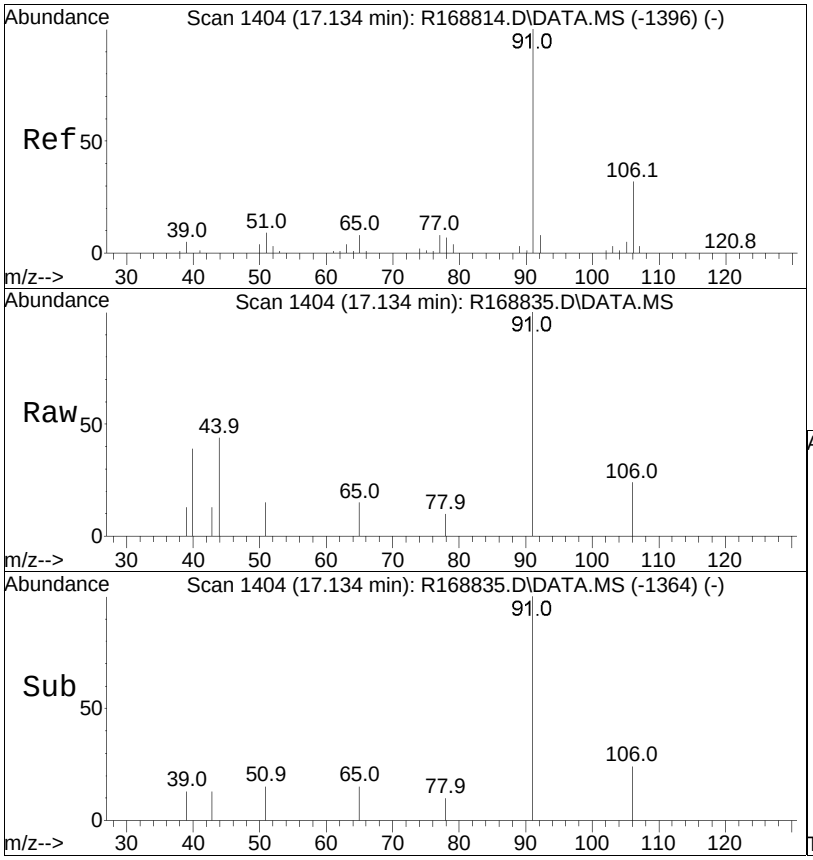


#68
toluene
Concen: 0.25 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 91 Resp: 12317

Ion	Ratio	Lower	Upper
91	100		
92	58.0	47.2	70.8

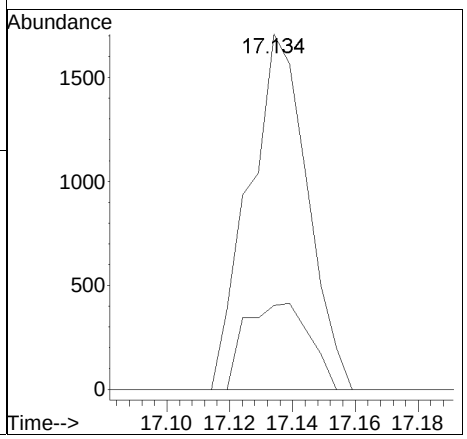


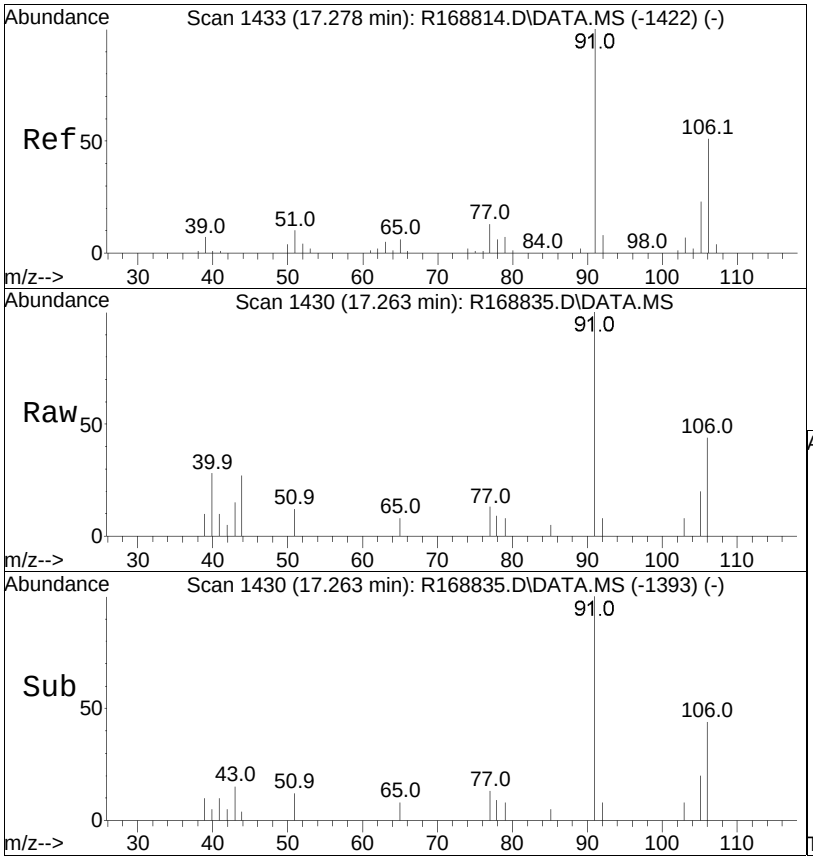


#81
ethylbenzene
Concen: 0.04 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 91 Resp: 2207

Ion	Ratio	Lower	Upper
91	100		
106	23.6	25.3	37.9#

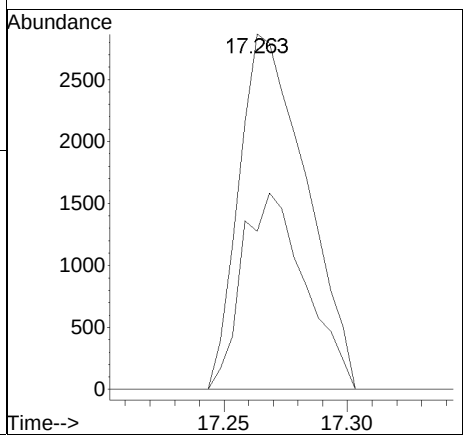


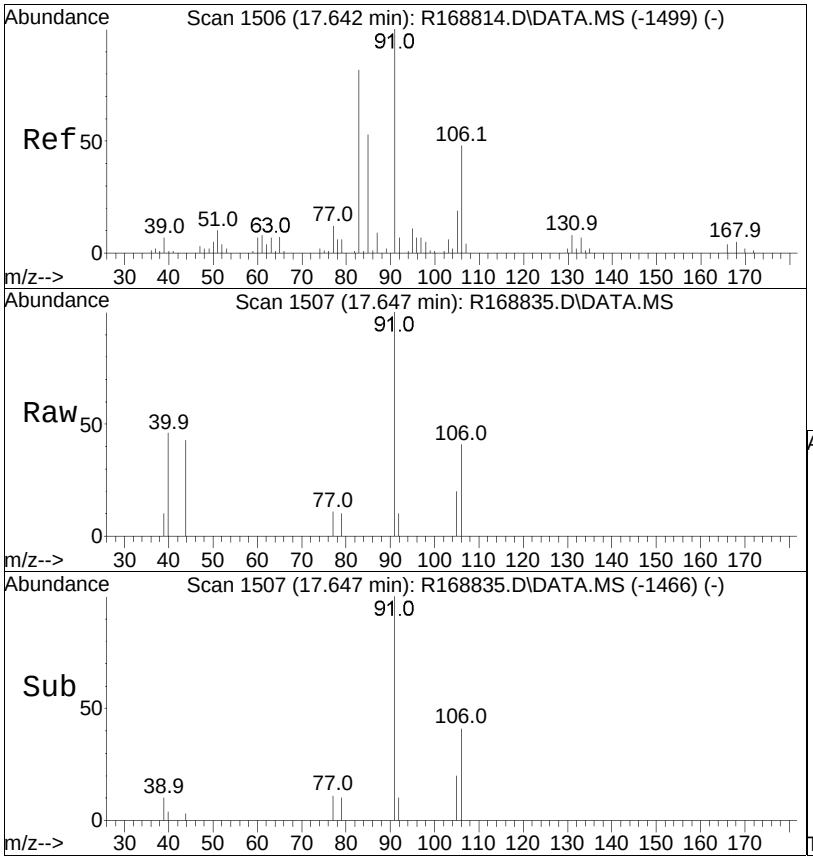


#83
m+p-xylene
Concen: 0.11 ppbV
RT: 17.263 min Scan# 1430
Delta R.T. -0.015 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 91 Resp: 5410

Ion	Ratio	Lower	Upper
91	100		
106	44.5	40.8	61.2

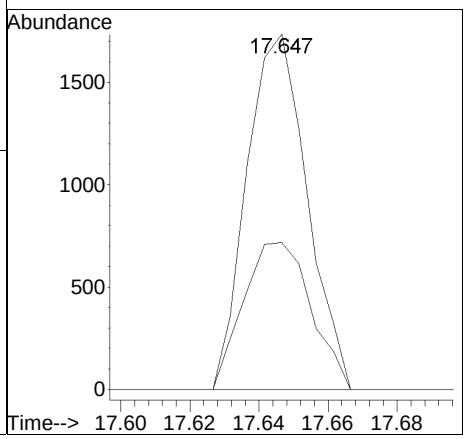


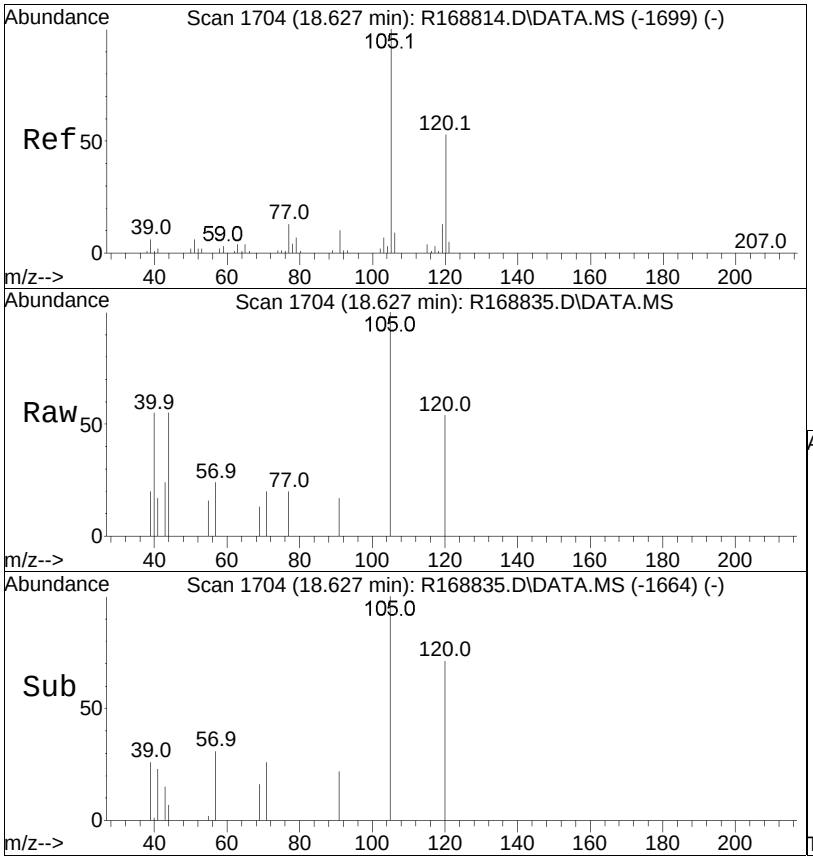


#87
o-xylene
Concen: 0.04 ppbV
RT: 17.647 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 91 Resp: 2101

Ion	Ratio	Lower	Upper
91	100		
106	41.4	38.3	57.5

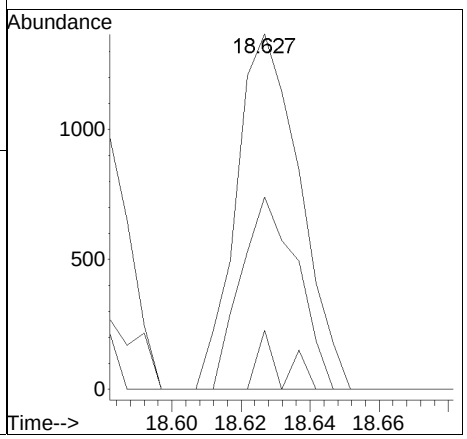


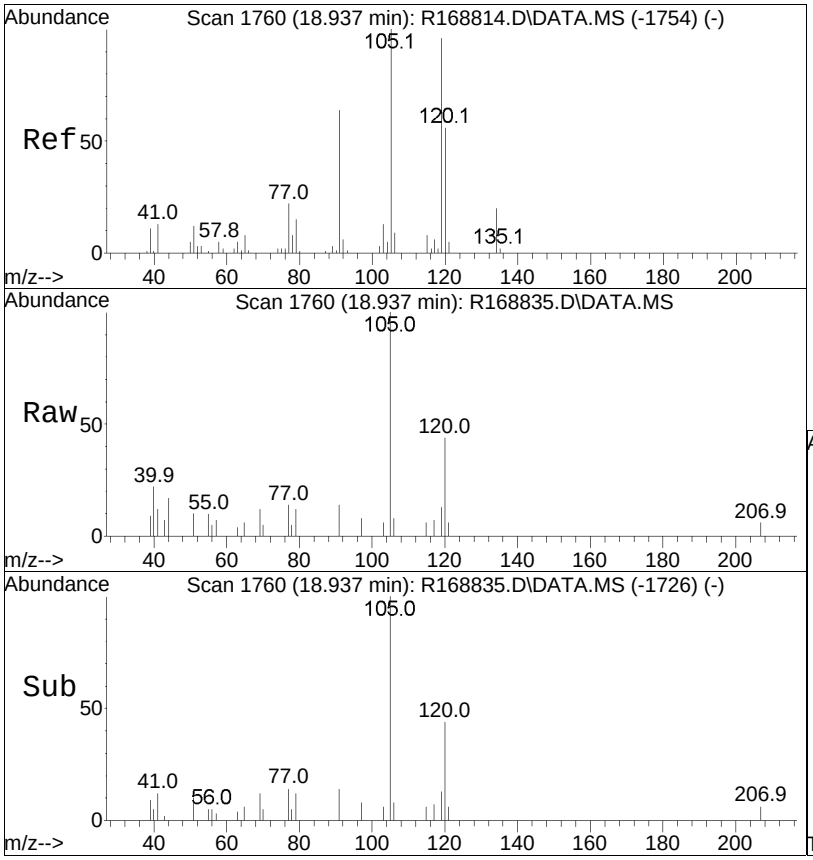


#97
1,3,5-trimethylbenzene
Concen: 0.03 ppbV
RT: 18.627 min Scan# 1704
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:105 Resp: 1752

Ion	Ratio	Lower	Upper
105	100		
120	54.1	41.9	62.9
91	16.7	8.0	12.0#

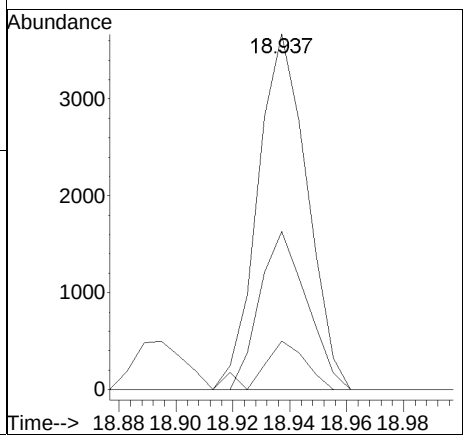




#99
1,2,4-trimethylbenzene
Concen: 0.08 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:105 Resp: 4426

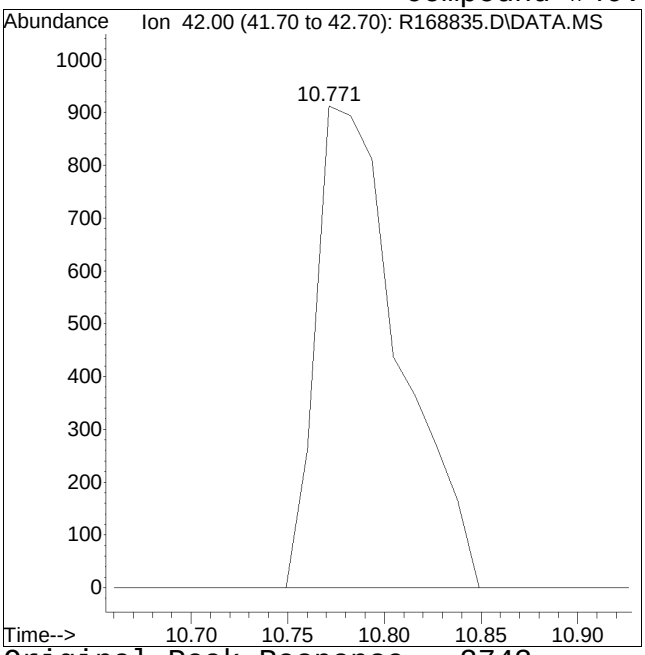
Ion	Ratio	Lower	Upper
105	100		
120	44.4	44.5	66.7#
91	13.6	51.4	77.2#

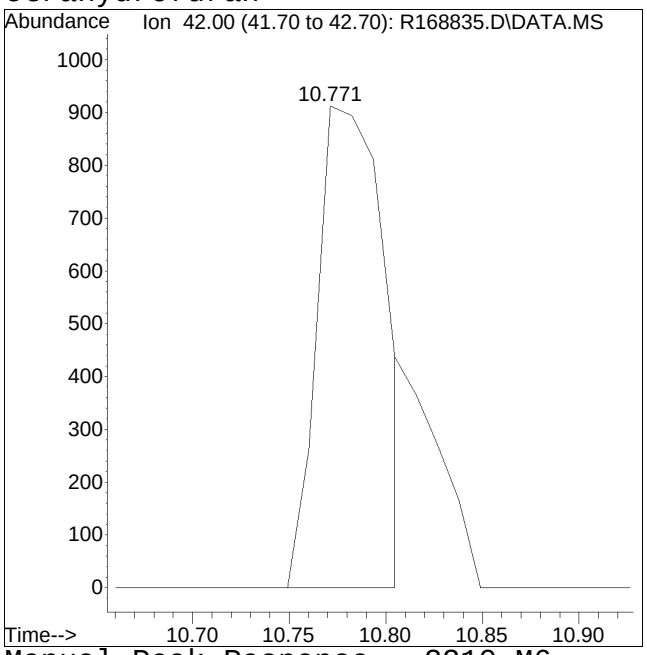


Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TFS1_191023.M
Data File : R168835.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 8:35 pm Instrument : Air Piano 1
Sample : L1948939-05,3,250,250 Quant Date : 10/25/2019 7:50 am

Compound #40: Tetrahydrofuran





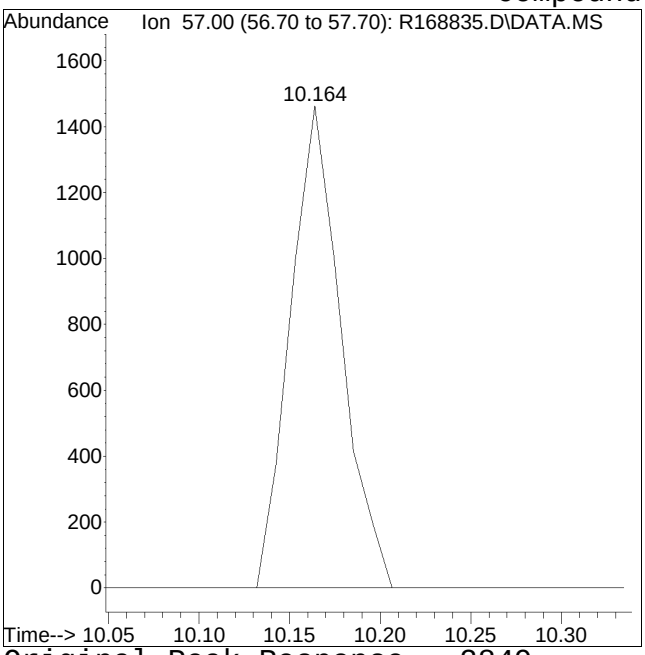
Original Peak Response = 2743 Manual Peak Response = 2210 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

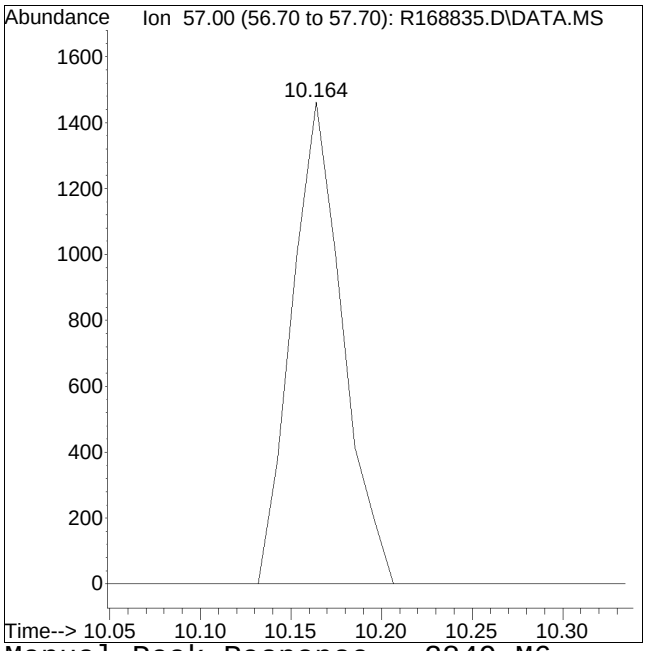
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168835.D
Date Inj'd : 10/24/2019 8:35 pm
Sample : L1948939-05,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/25/2019 7:50 am

Compound #44: hexane





Original Peak Response = 2849 Manual Peak Response = 2849 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168836.D
Acq On : 24 Oct 2019 9:07 pm
Operator : AIRPIANO1:TS
Sample : L1948939-06,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 25 14:37:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	284929	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		87.48%	
43) 1,4-difluorobenzene	12.348	114	605033	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		81.60%	
67) chlorobenzene-D5	16.801	54	104632	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		84.58%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	9569	0.350	ppbV	94
6) chloromethane	4.239	50	4727	0.508	ppbV	92
7) Freon-114	4.384		0	N.D.		
10) 1,3-butadiene	4.741	54	279	0.034	ppbV #	32
13) bromomethane	5.227		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.609	31	86154	13.878	ppbV	100
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.260	43	51138	2.986	ppbV #	98
21) trichlorofluoromethane	6.437	101	6522	0.227	ppbV	92
22) isopropyl alcohol	6.651	45	36286	1.915	ppbV	99
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	1363	0.110	ppbV	90
29) 3-chloropropene	7.591		0	N.D.		
30) carbon disulfide	7.796		0	N.D.		
31) Freon 113	7.815	101	1115	0.045	ppbV	95
32) trans-1,2-dichloroethene	0.000		0	N.D.	d	
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	9.471	43	5584	0.222	ppbV	93
38) Ethyl Acetate	10.249	61	194	0.034	ppbV #	82
39) chloroform	10.271	83	1228	0.035	ppbV #	70
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	10.164	57	2681	0.114	ppbV #	67
50) benzene	11.929	78	4100	0.106	ppbV	93
53) cyclohexane	12.232	56	949	0.050	ppbV #	85

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168836.D
Acq On : 24 Oct 2019 9:07 pm
Operator : AIRPIANO1:TS
Sample : L1948939-06,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 25 14:37:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

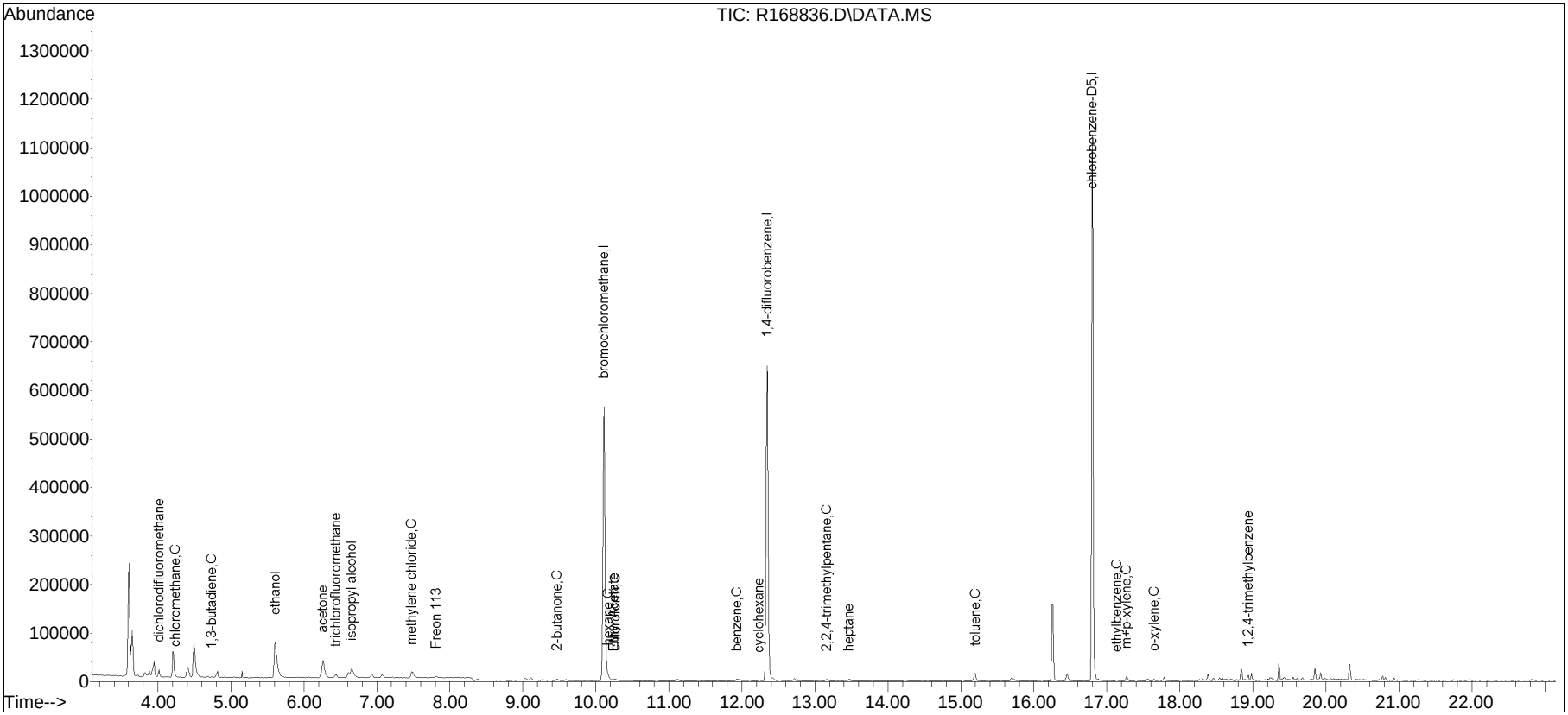
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	13.163	57	3033	0.051	ppbV #	90
62)	heptane	13.466	43	1993	0.093	ppbV #	81
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	14.226		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	15.198	91	12320	0.249	ppbV	94
72)	2-hexanone	15.415		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.139	91	2308	0.037	ppbV #	81
83)	m+p-xylene	17.269	91	5810	0.121	ppbV	87
84)	bromoform	0.000		0	N.D.		
85)	styrene	17.567		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.647	91	2200	0.045	ppbV	96
96)	4-ethyl toluene	18.577		0	N.D.		
97)	1,3,5-trimethylbenzene	18.627		0	N.D.		
99)	1,2,4-trimethylbenzene	18.937	105	3882	0.068	ppbV #	55
101)	Benzyl Chloride	18.943		0	N.D.		
102)	1,3-dichlorobenzene	19.119		0	N.D.		
103)	1,4-dichlorobenzene	19.119		0	N.D.		
107)	1,2-dichlorobenzene	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	0.000		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

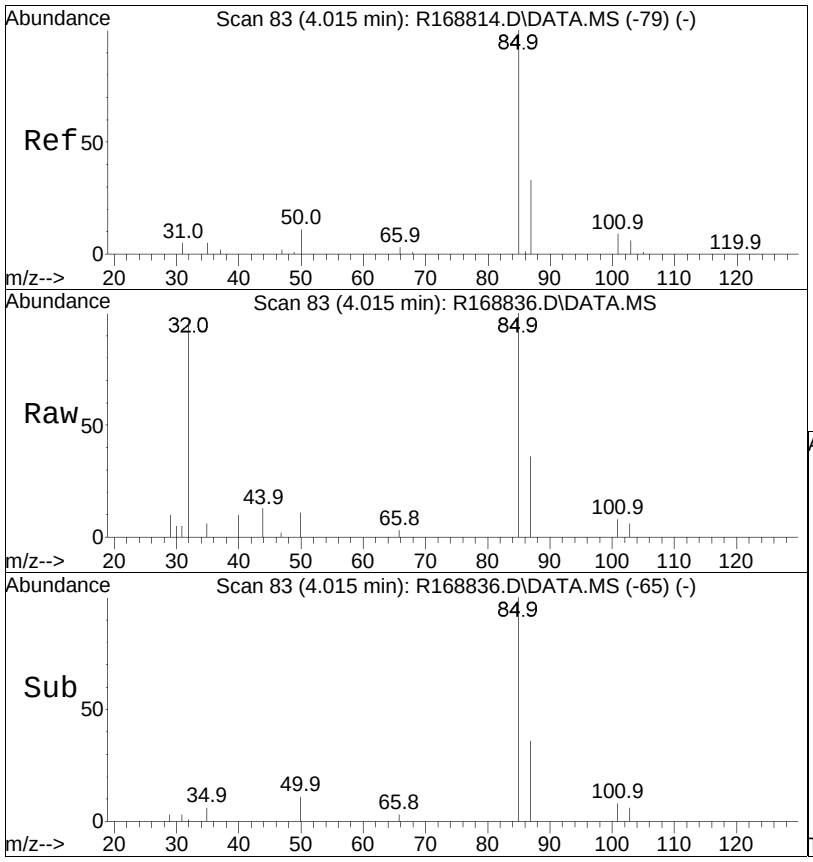
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168836.D
Acq On : 24 Oct 2019 9:07 pm
Operator : AIRPIANO1:TS
Sample : L1948939-06,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 25 14:37:47 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

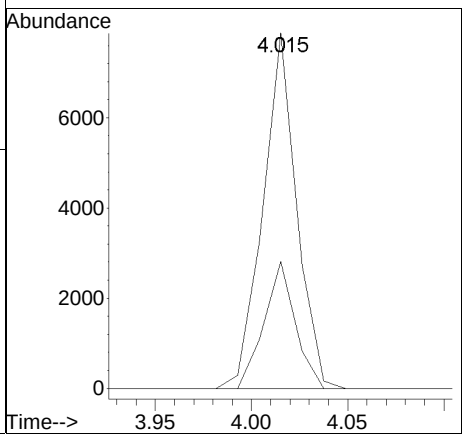


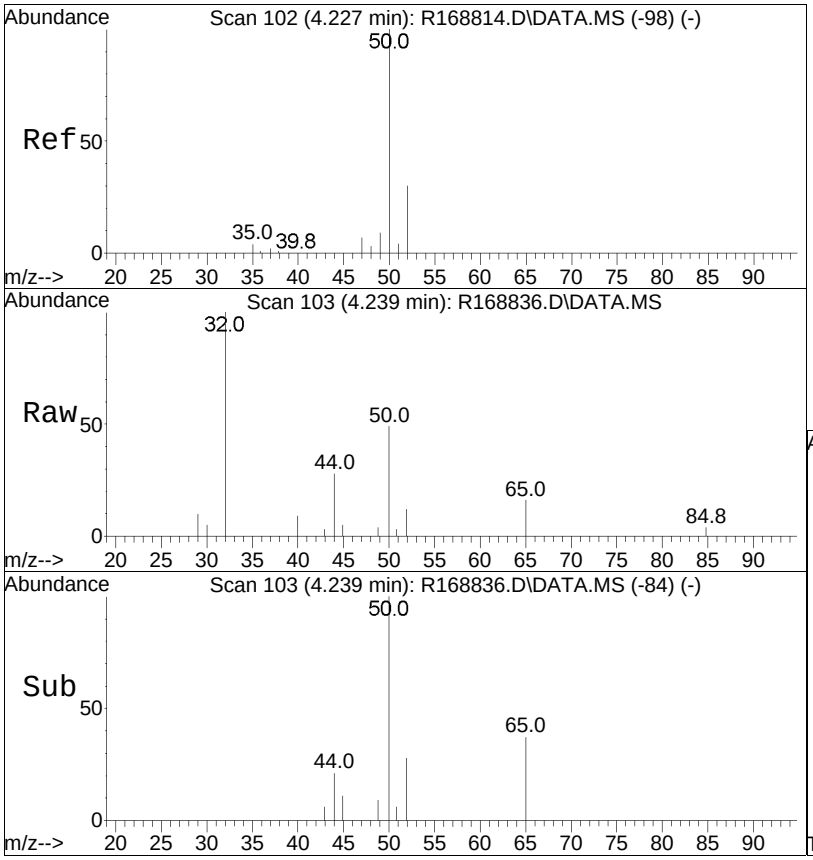


#5
dichlorodifluoromethane
Concen: 0.35 ppbV
RT: 4.015 min Scan# 83
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 85 Resp: 9569

Ion	Ratio	Lower	Upper
85	100		
87	35.7	26.1	39.1

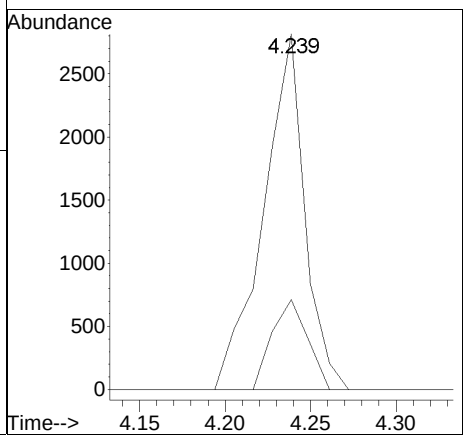


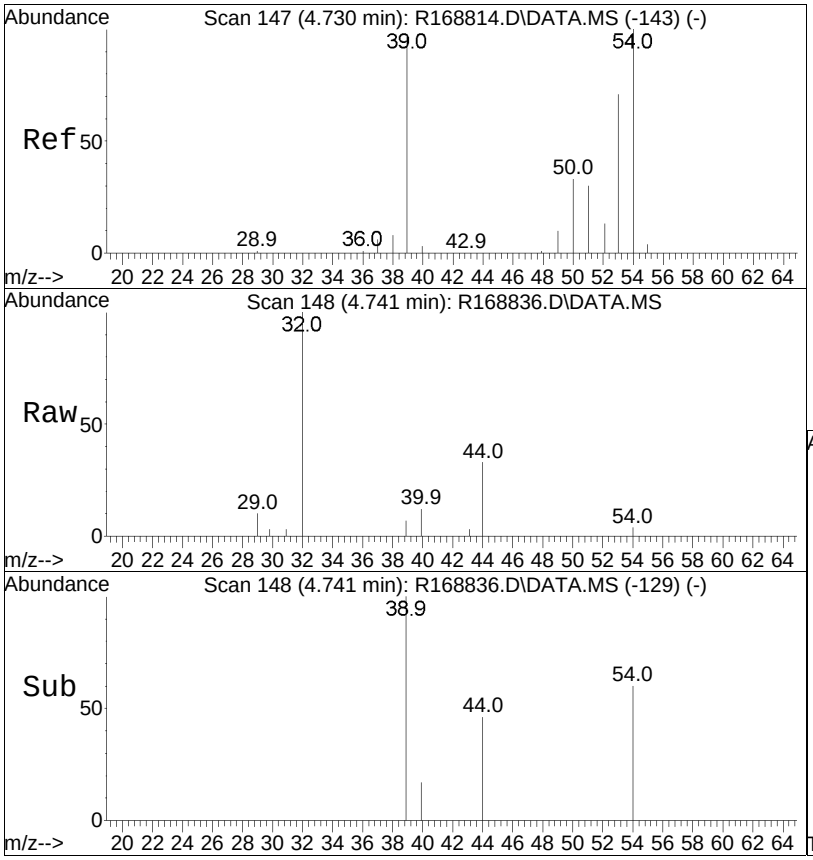


#6
chloromethane
Concen: 0.51 ppbV
RT: 4.239 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 50 Resp: 4727

Ion	Ratio	Lower	Upper
50	100		
52	25.3	23.7	35.5

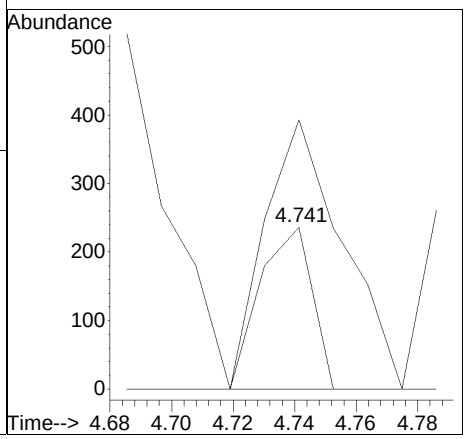


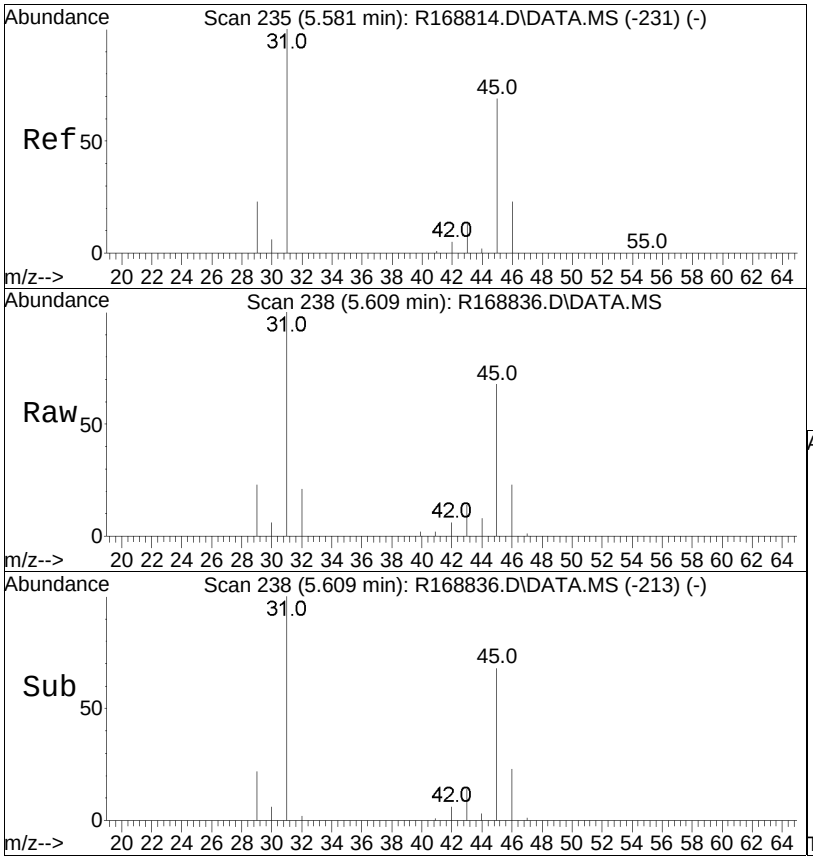


#10
1,3-butadiene
Concen: 0.03 ppbV
RT: 4.741 min Scan# 148
Delta R.T. 0.011 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 54 Resp: 279

Ion	Ratio	Lower	Upper
54	100		
39	166.5	79.2	118.8#

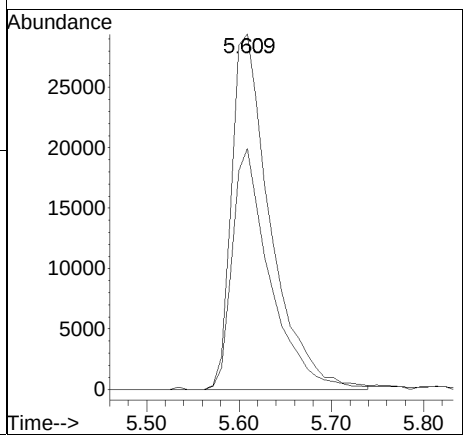


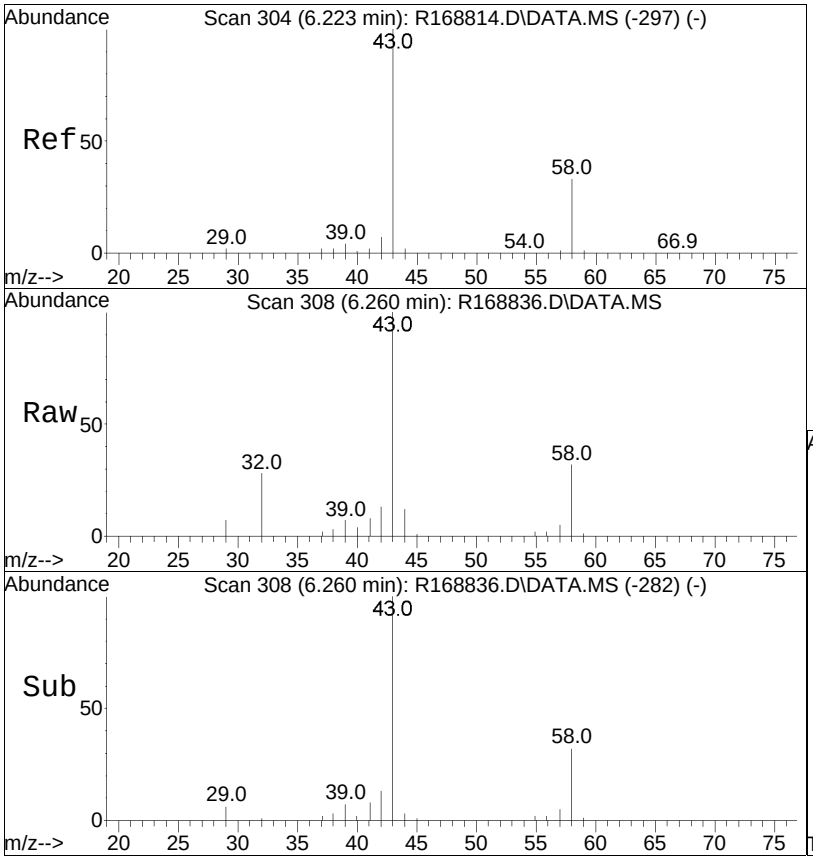


#15
ethanol
Concen: 13.88 ppbV
RT: 5.609 min Scan# 238
Delta R.T. 0.028 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 31 Resp: 86154

Ion	Ratio	Lower	Upper
31	100		
45	67.8	54.3	81.5

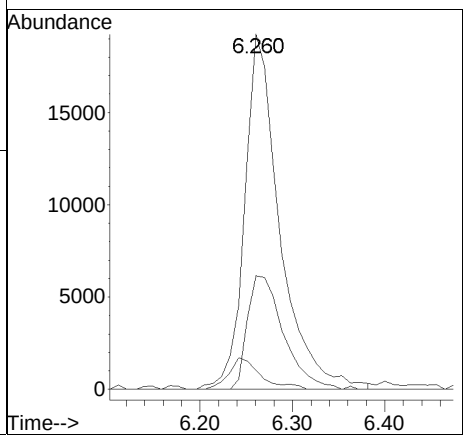


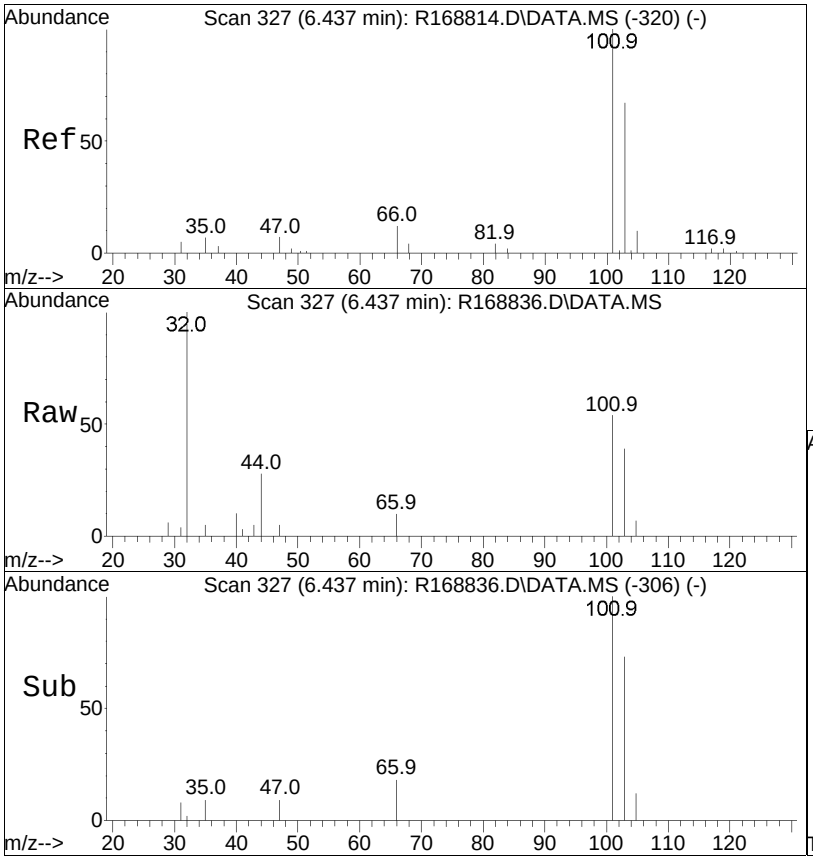


#19
acetone
Concen: 2.99 ppbV
RT: 6.260 min Scan# 308
Delta R.T. 0.037 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 43 Resp: 51138

Ion	Ratio	Lower	Upper
43	100		
58	32.0	26.5	39.7
57	5.4	0.8	1.2#

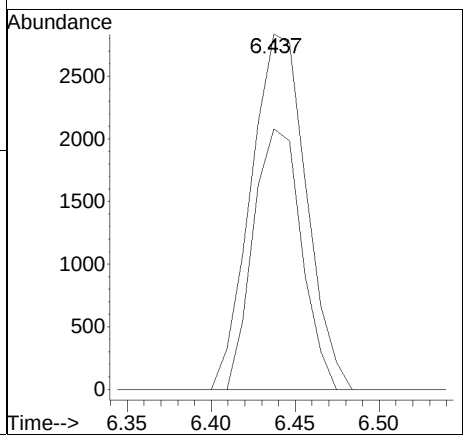


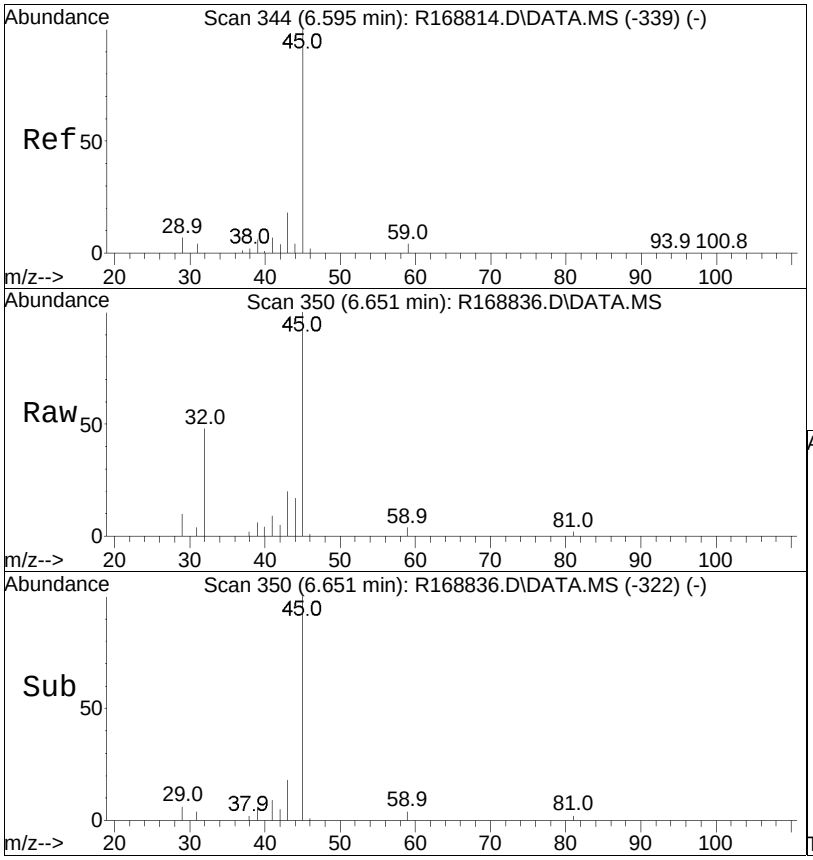


#21
trichlorofluoromethane
Concen: 0.23 ppbV
RT: 6.437 min Scan# 327
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:101 Resp: 6522

Ion	Ratio	Lower	Upper
101	100		
103	73.3	53.4	80.2

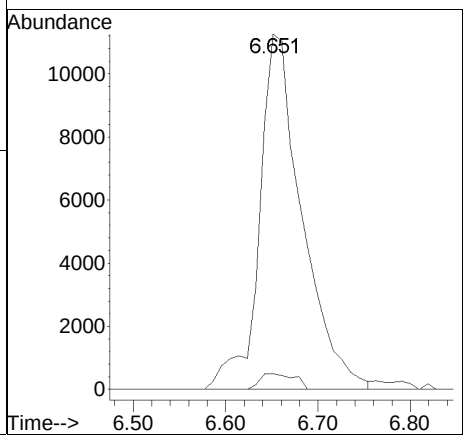


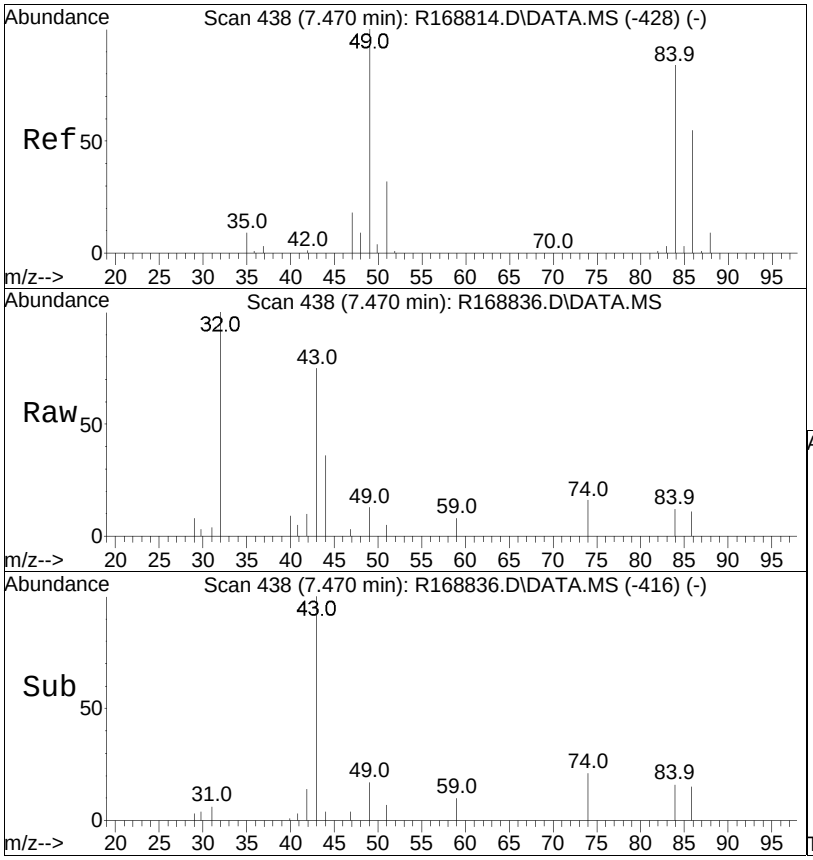


#22
isopropyl alcohol
Concen: 1.91 ppbV
RT: 6.651 min Scan# 350
Delta R.T. 0.056 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 45 Resp: 36286

Ion	Ratio	Lower	Upper
45	100		
59	4.4	3.4	5.0

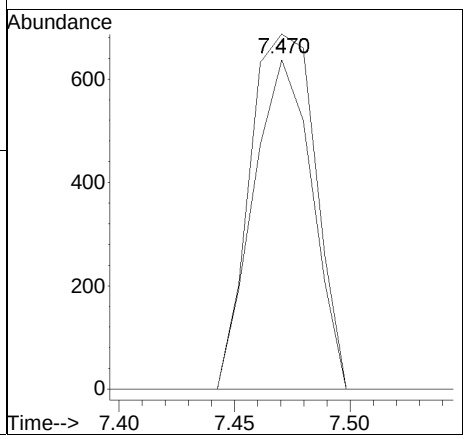


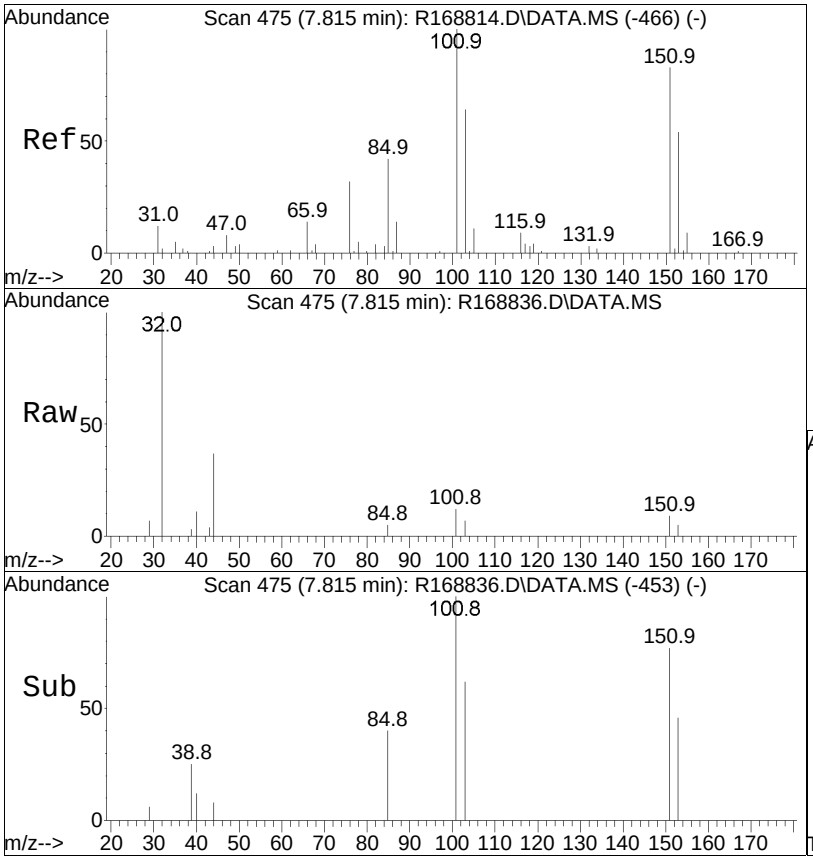


#28
methylene chloride
Concen: 0.11 ppbV
RT: 7.470 min Scan# 438
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 49 Resp: 1363

Ion	Ratio	Lower	Upper
49	100		
84	92.7	67.3	100.9

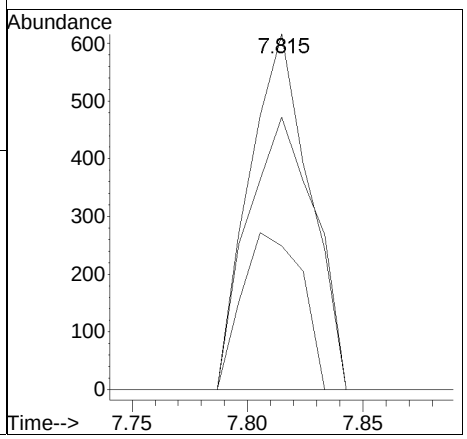


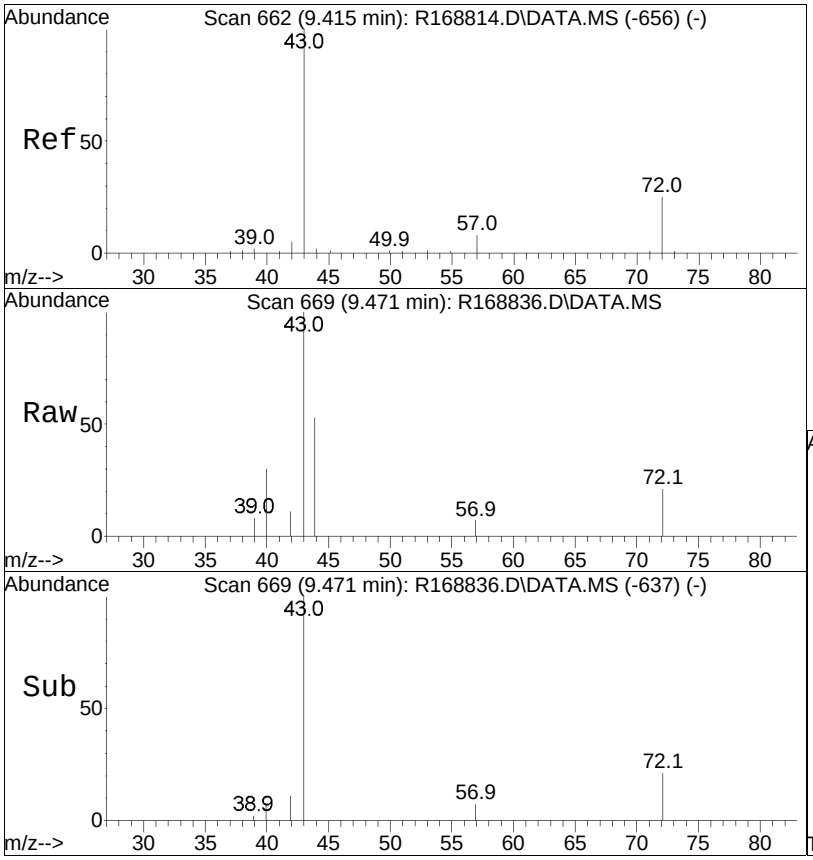


#31
Freon 113
Concen: 0.05 ppbV
RT: 7.815 min Scan# 475
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:101 Resp: 1115

Ion	Ratio	Lower	Upper
101	100		
85	40.4	33.2	49.8
151	76.6	66.2	99.2

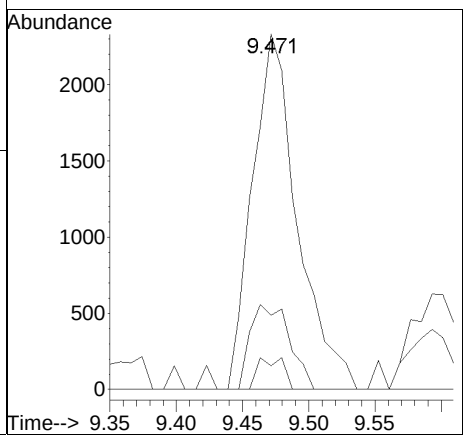


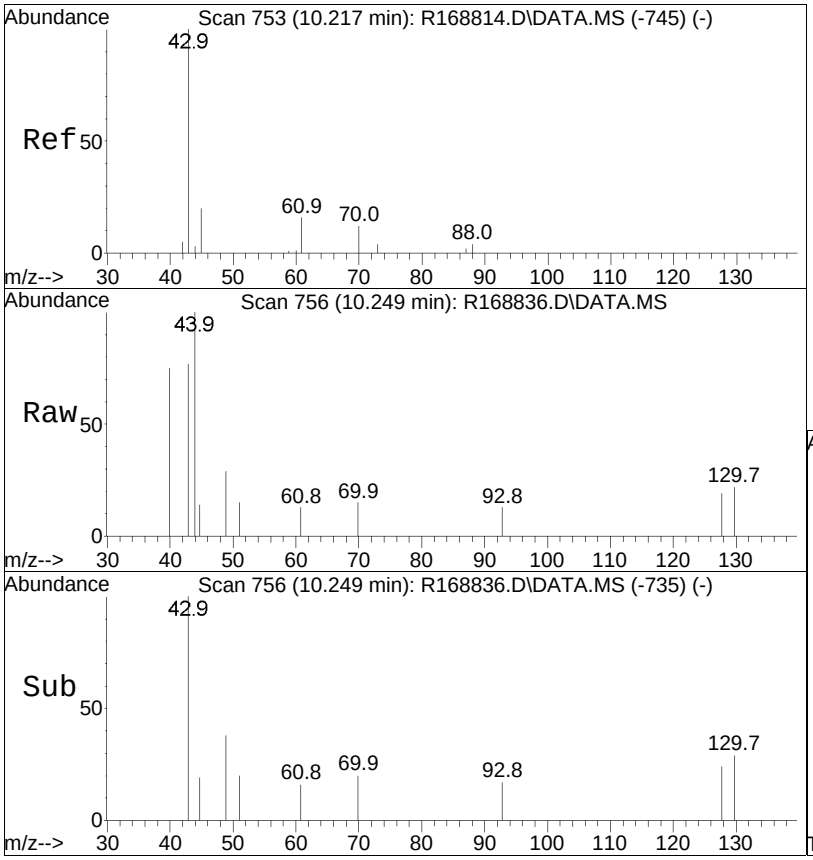


#36
2-butanone
Concen: 0.22 ppbV
RT: 9.471 min Scan# 669
Delta R.T. 0.057 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 43 Resp: 5584

Ion	Ratio	Lower	Upper
43	100		
72	20.9	20.0	30.0
57	6.6	6.3	9.5

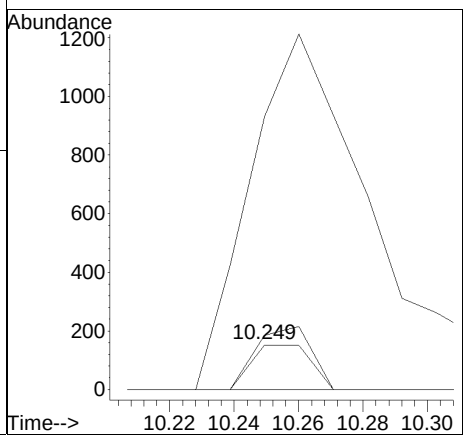


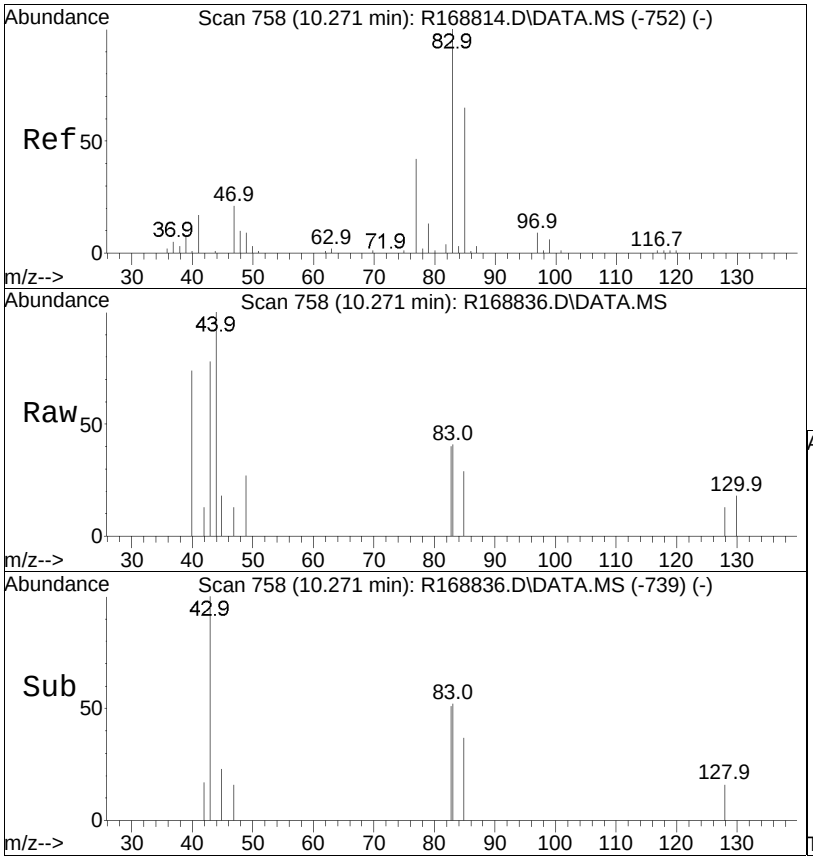


#38
Ethyl Acetate
Concen: 0.03 ppbV
RT: 10.249 min Scan# 756
Delta R.T. 0.032 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 61 Resp: 194

Ion	Ratio	Lower	Upper
61	100		
70	121.7	61.0	91.4#
43	612.5	528.6	793.0

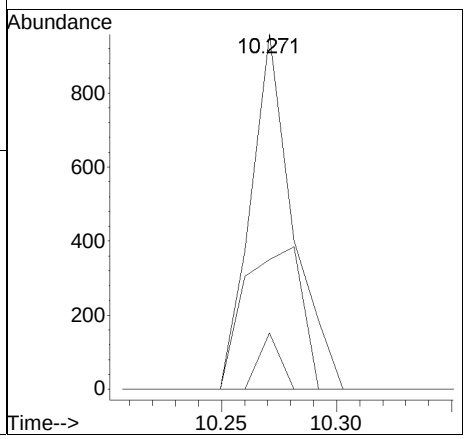


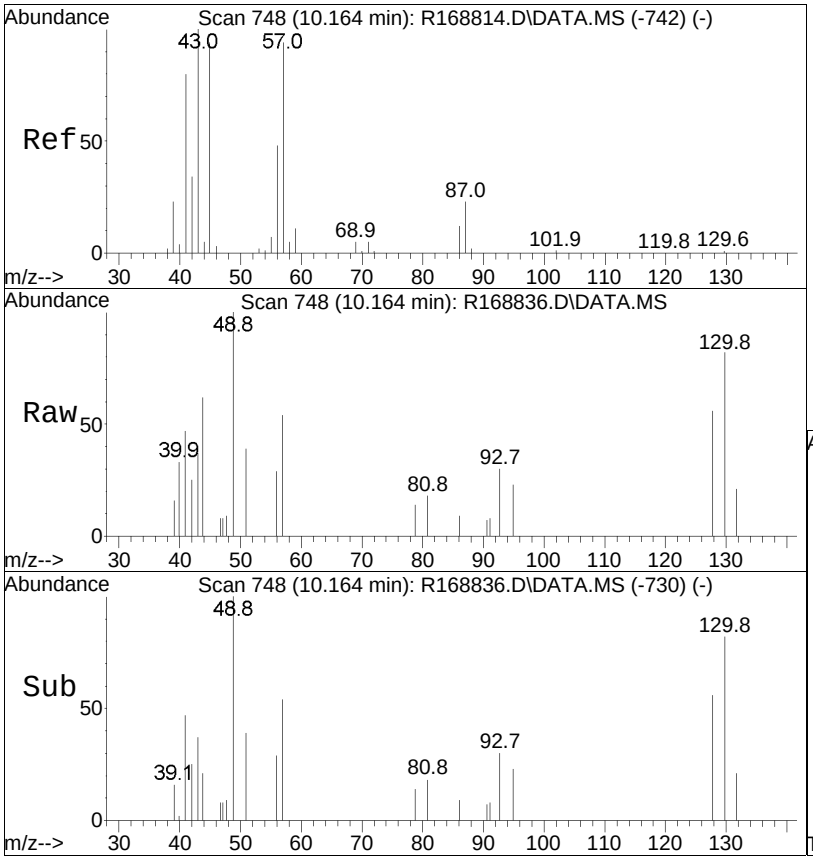


#39
chloroform
Concen: 0.04 ppbV
RT: 10.271 min Scan# 758
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 83 Resp: 1228

Ion	Ratio	Lower	Upper
83	100		
85	36.5	52.1	78.1#
47	15.8	17.3	25.9#

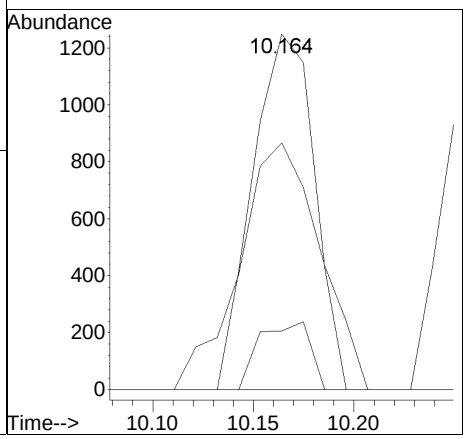


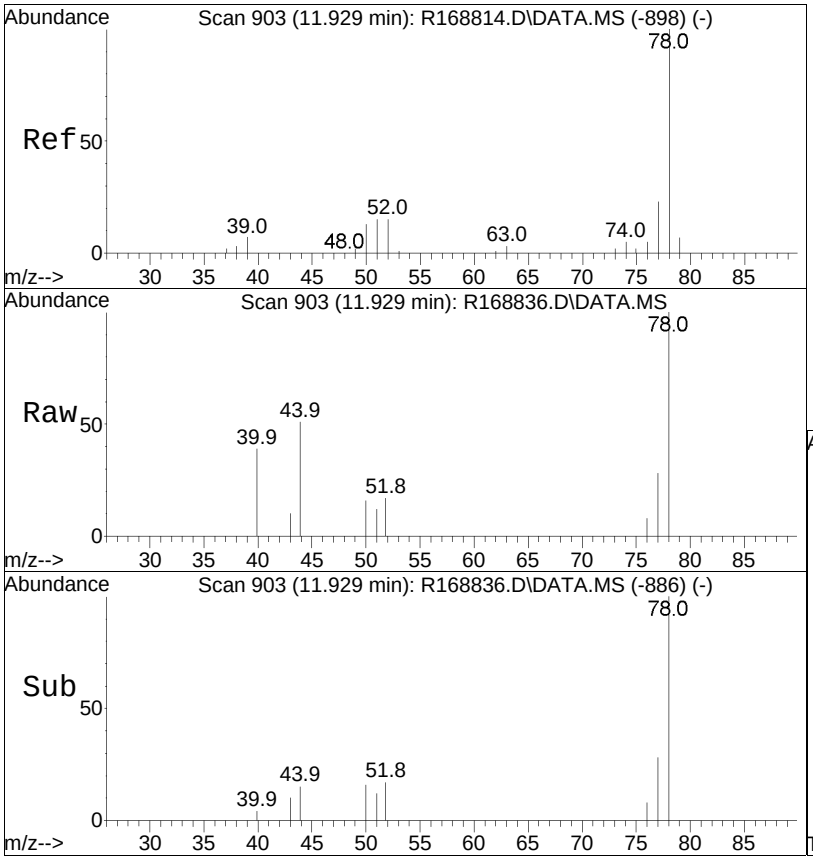


#44
hexane
Concen: 0.11 ppbV
RT: 10.164 min Scan# 748
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 57 Resp: 2681

Ion	Ratio	Lower	Upper
57	100		
43	69.4	85.5	128.3#
86	16.5	10.5	15.7#

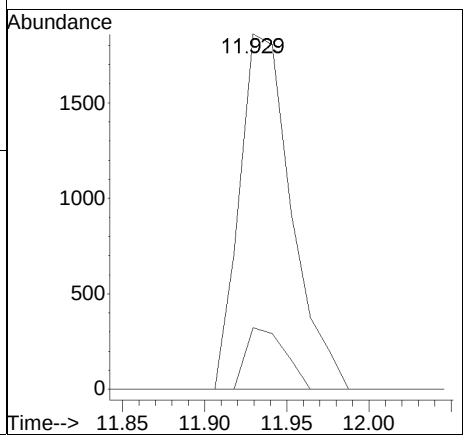


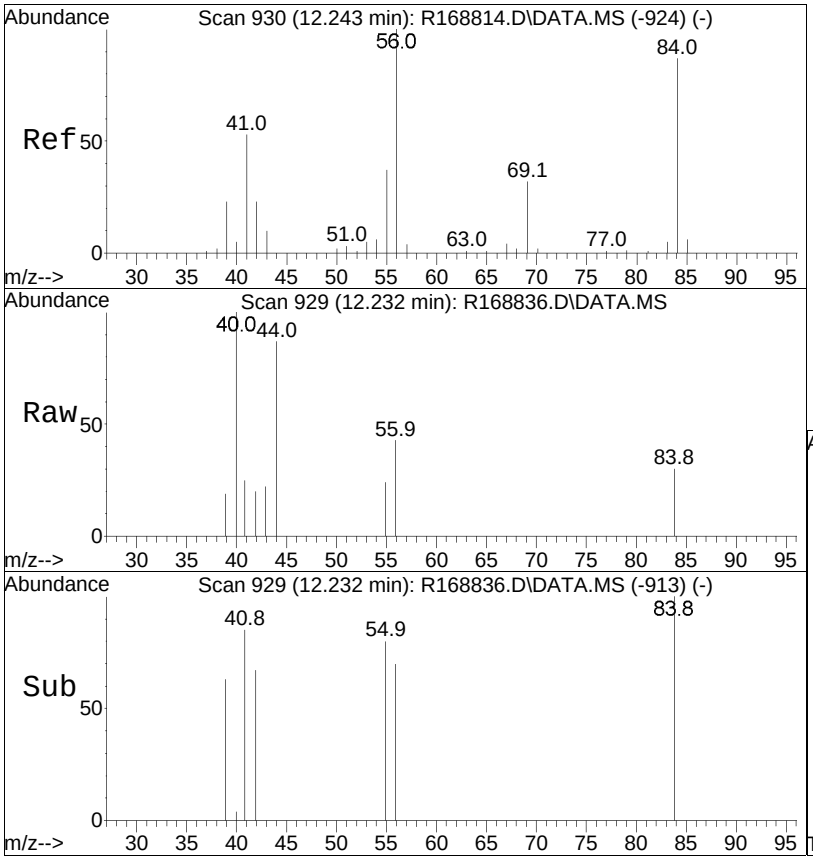


#50
benzene
Concen: 0.11 ppbV
RT: 11.929 min Scan# 903
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 78 Resp: 4100

Ion	Ratio	Lower	Upper
78	100		
52	17.4	11.7	17.5

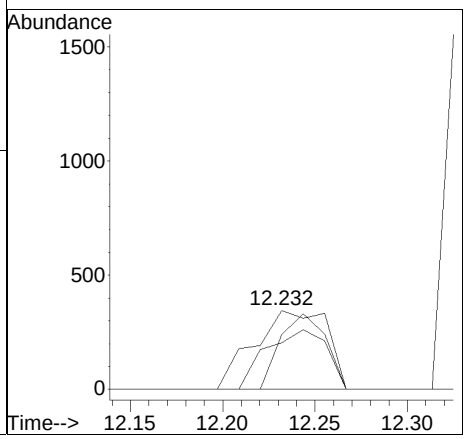


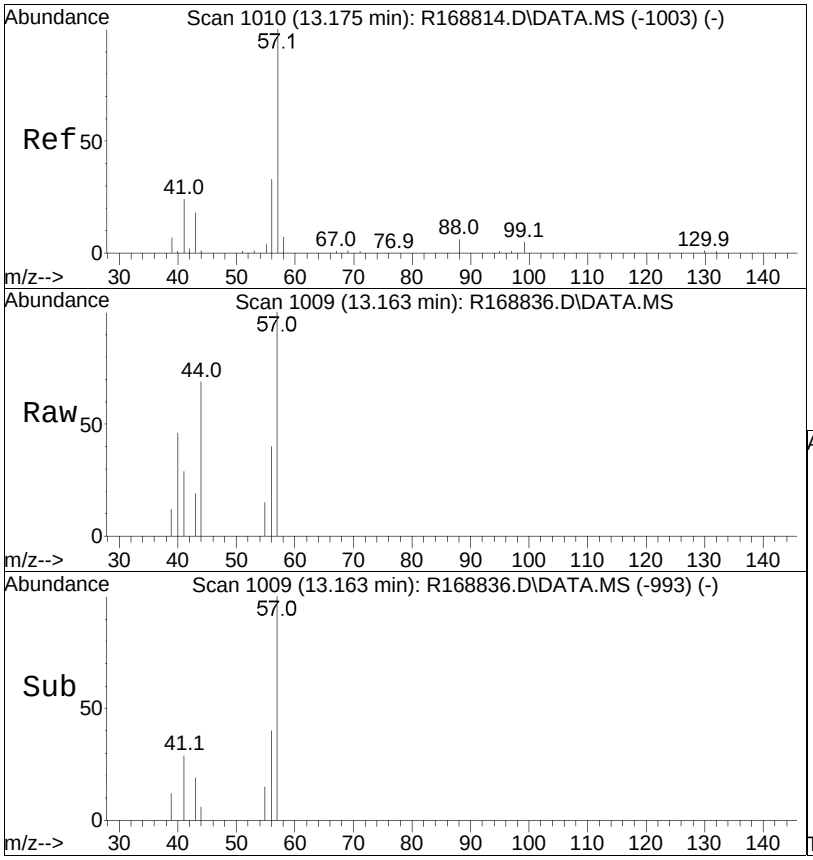


#53
cyclohexane
Concen: 0.05 ppbV
RT: 12.232 min Scan# 929
Delta R.T. -0.012 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 56 Resp: 949

Ion	Ratio	Lower	Upper
56	100		
84	69.6	70.1	105.1#
41	59.1	42.6	63.8

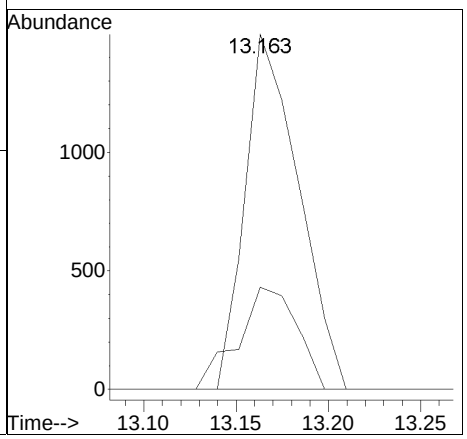


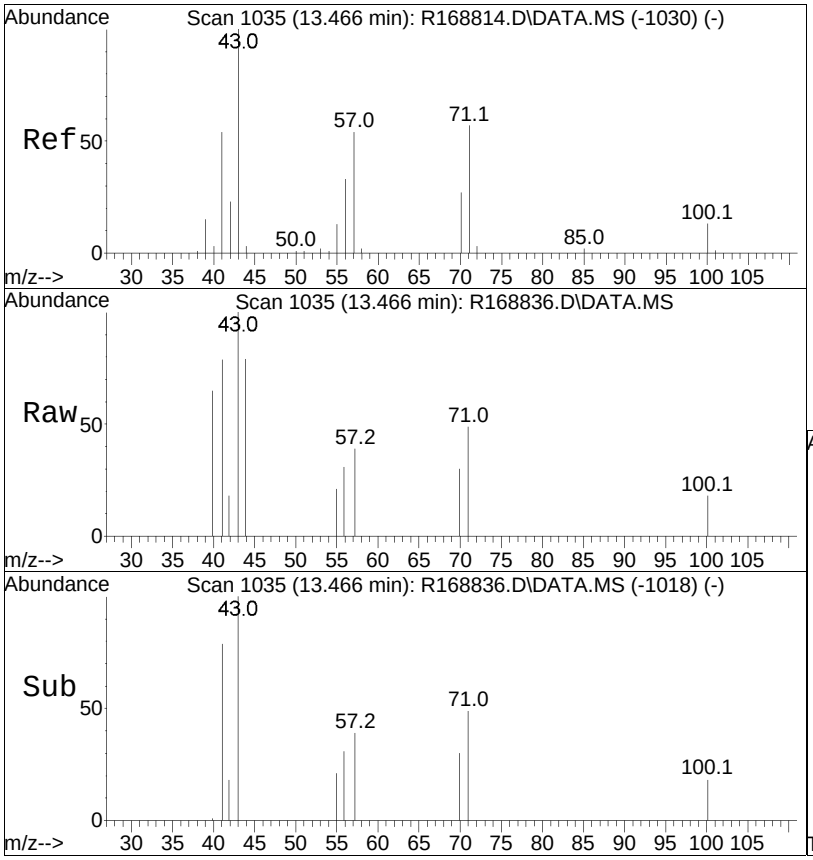


#60
2,2,4-trimethylpentane
Concen: 0.05 ppbV
RT: 13.163 min Scan# 1009
Delta R.T. -0.012 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 57 Resp: 3033

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	28.8	19.3	28.9

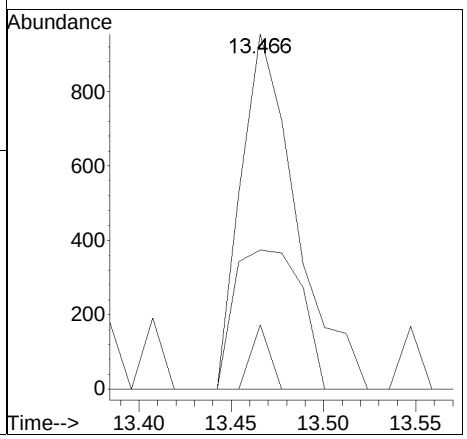


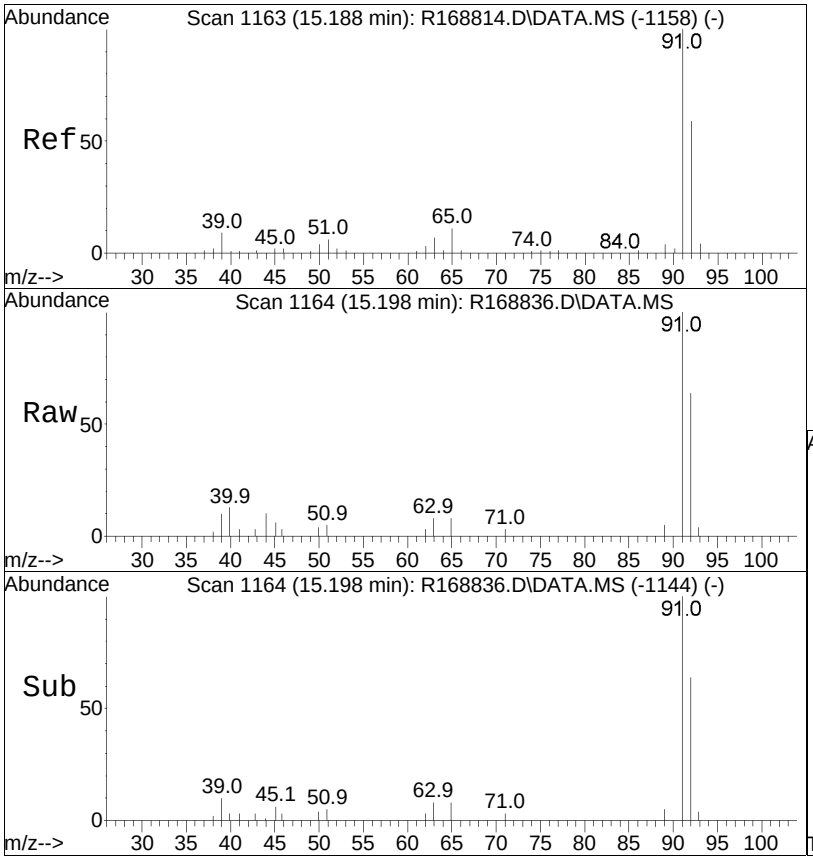


#62
heptane
Concen: 0.09 ppbV
RT: 13.466 min Scan# 1035
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 43 Resp: 1993

Ion	Ratio	Lower	Upper
43	100		
57	39.2	43.4	65.0#
100	18.1	11.2	16.8#

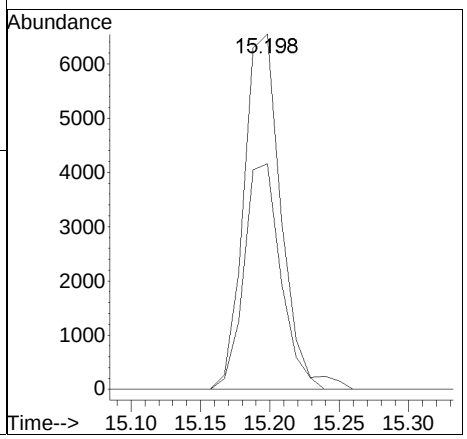


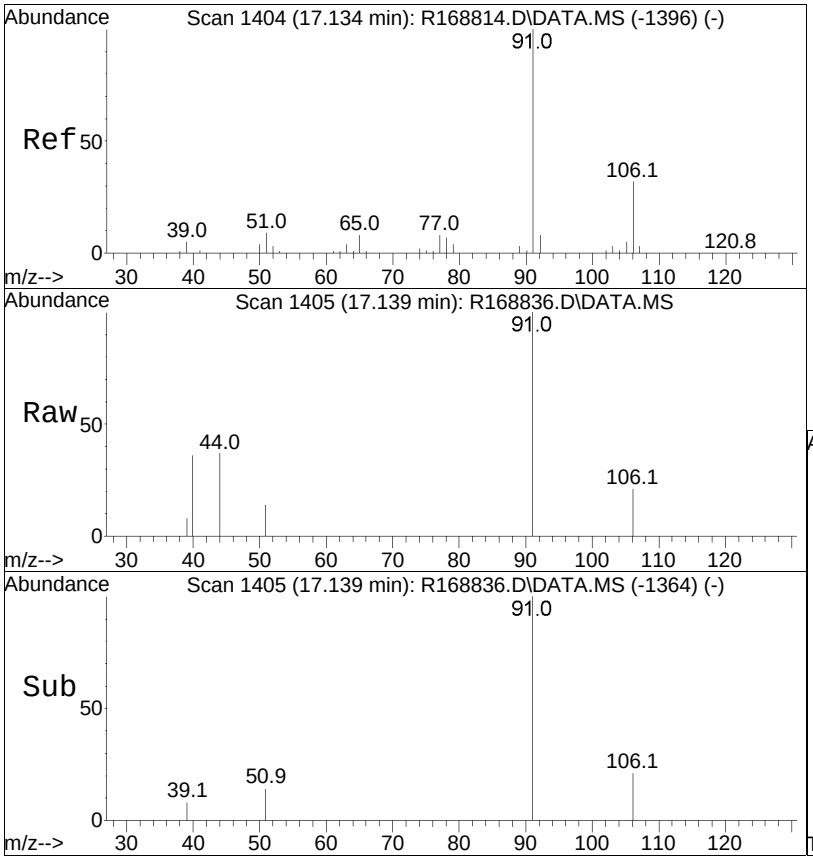


#68
toluene
Concen: 0.25 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 91 Resp: 12320

Ion	Ratio	Lower	Upper
91	100		
92	63.5	47.2	70.8

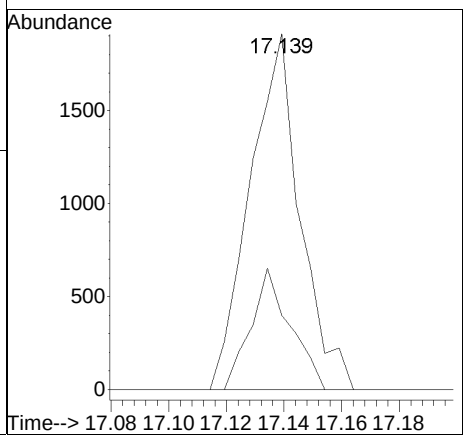


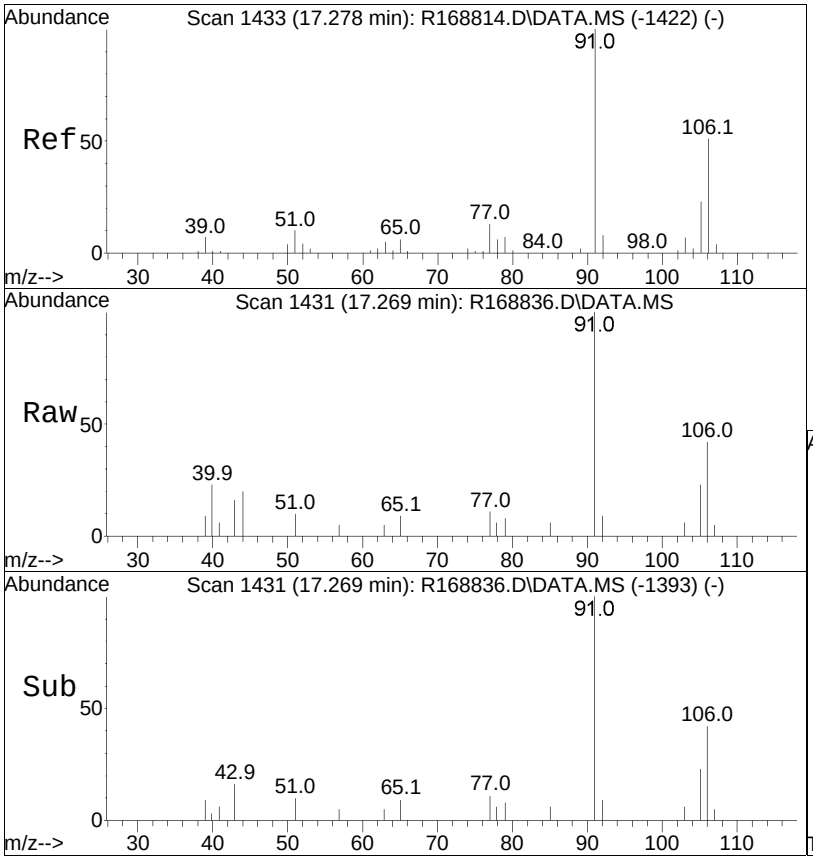


#81
ethylbenzene
Concen: 0.04 ppbV
RT: 17.139 min Scan# 1405
Delta R.T. 0.005 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 91 Resp: 2308

Ion	Ratio	Lower	Upper
91	100		
106	20.8	25.3	37.9#

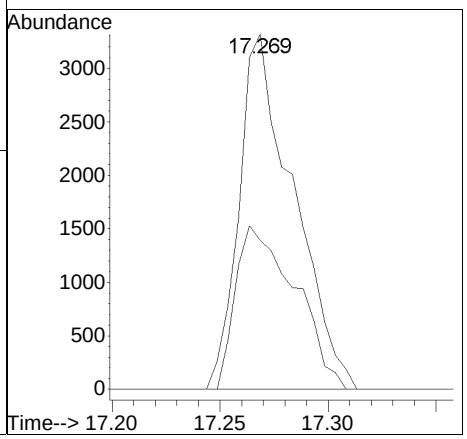


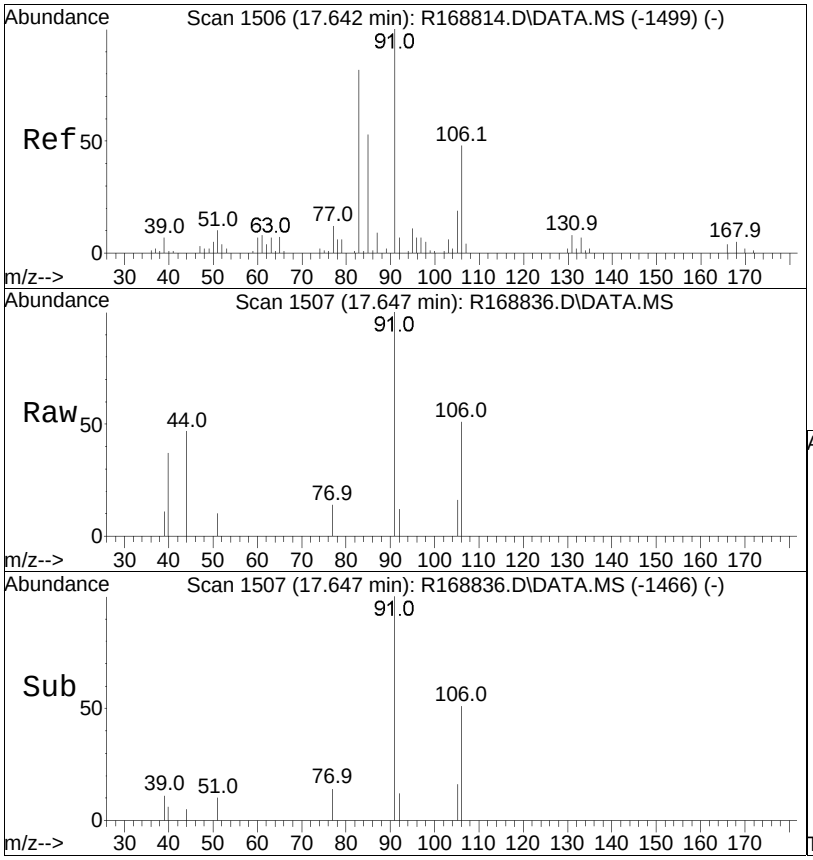


#83
m+p-xylene
Concen: 0.12 ppbV
RT: 17.269 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 91 Resp: 5810

Ion	Ratio	Lower	Upper
91	100		
106	41.9	40.8	61.2

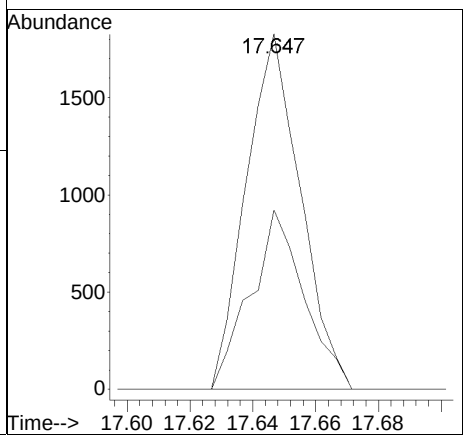


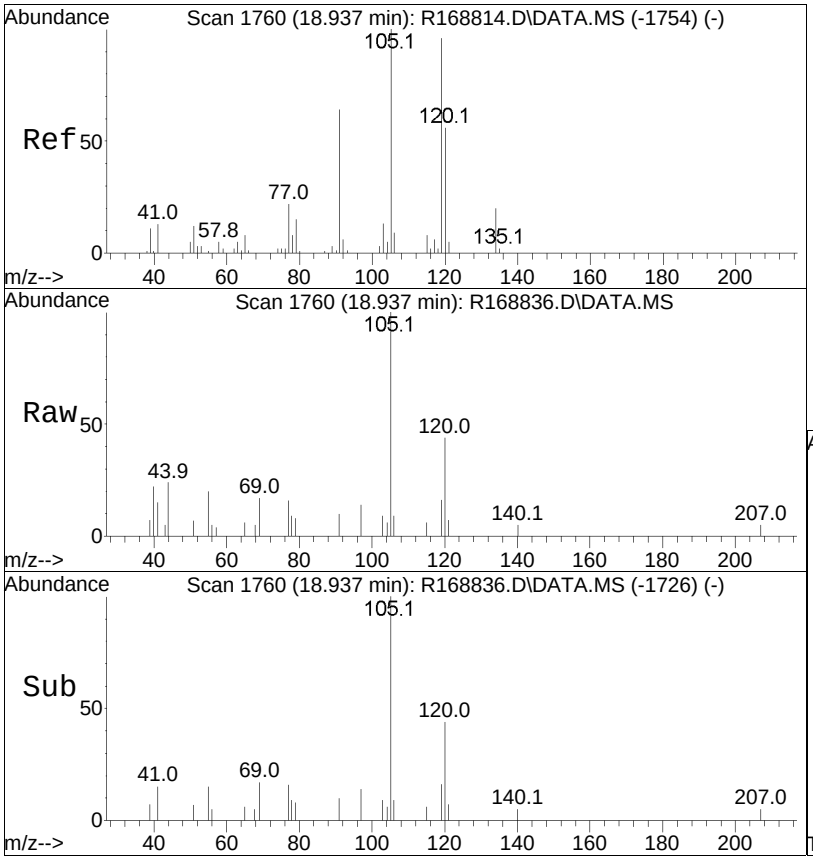


#87
o-xylene
Concen: 0.05 ppbV
RT: 17.647 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 91 Resp: 2200

Ion	Ratio	Lower	Upper
91	100		
106	50.5	38.3	57.5

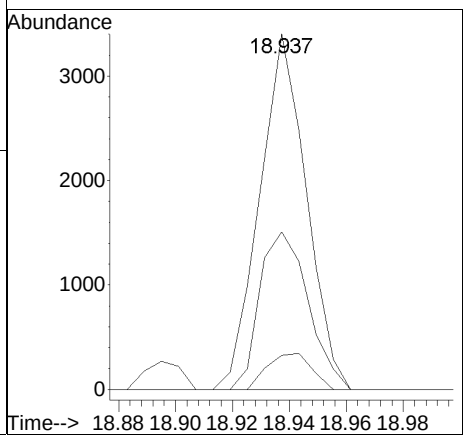




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:105 Resp: 3882

Ion	Ratio	Lower	Upper
105	100		
120	44.3	44.5	66.7#
91	9.6	51.4	77.2#



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	Q Method	: TFS1_191023.M
Data File	: R168836.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 9:07 pm	Instrument	: Air Piano 1
Sample	: L1948939-06,3,250,250	Quant Date	: 10/25/2019 7:51 am

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Integral Consulting, Inc.**	**Lab Number**	**: L1948939**
Project Name	**: 135 KENT AVE**	**Project Number**	**: E051**
Instrument ID	**: AIRPIANO1**	**Ical Ref**	**: ICAL16241**
Calibration dates	**: 10/23/19 14:26 10/23/19 18:11**		

Calibration Files

0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D

50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.793	0.703	0.669	0.647	0.642	0.650	0.583	0.531	0.6522	11.94
3)		propylene		0.322	0.322	0.317	0.294	0.314	0.271	0.245	0.2980	9.96
4)		propane		0.275	0.281	0.259	0.254	0.257	0.227	0.197	0.2498	11.66
5)		dichlorodifluoromethane	1.193	0.899	0.961	1.003	0.924	0.980	0.885	0.833	0.9597	11.37
6)	C	chloromethane	0.382	0.331	0.340	0.321	0.330	0.325	0.296	0.285	0.3265	8.93
7)		Freon-114	1.275	1.149	1.150	1.134	1.151	1.138	1.001	0.940	1.1173	9.19
8)	C	methanol			0.113	0.104	0.101	0.095	0.084	0.075	0.0954	14.62
9)	C	vinyl chloride	0.469	0.408	0.434	0.390	0.400	0.402	0.361	0.341	0.4007	9.92
10)	C	1,3-butadiene	0.320	0.318	0.326	0.297	0.296	0.287	0.253	0.234	0.2914	11.28
11)		butane	0.368	0.323	0.312	0.182	0.242	0.179	0.194	0.186	0.2484	30.40#
12)	C	acetaldehyde		0.157	0.160	0.155	0.152	0.135	0.116	0.102	0.1396	16.36
13)	C	bromomethane	0.498	0.492	0.460	0.432	0.431	0.434	0.393	0.371	0.4390	10.09
14)	C	chloroethane	0.226	0.210	0.197	0.188	0.192	0.195	0.177	0.163	0.1934	10.01
15)		ethanol			0.327	0.229	0.219	0.202	0.179	0.152	0.2179	27.69
16)		dichlorofluoromethane	1.037	0.949	0.933	0.856	0.856	0.862	0.782	0.719	0.8742	11.36
17)	C	vinyl bromide	0.494	0.461	0.442	0.433	0.433	0.440	0.403	0.384	0.4365	7.66
18)	C	acrolein		0.177	0.169	0.150	0.147	0.155	0.143	0.132	0.1532	10.01
19)		acetone	0.794	0.639	0.630	0.627	0.620	0.565	0.499	0.436	0.6010	17.77
20)	C	acetonitrile	0.429	0.368	0.325	0.288	0.287	0.279	0.251	0.226	0.3066	21.40
21)		trichlorofluoromethane	1.131	1.044	1.038	1.018	1.010	1.030	0.925	0.876	1.0090	7.70
22)		isopropyl alcohol	0.892	0.699	0.658	0.664	0.652	0.716	0.553	0.486	0.6651	17.97
23)	C	acrylonitrile	0.345	0.286	0.276	0.265	0.262	0.316	0.250	0.234	0.2791	12.95
24)		pentane	0.800	0.652	0.549	0.531	0.532	0.673	0.489	0.442	0.5834	20.01
25)		ethyl ether	0.388	0.382	0.359	0.364	0.350	0.450	0.314	0.274	0.3601	14.43
26)	C	1,1-dichloroethene	0.694	0.662	0.631	0.625	0.623	0.710	0.574	0.534	0.6317	9.24
27)		tertiary butyl alcohol		0.841	0.817	0.786	0.783	0.874	0.715	0.673	0.7842	8.94
28)	C	methylene chloride		0.468	0.463	0.431	0.437	0.509	0.386	0.355	0.4356	11.93
29)	C	3-chloropropene	0.684	0.570	0.449	0.431	0.434	0.534	0.397	0.362	0.4826	22.04
30)	C	carbon disulfide	1.498	1.340	1.287	1.237	1.248	1.445	1.128	1.030	1.2766	12.10
31)		Freon 113	0.935	0.883	0.886	0.855	0.868	0.962	0.784	0.736	0.8635	8.59
32)		trans-1,2-dichloroethene	0.726	0.640	0.622	0.688	0.590	0.709	0.642	0.603	0.6525	7.67
33)	C	1,1-dichloroethane	0.929	0.785	0.909	0.864	0.735	0.857	0.779	0.735	0.8241	9.21
34)	C	MTBE	1.343	1.200	1.260	1.206	1.193	1.242	1.117	1.069	1.2035	7.02
35)	C	vinyl acetate			0.870	0.801	0.865	0.865	0.855	0.819	0.8458	3.40
36)	C	2-butanone		1.019	0.934	0.873	0.908	0.887	0.819	0.749	0.8840	9.66

Initial Calibration Summary
Form 6
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Instrument ID	: AIRPIANO1	**Ical Ref**	: ICAL16241
Calibration dates	: 10/23/19 14:26 10/23/19 18:11		

Calibration Files

0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D

50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)		cis-1,2-dichloroethene	0.694	0.642	0.660	0.719	0.743	0.732	0.672	0.632	0.6866	6.11
38)		Ethyl Acetate		0.227	0.225	0.197	0.202	0.204	0.185	0.171	0.2015	10.06
39)	C	chloroform	1.358	1.305	1.284	1.244	1.248	1.226	1.114	1.026	1.2256	8.73
40)		Tetrahydrofuran	0.688	0.588	0.573	0.500	0.502	0.516	0.463	0.421	0.5314	15.66
41)		2,2-dichloropropane	1.149	1.045	1.094	1.035	1.028	1.051	0.950	0.880	1.0288	8.03
42)	C	1,2-dichloroethane	0.690	0.617	0.630	0.603	0.604	0.602	0.546	0.507	0.6000	9.10
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.440	0.421	0.410	0.384	0.386	0.386	0.362	0.313	0.3879	10.03
45)		diisopropyl ether	0.256	0.206	0.221	0.205	0.205	0.210	0.198	0.179	0.2100	10.53
46)		tert-butyl ethyl ether	0.659	0.630	0.636	0.598	0.605	0.619	0.572	0.514	0.6042	7.42
47)	s	1,2-dichloroethane-D4	0.227	0.226	0.230	0.232	0.230	0.232	0.231	0.214	0.2279	2.67
48)	C	1,1,1-trichloroethane	0.426	0.431	0.404	0.395	0.381	0.402	0.374	0.351	0.3954	6.74
49)		1,1-dichloropropene	0.334	0.334	0.335	0.319	0.311	0.323	0.301	0.277	0.3170	6.39
50)	C	benzene	0.715	0.657	0.671	0.650	0.634	0.646	0.605	0.550	0.6411	7.57
51)		thiophene	1.592	1.525	1.475	1.407	1.387	1.440	1.287	1.058	1.3963	11.79
52)	C	carbon tetrachloride	0.452	0.414	0.400	0.405	0.404	0.421	0.390	0.360	0.4057	6.44
53)		cyclohexane	0.356	0.341	0.343	0.316	0.308	0.312	0.292	0.258	0.3156	9.97
54)		tert-amyl methyl ether	0.644	0.619	0.596	0.591	0.574	0.591	0.557	0.511	0.5854	6.85
55)		dibromomethane	0.281	0.283	0.268	0.262	0.256	0.268	0.251	0.230	0.2625	6.45
56)	C	1,2-dichloropropane	0.283	0.248	0.255	0.245	0.239	0.244	0.225	0.199	0.2422	9.91
57)		bromodichloromethane	0.490	0.466	0.493	0.483	0.474	0.485	0.464	0.415	0.4712	5.31
58)	C	1,4-dioxane	0.150	0.149	0.148	0.148	0.150	0.149	0.140	0.128	0.1454	5.37
59)	C	trichloroethene	0.314	0.311	0.293	0.306	0.298	0.306	0.284	0.257	0.2961	6.28
60)	C	2,2,4-trimethylpentane	1.103	1.051	1.030	1.014	0.986	1.003	0.921	0.789	0.9873	9.67
61)		methyl methacrylate		0.319	0.308	0.327	0.325	0.306	0.284	0.247	0.3022	9.37
62)		heptane	0.419	0.385	0.390	0.357	0.347	0.353	0.317	0.275	0.3553	12.68
63)	C	cis-1,3-dichloropropene	0.379	0.333	0.337	0.354	0.356	0.361	0.341	0.318	0.3473	5.40
64)	C	4-methyl-2-pentanone		0.506	0.473	0.479	0.472	0.462	0.434	0.379	0.4579	8.94
65)		trans-1,3-dichloropropene	0.323	0.338	0.334	0.340	0.346	0.357	0.339	0.319	0.3369	3.59
66)	C	1,1,2-trichloroethane	0.285	0.269	0.283	0.272	0.269	0.279	0.261	0.240	0.2698	5.32
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	5.671	4.899	4.849	4.686	4.611	4.630	4.329	4.146	4.7277	9.65
69)	s	toluene-D8	4.279	4.201	4.345	4.402	4.378	4.360	4.430	4.570	4.3705	2.48
70)		2-methylthiophene	1.659	1.493	1.578	1.472	1.420	1.485	1.298	1.050	1.4320	13.06
71)		1,3-dichloropropane	2.220	2.066	2.214	2.085	2.103	2.158	2.034	1.878	2.0948	5.27
72)		2-hexanone	2.715	2.579	2.685	2.696	2.612	2.449	2.040	1.562	2.4172	16.96

Initial Calibration Summary
Form 6
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Instrument ID	: AIRPIANO1	**Ical Ref**	: ICAL16241
Calibration dates	: 10/23/19 14:26 10/23/19 18:11		

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)		3-methylthiophene	1.727	1.590	1.622	1.540	1.475	1.520	1.278	1.002	1.4692	15.59
74)		dibromochloromethane	3.013	2.736	2.890	2.950	3.027	3.046	2.966	2.804	2.9290	3.79
75)	C	1,2-dibromoethane	2.823	2.530	2.734	2.715	2.645	2.678	2.534	2.437	2.6370	4.84
76)		butyl acetate		0.479	0.497	0.487	0.490	0.496	0.472	0.442	0.4806	4.03
77)		octane	1.483	1.230	1.352	1.300	1.294	1.351	1.238	1.175	1.3028	7.30
78)	C	tetrachloroethene	2.447	2.293	2.314	2.340	2.303	2.320	2.248	2.167	2.3042	3.45
79)		1,1,1,2-tetrachloroethane	2.075	1.973	1.991	1.966	1.943	2.017	1.922	1.812	1.9624	3.90
80)	C	chlorobenzene	4.059	4.000	3.836	3.865	3.767	3.801	3.559	3.322	3.7761	6.29
81)	C	ethylbenzene	6.791	6.228	6.131	6.067	5.861	5.985	5.560	5.211	5.9793	7.82
82)		2-ethylthiophene	2.015	1.891	1.858	1.746	1.703	1.710	1.424	1.084	1.6789	17.65
83)	C	m+p-xylene	5.257	4.890	4.789	4.632	4.549	4.593	4.252	3.832	4.5994	9.25
84)	C	bromoform	3.039	2.832	2.915	3.016	3.066	3.189	3.116	2.945	3.0147	3.80
85)	C	styrene	4.038	3.676	3.743	3.718	3.724	3.704	3.516	3.340	3.6826	5.41
86)	C	1,1,2,2-tetrachloroethane	4.150	4.048	3.954	3.925	3.857	3.625	3.346	2.743	3.7060	12.53
87)	C	o-xylene	5.130	5.036	4.956	4.855	4.706	4.611	4.252	3.714	4.6574	10.12
88)		1,2,3-trichloropropane	2.964	2.960	2.937	2.865	2.780	2.776	2.655	2.395	2.7914	6.92
89)		nonane	3.733	3.470	3.380	3.107	3.049	3.030	2.684	2.154	3.0758	15.96
90)	s	bromofluorobenzene	2.694	2.737	2.730	2.774	2.772	2.691	2.824	2.915	2.7673	2.68
91)	C	isopropylbenzene	6.958	6.713	6.686	6.484	6.366	6.453	6.062	5.347	6.3835	7.77
92)		bromobenzene	3.645	3.568	3.528	3.411	3.322	3.363	3.113	2.873	3.3529	7.60
93)		2-chlorotoluene	2.517	2.042	1.954	1.873	1.865	1.810	1.740	1.623	1.9279	14.00
94)		n-propylbenzene	2.004	2.011	1.933	1.971	1.942	1.891	1.809	1.654	1.9019	6.28
95)		4-chlorotoluene	5.379	5.257	5.284	5.001	4.914	4.775	4.703	4.240	4.9440	7.60
96)		4-ethyl toluene	7.829	7.297	7.328	7.348	7.209	6.992	6.735	5.947	7.0859	7.85
97)		1,3,5-trimethylbenzene	6.103	5.901	5.692	5.834	5.722	5.408	5.272	4.819	5.5939	7.33
98)		tert-butylbenzene	6.487	6.269	6.116	6.196	6.106	5.716	5.424	4.587	5.8626	10.46
99)		1,2,4-trimethylbenzene	5.944	5.836	5.712	5.874	5.817	5.244	5.110	4.292	5.4787	10.39
100)		decane	3.945	3.924	3.858	3.850	3.751	3.405	3.209	2.626	3.5711	13.00
101)	C	Benzyl Chloride	4.474	4.271	4.555	4.995	5.177	4.810	5.026	4.544	4.7316	6.71
102)		1,3-dichlorobenzene	4.531	4.259	4.090	4.366	4.301	3.932	3.989	3.603	4.1338	7.09
103)	C	1,4-dichlorobenzene	4.434	4.322	4.361	4.408	4.384	3.993	3.980	3.548	4.1788	7.49
104)		sec-butylbenzene	8.978	8.734	8.618	8.606	8.362	7.888	7.530	6.212	8.1161	11.12
105)		1,2,3-trimethylbenzene	5.675	5.425	5.331	5.756	5.617	4.807	4.828	4.205	5.2057	10.42
106)		p-isopropyltoluene	8.011	7.784	7.715	7.833	7.683	6.975	6.833	5.648	7.3102	10.84
107)		1,2-dichlorobenzene	4.083	3.966	4.020	4.218	4.138	3.648	3.828	3.597	3.9371	5.75
108)		n-butylbenzene	6.925	7.032	7.168	7.236	7.106	5.963	6.101	5.474	6.6257	10.19

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Integral Consulting, Inc.**	**Lab Number**	**: L1948939**
Project Name	**: 135 KENT AVE**	**Project Number**	**: E051**
Instrument ID	**: AIRPIANO1**	**Ical Ref**	**: ICAL16241**
Calibration dates	**: 10/23/19 14:26 10/23/19 18:11**		

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)		indan	6.204	6.019	5.963	6.456	6.427	5.419	5.464	4.926	5.8597	9.24
110)		indene	4.804	4.914	4.921	5.389	5.374	4.443	4.600	4.317	4.8452	8.14
111)	C	1,2-dibromo-3-chloropropane	1.726	1.663	1.710	1.812	1.865	1.474	1.650	1.615	1.6894	7.13
112)		undecane	4.272	4.203	4.242	4.574	4.545	3.336	3.402	2.938	3.9391	15.76
113)		1,2,4,5-tetramethylbenzene	6.622	7.370	7.358	7.601	7.728	5.863	6.340	6.104	6.8732	10.58
114)		dodecane	4.198	4.007	3.998	4.545	4.929	2.989	2.787	2.382	3.7295	24.25
115)	C	1,2,4-trichlorobenzene	2.841	3.054	3.423	3.998	4.241	2.627	2.989	2.950	3.2654	17.64
116)		naphthalene	9.157	8.348	8.067	8.883	9.299	5.707	6.525	6.778	7.8455	17.15
117)		1,2,3-trichlorobenzene	2.703	2.906	3.226	3.662	3.988	2.403	2.728	3.053	3.0836	17.07
118)		benzothiophene		7.205	7.627	6.291	6.890	5.632	6.538	6.890	6.7248	9.63
119)	C	hexachlorobutadiene	2.554	2.773	2.822	3.188	3.423	2.136	2.447	2.688	2.7538	14.79
120)		2-methylnaphthalene			1.224	0.690	0.818	0.544	0.599	0.693	0.7613	32.19#
121)		1-methylnaphthalene			1.559	1.078	1.259	0.766	0.809	0.933	1.0672	28.24

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Method File : TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019
Response Via : Initial Calibration

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.793	0.703	0.669	0.647	0.642	0.650	0.583	0.531	0.6522	11.94
3)		propylene		0.322	0.322	0.317	0.294	0.314	0.271	0.245	0.2980	9.96
4)		propane		0.275	0.281	0.259	0.254	0.257	0.227	0.197	0.2498	11.66
5)		dichlorodifluoromethane	1.193	0.899	0.961	1.003	0.924	0.980	0.885	0.833	0.9597	11.37
6)	C	chloromethane	0.382	0.331	0.340	0.321	0.330	0.325	0.296	0.285	0.3265	8.93
7)		Freon-114	1.275	1.149	1.150	1.134	1.151	1.138	1.001	0.940	1.1173	9.19
8)	C	methanol			0.113	0.104	0.101	0.095	0.084	0.075	0.0954	14.62
9)	C	vinyl chloride	0.469	0.408	0.434	0.390	0.400	0.402	0.361	0.341	0.4007	9.92
10)	C	1,3-butadiene	0.320	0.318	0.326	0.297	0.296	0.287	0.253	0.234	0.2914	11.28
11)		butane	0.368	0.323	0.312	0.182	0.242	0.179	0.194	0.186	0.2484	30.40#
12)	C	acetaldehyde		0.157	0.160	0.155	0.152	0.135	0.116	0.102	0.1396	16.36
13)	C	bromomethane	0.498	0.492	0.460	0.432	0.431	0.434	0.393	0.371	0.4390	10.09
14)	C	chloroethane	0.226	0.210	0.197	0.188	0.192	0.195	0.177	0.163	0.1934	10.01
15)		ethanol			0.327	0.229	0.219	0.202	0.179	0.152	0.2179	27.69
16)		dichlorofluoromethane	1.037	0.949	0.933	0.856	0.856	0.862	0.782	0.719	0.8742	11.36
17)	C	vinyl bromide	0.494	0.461	0.442	0.433	0.433	0.440	0.403	0.384	0.4365	7.66
18)	C	acrolein		0.177	0.169	0.150	0.147	0.155	0.143	0.132	0.1532	10.01
19)		acetone	0.794	0.639	0.630	0.627	0.620	0.565	0.499	0.436	0.6010	17.77
20)	C	acetonitrile	0.429	0.368	0.325	0.288	0.287	0.279	0.251	0.226	0.3066	21.40
21)		trichlorofluoromethane	1.131	1.044	1.038	1.018	1.010	1.030	0.925	0.876	1.0090	7.70
22)		isopropyl alcohol	0.892	0.699	0.658	0.664	0.652	0.716	0.553	0.486	0.6651	17.97
23)	C	acrylonitrile	0.345	0.286	0.276	0.265	0.262	0.316	0.250	0.234	0.2791	12.95
24)		pentane	0.800	0.652	0.549	0.531	0.532	0.673	0.489	0.442	0.5834	20.01
25)		ethyl ether	0.388	0.382	0.359	0.364	0.350	0.450	0.314	0.274	0.3601	14.43
26)	C	1,1-dichloroethene	0.694	0.662	0.631	0.625	0.623	0.710	0.574	0.534	0.6317	9.24
27)		tertiary butyl alcohol		0.841	0.817	0.786	0.783	0.874	0.715	0.673	0.7842	8.94
28)	C	methylene chloride		0.468	0.463	0.431	0.437	0.509	0.386	0.355	0.4356	11.93
29)	C	3-chloropropene	0.684	0.570	0.449	0.431	0.434	0.534	0.397	0.362	0.4826	22.04
30)	C	carbon disulfide	1.498	1.340	1.287	1.237	1.248	1.445	1.128	1.030	1.2766	12.10
31)		Freon 113	0.935	0.883	0.886	0.855	0.868	0.962	0.784	0.736	0.8635	8.59

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Method File : TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019
Response Via : Initial Calibration

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	0.726	0.640	0.622	0.688	0.590	0.709	0.642	0.603	0.6525	7.67
33)	C	1,1-dichloroethane	0.929	0.785	0.909	0.864	0.735	0.857	0.779	0.735	0.8241	9.21
34)	C	MTBE	1.343	1.200	1.260	1.206	1.193	1.242	1.117	1.069	1.2035	7.02
35)	C	vinyl acetate			0.870	0.801	0.865	0.865	0.855	0.819	0.8458	3.40
36)	C	2-butanone		1.019	0.934	0.873	0.908	0.887	0.819	0.749	0.8840	9.66
37)		cis-1,2-dichloroethene	0.694	0.642	0.660	0.719	0.743	0.732	0.672	0.632	0.6866	6.11
38)		Ethyl Acetate		0.227	0.225	0.197	0.202	0.204	0.185	0.171	0.2015	10.06
39)	C	chloroform	1.358	1.305	1.284	1.244	1.248	1.226	1.114	1.026	1.2256	8.73
40)		Tetrahydrofuran	0.688	0.588	0.573	0.500	0.502	0.516	0.463	0.421	0.5314	15.66
41)		2,2-dichloropropane	1.149	1.045	1.094	1.035	1.028	1.051	0.950	0.880	1.0288	8.03
42)	C	1,2-dichloroethane	0.690	0.617	0.630	0.603	0.604	0.602	0.546	0.507	0.6000	9.10
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.440	0.421	0.410	0.384	0.386	0.386	0.362	0.313	0.3879	10.03
45)		diisopropyl ether	0.256	0.206	0.221	0.205	0.205	0.210	0.198	0.179	0.2100	10.53
46)		tert-butyl ethyl ether	0.659	0.630	0.636	0.598	0.605	0.619	0.572	0.514	0.6042	7.42
47)	s	1,2-dichloroethane-D4	0.227	0.226	0.230	0.232	0.230	0.232	0.231	0.214	0.2279	2.67
48)	C	1,1,1-trichloroethane	0.426	0.431	0.404	0.395	0.381	0.402	0.374	0.351	0.3954	6.74
49)		1,1-dichloropropene	0.334	0.334	0.335	0.319	0.311	0.323	0.301	0.277	0.3170	6.39
50)	C	benzene	0.715	0.657	0.671	0.650	0.634	0.646	0.605	0.550	0.6411	7.57
51)		thiophene	1.592	1.525	1.475	1.407	1.387	1.440	1.287	1.058	1.3963	11.79
52)	C	carbon tetrachloride	0.452	0.414	0.400	0.405	0.404	0.421	0.390	0.360	0.4057	6.44
53)		cyclohexane	0.356	0.341	0.343	0.316	0.308	0.312	0.292	0.258	0.3156	9.97
54)		tert-amyl methyl ether	0.644	0.619	0.596	0.591	0.574	0.591	0.557	0.511	0.5854	6.85
55)		dibromomethane	0.281	0.283	0.268	0.262	0.256	0.268	0.251	0.230	0.2625	6.45
56)	C	1,2-dichloropropane	0.283	0.248	0.255	0.245	0.239	0.244	0.225	0.199	0.2422	9.91
57)		bromodichloromethane	0.490	0.466	0.493	0.483	0.474	0.485	0.464	0.415	0.4712	5.31
58)	C	1,4-dioxane	0.150	0.149	0.148	0.148	0.150	0.149	0.140	0.128	0.1454	5.37
59)	C	trichloroethene	0.314	0.311	0.293	0.306	0.298	0.306	0.284	0.257	0.2961	6.28
60)	C	2,2,4-trimethylpentane	1.103	1.051	1.030	1.014	0.986	1.003	0.921	0.789	0.9873	9.67
61)		methyl methacrylate		0.319	0.308	0.327	0.325	0.306	0.284	0.247	0.3022	9.37
62)		heptane	0.419	0.385	0.390	0.357	0.347	0.353	0.317	0.275	0.3553	12.68

Method Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Method File : TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019
Response Via : Initial Calibration

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63)	C	cis-1,3-dichloropropene	0.379	0.333	0.337	0.354	0.356	0.361	0.341	0.318	0.3473	5.40
64)	C	4-methyl-2-pentanone		0.506	0.473	0.479	0.472	0.462	0.434	0.379	0.4579	8.94
65)		trans-1,3-dichloropropene	0.323	0.338	0.334	0.340	0.346	0.357	0.339	0.319	0.3369	3.59
66)	C	1,1,2-trichloroethane	0.285	0.269	0.283	0.272	0.269	0.279	0.261	0.240	0.2698	5.32
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	5.671	4.899	4.849	4.686	4.611	4.630	4.329	4.146	4.7277	9.65
69)	s	toluene-D8	4.279	4.201	4.345	4.402	4.378	4.360	4.430	4.570	4.3705	2.48
70)		2-methylthiophene	1.659	1.493	1.578	1.472	1.420	1.485	1.298	1.050	1.4320	13.06
71)		1,3-dichloropropane	2.220	2.066	2.214	2.085	2.103	2.158	2.034	1.878	2.0948	5.27
72)		2-hexanone	2.715	2.579	2.685	2.696	2.612	2.449	2.040	1.562	2.4172	16.96
73)		3-methylthiophene	1.727	1.590	1.622	1.540	1.475	1.520	1.278	1.002	1.4692	15.59
74)		dibromochloromethane	3.013	2.736	2.890	2.950	3.027	3.046	2.966	2.804	2.9290	3.79
75)	C	1,2-dibromoethane	2.823	2.530	2.734	2.715	2.645	2.678	2.534	2.437	2.6370	4.84
76)		butyl acetate		0.479	0.497	0.487	0.490	0.496	0.472	0.442	0.4806	4.03
77)		octane	1.483	1.230	1.352	1.300	1.294	1.351	1.238	1.175	1.3028	7.30
78)	C	tetrachloroethene	2.447	2.293	2.314	2.340	2.303	2.320	2.248	2.167	2.3042	3.45
79)		1,1,1,2-tetrachloroethane	2.075	1.973	1.991	1.966	1.943	2.017	1.922	1.812	1.9624	3.90
80)	C	chlorobenzene	4.059	4.000	3.836	3.865	3.767	3.801	3.559	3.322	3.7761	6.29
81)	C	ethylbenzene	6.791	6.228	6.131	6.067	5.861	5.985	5.560	5.211	5.9793	7.82
82)		2-ethylthiophene	2.015	1.891	1.858	1.746	1.703	1.710	1.424	1.084	1.6789	17.65
83)	C	m+p-xylene	5.257	4.890	4.789	4.632	4.549	4.593	4.252	3.832	4.5994	9.25
84)	C	bromoform	3.039	2.832	2.915	3.016	3.066	3.189	3.116	2.945	3.0147	3.80
85)	C	styrene	4.038	3.676	3.743	3.718	3.724	3.704	3.516	3.340	3.6826	5.41
86)	C	1,1,2,2-tetrachloroethane	4.150	4.048	3.954	3.925	3.857	3.625	3.346	2.743	3.7060	12.53
87)	C	o-xylene	5.130	5.036	4.956	4.855	4.706	4.611	4.252	3.714	4.6574	10.12
88)		1,2,3-trichloropropane	2.964	2.960	2.937	2.865	2.780	2.776	2.655	2.395	2.7914	6.92
89)		nonane	3.733	3.470	3.380	3.107	3.049	3.030	2.684	2.154	3.0758	15.96
90)	s	bromofluorobenzene	2.694	2.737	2.730	2.774	2.772	2.691	2.824	2.915	2.7673	2.68
91)	C	isopropylbenzene	6.958	6.713	6.686	6.484	6.366	6.453	6.062	5.347	6.3835	7.77
92)		bromobenzene	3.645	3.568	3.528	3.411	3.322	3.363	3.113	2.873	3.3529	7.60
93)		2-chlorotoluene	2.517	2.042	1.954	1.873	1.865	1.810	1.740	1.623	1.9279	14.00

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Method File : TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019
Response Via : Initial Calibration

Calibration Files
0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D 5.0 =R168813.D 10 =R168814.D 20 =R168815.D
50 =R168816.D 100 =R168817.D

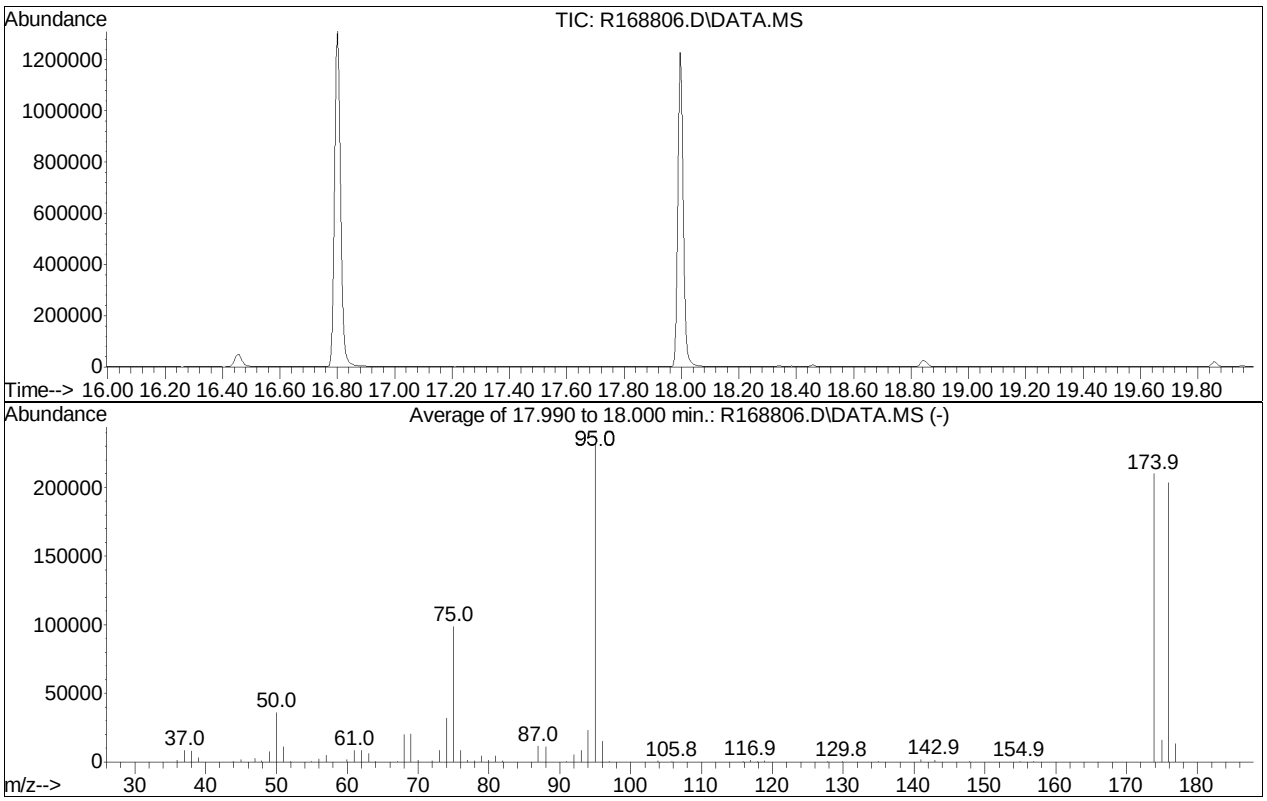
		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)		n-propylbenzene	2.004	2.011	1.933	1.971	1.942	1.891	1.809	1.654	1.9019	6.28
95)		4-chlorotoluene	5.379	5.257	5.284	5.001	4.914	4.775	4.703	4.240	4.9440	7.60
96)		4-ethyl toluene	7.829	7.297	7.328	7.348	7.209	6.992	6.735	5.947	7.0859	7.85
97)		1,3,5-trimethylbenzene	6.103	5.901	5.692	5.834	5.722	5.408	5.272	4.819	5.5939	7.33
98)		tert-butylbenzene	6.487	6.269	6.116	6.196	6.106	5.716	5.424	4.587	5.8626	10.46
99)		1,2,4-trimethylbenzene	5.944	5.836	5.712	5.874	5.817	5.244	5.110	4.292	5.4787	10.39
100)		decane	3.945	3.924	3.858	3.850	3.751	3.405	3.209	2.626	3.5711	13.00
101)	C	Benzyl Chloride	4.474	4.271	4.555	4.995	5.177	4.810	5.026	4.544	4.7316	6.71
102)		1,3-dichlorobenzene	4.531	4.259	4.090	4.366	4.301	3.932	3.989	3.603	4.1338	7.09
103)	C	1,4-dichlorobenzene	4.434	4.322	4.361	4.408	4.384	3.993	3.980	3.548	4.1788	7.49
104)		sec-butylbenzene	8.978	8.734	8.618	8.606	8.362	7.888	7.530	6.212	8.1161	11.12
105)		1,2,3-trimethylbenzene	5.675	5.425	5.331	5.756	5.617	4.807	4.828	4.205	5.2057	10.42
106)		p-isopropyltoluene	8.011	7.784	7.715	7.833	7.683	6.975	6.833	5.648	7.3102	10.84
107)		1,2-dichlorobenzene	4.083	3.966	4.020	4.218	4.138	3.648	3.828	3.597	3.9371	5.75
108)		n-butylbenzene	6.925	7.032	7.168	7.236	7.106	5.963	6.101	5.474	6.6257	10.19
109)		indan	6.204	6.019	5.963	6.456	6.427	5.419	5.464	4.926	5.8597	9.24
110)		indene	4.804	4.914	4.921	5.389	5.374	4.443	4.600	4.317	4.8452	8.14
111)	C	1,2-dibromo-3-chloropropane	1.726	1.663	1.710	1.812	1.865	1.474	1.650	1.615	1.6894	7.13
112)		undecane	4.272	4.203	4.242	4.574	4.545	3.336	3.402	2.938	3.9391	15.76
113)		1,2,4,5-tetramethylbenzene	6.622	7.370	7.358	7.601	7.728	5.863	6.340	6.104	6.8732	10.58
114)		dodecane	4.198	4.007	3.998	4.545	4.929	2.989	2.787	2.382	3.7295	24.25
115)	C	1,2,4-trichlorobenzene	2.841	3.054	3.423	3.998	4.241	2.627	2.989	2.950	3.2654	17.64
116)		naphthalene	9.157	8.348	8.067	8.883	9.299	5.707	6.525	6.778	7.8455	17.15
117)		1,2,3-trichlorobenzene	2.703	2.906	3.226	3.662	3.988	2.403	2.728	3.053	3.0836	17.07
118)		benzothiophene		7.205	7.627	6.291	6.890	5.632	6.538	6.890	6.7248	9.63
119)	C	hexachlorobutadiene	2.554	2.773	2.822	3.188	3.423	2.136	2.447	2.688	2.7538	14.79
120)		2-methylnaphthalene			1.224	0.690	0.818	0.544	0.599	0.693	0.7613	32.19#
121)		1-methylnaphthalene			1.559	1.078	1.259	0.766	0.809	0.933	1.0672	28.24

(#) = Out of Range

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168806.D
Acq On : 23 Oct 2019 12:21 pm
Operator : AIRPIANO1:RY
Sample : WG1300074-1,3,250,250
Misc : WG1300074
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019



Spectrum Information: Average of 17.990 to 18.000 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.6	36341	PASS
75	95	30	66	42.5	98968	PASS
95	95	100	100	100.0	232661	PASS
96	95	5	9	6.6	15378	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.4	210261	PASS
175	174	4	9	7.7	16282	PASS
176	174	93	101	96.8	203584	PASS
177	176	5	9	6.6	13385	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:30:29 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	307849	10.000 ppbV	0.00
Standard Area = 301797			Recovery	= 102.01%	
43) 1,4-difluorobenzene	12.35	114	722274	10.000 ppbV	0.00
Standard Area = 707136			Recovery	= 102.14%	
67) chlorobenzene-D5	16.80	54	122987	10.000 ppbV	0.00
Standard Area = 120451			Recovery	= 102.11%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	164206	9.870 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.70%	
69) toluene-D8	15.08	98	526217	9.773 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.73%	
90) bromofluorobenzene	17.99	95	331355	9.718 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.18%	

Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	4885	0.247 ppbV #	92
3) propylene	3.91	41	2593M6	0.286 ppbV	
4) propane	3.95	29	2012M4	0.257 ppbV	
5) dichlorodifluoromethane	4.02	85	7346	0.258 ppbV	99
6) chloromethane	4.24	50	2352	0.231 ppbV	93
7) Freon-114	4.38	85	7852	0.222 ppbV	95
8) methanol	4.51	31	4316	1.383 ppbV #	1
9) vinyl chloride	4.54	62	2890	0.235 ppbV #	88
10) 1,3-butadiene	4.73	54	1971	0.216 ppbV	92
11) butane	4.82	43	2266M4	0.304 ppbV	
12) acetaldehyde	4.43	29	5699	1.221 ppbV #	66
13) bromomethane	5.12	94	3069	0.231 ppbV	86
14) chloroethane	5.37	64	1394	0.235 ppbV	89
15) ethanol	5.62	31	26340	3.905 ppbV	93
16) dichlorofluoromethane	5.52	67	6386	0.242 ppbV #	90
17) vinyl bromide	5.85	106	3043	0.228 ppbV	89
18) acrolein	6.06	56	1101M3	0.243 ppbV	
19) acetone	6.28	43	24454	1.282 ppbV #	99
20) acetonitrile	5.90	41	2641M4	0.299 ppbV	
21) trichlorofluoromethane	6.44	101	6964	0.224 ppbV	97
22) isopropyl alcohol	6.66	45	13731	0.684 ppbV #	96
23) acrylonitrile	6.90	53	2124	0.264 ppbV #	90
24) pentane	6.93	43	4928	0.301 ppbV #	90

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:30:29 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.02	31	2386	0.222 ppbV #	82
26) 1,1-dichloroethene	7.28	61	4272	0.223 ppbV #	87
27) tertiary butyl alcohol	7.49	59	5817	0.241 ppbV #	82
28) methylene chloride	7.47	49	2989	0.222 ppbV	91
29) 3-chloropropene	7.62	41	4214	0.315 ppbV	95
30) carbon disulfide	7.80	76	9226	0.240 ppbV #	1
31) Freon 113	7.81	101	5756	0.215 ppbV #	93
32) trans-1,2-dichloroethene	8.66	61	4469	0.246 ppbV	94
33) 1,1-dichloroethane	8.90	63	5718	0.253 ppbV	96
34) MTBE	9.05	73	8267	0.225 ppbV #	89
35) vinyl acetate	9.14	43	7514	0.282 ppbV	97
36) 2-butanone	9.46	43	6866	0.246 ppbV	95
37) cis-1,2-dichloroethene	9.92	61	4272	0.187 ppbV	98
38) Ethyl Acetate	10.27	61	914M6	0.147 ppbV	
39) chloroform	10.27	83	8360	0.218 ppbV	97
40) Tetrahydrofuran	10.82	42	4238	0.274 ppbV	95
41) 2,2-dichloropropane	10.29	77	7072	0.224 ppbV	93
42) 1,2-dichloroethane	11.13	62	4248	0.228 ppbV	96
44) hexane	10.16	57	6362	0.228 ppbV #	59
45) diisopropyl ether	10.21	87	3702	0.251 ppbV	87
46) tert-butyl ethyl ether	10.84	59	9516	0.218 ppbV	99
48) 1,1,1-trichloroethane	11.40	97	6150	0.223 ppbV #	92
49) 1,1-dichloropropene	11.77	75	4830	0.215 ppbV	98
50) benzene	11.93	78	10332	0.226 ppbV #	91
51) thiophene	12.08	84	22994	0.230 ppbV	99
52) carbon tetrachloride	12.10	117	6529	0.224 ppbV	99
53) cyclohexane	12.24	56	5139	0.231 ppbV #	83
54) tert-amyl methyl ether	12.65	73	9310	0.224 ppbV	97
55) dibromomethane	12.85	93	4059	0.219 ppbV	97
56) 1,2-dichloropropane	12.87	63	4083	0.237 ppbV	92
57) bromodichloromethane	13.09	83	7083	0.207 ppbV	98
58) 1,4-dioxane	13.22	88	2168	0.200 ppbV #	80
59) trichloroethene	13.14	130	4529	0.211 ppbV	96
60) 2,2,4-trimethylpentane	13.17	57	15937	0.224 ppbV	99
61) methyl methacrylate	13.38	41	5434	0.232 ppbV #	95
62) heptane	13.47	43	6052	0.242 ppbV	92
63) cis-1,3-dichloropropene	14.14	75	5469	0.213 ppbV	96
64) 4-methyl-2-pentanone	14.21	43	7360	0.216 ppbV	94
65) trans-1,3-dichloropropene	14.72	75	4660	0.186 ppbV	93
66) 1,1,2-trichloroethane	14.91	97	4124	0.213 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:30:29 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.20	91	13949	0.246	ppbV		99
70)	2-methylthiophene	15.26	97	40817	0.234	ppbV		95
71)	1,3-dichloropropane	15.23	76	5460	0.211	ppbV		95
72)	2-hexanone	15.49	43	6679	0.208	ppbV	#	81
73)	3-methylthiophene	15.44	97	42484	0.234	ppbV		98
74)	dibromochloromethane	15.61	129	7411	0.199	ppbV		92
75)	1,2-dibromoethane	15.85	107	6945	0.213	ppbV		91
76)	butyl acetate	16.05	73	1020	0.169	ppbV		94
77)	octane	16.11	85	3648	0.229	ppbV		95
78)	tetrachloroethene	16.26	166	6020	0.213	ppbV		92
79)	1,1,1,2-tetrachloroethane	16.82	131	5103	0.214	ppbV		98
80)	chlorobenzene	16.84	112	9984	0.215	ppbV		95
81)	ethylbenzene	17.13	91	16704	0.232	ppbV		99
82)	2-ethylthiophene	17.17	97	49563	0.237	ppbV		98
83)	m+p-xylene	17.28	91	25864	0.462	ppbV		99
84)	bromoform	17.36	173	7474	0.198	ppbV		97
85)	styrene	17.56	104	9932	0.217	ppbV		89
86)	1,1,2,2-tetrachloroethane	17.65	83	10208	0.215	ppbV		97
87)	o-xylene	17.65	91	12618	0.218	ppbV		97
88)	1,2,3-trichloropropane	17.75	75	7291	0.213	ppbV	#	87
89)	nonane	17.78	43	9181	0.245	ppbV		94
91)	isopropylbenzene	18.09	105	17114	0.219	ppbV		95
92)	bromobenzene	18.17	77	8966	0.219	ppbV		92
93)	2-chlorotoluene	18.46	126	6191	0.270	ppbV		85
94)	n-propylbenzene	18.47	120	4930	0.206	ppbV	#	63
95)	4-chlorotoluene	18.51	91	13230	0.219	ppbV		96
96)	4-ethyl toluene	18.58	105	19258	0.217	ppbV		99
97)	1,3,5-trimethylbenzene	18.63	105	15013	0.213	ppbV		96
98)	tert-butylbenzene	18.94	119	15956	0.212	ppbV		98
99)	1,2,4-trimethylbenzene	18.94	105	14621	0.204	ppbV		92
100)	decane	18.99	57	9704	0.210	ppbV	#	92
101)	Benzyl Chloride	19.06	91	11006	0.173	ppbV		100
102)	1,3-dichlorobenzene	19.07	146	11145	0.211	ppbV		96
103)	1,4-dichlorobenzene	19.12	146	10906	0.202	ppbV		97
104)	sec-butylbenzene	19.14	105	22084	0.215	ppbV		96
105)	1,2,3-trimethylbenzene	19.26	105	13959	0.202	ppbV		92
106)	p-isopropyltoluene	19.25	119	19704	0.209	ppbV		97
107)	1,2-dichlorobenzene	19.38	146	10043	0.197	ppbV		100
108)	n-butylbenzene	19.57	91	17033	0.195	ppbV		96
109)	indan	19.42	117	15259	0.193	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:30:29 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.50	115	11817	0.179	ppbV	90
111) 1,2-dibromo-3-chloropr...	19.73	75	4245	0.185	ppbV	90
112) undecane	19.93	57	10509	0.188	ppbV #	96
113) 1,2,4,5-tetramethylben...	20.18	119	16288	0.171	ppbV	99
114) dodecane	20.82	57	10327	0.170	ppbV	92
115) 1,2,4-trichlorobenzene	20.81	180	6988	0.134	ppbV	94
116) naphthalene	20.93	128	22525	0.197	ppbV	98
117) 1,2,3-trichlorobenzene	21.18	180	6648	0.136	ppbV	97
118) benzothiophene	21.00	134	15509	0.183	ppbV	99
119) hexachlorobutadiene	21.24	225	6283	0.149	ppbV	96
120) 2-methylnaphthalene	22.07	142	2014	0.200	ppbV #	80
121) 1-methylnaphthalene	22.27	142	2666	0.172	ppbV #	85

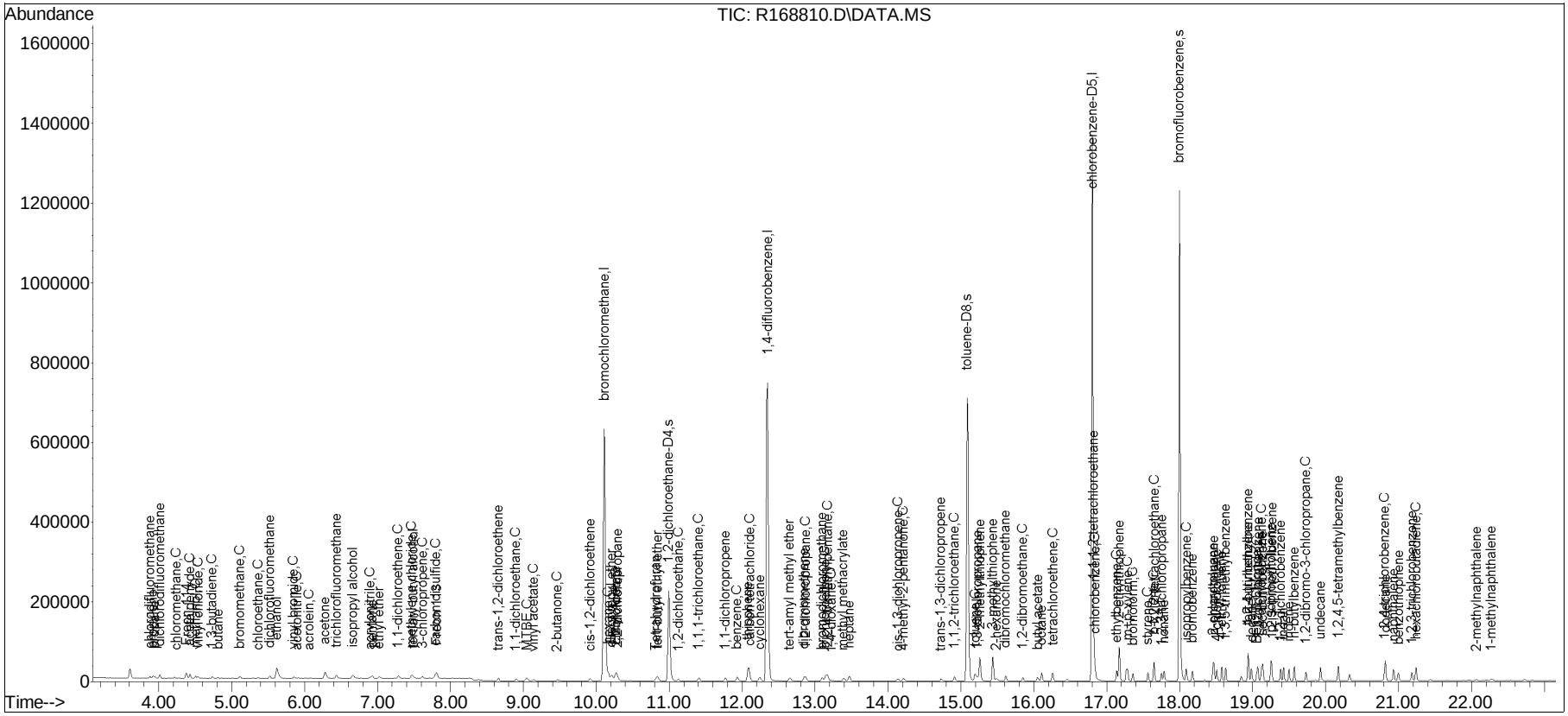
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:30:29 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

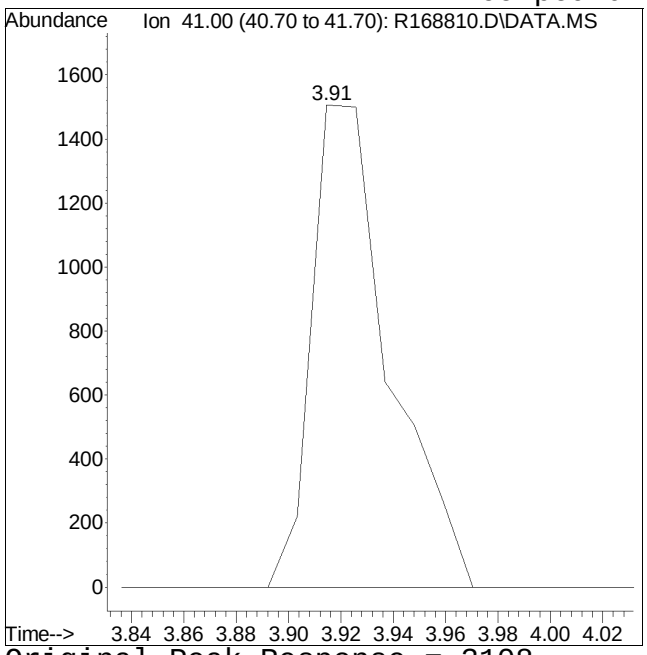
Sub List : Default - All compounds listed1023T_ICAL\R168814.D



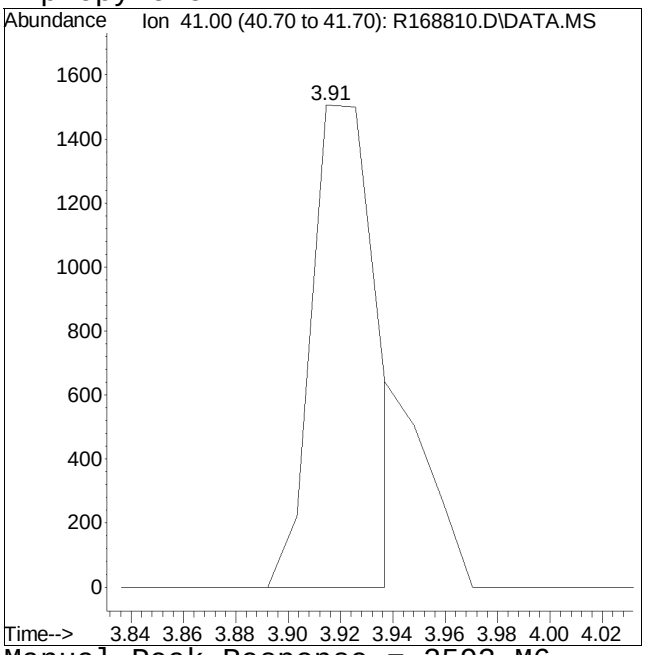
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2
Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #3: propylene



Original Peak Response = 3108



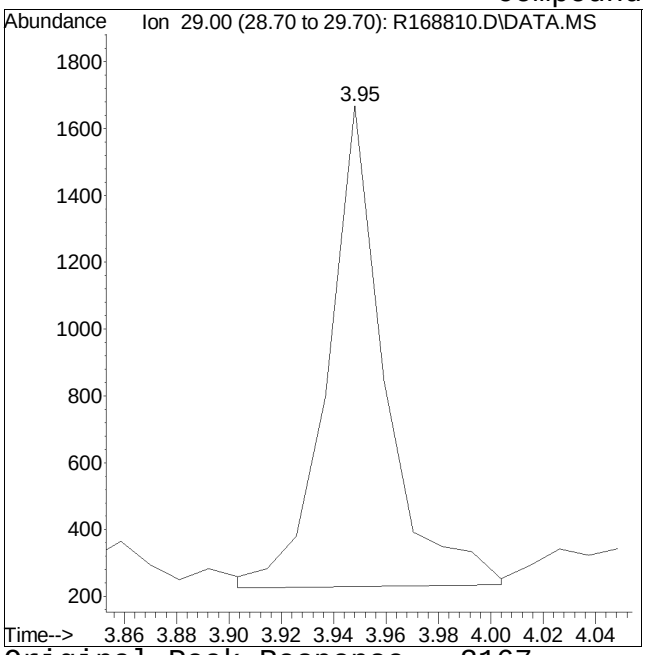
Manual Peak Response = 2593 M6

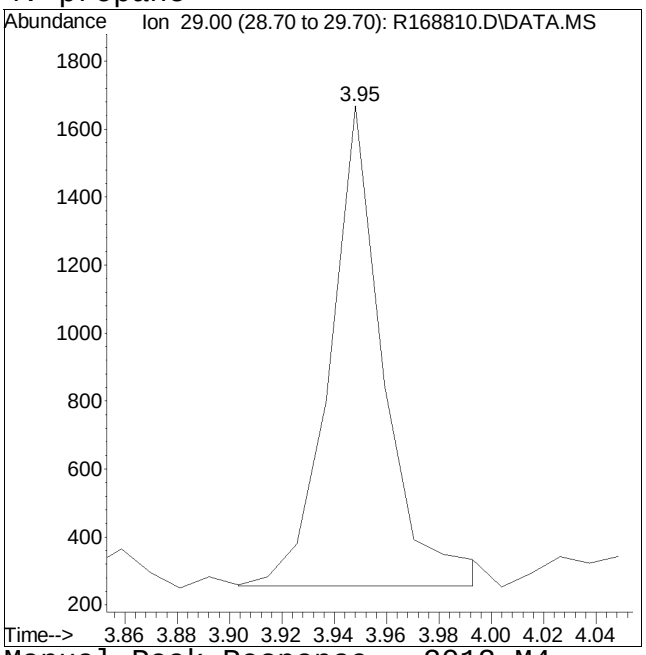
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TFS1_191023.M
Data File : R168810.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 2:26 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 10/24/2019 8:26 am

Compound #4: propane





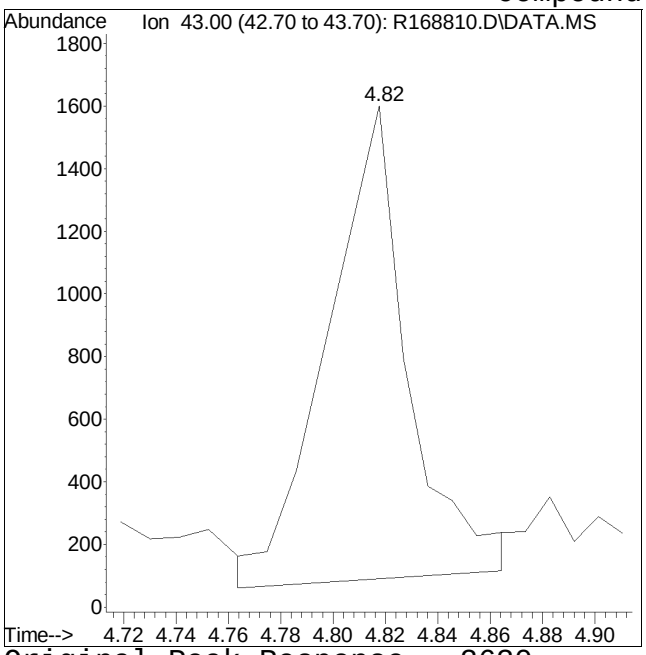
Original Peak Response = 2167 Manual Peak Response = 2012 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

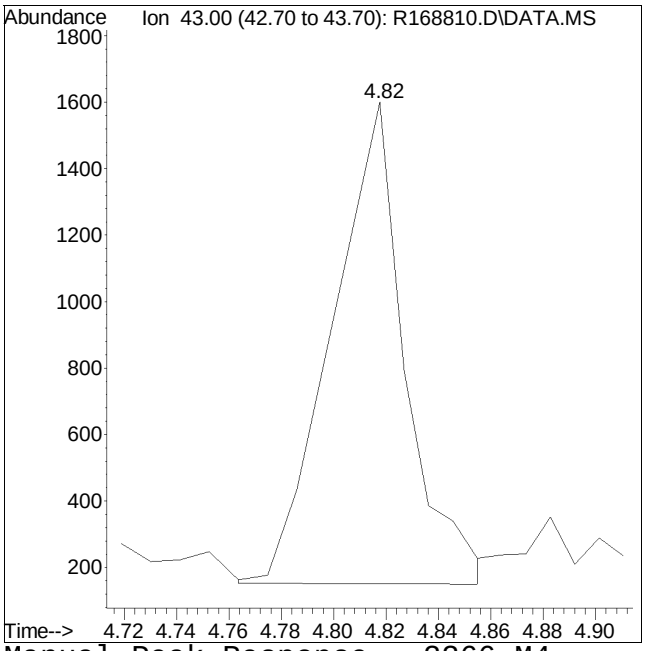
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #11: butane



Original Peak Response = 2630



Manual Peak Response = 2266 M4

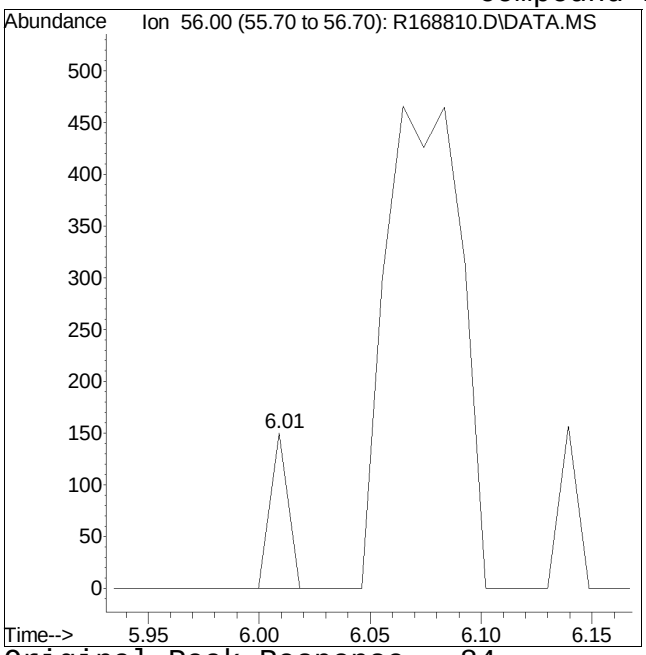
M4 = Poor automated baseline construction.

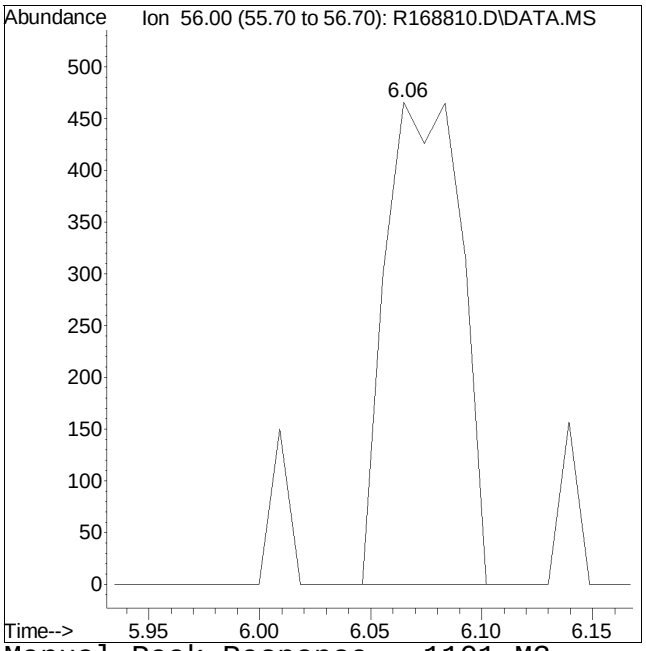
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #18: acrolein





Original Peak Response = 84 Manual Peak Response = 1101 M3

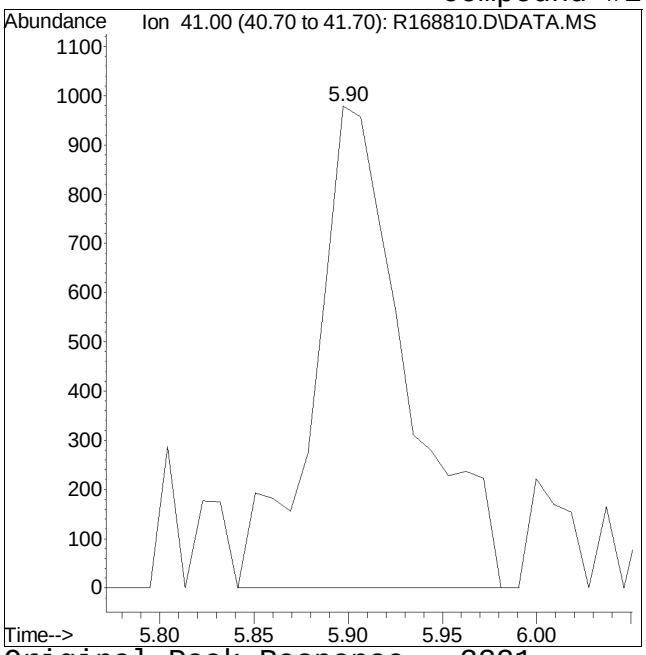
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

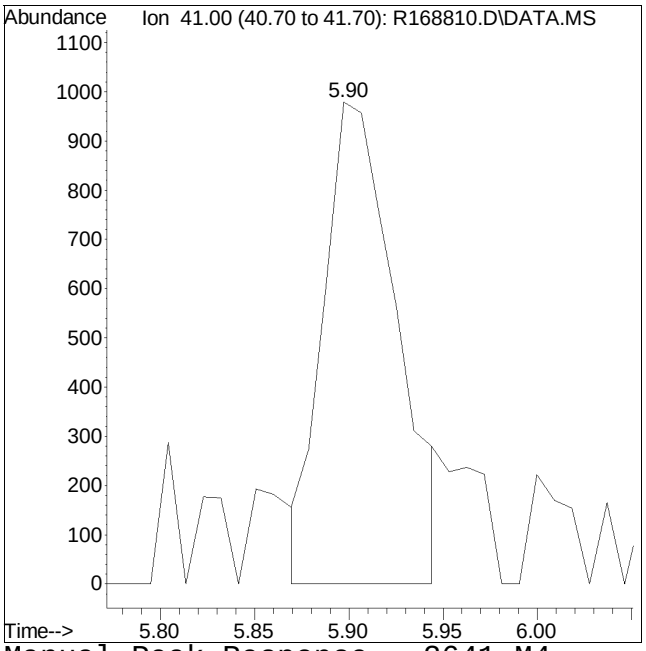
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #20: acetonitrile



Original Peak Response = 3321



Manual Peak Response = 2641 M4

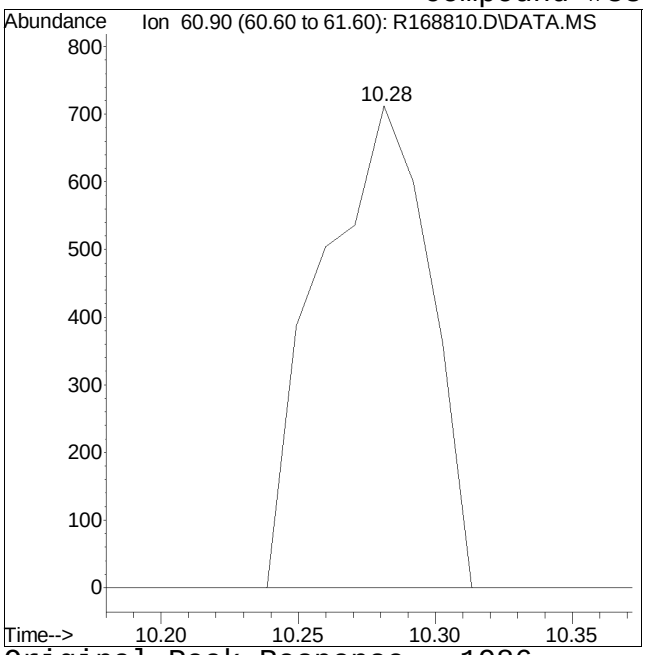
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

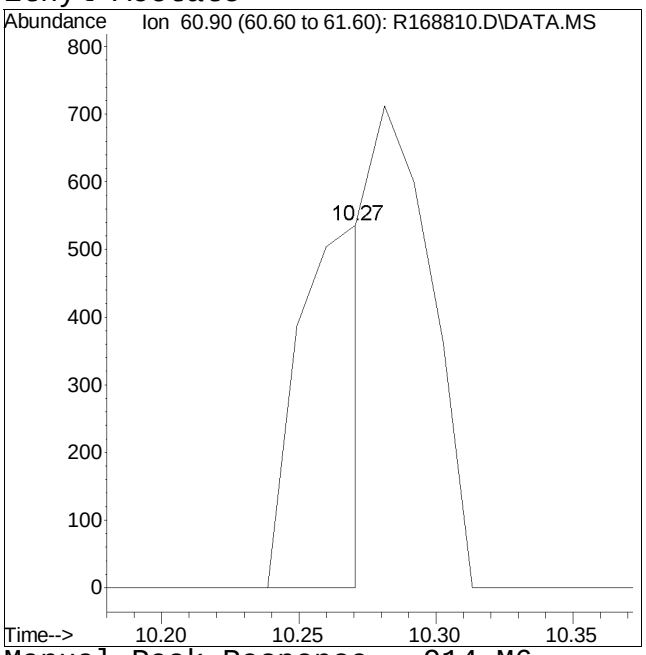
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #38: Ethyl Acetate



Original Peak Response = 1986



Manual Peak Response = 914 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:32:26 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	311067	10.000 ppbV	0.00
Standard Area = 301797			Recovery	= 103.07%	
43) 1,4-difluorobenzene	12.35	114	720736	10.000 ppbV	0.00
Standard Area = 707136			Recovery	= 101.92%	
67) chlorobenzene-D5	16.80	54	126952	10.000 ppbV	0.00
Standard Area = 120451			Recovery	= 105.40%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	163161	9.828 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.28%	
69) toluene-D8	15.08	98	533303	9.595 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 95.95%	
90) bromofluorobenzene	17.99	95	347482	9.873 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.73%	
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	10931	0.547 ppbV	99
3) propylene	3.91	41	5011M6	0.547 ppbV	
4) propane	3.95	29	4270M4	0.539 ppbV	
5) dichlorodifluoromethane	4.02	85	13981	0.486 ppbV	96
6) chloromethane	4.24	50	5153	0.501 ppbV	91
7) Freon-114	4.37	85	17864	0.499 ppbV	94
8) methanol	4.51	31	9308	2.952 ppbV #	30
9) vinyl chloride	4.54	62	6339	0.509 ppbV	96
10) 1,3-butadiene	4.73	54	4945	0.537 ppbV	100
11) butane	4.82	43	5027M4	0.668 ppbV	
12) acetaldehyde	4.42	29	12243M4	2.596 ppbV	
13) bromomethane	5.12	94	7656	0.571 ppbV	96
14) chloroethane	5.37	64	3259	0.544 ppbV	99
15) ethanol	5.62	31	37132	5.448 ppbV	93
16) dichlorofluoromethane	5.52	67	14753	0.554 ppbV	96
17) vinyl bromide	5.86	106	7172	0.532 ppbV	97
18) acrolein	6.06	56	2749	0.601 ppbV #	86
19) acetone	6.27	43	49677	2.578 ppbV #	100
20) acetonitrile	5.90	41	5726	0.642 ppbV #	68
21) trichlorofluoromethane	6.44	101	16238	0.517 ppbV	94
22) isopropyl alcohol	6.65	45	27173	1.340 ppbV #	96
23) acrylonitrile	6.88	53	4441	0.545 ppbV	90
24) pentane	6.93	43	10137	0.613 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:32:26 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.01	31	5949	0.547 ppbV	99
26) 1,1-dichloroethene	7.28	61	10294	0.531 ppbV	98
27) tertiary butyl alcohol	7.47	59	13088	0.538 ppbV #	85
28) methylene chloride	7.47	49	7278	0.536 ppbV	96
29) 3-chloropropene	7.62	41	8868	0.657 ppbV	98
30) carbon disulfide	7.80	76	20838	0.537 ppbV #	50
31) Freon 113	7.81	101	13731	0.509 ppbV	97
32) trans-1,2-dichloroethene	8.65	61	9959	0.543 ppbV	95
33) 1,1-dichloroethane	8.90	63	12203	0.534 ppbV	99
34) MTBE	9.03	73	18662	0.503 ppbV #	90
35) vinyl acetate	9.13	43	12779	0.475 ppbV	96
36) 2-butanone	9.46	43	15850	0.561 ppbV	100
37) cis-1,2-dichloroethene	9.92	61	9987	0.432 ppbV	97
38) Ethyl Acetate	10.25	61	3528	0.562 ppbV #	59
39) chloroform	10.27	83	20290	0.523 ppbV	97
40) Tetrahydrofuran	10.79	42	9145	0.586 ppbV	89
41) 2,2-dichloropropane	10.29	77	16253	0.508 ppbV	95
42) 1,2-dichloroethane	11.13	62	9602	0.511 ppbV	95
44) hexane	10.16	57	15171	0.545 ppbV #	62
45) diisopropyl ether	10.21	87	7417	0.503 ppbV	95
46) tert-butyl ethyl ether	10.83	59	22697	0.520 ppbV	94
48) 1,1,1-trichloroethane	11.40	97	15548	0.566 ppbV	99
49) 1,1-dichloropropene	11.77	75	12042	0.537 ppbV	98
50) benzene	11.93	78	23691	0.519 ppbV	98
51) thiophene	12.08	84	54956	0.550 ppbV	98
52) carbon tetrachloride	12.10	117	14932	0.513 ppbV	94
53) cyclohexane	12.24	56	12291	0.554 ppbV	92
54) tert-amyl methyl ether	12.64	73	22290	0.539 ppbV	97
55) dibromomethane	12.85	93	10182	0.552 ppbV	95
56) 1,2-dichloropropane	12.87	63	8949	0.520 ppbV #	93
57) bromodichloromethane	13.09	83	16778	0.491 ppbV	98
58) 1,4-dioxane	13.20	88	5370	0.495 ppbV #	75
59) trichloroethene	13.14	130	11223	0.523 ppbV	94
60) 2,2,4-trimethylpentane	13.17	57	37883	0.533 ppbV #	95
61) methyl methacrylate	13.38	41	11478	0.490 ppbV	98
62) heptane	13.47	43	13869	0.555 ppbV	93
63) cis-1,3-dichloropropene	14.12	75	12007	0.469 ppbV	95
64) 4-methyl-2-pentanone	14.21	43	18220	0.535 ppbV	96
65) trans-1,3-dichloropropene	14.72	75	12168	0.487 ppbV	98
66) 1,1,2-trichloroethane	14.91	97	9679	0.500 ppbV #	85

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:32:26 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.20	91	31100	0.531	ppbV		96
70)	2-methylthiophene	15.26	97	94772	0.526	ppbV		99
71)	1,3-dichloropropane	15.22	76	13111	0.491	ppbV		94
72)	2-hexanone	15.48	43	16372	0.494	ppbV	#	83
73)	3-methylthiophene	15.44	97	100901	0.539	ppbV		99
74)	dibromochloromethane	15.61	129	17369	0.452	ppbV		96
75)	1,2-dibromoethane	15.85	107	16062	0.478	ppbV		97
76)	butyl acetate	16.04	73	3043	0.489	ppbV		93
77)	octane	16.11	85	7805	0.475	ppbV		93
78)	tetrachloroethene	16.25	166	14558	0.498	ppbV		97
79)	1,1,1,2-tetrachloroethane	16.82	131	12522	0.508	ppbV		99
80)	chlorobenzene	16.84	112	25388	0.531	ppbV		99
81)	ethylbenzene	17.13	91	39536	0.531	ppbV		99
82)	2-ethylthiophene	17.17	97	120013	0.555	ppbV		98
83)	m+p-xylene	17.27	91	62080	1.075	ppbV		98
84)	bromoform	17.36	173	17978	0.462	ppbV		99
85)	styrene	17.56	104	23335	0.494	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.65	83	25698	0.525	ppbV		98
87)	o-xylene	17.65	91	31969	0.535	ppbV		98
88)	1,2,3-trichloropropane	17.75	75	18789	0.532	ppbV		98
89)	nonane	17.78	43	22024	0.569	ppbV		99
91)	isopropylbenzene	18.09	105	42613	0.527	ppbV		97
92)	bromobenzene	18.17	77	22650	0.537	ppbV		97
93)	2-chlorotoluene	18.45	126	12963	0.548	ppbV		86
94)	n-propylbenzene	18.47	120	12762	0.518	ppbV		77
95)	4-chlorotoluene	18.51	91	33369	0.535	ppbV		98
96)	4-ethyl toluene	18.58	105	46320	0.506	ppbV		100
97)	1,3,5-trimethylbenzene	18.63	105	37459	0.516	ppbV		98
98)	tert-butylbenzene	18.94	119	39791	0.513	ppbV		96
99)	1,2,4-trimethylbenzene	18.94	105	37045	0.502	ppbV		97
100)	decane	18.98	57	24906	0.523	ppbV		97
101)	Benzyl Chloride	19.05	91	27109	0.412	ppbV		100
102)	1,3-dichlorobenzene	19.07	146	27034	0.495	ppbV		98
103)	1,4-dichlorobenzene	19.12	146	27437	0.493	ppbV		97
104)	sec-butylbenzene	19.14	105	55442	0.522	ppbV		99
105)	1,2,3-trimethylbenzene	19.26	105	34438	0.483	ppbV		97
106)	p-isopropyltoluene	19.25	119	49411	0.507	ppbV		100
107)	1,2-dichlorobenzene	19.38	146	25173	0.479	ppbV		98
108)	n-butylbenzene	19.57	91	44634	0.495	ppbV		98
109)	indan	19.42	117	38206	0.468	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:32:26 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.50	115	31191	0.457	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.73	75	10557	0.446	ppbV	91
112) undecane	19.93	57	26681	0.462	ppbV	96
113) 1,2,4,5-tetramethylben...	20.17	119	46783	0.477	ppbV	100
114) dodecane	20.82	57	25433	0.406	ppbV	92
115) 1,2,4-trichlorobenzene	20.81	180	19385	0.360	ppbV	96
116) naphthalene	20.93	128	52988	0.449	ppbV	99
117) 1,2,3-trichlorobenzene	21.18	180	18449	0.364	ppbV	96
118) benzothiophene	21.00	134	45732	0.523	ppbV	98
119) hexachlorobutadiene	21.24	225	17602	0.405	ppbV	97
120) 2-methylnaphthalene	22.07	142	6278	0.605	ppbV	97
121) 1-methylnaphthalene	22.27	142	8463	0.530	ppbV #	90

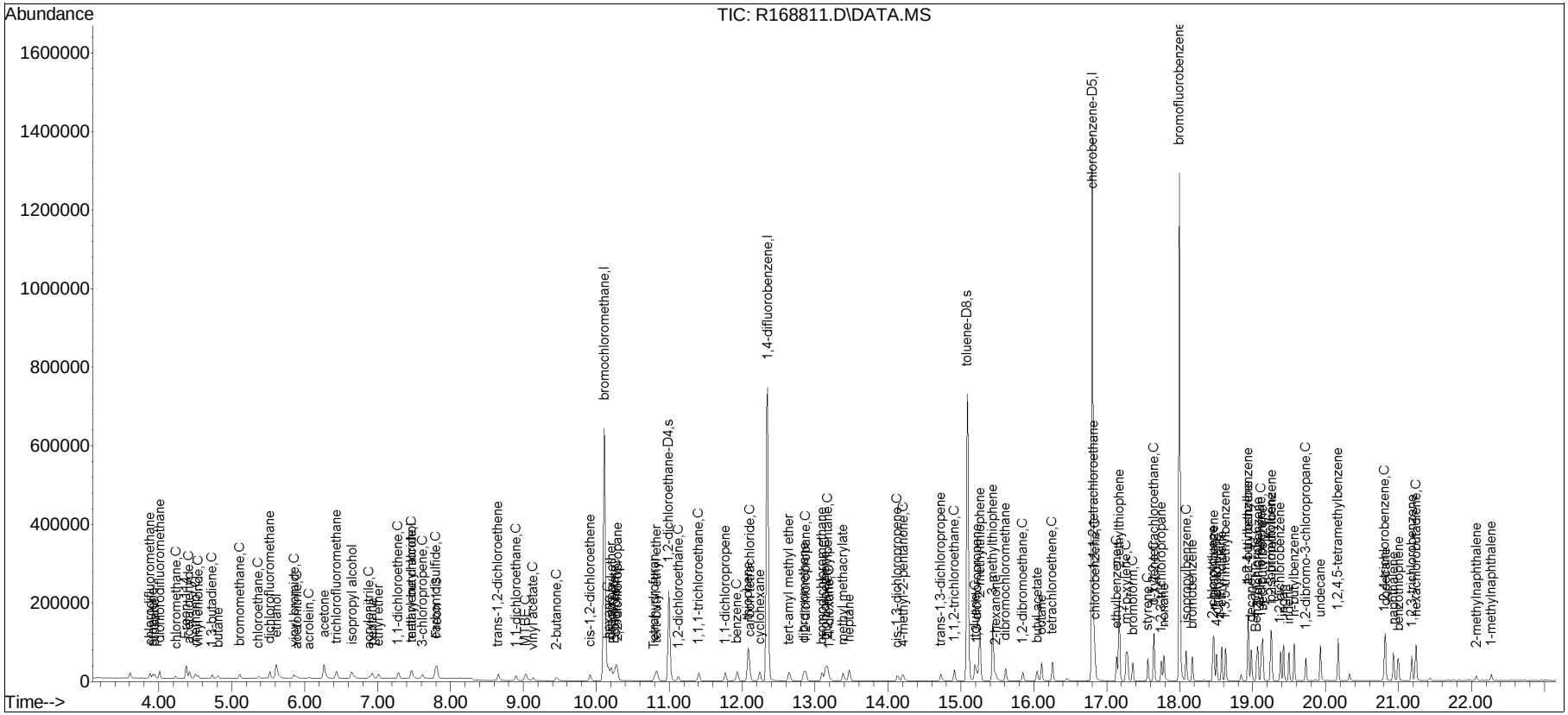
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:32:26 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

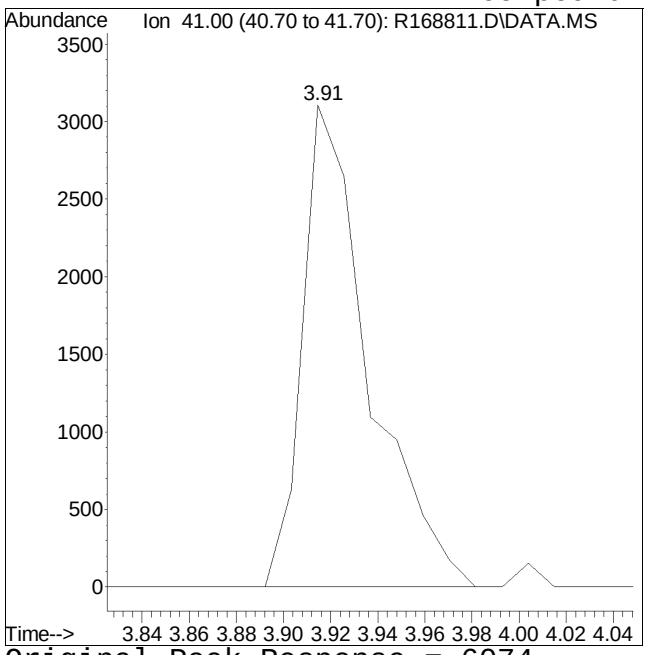
Sub List : Default - All compounds listed1023T_ICAL\R168814.D



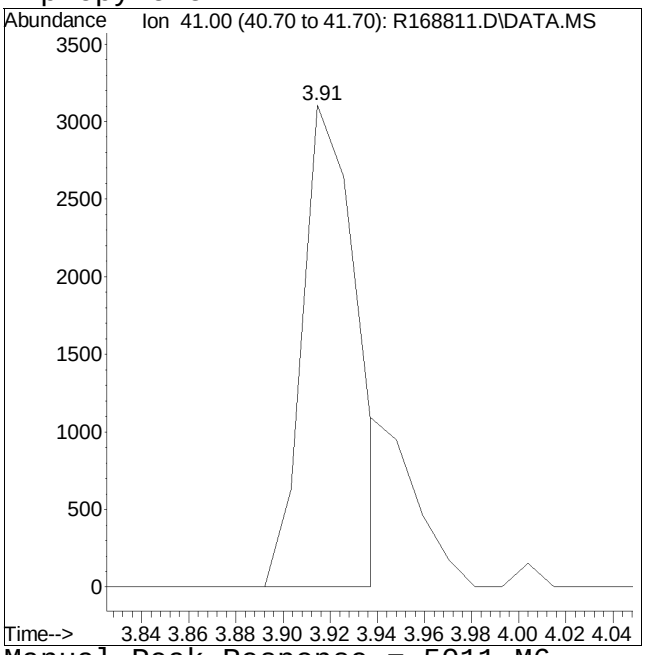
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5
Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #3: propylene



Original Peak Response = 6074



Manual Peak Response = 5011 M6

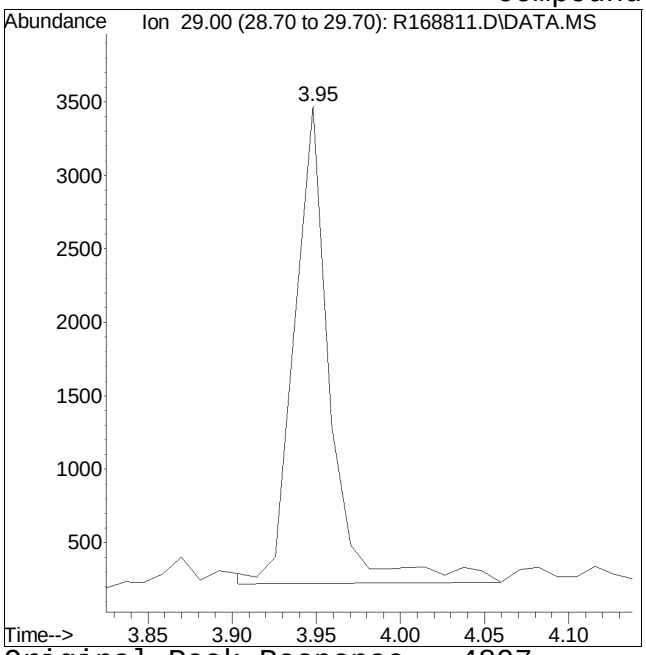
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

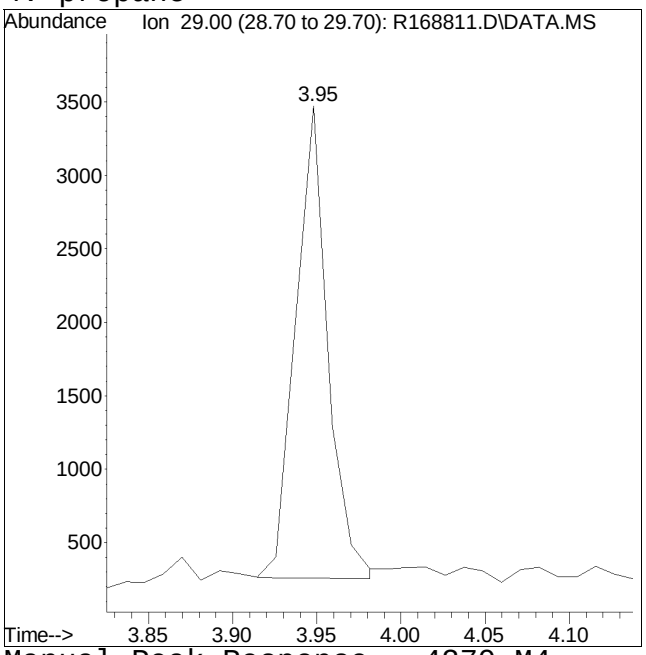
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #4: propane



Original Peak Response = 4807



Manual Peak Response = 4270 M4

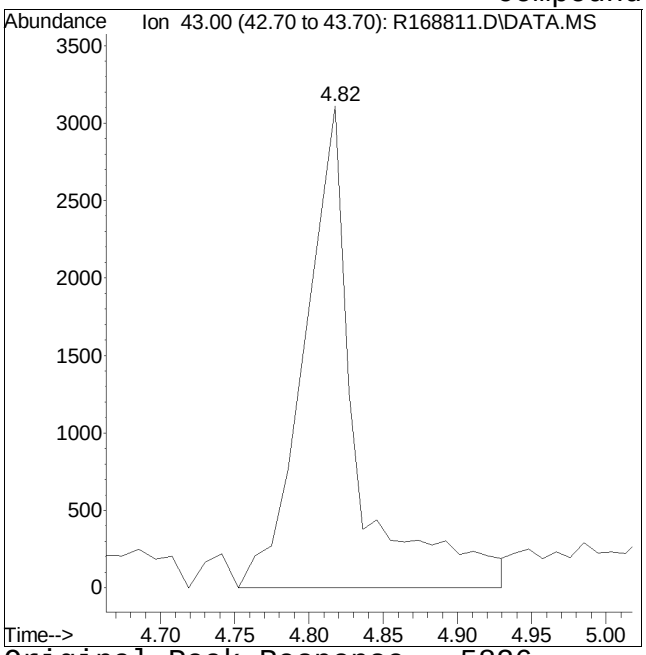
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

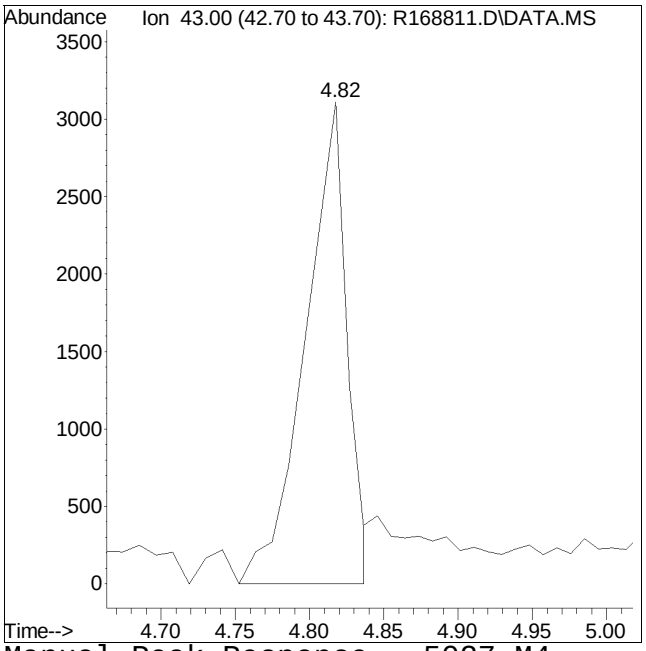
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #11: butane



Original Peak Response = 5826



Manual Peak Response = 5027 M4

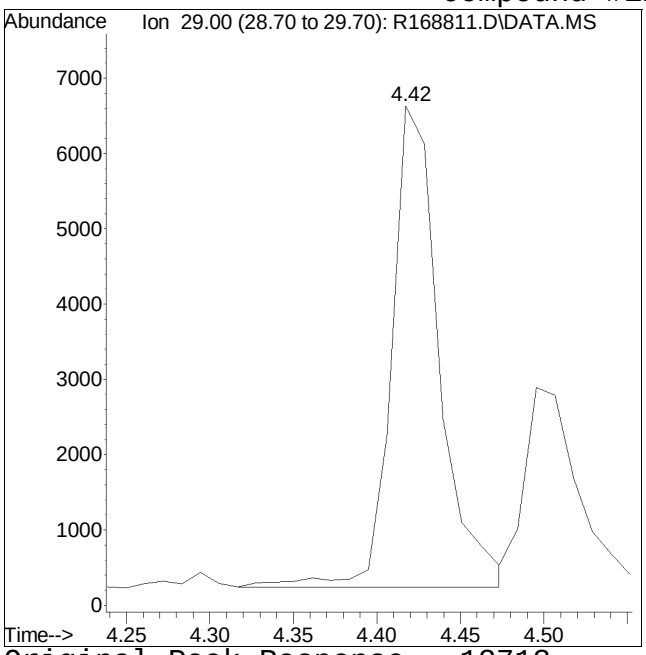
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

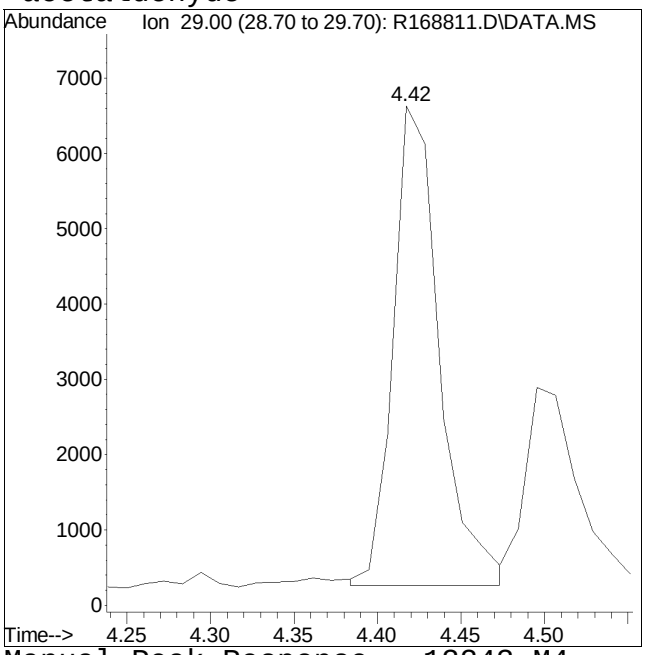
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:26 am

Compound #12: acetaldehyde



Original Peak Response = 12713



Manual Peak Response = 12243 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:34:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	304578	10.000 ppbV	0.00
Standard Area = 301797			Recovery	= 100.92%	
43) 1,4-difluorobenzene	12.35	114	707894	10.000 ppbV	0.00
Standard Area = 707136			Recovery	= 100.11%	
67) chlorobenzene-D5	16.80	54	121343	10.000 ppbV	0.00
Standard Area = 120451			Recovery	= 100.74%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	163103	10.003 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.03%	
69) toluene-D8	15.09	98	527268	9.925 ppbV	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.25%	
90) bromofluorobenzene	17.99	95	331314	9.848 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.48%	
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	20364	1.041 ppbV	99
3) propylene	3.93	41	9805M6	1.094 ppbV	
4) propane	3.95	29	8557	1.104 ppbV	99
5) dichlorodifluoromethane	4.02	85	29282	1.041 ppbV	98
6) chloromethane	4.24	50	10367	1.030 ppbV	94
7) Freon-114	4.38	85	35037	1.000 ppbV	99
8) methanol	4.51	31	17224	5.579 ppbV #	57
9) vinyl chloride	4.54	62	13213	1.084 ppbV	93
10) 1,3-butadiene	4.74	54	9933	1.101 ppbV	98
11) butane	4.82	43	9490M4	1.287 ppbV	
12) acetaldehyde	4.42	29	24359	5.274 ppbV	99
13) bromomethane	5.12	94	14015	1.068 ppbV	93
14) chloroethane	5.37	64	6015	1.026 ppbV #	87
15) ethanol	5.61	31	49800	7.462 ppbV	95
16) dichlorofluoromethane	5.52	67	28429	1.091 ppbV	96
17) vinyl bromide	5.86	106	13474	1.022 ppbV	95
18) acrolein	6.06	56	5134	1.146 ppbV #	90
19) acetone	6.25	43	95908	5.082 ppbV	99
20) acetonitrile	5.89	41	9908	1.135 ppbV #	76
21) trichlorofluoromethane	6.44	101	31614	1.027 ppbV	99
22) isopropyl alcohol	6.63	45	50070	2.522 ppbV	99
23) acrylonitrile	6.88	53	8416M4	1.056 ppbV	
24) pentane	6.93	43	16709	1.032 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:34:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.00	31	10938	1.027 ppbV	90
26) 1,1-dichloroethene	7.29	61	19221	1.013 ppbV	99
27) tertiary butyl alcohol	7.45	59	24890	1.044 ppbV	95
28) methylene chloride	7.47	49	14116	1.062 ppbV	90
29) 3-chloropropene	7.62	41	13667	1.034 ppbV	97
30) carbon disulfide	7.80	76	39196	1.032 ppbV #	75
31) Freon 113	7.81	101	26994	1.021 ppbV	99
32) trans-1,2-dichloroethene	8.65	61	18938	1.054 ppbV	94
33) 1,1-dichloroethane	8.90	63	27692	1.237 ppbV	96
34) MTBE	9.03	73	38376	1.056 ppbV	100
35) vinyl acetate	9.13	43	26504M4	1.006 ppbV	
36) 2-butanone	9.45	43	28433	1.029 ppbV	99
37) cis-1,2-dichloroethene	9.92	61	20092	0.887 ppbV	99
38) Ethyl Acetate	10.24	61	6858	1.116 ppbV	91
39) chloroform	10.27	83	39098	1.029 ppbV	92
40) Tetrahydrofuran	10.79	42	17446	1.141 ppbV	96
41) 2,2-dichloropropane	10.29	77	33323	1.065 ppbV	99
42) 1,2-dichloroethane	11.13	62	19174	1.042 ppbV	98
44) hexane	10.16	57	29005	1.061 ppbV #	61
45) diisopropyl ether	10.20	87	15650	1.081 ppbV	84
46) tert-butyl ethyl ether	10.83	59	45040	1.051 ppbV	97
48) 1,1,1-trichloroethane	11.40	97	28581	1.060 ppbV	97
49) 1,1-dichloropropene	11.77	75	23736	1.078 ppbV	97
50) benzene	11.93	78	47527	1.060 ppbV	97
51) thiophene	12.08	84	104433	1.064 ppbV	99
52) carbon tetrachloride	12.10	117	28336	0.991 ppbV	98
53) cyclohexane	12.24	56	24248	1.112 ppbV	97
54) tert-amyl methyl ether	12.64	73	42165	1.037 ppbV	98
55) dibromomethane	12.85	93	18997	1.048 ppbV	96
56) 1,2-dichloropropane	12.87	63	18041	1.067 ppbV	98
57) bromodichloromethane	13.09	83	34866	1.039 ppbV	100
58) 1,4-dioxane	13.19	88	10465	0.983 ppbV	94
59) trichloroethene	13.14	130	20713	0.983 ppbV	98
60) 2,2,4-trimethylpentane	13.17	57	72887	1.044 ppbV	99
61) methyl methacrylate	13.38	41	21794	0.948 ppbV	97
62) heptane	13.47	43	27638	1.126 ppbV	96
63) cis-1,3-dichloropropene	14.12	75	23890	0.949 ppbV	97
64) 4-methyl-2-pentanone	14.19	43	33490	1.001 ppbV	99
65) trans-1,3-dichloropropene	14.72	75	23630	0.964 ppbV	96
66) 1,1,2-trichloroethane	14.91	97	20023	1.053 ppbV	93

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:34:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.19	91	58842	1.052	ppbV		99
70)	2-methylthiophene	15.26	97	191470	1.111	ppbV		98
71)	1,3-dichloropropane	15.22	76	26863	1.053	ppbV		99
72)	2-hexanone	15.47	43	32576	1.028	ppbV	#	80
73)	3-methylthiophene	15.44	97	196790	1.099	ppbV		97
74)	dibromochloromethane	15.61	129	35063	0.954	ppbV		98
75)	1,2-dibromoethane	15.85	107	33174	1.034	ppbV		95
76)	butyl acetate	16.03	73	6034	1.015	ppbV		88
77)	octane	16.11	85	16408	1.045	ppbV		100
78)	tetrachloroethene	16.25	166	28078	1.005	ppbV		96
79)	1,1,1,2-tetrachloroethane	16.82	131	24165	1.025	ppbV		97
80)	chlorobenzene	16.84	112	46542	1.018	ppbV		99
81)	ethylbenzene	17.13	91	74390	1.046	ppbV		95
82)	2-ethylthiophene	17.17	97	225513	1.091	ppbV		98
83)	m+p-xylene	17.28	91	116223	2.106	ppbV		100
84)	bromoform	17.35	173	35377	0.951	ppbV		98
85)	styrene	17.56	104	45423	1.005	ppbV		98
86)	1,1,2,2-tetrachloroethane	17.65	83	47978	1.025	ppbV		98
87)	o-xylene	17.64	91	60140	1.053	ppbV		97
88)	1,2,3-trichloropropane	17.75	75	35637	1.057	ppbV		97
89)	nonane	17.78	43	41016	1.109	ppbV		98
91)	isopropylbenzene	18.08	105	81131	1.050	ppbV		100
92)	bromobenzene	18.17	77	42814	1.062	ppbV		96
93)	2-chlorotoluene	18.45	126	23705	1.048	ppbV		99
94)	n-propylbenzene	18.47	120	23457	0.995	ppbV		84
95)	4-chlorotoluene	18.51	91	64117	1.075	ppbV		98
96)	4-ethyl toluene	18.58	105	88925	1.017	ppbV		99
97)	1,3,5-trimethylbenzene	18.63	105	69067	0.995	ppbV		97
98)	tert-butylbenzene	18.94	119	74218	1.002	ppbV		97
99)	1,2,4-trimethylbenzene	18.94	105	69308	0.982	ppbV		95
100)	decane	18.98	57	46817	1.029	ppbV		94
101)	Benzyl Chloride	19.05	91	55270	0.880	ppbV		98
102)	1,3-dichlorobenzene	19.07	146	49625	0.951	ppbV		99
103)	1,4-dichlorobenzene	19.12	146	52923	0.995	ppbV		98
104)	sec-butylbenzene	19.14	105	104573	1.031	ppbV		96
105)	1,2,3-trimethylbenzene	19.26	105	64691	0.949	ppbV		98
106)	p-isopropyltoluene	19.25	119	93613	1.004	ppbV		99
107)	1,2-dichlorobenzene	19.38	146	48776	0.971	ppbV		97
108)	n-butylbenzene	19.57	91	86976	1.009	ppbV		96
109)	indan	19.42	117	72354	0.928	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:34:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.50	115	59718	0.916	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.73	75	20750	0.917	ppbV	92
112) undecane	19.93	57	51475	0.933	ppbV	97
113) 1,2,4,5-tetramethylben...	20.17	119	89280	0.952	ppbV	99
114) dodecane	20.82	57	48514	0.811	ppbV	98
115) 1,2,4-trichlorobenzene	20.81	180	41534	0.807	ppbV	100
116) naphthalene	20.93	128	97885	0.867	ppbV	100
117) 1,2,3-trichlorobenzene	21.18	180	39144	0.809	ppbV	96
118) benzothiophene	21.00	134	92554	1.107	ppbV	98
119) hexachlorobutadiene	21.24	225	34239	0.824	ppbV	97
120) 2-methylnaphthalene	22.07	142	14849	1.497	ppbV	92
121) 1-methylnaphthalene	22.27	142	18914	1.238	ppbV	98

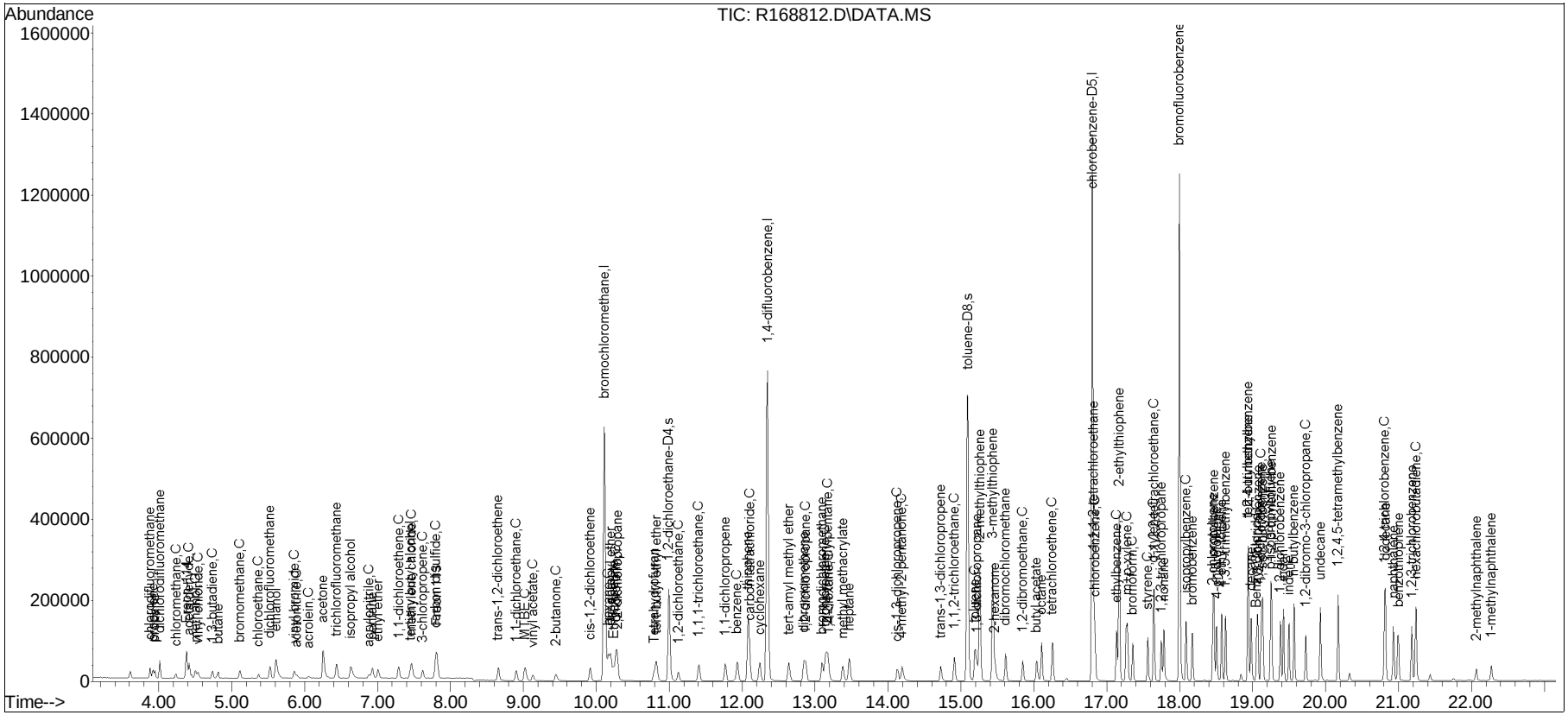
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300074
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 24 08:34:31 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023T_ICAL\R168814.D

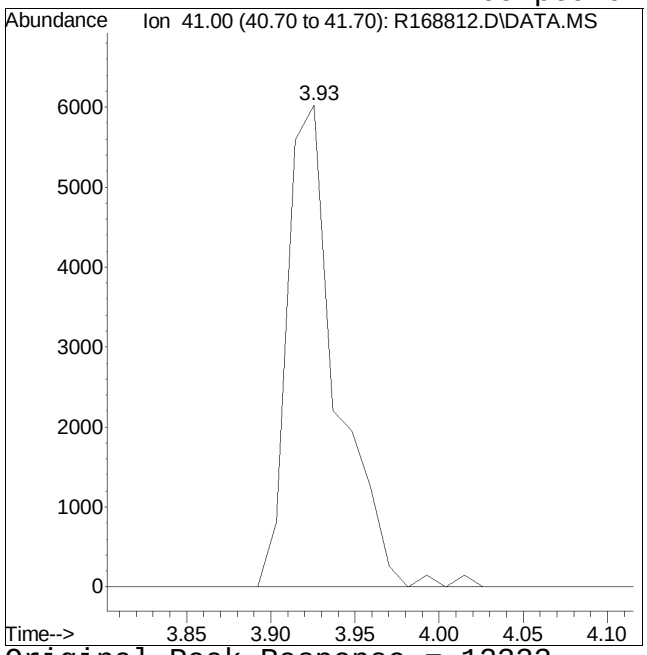


Manual Integration/Negative Proof Report

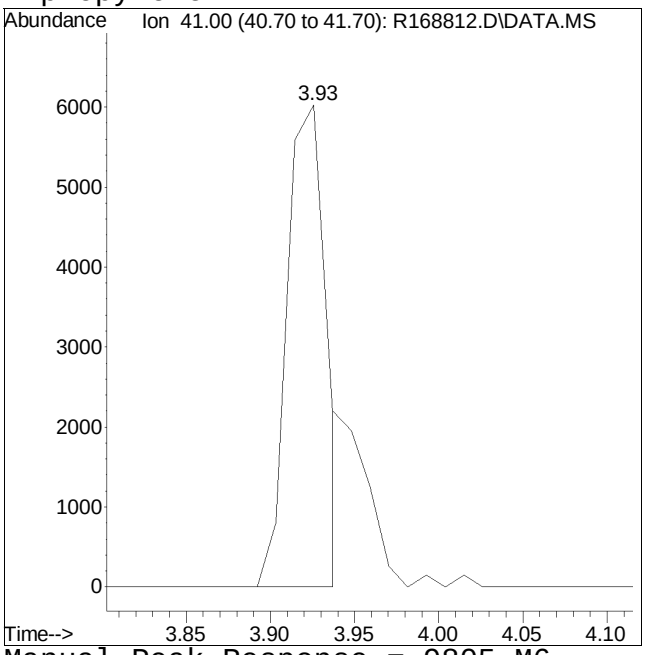
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #3: propylene



Original Peak Response = 12333



Manual Peak Response = 9805 M6

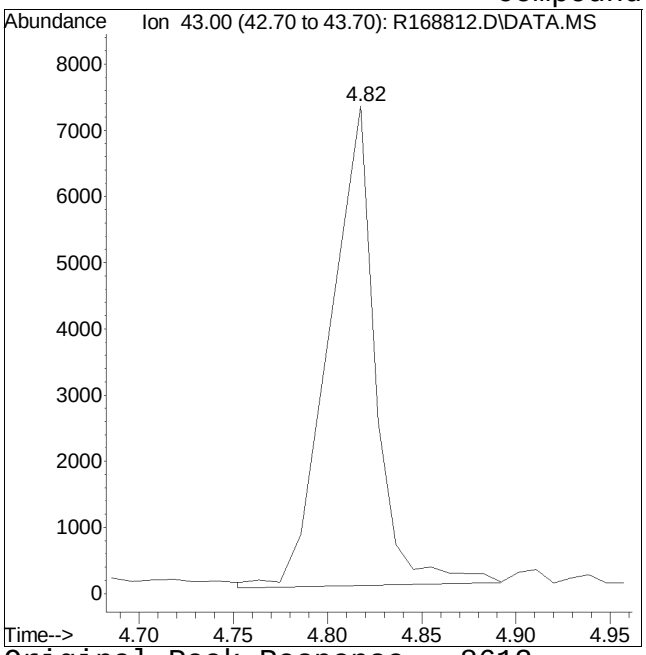
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

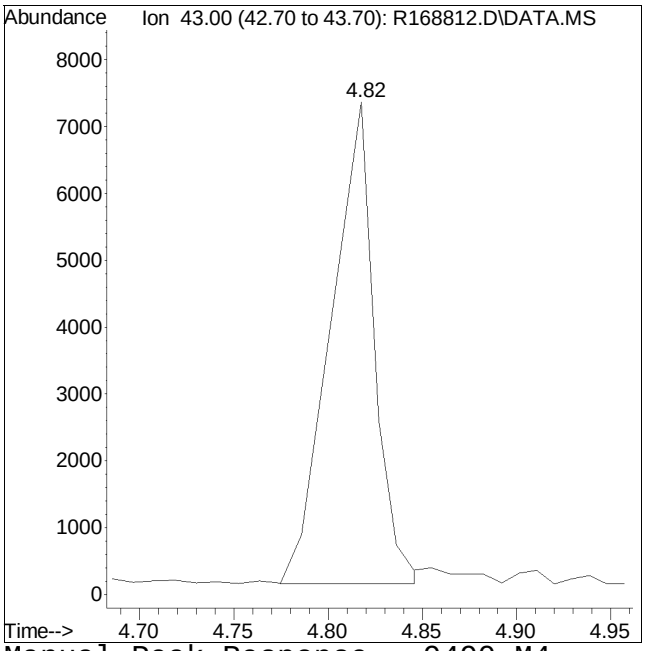
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #11: butane



Original Peak Response = 8612



Manual Peak Response = 9490 M4

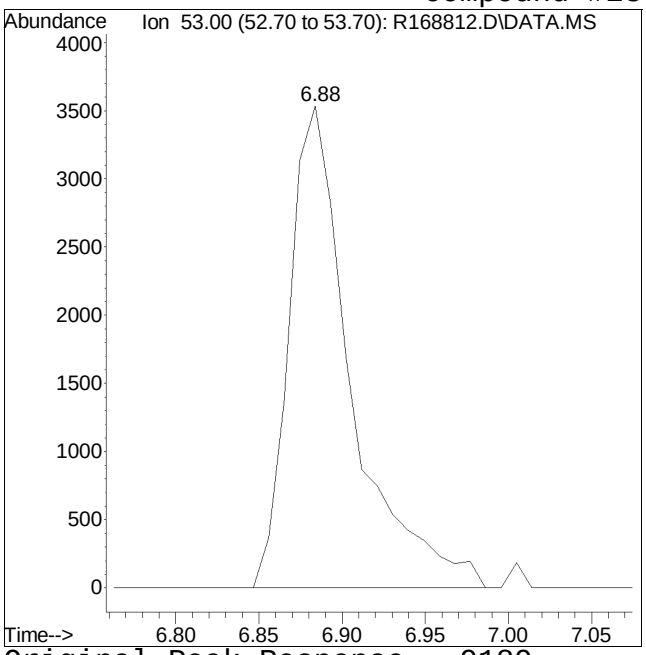
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

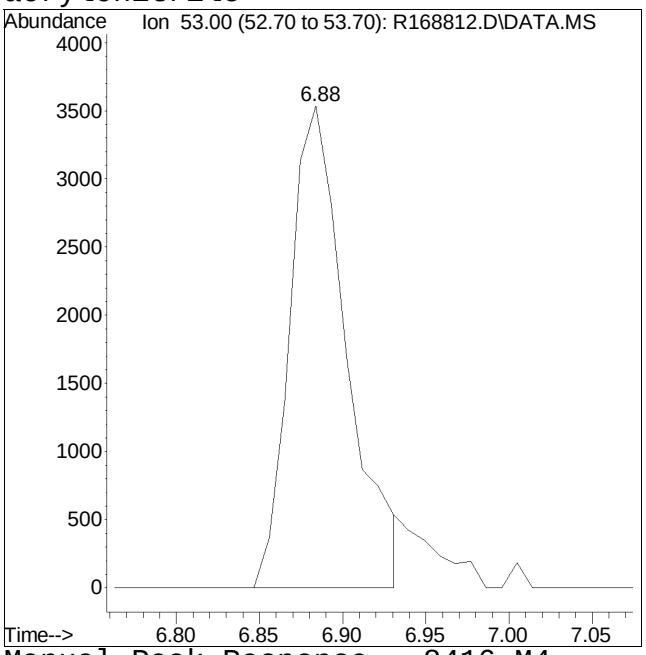
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #23: acrylonitrile



Original Peak Response = 9189



Manual Peak Response = 8416 M4

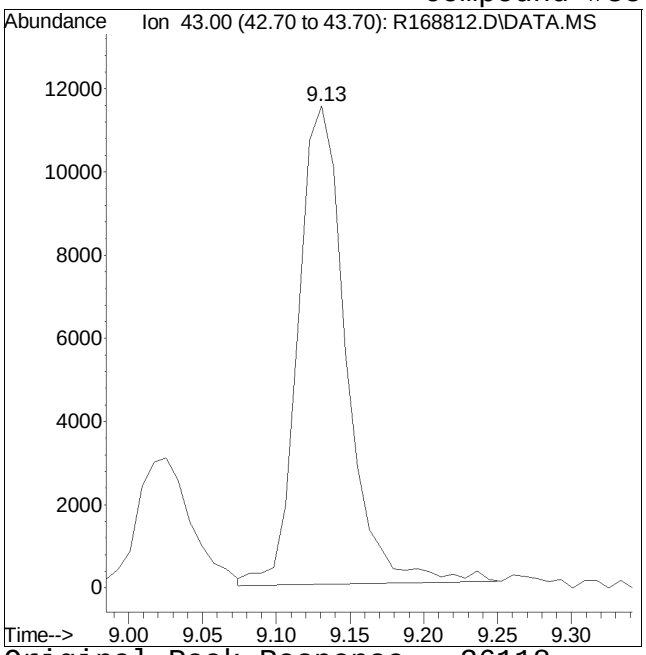
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

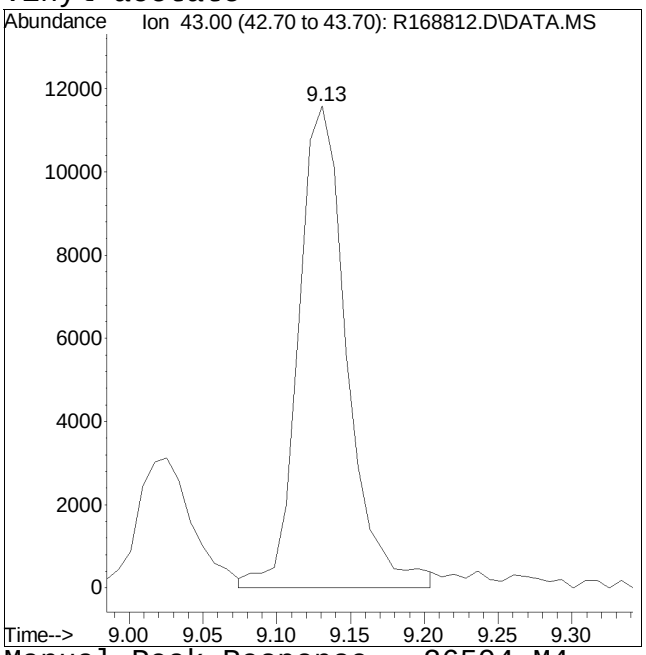
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #35: vinyl acetate



Original Peak Response = 26118



Manual Peak Response = 26504 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:36:02 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	305780	10.000 ppbV	0.00
Standard Area = 301797			Recovery	= 101.32%	
43) 1,4-difluorobenzene	12.35	114	707153	10.000 ppbV	0.00
Standard Area = 707136			Recovery	= 100.00%	
67) chlorobenzene-D5	16.80	54	120061	10.000 ppbV	0.00
Standard Area = 120451			Recovery	= 99.68%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	163848	10.059 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.59%	
69) toluene-D8	15.08	98	528510	10.054 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.54%	
90) bromofluorobenzene	17.99	95	332995	10.004 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.04%	
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	98905	5.035 ppbV	98
3) propylene	3.91	41	48522M6	5.392 ppbV	
4) propane	3.95	29	39561	5.084 ppbV	99
5) dichlorodifluoromethane	4.02	85	153361	5.428 ppbV	97
6) chloromethane	4.23	50	49146	4.864 ppbV	97
7) Freon-114	4.37	85	173429	4.930 ppbV	94
8) methanol	4.48	31	79138	25.534 ppbV	94
9) vinyl chloride	4.54	62	59699	4.880 ppbV	99
10) 1,3-butadiene	4.73	54	45417	5.014 ppbV	100
11) butane	4.82	43	27873	3.767 ppbV	98
12) acetaldehyde	4.41	29	118832	25.629 ppbV	98
13) bromomethane	5.11	94	66033	5.010 ppbV	98
14) chloroethane	5.37	64	28702	4.877 ppbV	96
15) ethanol	5.58	31	174948	26.110 ppbV	97
16) dichlorofluoromethane	5.52	67	130826	4.999 ppbV	100
17) vinyl bromide	5.85	106	66224	5.002 ppbV	92
18) acrolein	6.05	56	22955	5.104 ppbV	98
19) acetone	6.22	43	479309	25.299 ppbV	98
20) acetonitrile	5.87	41	44023	5.024 ppbV	96
21) trichlorofluoromethane	6.44	101	155571	5.035 ppbV	97
22) isopropyl alcohol	6.60	45	253980	12.742 ppbV	100
23) acrylonitrile	6.87	53	40467M4	5.056 ppbV	
24) pentane	6.93	43	81156	4.992 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:36:02 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.99	31	55650	5.207 ppbV	99
26) 1,1-dichloroethene	7.28	61	95544	5.014 ppbV	99
27) tertiary butyl alcohol	7.41	59	120226	5.023 ppbV	98
28) methylene chloride	7.47	49	65905	4.937 ppbV	99
29) 3-chloropropene	7.62	41	65881	4.965 ppbV	96
30) carbon disulfide	7.79	76	189130	4.958 ppbV	95
31) Freon 113	7.81	101	130712	4.926 ppbV	97
32) trans-1,2-dichloroethene	8.65	61	105208	5.835 ppbV	98
33) 1,1-dichloroethane	8.90	63	132171	5.880 ppbV	97
34) MTBE	8.99	73	184341	5.055 ppbV	97
35) vinyl acetate	9.12	43	122494	4.633 ppbV	99
36) 2-butanone	9.41	43	133437	4.808 ppbV	97
37) cis-1,2-dichloroethene	9.92	61	109913	4.835 ppbV	99
38) Ethyl Acetate	10.22	61	30106	4.879 ppbV	100
39) chloroform	10.27	83	190180	4.983 ppbV	98
40) Tetrahydrofuran	10.75	42	76429M4	4.979 ppbV	
41) 2,2-dichloropropane	10.28	77	158168	5.034 ppbV	99
42) 1,2-dichloroethane	11.12	62	92229	4.991 ppbV	98
44) hexane	10.16	57	135925	4.976 ppbV	98
45) diisopropyl ether	10.17	87	72307	5.000 ppbV	97
46) tert-butyl ethyl ether	10.80	59	211411	4.937 ppbV	99
48) 1,1,1-trichloroethane	11.40	97	139610	5.181 ppbV	98
49) 1,1-dichloropropene	11.77	75	112952	5.135 ppbV	100
50) benzene	11.93	78	229873	5.131 ppbV	98
51) thiophene	12.08	84	497492	5.073 ppbV	99
52) carbon tetrachloride	12.10	117	143080	5.011 ppbV	98
53) cyclohexane	12.24	56	111714	5.129 ppbV	96
54) tert-amyl methyl ether	12.62	73	209017	5.147 ppbV	100
55) dibromomethane	12.84	93	92754	5.121 ppbV	98
56) 1,2-dichloropropane	12.87	63	86501	5.123 ppbV	99
57) bromodichloromethane	13.09	83	170879	5.095 ppbV	100
58) 1,4-dioxane	13.16	88	52380	4.925 ppbV #	82
59) trichloroethene	13.14	130	108162	5.138 ppbV	99
60) 2,2,4-trimethylpentane	13.16	57	358697	5.144 ppbV	99
61) methyl methacrylate	13.36	41	115543	5.032 ppbV	100
62) heptane	13.47	43	126060	5.140 ppbV	97
63) cis-1,3-dichloropropene	14.12	75	125149	4.978 ppbV	98
64) 4-methyl-2-pentanone	14.17	43	169391	5.070 ppbV	99
65) trans-1,3-dichloropropene	14.71	75	120376	4.913 ppbV	98
66) 1,1,2-trichloroethane	14.91	97	96220	5.065 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:36:02 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	15.19	91	281327	5.082	ppbV	100
70)	2-methylthiophene	15.26	97	883933	5.185	ppbV	100
71)	1,3-dichloropropane	15.22	76	125191	4.958	ppbV	99
72)	2-hexanone	15.45	43	161838	5.160	ppbV	97
73)	3-methylthiophene	15.44	97	924348	5.219	ppbV	100
74)	dibromochloromethane	15.61	129	177099	4.872	ppbV	99
75)	1,2-dibromoethane	15.85	107	162959	5.132	ppbV	100
76)	butyl acetate	16.02	73	29262	4.976	ppbV	98
77)	octane	16.11	85	78017	5.023	ppbV	98
78)	tetrachloroethene	16.25	166	140464	5.079	ppbV	99
79)	1,1,1,2-tetrachloroethane	16.82	131	118040	5.060	ppbV	100
80)	chlorobenzene	16.84	112	232022	5.130	ppbV	100
81)	ethylbenzene	17.13	91	364208	5.176	ppbV	99
82)	2-ethylthiophene	17.17	97	1047844	5.123	ppbV	99
83)	m+p-xylene	17.28	91	556127	10.183	ppbV	100
84)	bromoform	17.35	173	181052	4.919	ppbV	99
85)	styrene	17.56	104	223218	4.992	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.64	83	235591	5.087	ppbV	100
87)	o-xylene	17.64	91	291420	5.158	ppbV	98
88)	1,2,3-trichloropropane	17.74	75	171975	5.153	ppbV	100
89)	nonane	17.78	43	186519	5.096	ppbV	99
91)	isopropylbenzene	18.08	105	389209	5.093	ppbV	98
92)	bromobenzene	18.17	77	204778	5.135	ppbV	100
93)	2-chlorotoluene	18.45	126	112432	5.021	ppbV	95
94)	n-propylbenzene	18.47	120	118335	5.075	ppbV	96
95)	4-chlorotoluene	18.50	91	300197	5.088	ppbV	99
96)	4-ethyl toluene	18.57	105	441118	5.096	ppbV	99
97)	1,3,5-trimethylbenzene	18.63	105	350218	5.098	ppbV	99
98)	tert-butylbenzene	18.94	119	371951	5.074	ppbV	99
99)	1,2,4-trimethylbenzene	18.94	105	352649	5.049	ppbV	99
100)	decane	18.98	57	231140	5.132	ppbV	99
101)	Benzyl Chloride	19.05	91	299876	4.825	ppbV	100
102)	1,3-dichlorobenzene	19.07	146	262075	5.075	ppbV	97
103)	1,4-dichlorobenzene	19.12	146	264617	5.028	ppbV	100
104)	sec-butylbenzene	19.14	105	516613	5.146	ppbV	100
105)	1,2,3-trimethylbenzene	19.26	105	345565	5.124	ppbV	100
106)	p-isopropyltoluene	19.25	119	470217	5.098	ppbV	100
107)	1,2-dichlorobenzene	19.38	146	253182	5.096	ppbV	100
108)	n-butylbenzene	19.57	91	434410	5.092	ppbV	99
109)	indan	19.42	117	387528	5.022	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:36:02 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.49	115	323502	5.014	ppbV	97
111) 1,2-dibromo-3-chloropr...	19.72	75	108754	4.856	ppbV	90
112) undecane	19.92	57	274592	5.032	ppbV	99
113) 1,2,4,5-tetramethylben...	20.17	119	456296	4.918	ppbV	99
114) dodecane	20.82	57	272856	4.611	ppbV	99
115) 1,2,4-trichlorobenzene	20.81	180	239982	4.713	ppbV	99
116) naphthalene	20.93	128	533244	4.776	ppbV	99
117) 1,2,3-trichlorobenzene	21.18	180	219810	4.591	ppbV	99
118) benzothiophene	20.99	134	377628	4.565	ppbV	100
119) hexachlorobutadiene	21.24	225	191379	4.657	ppbV	99
120) 2-methylnaphthalene	22.07	142	41443	4.221	ppbV	98
121) 1-methylnaphthalene	22.27	142	64722	4.283	ppbV	97

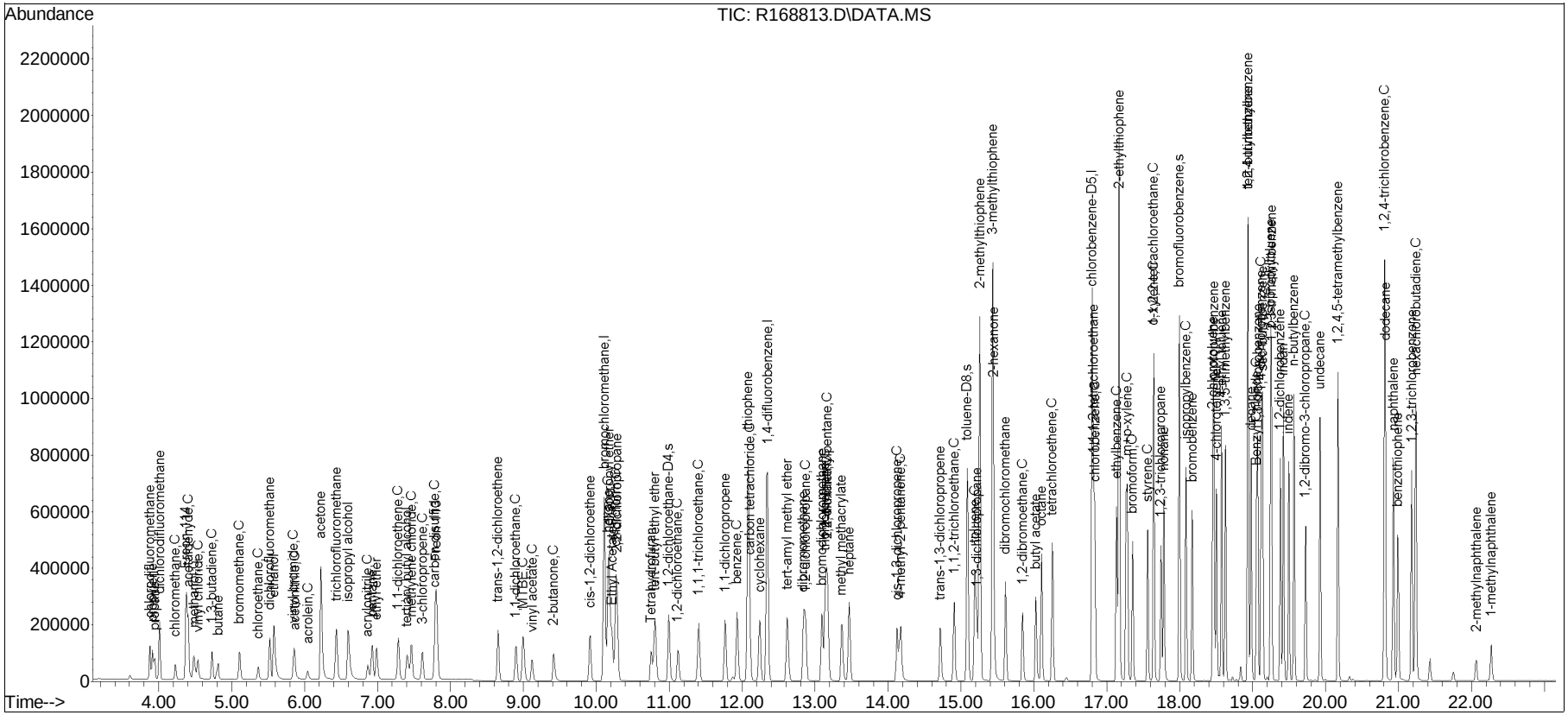
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:36:02 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

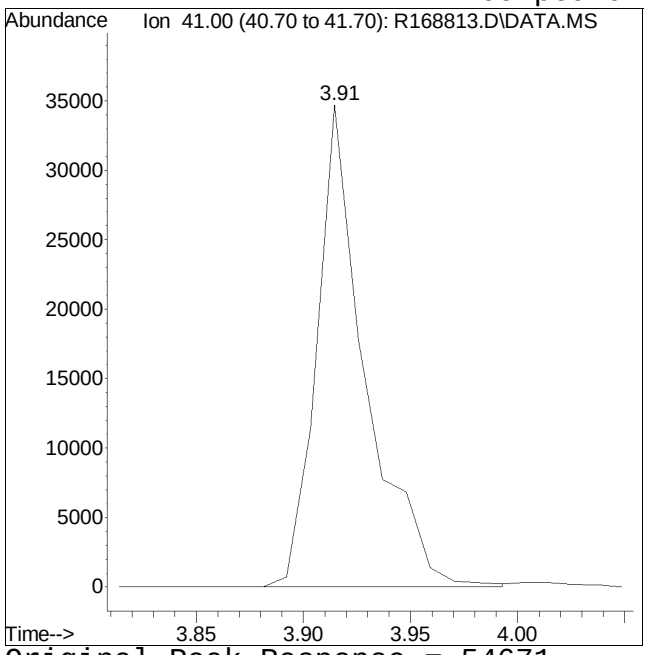
Sub List : Default - All compounds listed1023T_ICAL\R168814.D

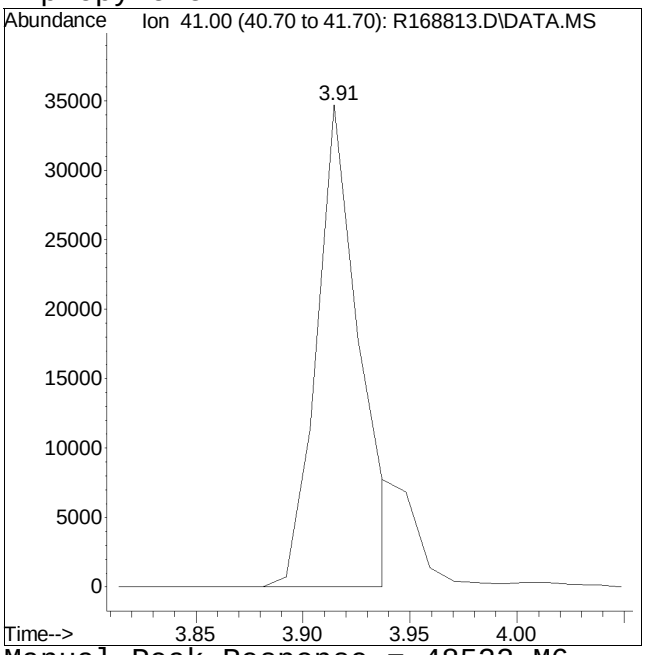


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TFS1_191023.M
Data File : R168813.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 4:02 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 10/24/2019 8:27 am

Compound #3: propylene





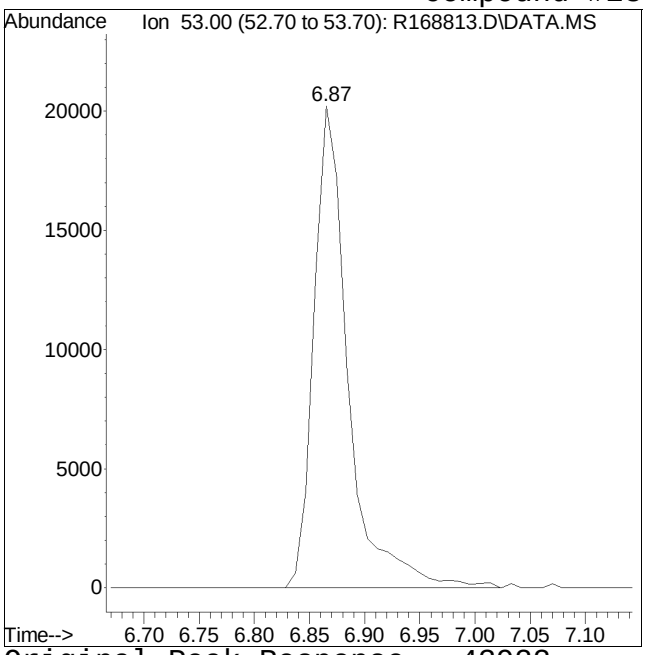
Original Peak Response = 54671 Manual Peak Response = 48522 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

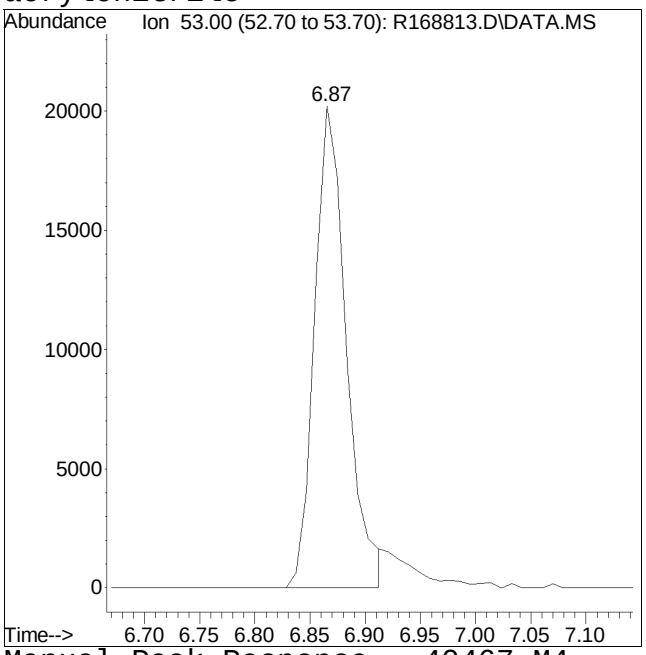
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #23: acrylonitrile



Original Peak Response = 43922



Manual Peak Response = 40467 M4

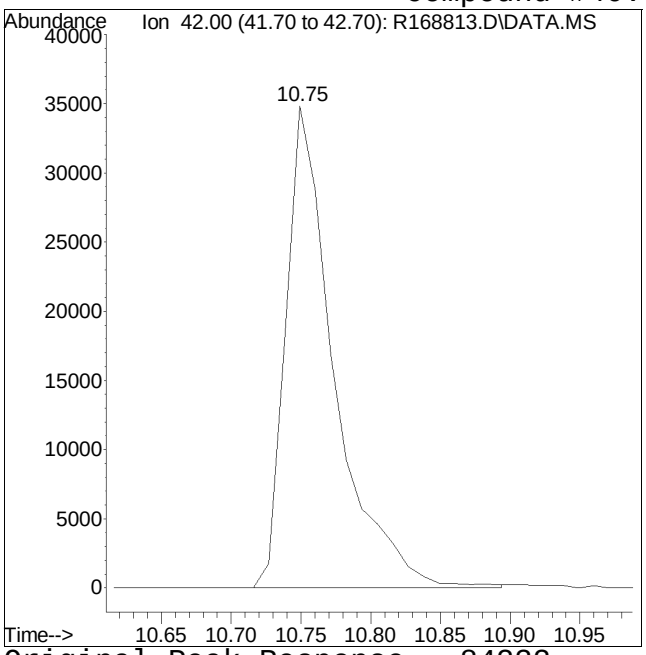
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

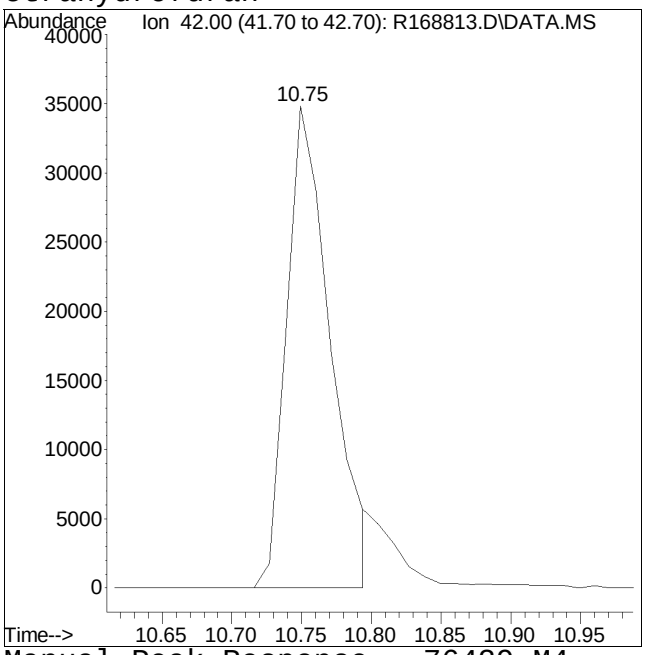
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #40: Tetrahydrofuran



Original Peak Response = 84232



Manual Peak Response = 76429 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:24:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 13 07:24:01 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	301797	10.000 ppbV	0.00
Standard Area = 301797			Recovery	= 100.00%	
43) 1,4-difluorobenzene	12.35	114	707136	10.000 ppbV	0.00
Standard Area = 707136			Recovery	= 100.00%	
67) chlorobenzene-D5	16.80	54	120451	10.000 ppbV	# 0.00
Standard Area = 120451			Recovery	= 100.00%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	162882	6.407 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 64.07%#	
69) toluene-D8	15.08	98	527356	7.573 ppbV	-0.01
Spiked Amount 10.000	Range 70 - 130		Recovery	= 75.73%	
90) bromofluorobenzene	17.99	95	333941	7.552 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 75.52%	
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	193860	6.879 ppbV	99
3) propylene	3.91	41	88815M6	6.500 ppbV	
4) propane	3.95	29	76799	6.876 ppbV	100
5) dichlorodifluoromethane	4.02	85	278843	7.242 ppbV	99
6) chloromethane	4.23	50	99724	6.851 ppbV	94
7) Freon-114	4.38	85	347221	7.689 ppbV	92
8) methanol	4.48	31	152950	34.074 ppbV	98
9) vinyl chloride	4.54	62	120733	7.169 ppbV	100
10) 1,3-butadiene	4.73	54	89403	7.051 ppbV	90
11) butane	4.82	43	73038	5.556 ppbV	99
12) acetaldehyde	4.41	29	228810	30.734 ppbV	95
13) bromomethane	5.12	94	130073	7.660 ppbV	99
14) chloroethane	5.37	64	58080	7.083 ppbV	98
15) ethanol	5.58	31	330654M4	35.907 ppbV	
16) dichlorofluoromethane	5.52	67	258316	7.123 ppbV	99
17) vinyl bromide	5.86	106	130683	7.895 ppbV	96
18) acrolein	6.04	56	44387	6.680 ppbV	97
19) acetone	6.22	43	934940	30.992 ppbV	95
20) acetonitrile	5.87	41	86488	6.526 ppbV	98
21) trichlorofluoromethane	6.44	101	304954	7.664 ppbV	96
22) isopropyl alcohol	6.60	45	491841	14.190 ppbV	100
23) acrylonitrile	6.87	53	79000M4	6.386 ppbV	
24) pentane	6.93	43	160463	5.681 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:24:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 13 07:24:01 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.99	31	105486	5.747 ppbV	94
26) 1,1-dichloroethene	7.29	61	188080	6.154 ppbV	94
27) tertiary butyl alcohol	7.40	59	236216	6.168 ppbV	98
28) methylene chloride	7.47	49	131756	5.804 ppbV	90
29) 3-chloropropene	7.62	41	130966	5.061 ppbV	94
30) carbon disulfide	7.79	76	376513	6.129 ppbV	98
31) Freon 113	7.81	101	261888	6.781 ppbV	92
32) trans-1,2-dichloroethene	8.65	61	177967	5.784 ppbV	91
33) 1,1-dichloroethane	8.90	63	221856	5.927 ppbV	99
34) MTBE	8.99	73	359954	6.654 ppbV	98
35) vinyl acetate	9.12	43	260963	6.928 ppbV	98
36) 2-butanone	9.41	43	273908	7.112 ppbV	97
37) cis-1,2-dichloroethene	9.92	61	224347	7.403 ppbV	92
38) Ethyl Acetate	10.22	61	60903	7.270 ppbV	79
39) chloroform	10.27	83	376673	7.454 ppbV	99
40) Tetrahydrofuran	10.75	42	151508M6	6.359 ppbV	
41) 2,2-dichloropropane	10.28	77	310103	7.163 ppbV	96
42) 1,2-dichloroethane	11.13	62	182375	7.126 ppbV	98
44) hexane	10.16	57	273143	6.159 ppbV	87
45) diisopropyl ether	10.17	87	144621	6.344 ppbV	87
46) tert-butyl ethyl ether	10.80	59	428165	6.102 ppbV	97
48) 1,1,1-trichloroethane	11.40	97	269446	6.313 ppbV	94
49) 1,1-dichloropropene	11.77	75	219949	6.395 ppbV	93
50) benzene	11.93	78	448036	6.343 ppbV	96
51) thiophene	12.08	84	980635	6.741 ppbV	92
52) carbon tetrachloride	12.10	117	285498	6.946 ppbV	99
53) cyclohexane	12.24	56	217791	5.764 ppbV	91
54) tert-amyl methyl ether	12.62	73	406097	6.192 ppbV	97
55) dibromomethane	12.85	93	181133	6.787 ppbV	94
56) 1,2-dichloropropane	12.87	63	168851	6.175 ppbV	97
57) bromodichloromethane	13.09	83	335365	6.611 ppbV	99
58) 1,4-dioxane	13.15	88	106348	6.945 ppbV	100
59) trichloroethene	13.14	130	210508	7.172 ppbV	97
60) 2,2,4-trimethylpentane	13.17	57	697311	5.885 ppbV	97
61) methyl methacrylate	13.36	41	229630	5.837 ppbV	92
62) heptane	13.47	43	245228	5.519 ppbV	98
63) cis-1,3-dichloropropene	14.12	75	251389	6.569 ppbV	94
64) 4-methyl-2-pentanone	14.17	43	334083	6.012 ppbV	97
65) trans-1,3-dichloropropene	14.71	75	244987	6.572 ppbV	96
66) 1,1,2-trichloroethane	14.91	97	189961	6.601 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:24:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 13 07:24:01 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	15.19	91	555364	7.270	ppbV	99
70)	2-methylthiophene	15.26	97	1710329	7.682	ppbV	98
71)	1,3-dichloropropane	15.22	76	253347	7.368	ppbV	94
72)	2-hexanone	15.45	43	314640	7.166	ppbV	99
73)	3-methylthiophene	15.44	97	1776735	7.905	ppbV	99
74)	dibromochloromethane	15.61	129	364654	8.276	ppbV	98
75)	1,2-dibromoethane	15.85	107	318591	7.902	ppbV	100
76)	butyl acetate	16.02	73	59003	7.466	ppbV	89
77)	octane	16.11	85	155832	7.328	ppbV	86
78)	tetrachloroethene	16.25	166	277448	8.312	ppbV	99
79)	1,1,1,2-tetrachloroethane	16.82	131	234044	8.009	ppbV	98
80)	chlorobenzene	16.84	112	453777	7.873	ppbV	96
81)	ethylbenzene	17.13	91	705987	7.320	ppbV	99
82)	2-ethylthiophene	17.17	97	2051874	8.119	ppbV	97
83)	m+p-xylene	17.28	91	1095832	14.773	ppbV	96
84)	bromoform	17.35	173	369249	8.556	ppbV	98
85)	styrene	17.56	104	448577	7.760	ppbV	98
86)	1,1,2,2-tetrachloroethane	17.64	83	464637	8.069	ppbV	99
87)	o-xylene	17.64	91	566817	7.612	ppbV	99
88)	1,2,3-trichloropropane	17.74	75	334805	7.372	ppbV	98
89)	nonane	17.78	43	367230	6.668	ppbV	98
91)	isopropylbenzene	18.08	105	766761	7.682	ppbV	100
92)	bromobenzene	18.17	77	400107	7.239	ppbV	92
93)	2-chlorotoluene	18.45	126	224632	8.471	ppbV	66
94)	n-propylbenzene	18.47	120	233921	8.365	ppbV	100
95)	4-chlorotoluene	18.50	91	591894	7.531	ppbV	96
96)	4-ethyl toluene	18.57	105	868355	7.851	ppbV	99
97)	1,3,5-trimethylbenzene	18.63	105	689254	7.868	ppbV	95
98)	tert-butylbenzene	18.94	119	735420	8.504	ppbV	99
99)	1,2,4-trimethylbenzene	18.94	105	700704	8.431	ppbV	92
100)	decane	18.98	57	451831	7.554	ppbV	95
101)	Benzyl Chloride	19.05	91	623559	8.193	ppbV	96
102)	1,3-dichlorobenzene	19.07	146	518084	8.852	ppbV	95
103)	1,4-dichlorobenzene	19.12	146	527998	9.040	ppbV	94
104)	sec-butylbenzene	19.14	105	1007254	8.090	ppbV	98
105)	1,2,3-trimethylbenzene	19.26	105	676618	7.804	ppbV	94
106)	p-isopropyltoluene	19.25	119	925405	8.489	ppbV	98
107)	1,2-dichlorobenzene	19.38	146	498451	8.857	ppbV	98
108)	n-butylbenzene	19.57	91	855900	8.418	ppbV	98
109)	indan	19.42	117	774188	8.133	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:24:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 13 07:24:01 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.49	115	647266	8.167	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.73	75	224683	8.411	ppbV	84
112) undecane	19.92	57	547452	9.128	ppbV	98
113) 1,2,4,5-tetramethylben...	20.17	119	930883	8.088	ppbV	98
114) dodecane	20.82	57	593723	13.120	ppbV	96
115) 1,2,4-trichlorobenzene	20.81	180	510875	13.260	ppbV	95
116) naphthalene	20.93	128	1120066	11.522	ppbV	99
117) 1,2,3-trichlorobenzene	21.18	180	480334	12.869	ppbV	95
118) benzothiophene	20.99	134	829937	7.949	ppbV	100
119) hexachlorobutadiene	21.24	225	412273	11.852	ppbV	93
120) 2-methylnaphthalene	22.07	142	98495	9.942	ppbV	99
121) 1-methylnaphthalene	22.27	142	151614	8.328	ppbV	99

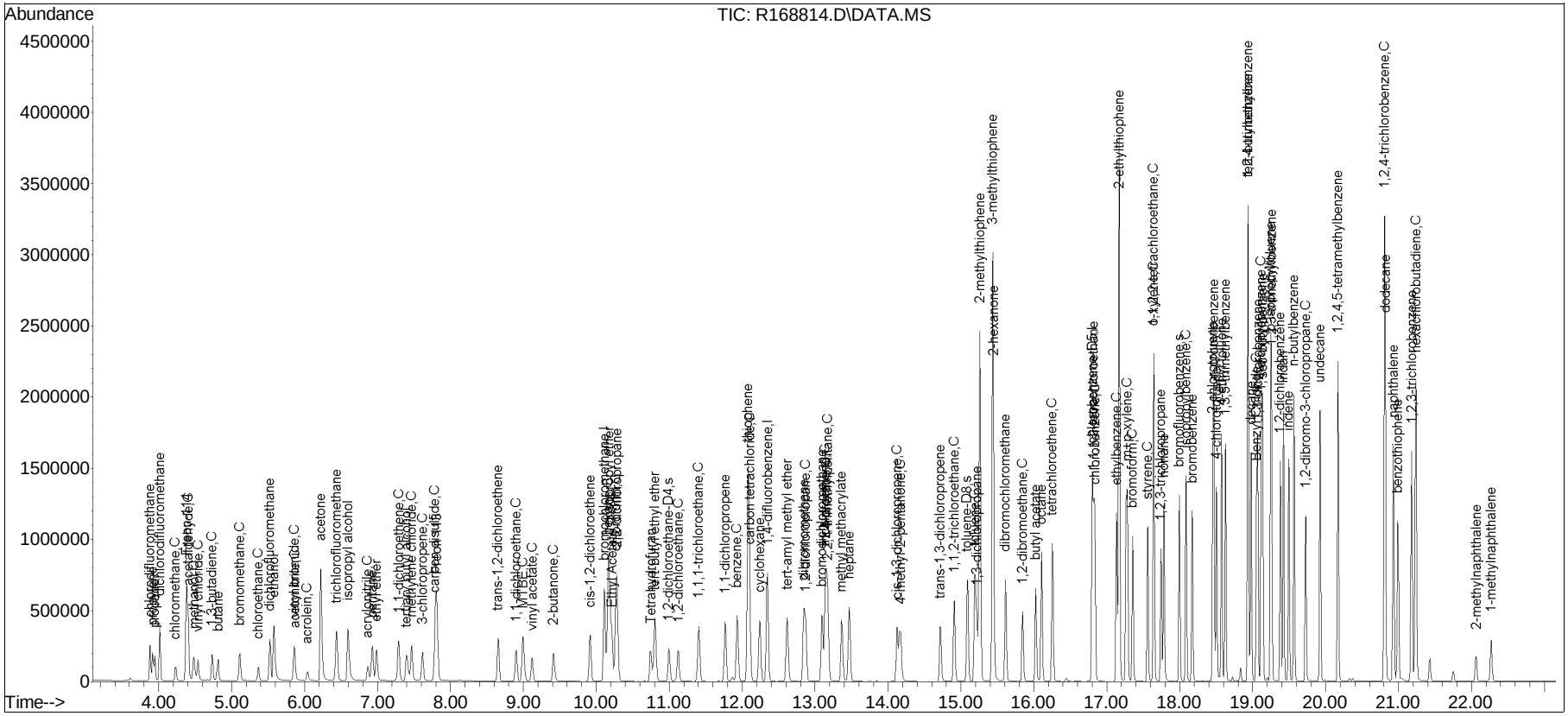
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300074
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 24 08:24:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 13 07:24:01 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023T_ICAL\R168814.D

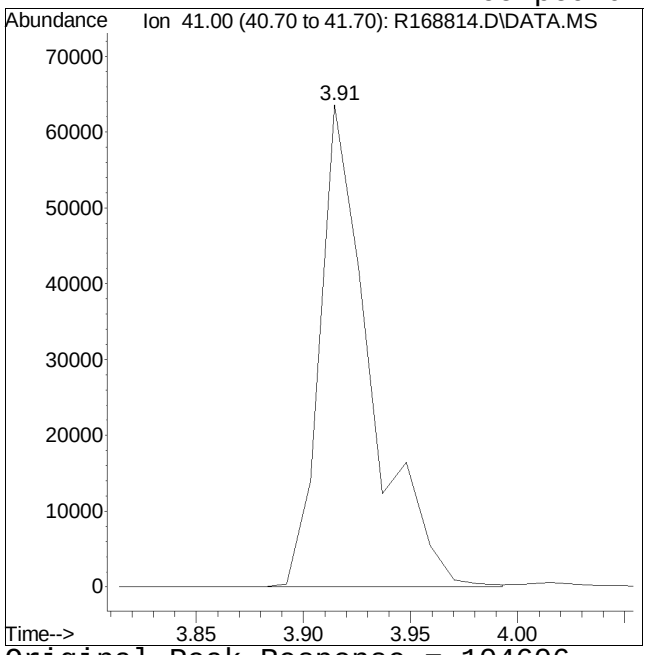


Manual Integration/Negative Proof Report

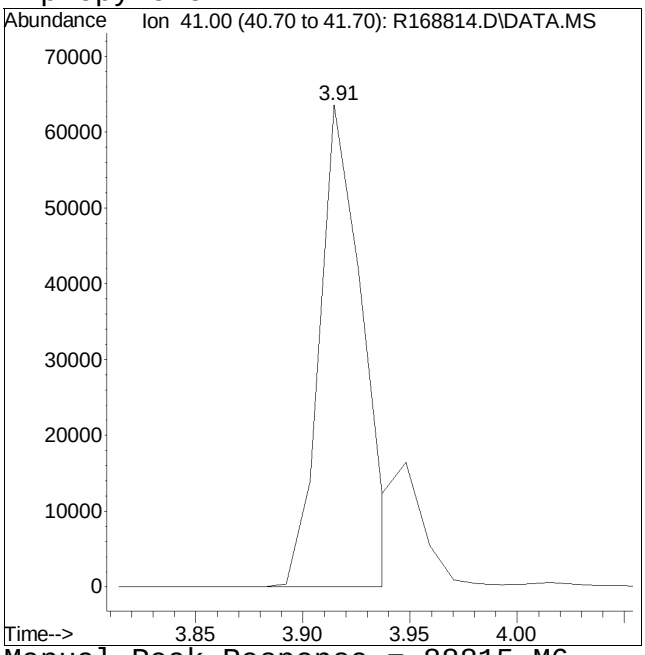
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:23 am

Compound #3: propylene



Original Peak Response = 104606



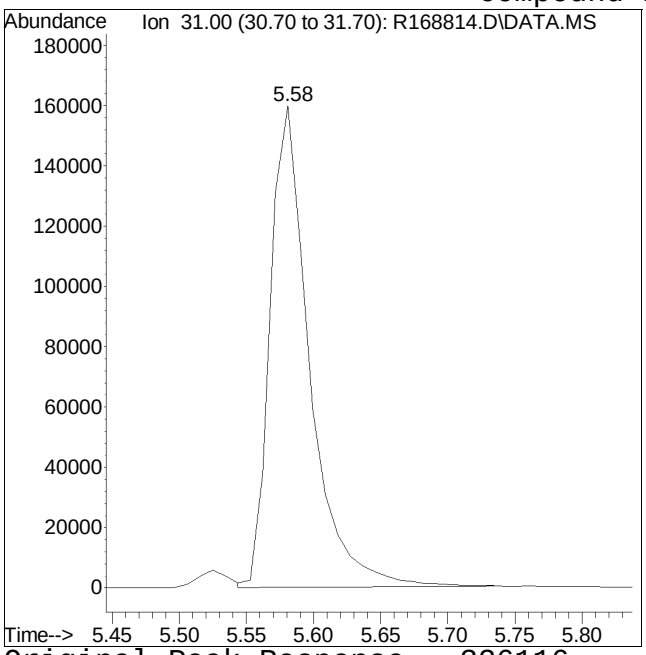
Manual Peak Response = 88815 M6

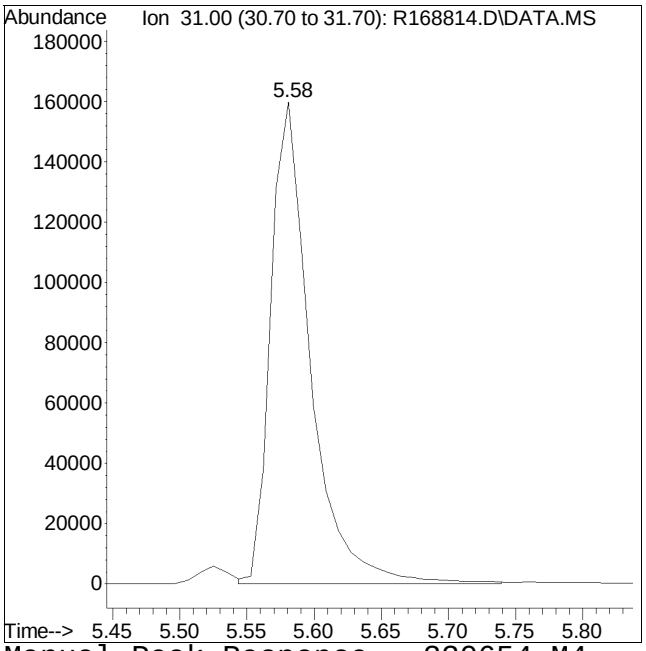
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TFS1_191023.M
Data File : R168814.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 4:36 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 10/24/2019 8:23 am

Compound #15: ethanol





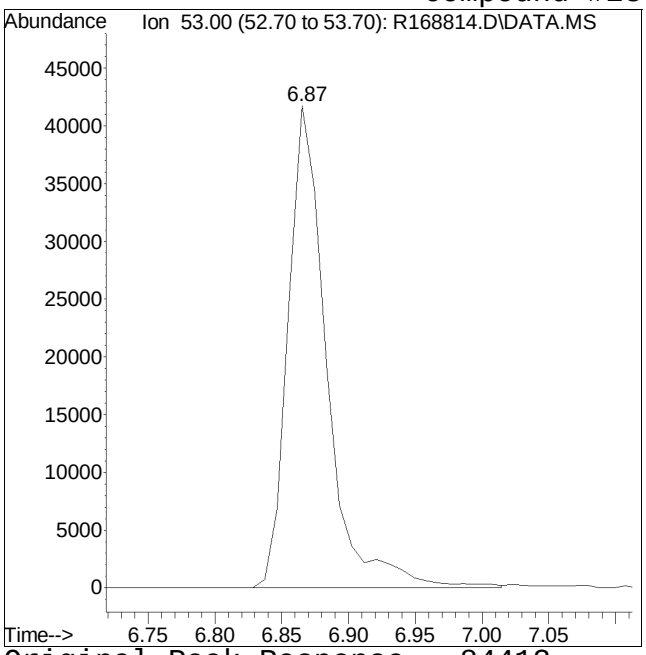
Original Peak Response = 326116 Manual Peak Response = 330654 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

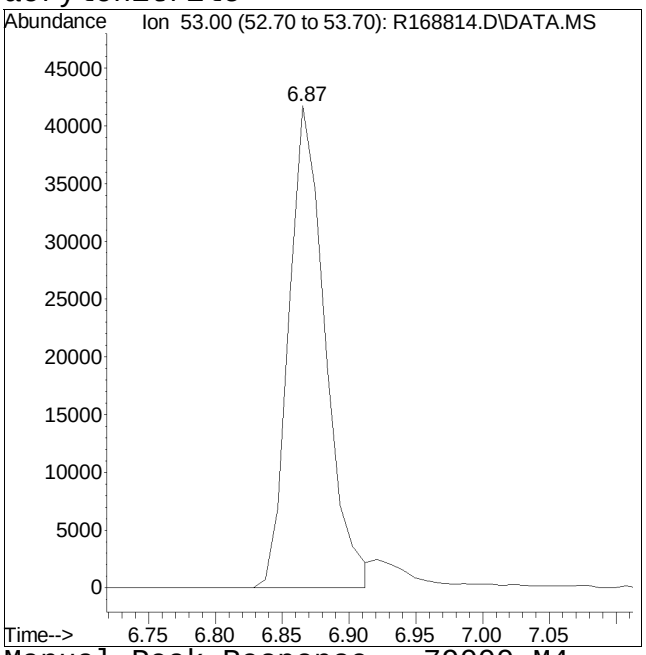
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:23 am

Compound #23: acrylonitrile



Original Peak Response = 84413



Manual Peak Response = 79000 M4

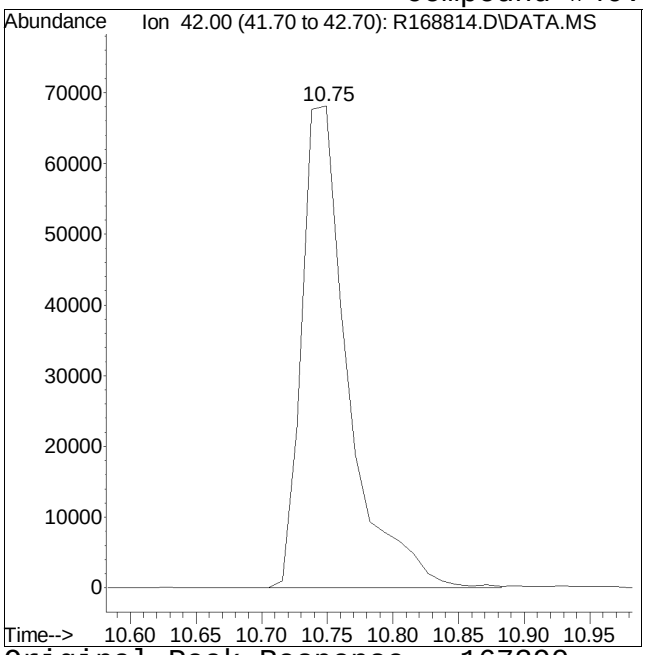
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

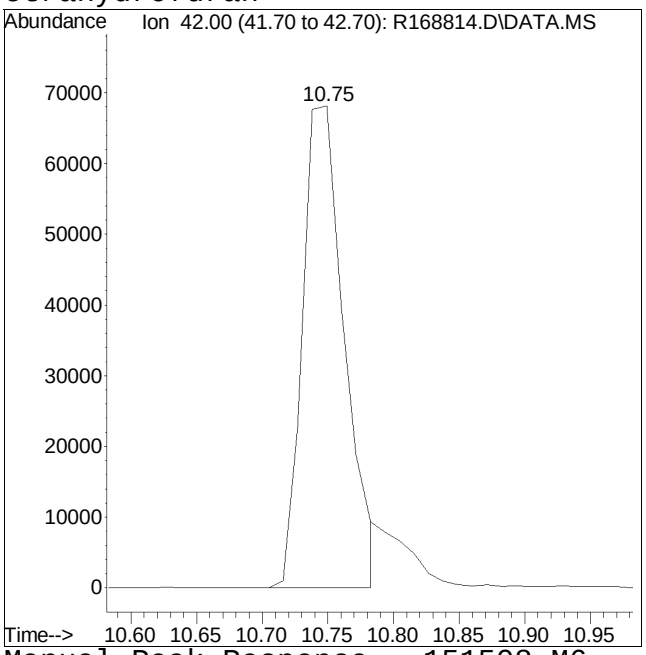
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:23 am

Compound #40: Tetrahydrofuran



Original Peak Response = 167390



Manual Peak Response = 151508 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:37:44 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	316244	10.000 ppbV	0.00
Standard Area = 301797			Recovery = 104.79%		
43) 1,4-difluorobenzene	12.34	114	727744	10.000 ppbV	-0.01
Standard Area = 707136			Recovery = 102.91%		
67) chlorobenzene-D5	16.80	54	123668	10.000 ppbV	0.00
Standard Area = 120451			Recovery = 102.67%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	10.99	65	168890	10.075 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.75%		
69) toluene-D8	15.08	98	539143	9.958 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.58%		
90) bromofluorobenzene	17.99	95	332837	9.708 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.08%		
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	410936	20.229 ppbV	100
3) propylene	3.91	41	198464M6	21.325 ppbV	
4) propane	3.95	29	162282	20.165 ppbV	98
5) dichlorodifluoromethane	4.02	85	619580	21.205 ppbV	98
6) chloromethane	4.23	50	205319	19.648 ppbV	92
7) Freon-114	4.37	85	720071	19.791 ppbV	94
8) methanol	4.47	31	301449	94.043 ppbV	98
9) vinyl chloride	4.54	62	254355	20.105 ppbV	99
10) 1,3-butadiene	4.73	54	181323	19.355 ppbV	96
11) butane	4.82	43	113382	14.815 ppbV	100
12) acetaldehyde	4.39	29	428151	89.286 ppbV	99
13) bromomethane	5.11	94	274794	20.161 ppbV	99
14) chloroethane	5.37	64	123023	20.214 ppbV	100
15) ethanol	5.58	31	638458	92.134 ppbV	100
16) dichlorofluoromethane	5.53	67	545263	20.144 ppbV	100
17) vinyl bromide	5.85	106	278533	20.340 ppbV	98
18) acrolein	6.04	56	98226	21.119 ppbV	97
19) acetone	6.21	43	1785201	91.110 ppbV	98
20) acetonitrile	5.86	41	176250	19.448 ppbV	99
21) trichlorofluoromethane	6.44	101	651448	20.386 ppbV	98
22) isopropyl alcohol	6.59	45	1132332	54.926 ppbV	100
23) acrylonitrile	6.87	53	199724M4	24.127 ppbV	
24) pentane	6.92	43	425545	25.308 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:37:44 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.98	31	284492	25.738	ppbV	95
26) 1,1-dichloroethene	7.28	61	449208	22.793	ppbV	98
27) tertiary butyl alcohol	7.39	59	552553	22.323	ppbV	99
28) methylene chloride	7.46	49	322003	23.323	ppbV	97
29) 3-chloropropene	7.61	41	337732	24.610	ppbV	96
30) carbon disulfide	7.79	76	914074	23.168	ppbV	99
31) Freon 113	7.81	101	608567	22.176	ppbV	96
32) trans-1,2-dichloroethene	8.65	61	448655	24.058	ppbV	98
33) 1,1-dichloroethane	8.90	63	542050	23.316	ppbV	99
34) MTBE	8.98	73	785438	20.824	ppbV	98
35) vinyl acetate	9.11	43	546986	20.003	ppbV	99
36) 2-butanone	9.40	43	560906	19.542	ppbV	100
37) cis-1,2-dichloroethene	9.91	61	462942	19.692	ppbV	98
38) Ethyl Acetate	10.20	61	129136	20.235	ppbV	88
39) chloroform	10.27	83	775545	19.649	ppbV	99
40) Tetrahydrofuran	10.73	42	326203M4	20.547	ppbV	
41) 2,2-dichloropropane	10.28	77	664697	20.456	ppbV	99
42) 1,2-dichloroethane	11.12	62	380897	19.931	ppbV	99
44) hexane	10.16	57	561994	19.992	ppbV #	72
45) diisopropyl ether	10.17	87	305973	20.558	ppbV	91
46) tert-butyl ethyl ether	10.79	59	901007	20.448	ppbV	100
48) 1,1,1-trichloroethane	11.40	97	584560	21.081	ppbV	99
49) 1,1-dichloropropene	11.77	75	470778	20.798	ppbV	100
50) benzene	11.93	78	940506	20.397	ppbV	99
51) thiophene	12.08	84	2095240	20.761	ppbV	100
52) carbon tetrachloride	12.10	117	612126	20.833	ppbV	99
53) cyclohexane	12.24	56	453532	20.234	ppbV	98
54) tert-amyl methyl ether	12.60	73	860480	20.589	ppbV	99
55) dibromomethane	12.84	93	390136	20.929	ppbV	98
56) 1,2-dichloropropane	12.87	63	355674	20.468	ppbV	99
57) bromodichloromethane	13.09	83	705259	20.434	ppbV	99
58) 1,4-dioxane	13.14	88	217194	19.845	ppbV	83
59) trichloroethene	13.14	130	445567	20.567	ppbV	100
60) 2,2,4-trimethylpentane	13.17	57	1460240	20.348	ppbV	100
61) methyl methacrylate	13.36	41	445402	18.847	ppbV	100
62) heptane	13.47	43	513689	20.354	ppbV	99
63) cis-1,3-dichloropropene	14.12	75	524939	20.290	ppbV	99
64) 4-methyl-2-pentanone	14.16	43	673088	19.577	ppbV	99
65) trans-1,3-dichloropropene	14.71	75	518995	20.585	ppbV	99
66) 1,1,2-trichloroethane	14.91	97	405762	20.755	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:37:44 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.19	91	1145058	20.082	ppbV		99
70)	2-methylthiophene	15.26	97	3672707	20.915	ppbV		100
71)	1,3-dichloropropane	15.22	76	533745	20.520	ppbV		96
72)	2-hexanone	15.44	43	605667	18.749	ppbV	#	87
73)	3-methylthiophene	15.44	97	3760403	20.614	ppbV		100
74)	dibromochloromethane	15.61	129	753281	20.120	ppbV		99
75)	1,2-dibromoethane	15.85	107	662330	20.249	ppbV		100
76)	butyl acetate	16.02	73	122754	20.264	ppbV		86
77)	octane	16.11	85	334193	20.888	ppbV		95
78)	tetrachloroethene	16.25	166	573738	20.141	ppbV		99
79)	1,1,1,2-tetrachloroethane	16.82	131	498789	20.757	ppbV		99
80)	chlorobenzene	16.84	112	940151	20.179	ppbV		100
81)	ethylbenzene	17.13	91	1480415	20.424	ppbV		98
82)	2-ethylthiophene	17.17	97	4228393	20.071	ppbV		100
83)	m+p-xylene	17.28	91	2272123	40.390	ppbV		99
84)	bromoform	17.36	173	788764	20.806	ppbV		100
85)	styrene	17.56	104	916210	19.893	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.64	83	896523	18.793	ppbV		98
87)	o-xylene	17.64	91	1140499	19.598	ppbV		98
88)	1,2,3-trichloropropane	17.74	75	686497	19.971	ppbV		98
89)	nonane	17.78	43	749343	19.874	ppbV		98
91)	isopropylbenzene	18.08	105	1595978	20.273	ppbV		98
92)	bromobenzene	18.17	77	831754	20.248	ppbV		100
93)	2-chlorotoluene	18.45	126	447587	19.407	ppbV		100
94)	n-propylbenzene	18.47	120	467631	19.471	ppbV		94
95)	4-chlorotoluene	18.50	91	1180924	19.433	ppbV		100
96)	4-ethyl toluene	18.57	105	1729387	19.398	ppbV		98
97)	1,3,5-trimethylbenzene	18.63	105	1337555	18.901	ppbV		99
98)	tert-butylbenzene	18.94	119	1413837	18.725	ppbV		100
99)	1,2,4-trimethylbenzene	18.94	105	1297057	18.029	ppbV		97
100)	decane	18.98	57	842224	18.155	ppbV		100
101)	Benzyl Chloride	19.05	91	1189610	18.581	ppbV		99
102)	1,3-dichlorobenzene	19.07	146	972532	18.283	ppbV		100
103)	1,4-dichlorobenzene	19.12	146	987529	18.217	ppbV		100
104)	sec-butylbenzene	19.14	105	1950987	18.866	ppbV		99
105)	1,2,3-trimethylbenzene	19.26	105	1188902	17.114	ppbV		99
106)	p-isopropyltoluene	19.25	119	1725075	18.156	ppbV		100
107)	1,2-dichlorobenzene	19.38	146	902305	17.631	ppbV		99
108)	n-butylbenzene	19.57	91	1474921	16.784	ppbV		100
109)	indan	19.42	117	1340418	16.863	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:37:44 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.49	115	1098948	16.537	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.72	75	364648	15.807	ppbV	94
112) undecane	19.92	57	825207	14.681	ppbV	99
113) 1,2,4,5-tetramethylben...	20.17	119	1450174	15.173	ppbV	100
114) dodecane	20.82	57	739351	12.129	ppbV	99
115) 1,2,4-trichlorobenzene	20.81	180	649813	12.389	ppbV	99
116) naphthalene	20.93	128	1411510	12.274	ppbV	100
117) 1,2,3-trichlorobenzene	21.18	180	594291	12.051	ppbV	100
118) benzothiophene	20.99	134	1392998	16.348	ppbV	100
119) hexachlorobutadiene	21.24	225	528277	12.480	ppbV	98
120) 2-methylnaphthalene	22.06	142	134570	13.307	ppbV	99
121) 1-methylnaphthalene	22.27	142	189409	12.168	ppbV	99

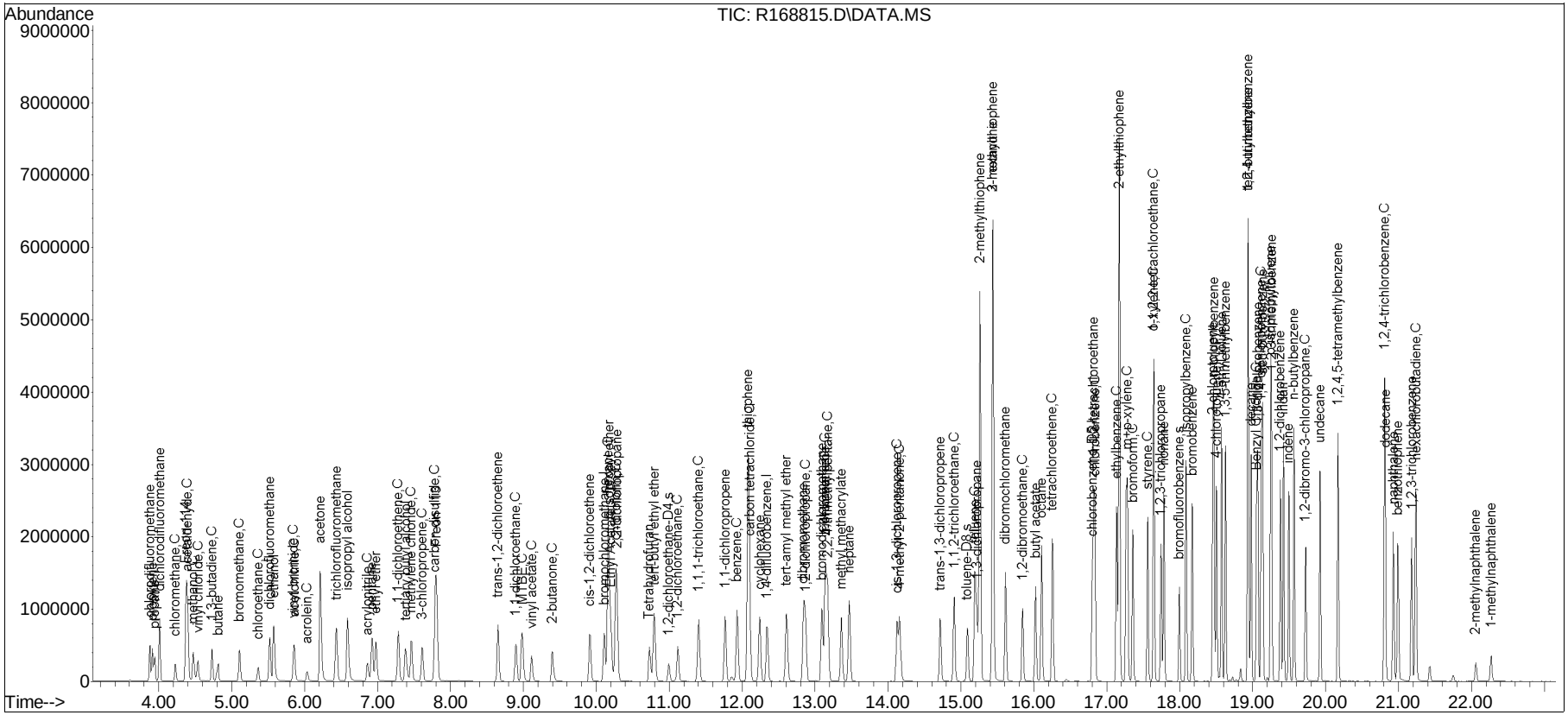
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:37:44 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023T_ICAL\R168814.D

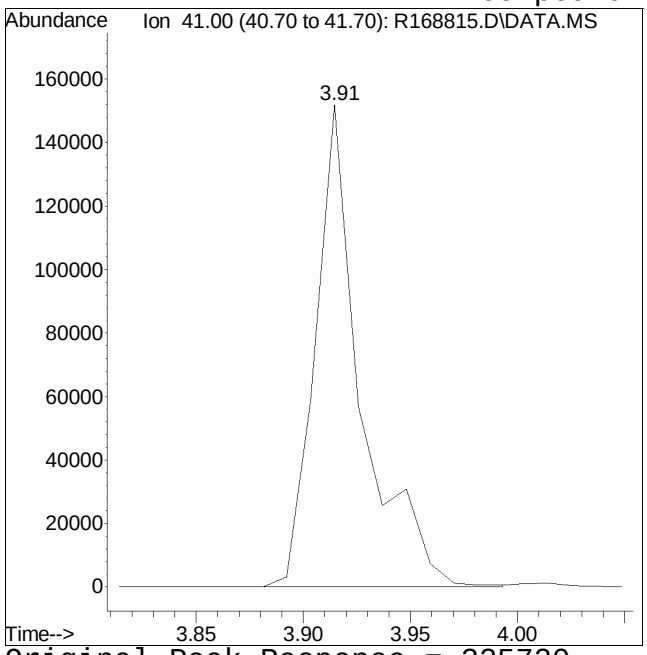


Manual Integration/Negative Proof Report

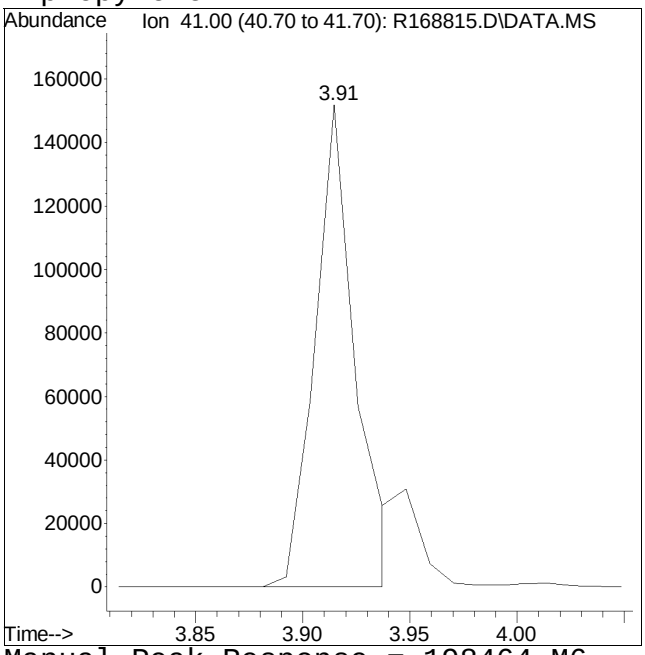
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #3: propylene



Original Peak Response = 225720



Manual Peak Response = 198464 M6

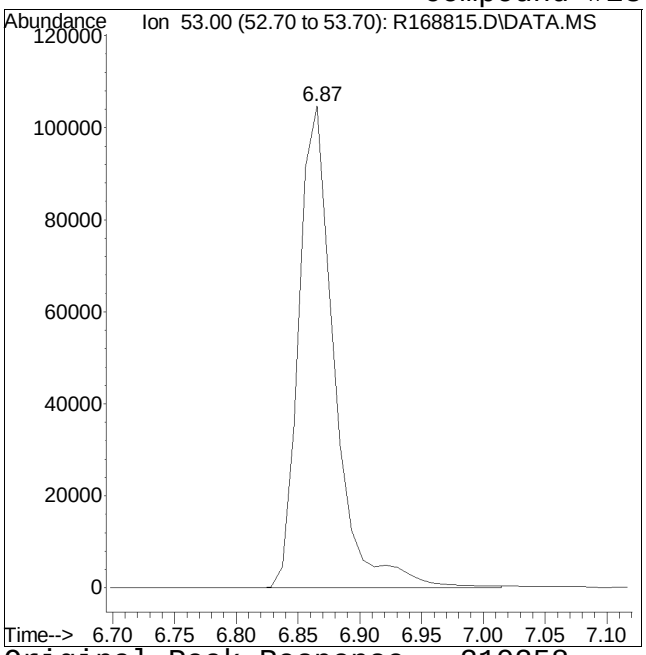
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

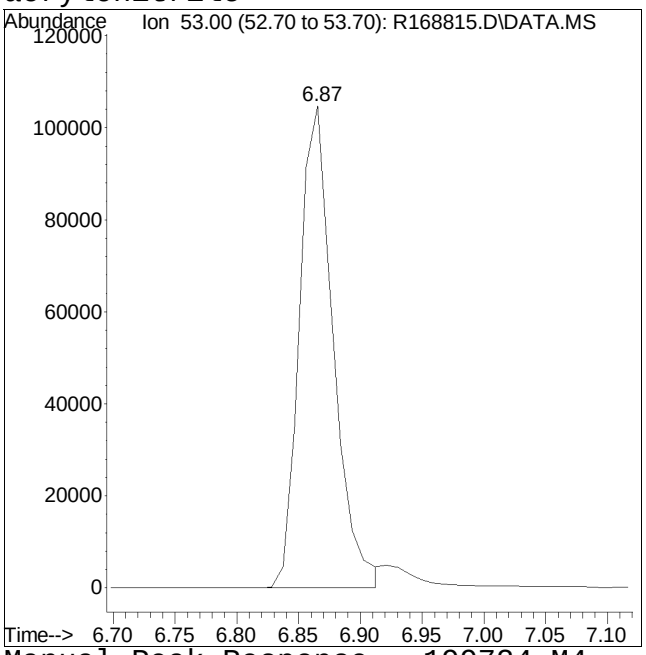
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #23: acrylonitrile



Original Peak Response = 210258



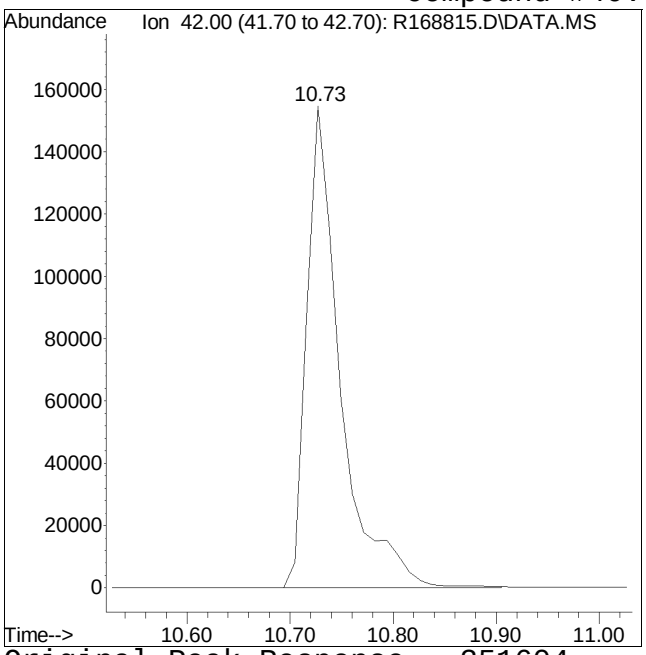
Manual Peak Response = 199724 M4

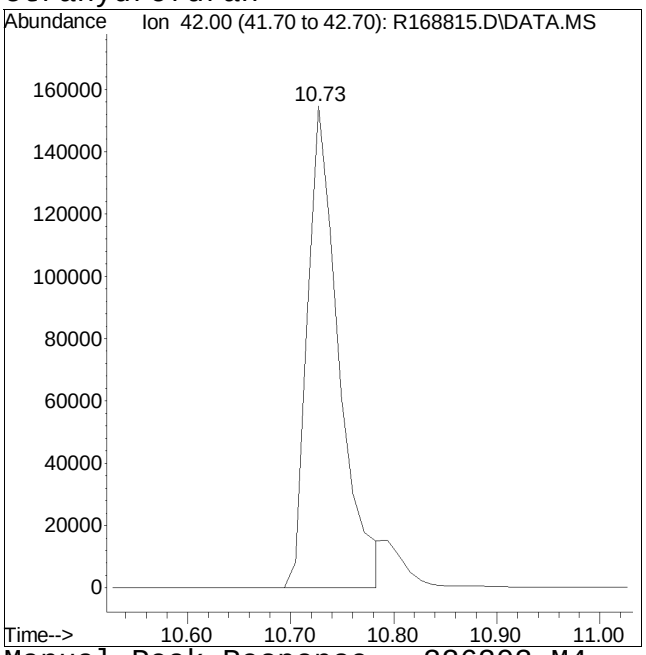
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TFS1_191023.M
Data File : R168815.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 5:06 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 10/24/2019 8:27 am

Compound #40: Tetrahydrofuran





Original Peak Response = 351604 Manual Peak Response = 326203 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:39:12 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	331739	10.000 ppbV	0.00
Standard Area = 301797			Recovery = 109.92%		
43) 1,4-difluorobenzene	12.35	114	738100	10.000 ppbV	0.00
Standard Area = 707136			Recovery = 104.38%		
67) chlorobenzene-D5	16.80	54	124868	10.000 ppbV	0.00
Standard Area = 120451			Recovery = 103.67%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.00	65	170707	10.041 ppbV	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.41%		
69) toluene-D8	15.09	98	553107	10.117 ppbV	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.17%		
90) bromofluorobenzene	17.99	95	352658	10.187 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.87%		
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	966378	45.350 ppbV	100
3) propylene	3.91	41	449462M6	46.039 ppbV	
4) propane	3.95	29	375941	44.533 ppbV	99
5) dichlorodifluoromethane	4.02	85	1467285	47.871 ppbV	99
6) chloromethane	4.23	50	491101	44.801 ppbV	95
7) Freon-114	4.38	85	1659564	43.482 ppbV	99
8) methanol	4.47	31	699373	207.993 ppbV	95
9) vinyl chloride	4.54	62	598943	45.131 ppbV	100
10) 1,3-butadiene	4.73	54	420447	42.784 ppbV	97
11) butane	4.82	43	322104	40.120 ppbV	98
12) acetaldehyde	4.41	29	959589	190.765 ppbV	98
13) bromomethane	5.12	94	651475	45.565 ppbV	99
14) chloroethane	5.37	64	292796	45.862 ppbV	100
15) ethanol	5.59	31	1481619	203.822 ppbV	98
16) dichlorofluoromethane	5.53	67	1296399	45.657 ppbV	99
17) vinyl bromide	5.86	106	669266	46.591 ppbV	96
18) acrolein	6.04	56	236807	48.535 ppbV	98
19) acetone	6.22	43	4135400	201.197 ppbV	100
20) acetonitrile	5.87	41	416585	43.819 ppbV	99
21) trichlorofluoromethane	6.44	101	1534520	45.778 ppbV	99
22) isopropyl alcohol	6.60	45	2295060	106.127 ppbV	100
23) acrylonitrile	6.87	53	415306M4	47.825 ppbV	
24) pentane	6.93	43	811033	45.981 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:39:12 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.98	31	521466	44.973 ppbV	97
26) 1,1-dichloroethene	7.29	61	952359	46.066 ppbV	99
27) tertiary butyl alcohol	7.40	59	1185657	45.663 ppbV	99
28) methylene chloride	7.47	49	640845	44.249 ppbV	97
29) 3-chloropropene	7.62	41	658016	45.708 ppbV	98
30) carbon disulfide	7.79	76	1871621	45.223 ppbV	99
31) Freon 113	7.81	101	1299755	45.151 ppbV	99
32) trans-1,2-dichloroethene	8.65	61	1064974	54.440 ppbV	97
33) 1,1-dichloroethane	8.90	63	1292370	52.995 ppbV	99
34) MTBE	8.98	73	1852078	46.809 ppbV	99
35) vinyl acetate	9.11	43	1418494	49.450 ppbV	100
36) 2-butanone	9.41	43	1359069	45.139 ppbV	99
37) cis-1,2-dichloroethene	9.92	61	1114320	45.186 ppbV	99
38) Ethyl Acetate	10.21	61	306331	45.758 ppbV	90
39) chloroform	10.27	83	1847438	44.619 ppbV	99
40) Tetrahydrofuran	10.73	42	768085M4	46.120 ppbV	
41) 2,2-dichloropropane	10.29	77	1575835	46.230 ppbV	98
42) 1,2-dichloroethane	11.13	62	906202	45.204 ppbV	99
44) hexane	10.16	57	1335054	46.827 ppbV	96
45) diisopropyl ether	10.17	87	729733	48.342 ppbV	90
46) tert-butyl ethyl ether	10.80	59	2111742	47.252 ppbV	99
48) 1,1,1-trichloroethane	11.40	97	1380793	49.096 ppbV	99
49) 1,1-dichloropropene	11.77	75	1112541	48.460 ppbV	100
50) benzene	11.94	78	2231190	47.710 ppbV	100
51) thiophene	12.09	84	4748859	46.395 ppbV	97
52) carbon tetrachloride	12.10	117	1438974	48.288 ppbV	98
53) cyclohexane	12.24	56	1075817	47.325 ppbV	100
54) tert-amyl methyl ether	12.62	73	2054090	48.459 ppbV	98
55) dibromomethane	12.85	93	926069	48.982 ppbV	99
56) 1,2-dichloropropane	12.87	63	831897	47.201 ppbV	100
57) bromodichloromethane	13.09	83	1711216	48.885 ppbV	100
58) 1,4-dioxane	13.14	88	518344	46.696 ppbV	82
59) trichloroethene	13.14	130	1048482	47.718 ppbV	99
60) 2,2,4-trimethylpentane	13.17	57	3398518	46.693 ppbV	100
61) methyl methacrylate	13.36	41	1049329	43.779 ppbV	99
62) heptane	13.48	43	1169770	45.700 ppbV	97
63) cis-1,3-dichloropropene	14.12	75	1257898	47.939 ppbV	99
64) 4-methyl-2-pentanone	14.16	43	1602733	45.962 ppbV	99
65) trans-1,3-dichloropropene	14.72	75	1249877	48.878 ppbV	99
66) 1,1,2-trichloroethane	14.91	97	963994	48.618 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:39:12 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	15.20	91	2703018	46.949	ppbV	98
70)	2-methylthiophene	15.27	97	8103235	45.702	ppbV	98
71)	1,3-dichloropropane	15.23	76	1270072	48.358	ppbV	97
72)	2-hexanone	15.44	43	1273468	39.042	ppbV	93
73)	3-methylthiophene	15.45	97	7977523	43.312	ppbV	98
74)	dibromochloromethane	15.62	129	1851875	48.988	ppbV	99
75)	1,2-dibromoethane	15.85	107	1581798	47.894	ppbV	99
76)	butyl acetate	16.02	73	294837	48.202	ppbV	85
77)	octane	16.11	85	773123	47.858	ppbV	94
78)	tetrachloroethene	16.26	166	1403668	48.802	ppbV	95
79)	1,1,1,2-tetrachloroethane	16.83	131	1200199	49.467	ppbV	98
80)	chlorobenzene	16.84	112	2221803	47.230	ppbV	99
81)	ethylbenzene	17.14	91	3471402	47.432	ppbV	97
82)	2-ethylthiophene	17.18	97	8892837	41.807	ppbV	97
83)	m+p-xylene	17.28	91	5309408	93.474	ppbV	98
84)	bromoform	17.36	173	1945497	50.824	ppbV	100
85)	styrene	17.56	104	2195466	47.212	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.65	83	2089353	43.377	ppbV	97
87)	o-xylene	17.65	91	2654567	45.176	ppbV	98
88)	1,2,3-trichloropropane	17.75	75	1657643	47.759	ppbV	97
89)	nonane	17.79	43	1675972	44.024	ppbV	94
91)	isopropylbenzene	18.09	105	3784444	47.610	ppbV	96
92)	bromobenzene	18.17	77	1943744	46.862	ppbV	93
93)	2-chlorotoluene	18.45	126	1086471	46.656	ppbV	81
94)	n-propylbenzene	18.47	120	1129603	46.582	ppbV	77
95)	4-chlorotoluene	18.51	91	2936328	47.854	ppbV	98
96)	4-ethyl toluene	18.58	105	4204966	46.712	ppbV	97
97)	1,3,5-trimethylbenzene	18.63	105	3291291	46.062	ppbV	99
98)	tert-butylbenzene	18.94	119	3386541	44.420	ppbV	99
99)	1,2,4-trimethylbenzene	18.94	105	3190197	43.918	ppbV	97
100)	decane	18.98	57	2003309	42.769	ppbV	97
101)	Benzyl Chloride	19.06	91	3138166	48.546	ppbV	97
102)	1,3-dichlorobenzene	19.07	146	2490743	46.375	ppbV	98
103)	1,4-dichlorobenzene	19.12	146	2485154	45.403	ppbV	98
104)	sec-butylbenzene	19.14	105	4701396	45.024	ppbV	97
105)	1,2,3-trimethylbenzene	19.26	105	3014056	42.970	ppbV	99
106)	p-isopropyltoluene	19.25	119	4266356	44.472	ppbV	98
107)	1,2-dichlorobenzene	19.38	146	2389689	46.246	ppbV	99
108)	n-butylbenzene	19.57	91	3809328	42.932	ppbV	95
109)	indan	19.43	117	3411611	42.508	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:39:12 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.50	115	2872069	42.803	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.73	75	1029881	44.216	ppbV	98
112) undecane	19.93	57	2123752	37.421	ppbV #	95
113) 1,2,4,5-tetramethylben...	20.17	119	3958031	41.015	ppbV	100
114) dodecane	20.82	57	1740329	28.275	ppbV	95
115) 1,2,4-trichlorobenzene	20.81	180	1866280	35.239	ppbV	99
116) naphthalene	20.93	128	4074110	35.087	ppbV	99
117) 1,2,3-trichlorobenzene	21.18	180	1703387	34.208	ppbV	99
118) benzothiophene	21.00	134	4082207	47.447	ppbV	98
119) hexachlorobutadiene	21.24	225	1527989	35.752	ppbV	98
120) 2-methylnaphthalene	22.06	142	373865	36.615	ppbV	98
121) 1-methylnaphthalene	22.27	142	504783	32.116	ppbV	97

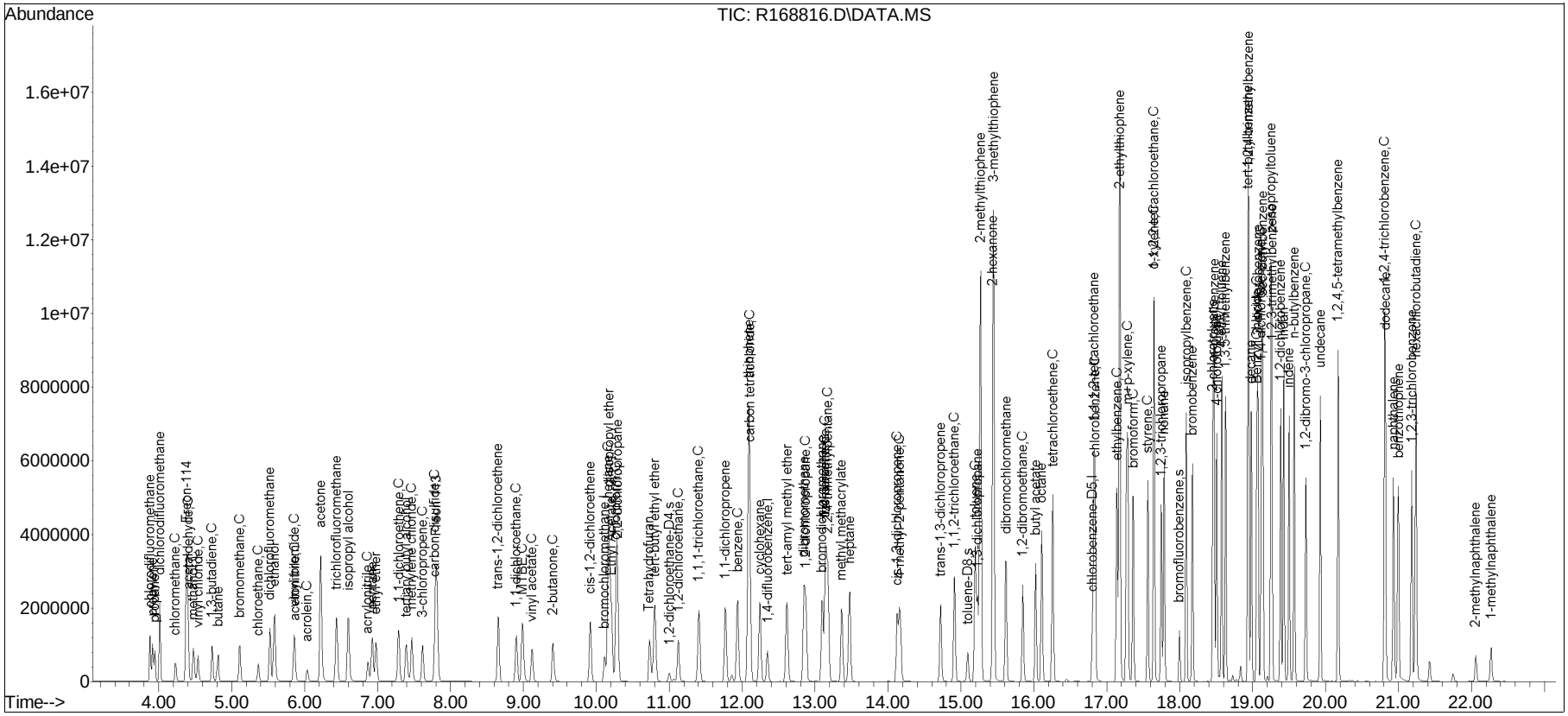
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:39:12 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

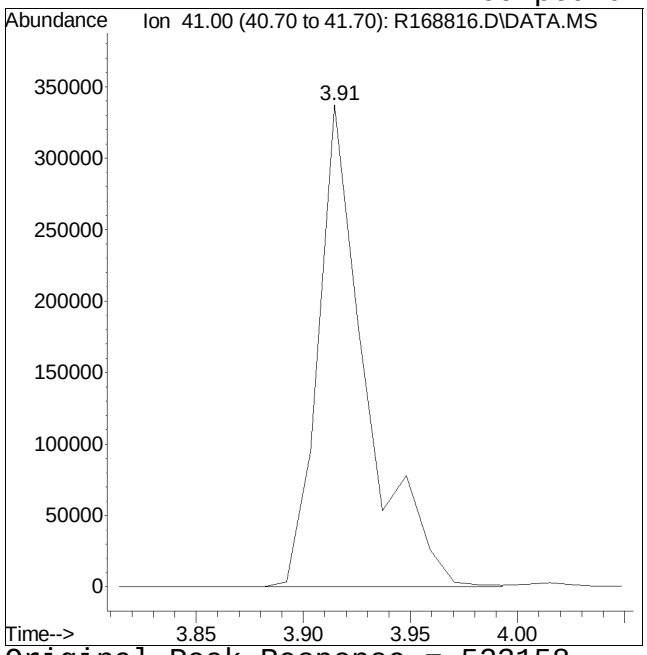
Sub List : Default - All compounds listed1023T_ICAL\R168814.D

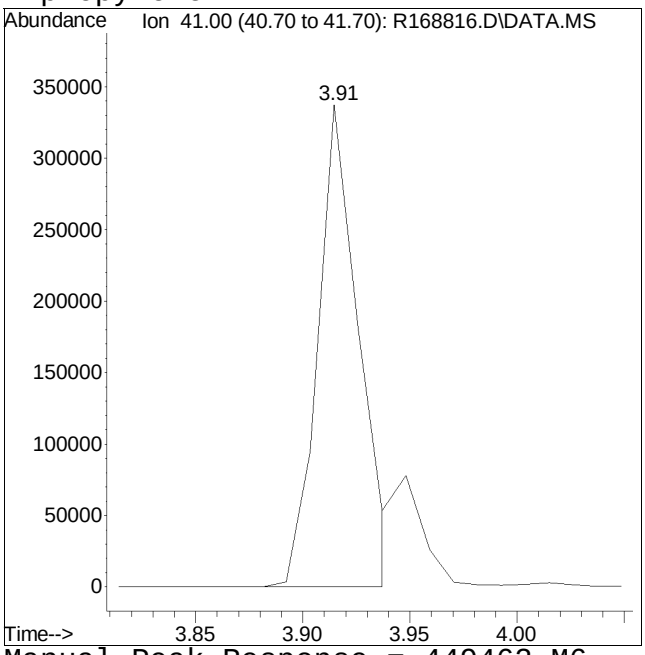


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TFS1_191023.M
Data File : R168816.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 5:38 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD50.0 Quant Date : 10/24/2019 8:27 am

Compound #3: propylene





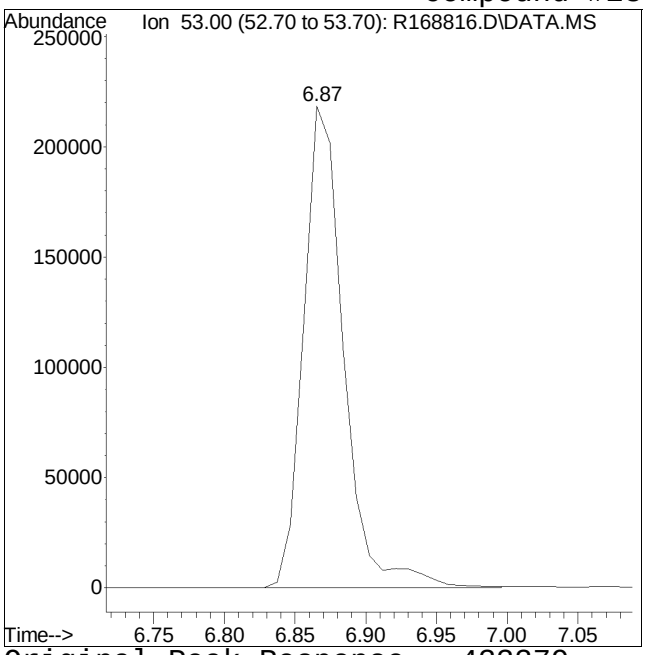
Original Peak Response = 523158 Manual Peak Response = 449462 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

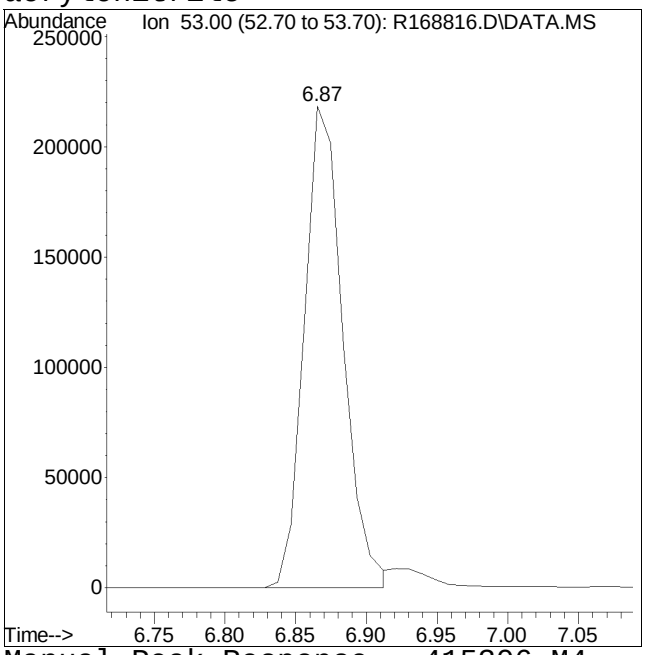
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168816.D
Date Inj'd : 10/23/2019 5:38 pm
Sample : ITO15-SIMSTD50.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #23: acrylonitrile



Original Peak Response = 433379



Manual Peak Response = 415306 M4

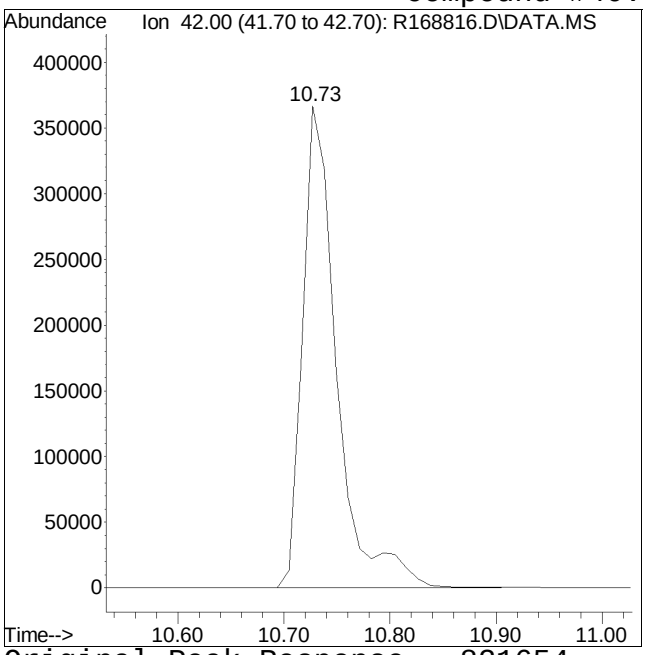
M4 = Poor automated baseline construction.

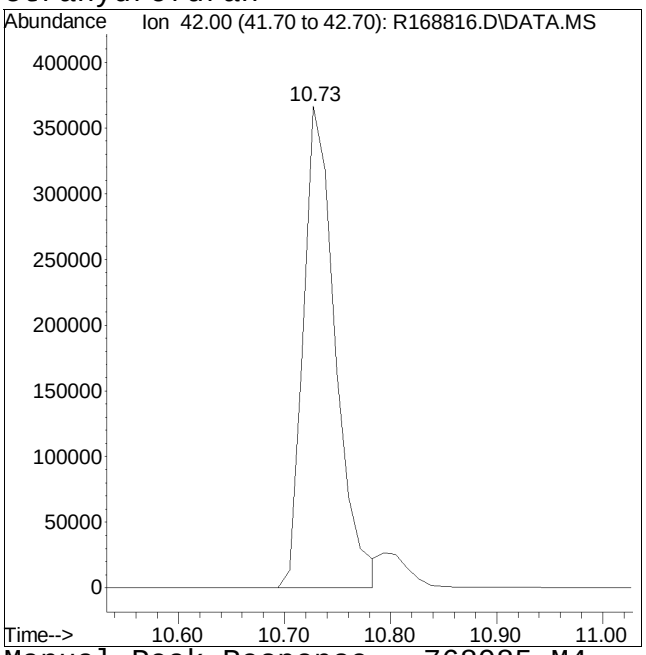
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168816.D
Date Inj'd : 10/23/2019 5:38 pm
Sample : ITO15-SIMSTD50.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #40: Tetrahydrofuran





Original Peak Response = 821654 Manual Peak Response = 768085 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168817.D
Acq On : 23 Oct 2019 6:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:40:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.12	49	346620	10.000 ppbV	0.01
Standard Area = 301797			Recovery = 114.85%		
43) 1,4-difluorobenzene	12.35	114	795265	10.000 ppbV	0.00
Standard Area = 707136			Recovery = 112.46%		
67) chlorobenzene-D5	16.80	54	129228	10.000 ppbV	0.00
Standard Area = 120451			Recovery = 107.29%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.00	65	169987	9.280 ppbV	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.80%		
69) toluene-D8	15.09	98	590520	10.437 ppbV	0.01
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.37%		
90) bromofluorobenzene	18.00	95	376669	10.513 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.13%		
Target Compounds					Qvalue
2) chlorodifluoromethane	3.88	51	1840294	82.653 ppbV	98
3) propylene	3.91	41	850852M6	83.412 ppbV	
4) propane	3.95	29	681592	77.273 ppbV	94
5) dichlorodifluoromethane	4.02	85	2888505	90.193 ppbV	98
6) chloromethane	4.23	50	989420	86.386 ppbV	94
7) Freon-114	4.38	85	3259830	81.743 ppbV	98
8) methanol	4.48	31	1292340	367.840 ppbV	96
9) vinyl chloride	4.54	62	1183028	85.316 ppbV	99
10) 1,3-butadiene	4.73	54	810377	78.922 ppbV	97
11) butane	4.82	43	645414	76.940 ppbV	98
12) acetaldehyde	4.41	29	1767465	336.285 ppbV	98
13) bromomethane	5.12	94	1285270	86.034 ppbV	100
14) chloroethane	5.37	64	564140	84.571 ppbV	99
15) ethanol	5.61	31	2629944	346.261 ppbV	96
16) dichlorofluoromethane	5.53	67	2492393	84.009 ppbV	99
17) vinyl bromide	5.86	106	1331858	88.736 ppbV	96
18) acrolein	6.04	56	456586	89.563 ppbV	97
19) acetone	6.23	43	7550585	351.583 ppbV	98
20) acetonitrile	5.87	41	784860	79.013 ppbV	99
21) trichlorofluoromethane	6.44	101	3036324	86.691 ppbV	99
22) isopropyl alcohol	6.61	45	4211782	186.399 ppbV	99
23) acrylonitrile	6.87	53	809475M4	89.215 ppbV	
24) pentane	6.93	43	1531780M4	83.116 ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168817.D
Acq On : 23 Oct 2019 6:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:40:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.98	31	950155	78.426	ppbV	93
26) 1,1-dichloroethene	7.29	61	1851654	85.719	ppbV	99
27) tertiary butyl alcohol	7.41	59	2334090	86.034	ppbV	98
28) methylene chloride	7.47	49	1229993	81.282	ppbV	95
29) 3-chloropropene	7.62	41	1254567	83.406	ppbV	95
30) carbon disulfide	7.80	76	3569602	82.547	ppbV	99
31) Freon 113	7.81	101	2550725	84.803	ppbV	99
32) trans-1,2-dichloroethene	8.66	61	2088558	102.181	ppbV	99
33) 1,1-dichloroethane	8.90	63	2547074	99.961	ppbV	100
34) MTBE	8.98	73	3704022	89.596	ppbV	98
35) vinyl acetate	9.12	43	2837951	94.686	ppbV	98
36) 2-butanone	9.41	43	2596467	82.535	ppbV	97
37) cis-1,2-dichloroethene	9.93	61	2189051	84.957	ppbV	97
38) Ethyl Acetate	10.22	61	591524	84.566	ppbV	89
39) chloroform	10.28	83	3558006	82.244	ppbV	100
40) Tetrahydrofuran	10.73	42	1459542	83.877	ppbV	93
41) 2,2-dichloropropane	10.29	77	3050464	85.649	ppbV	97
42) 1,2-dichloroethane	11.13	62	1756383	83.852	ppbV	100
44) hexane	10.16	57	2491795	81.117	ppbV	91
45) diisopropyl ether	10.19	87	1427481	87.767	ppbV	80
46) tert-butyl ethyl ether	10.80	59	4088686	84.911	ppbV	97
48) 1,1,1-trichloroethane	11.42	97	2790177	92.077	ppbV	98
49) 1,1-dichloropropene	11.78	75	2201509	89.000	ppbV	97
50) benzene	11.94	78	4374203	86.811	ppbV	99
51) thiophene	12.10	84	8413747	76.291	ppbV	96
52) carbon tetrachloride	12.12	117	2865674	89.251	ppbV	100
53) cyclohexane	12.24	56	2053997	83.859	ppbV	98
54) tert-amyl methyl ether	12.62	73	4063960	88.984	ppbV	97
55) dibromomethane	12.85	93	1832809	89.973	ppbV	99
56) 1,2-dichloropropane	12.88	63	1580077	83.208	ppbV	100
57) bromodichloromethane	13.10	83	3302231	87.555	ppbV	98
58) 1,4-dioxane	13.14	88	1015556	84.911	ppbV #	77
59) trichloroethene	13.15	130	2044266	86.350	ppbV	99
60) 2,2,4-trimethylpentane	13.17	57	6278534	80.061	ppbV	98
61) methyl methacrylate	13.37	41	1963248	76.022	ppbV	94
62) heptane	13.48	43	2184715	79.217	ppbV #	95
63) cis-1,3-dichloropropene	14.12	75	2529185	89.459	ppbV	98
64) 4-methyl-2-pentanone	14.17	43	3010198	80.118	ppbV	96
65) trans-1,3-dichloropropene	14.72	75	2537985	92.116	ppbV	98
66) 1,1,2-trichloroethane	14.92	97	1912049	89.501	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168817.D
Acq On : 23 Oct 2019 6:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:40:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.20	91	5358028	89.925	ppbV		99
70)	2-methylthiophene	15.28	97	13575341	73.982	ppbV		96
71)	1,3-dichloropropane	15.24	76	2427155	89.297	ppbV		95
72)	2-hexanone	15.45	43	2018691	59.801	ppbV		92
73)	3-methylthiophene	15.46	97	12945894	67.915	ppbV		96
74)	dibromochloromethane	15.62	129	3623522	92.620	ppbV		97
75)	1,2-dibromoethane	15.86	107	3149684	92.148	ppbV		100
76)	butyl acetate	16.02	73	570673	90.150	ppbV		77
77)	octane	16.12	85	1517882	90.789	ppbV		79
78)	tetrachloroethene	16.26	166	2800640	94.087	ppbV		98
79)	1,1,1,2-tetrachloroethane	16.83	131	2341992	93.270	ppbV		98
80)	chlorobenzene	16.85	112	4293477	88.190	ppbV		99
81)	ethylbenzene	17.14	91	6733769	88.903	ppbV		96
82)	2-ethylthiophene	17.18	97	14007254	63.629	ppbV	#	91
83)	m+p-xylene	17.29	91	9905016	168.498	ppbV		98
84)	bromoform	17.37	173	3805269	96.055	ppbV		98
85)	styrene	17.57	104	4316492	89.691	ppbV		98
86)	1,1,2,2-tetrachloroethane	17.65	83	3544385	71.102	ppbV		97
87)	o-xylene	17.65	91	4799044	78.916	ppbV		99
88)	1,2,3-trichloropropane	17.75	75	3094807	86.158	ppbV		95
89)	nonane	17.79	43	2783357	70.646	ppbV	#	89
91)	isopropylbenzene	18.09	105	6910194	84.001	ppbV		94
92)	bromobenzene	18.18	77	3712235	86.479	ppbV		86
93)	2-chlorotoluene	18.46	126	2096998	87.012	ppbV		79
94)	n-propylbenzene	18.47	120	2137534	85.172	ppbV		68
95)	4-chlorotoluene	18.51	91	5479714	86.291	ppbV		95
96)	4-ethyl toluene	18.58	105	7685773	82.498	ppbV		94
97)	1,3,5-trimethylbenzene	18.63	105	6227523	84.215	ppbV		99
98)	tert-butylbenzene	18.94	119	5927455	75.125	ppbV		98
99)	1,2,4-trimethylbenzene	18.94	105	5546928	73.786	ppbV		95
100)	decane	18.99	57	3393862	70.012	ppbV	#	92
101)	Benzyl Chloride	19.06	91	5872511	87.781	ppbV		94
102)	1,3-dichlorobenzene	19.08	146	4655671	83.760	ppbV		96
103)	1,4-dichlorobenzene	19.12	146	4585417	80.947	ppbV		96
104)	sec-butylbenzene	19.14	105	8027300	74.282	ppbV		92
105)	1,2,3-trimethylbenzene	19.27	105	5434456	74.863	ppbV		99
106)	p-isopropyltoluene	19.26	119	7299137	73.518	ppbV		95
107)	1,2-dichlorobenzene	19.39	146	4648722	86.929	ppbV		98
108)	n-butylbenzene	19.57	91	7074327	77.040	ppbV		93
109)	indan	19.43	117	6365527	76.638	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168817.D
Acq On : 23 Oct 2019 6:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:40:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.51	115	5578174	80.327	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.73	75	2087316	86.591	ppbV	97
112) undecane	19.93	57	3796118	64.632	ppbV #	92
113) 1,2,4,5-tetramethylben...	20.18	119	7887625	78.978	ppbV	96
114) dodecane	20.83	57	3077669	48.316	ppbV	92
115) 1,2,4-trichlorobenzene	20.81	180	3812148	69.552	ppbV	96
116) naphthalene	20.93	128	8758807	72.888	ppbV	97
117) 1,2,3-trichlorobenzene	21.19	180	3945388	76.560	ppbV	97
118) benzothiophene	21.01	134	8903939	99.998	ppbV	99
119) hexachlorobutadiene	21.25	225	3473304	78.526	ppbV	97
120) 2-methylnaphthalene	22.06	142	896040	84.794	ppbV	99
121) 1-methylnaphthalene	22.27	142	1205948	74.138	ppbV	98

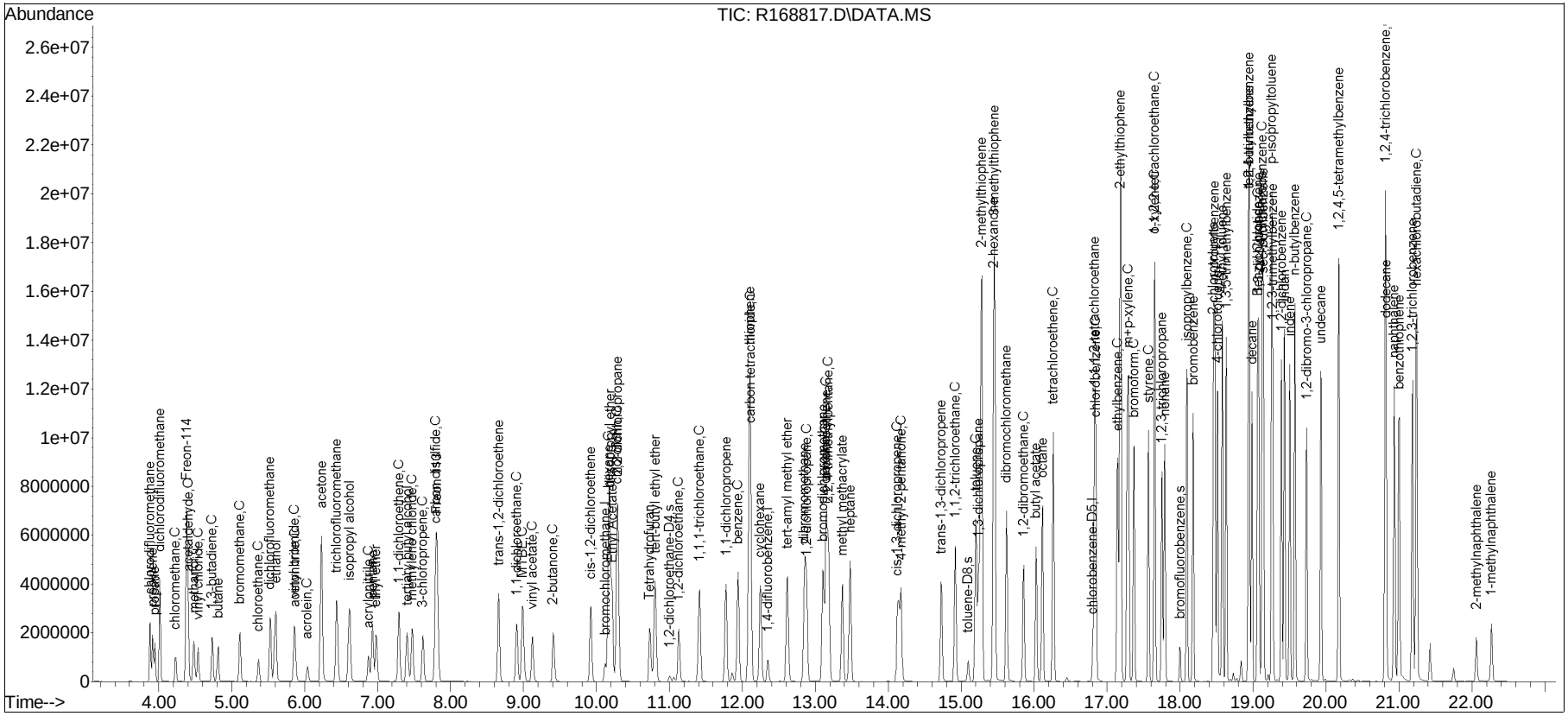
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168817.D
Acq On : 23 Oct 2019 6:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG1300074
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 24 08:40:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:26:30 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023T_ICAL\R168814.D

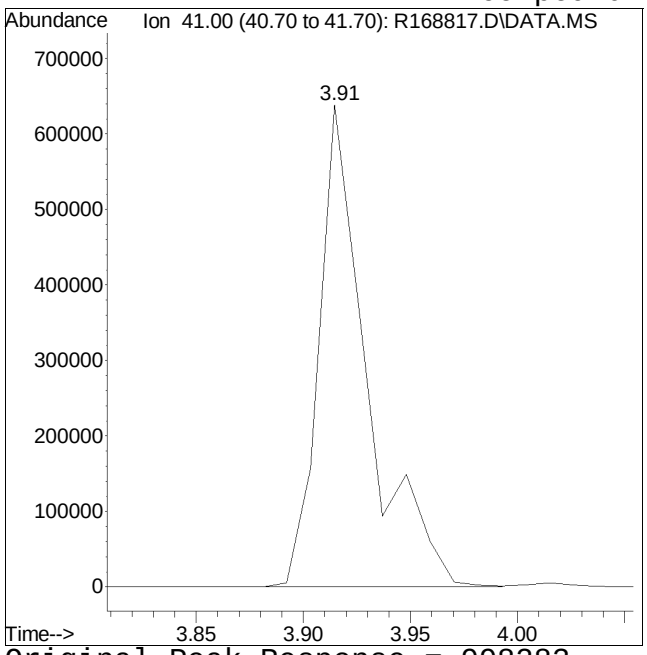


Manual Integration/Negative Proof Report

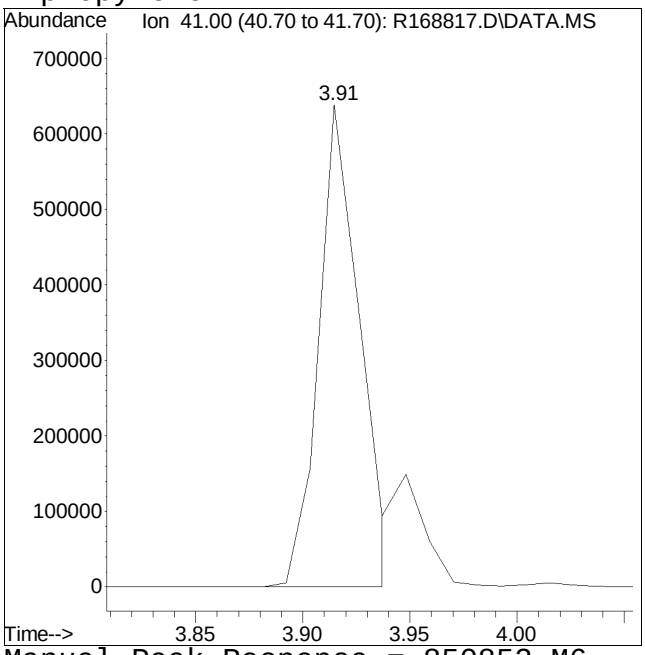
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168817.D
Date Inj'd : 10/23/2019 6:11 pm
Sample : ITO15-LLSTD100.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #3: propylene



Original Peak Response = 998283



Manual Peak Response = 850852 M6

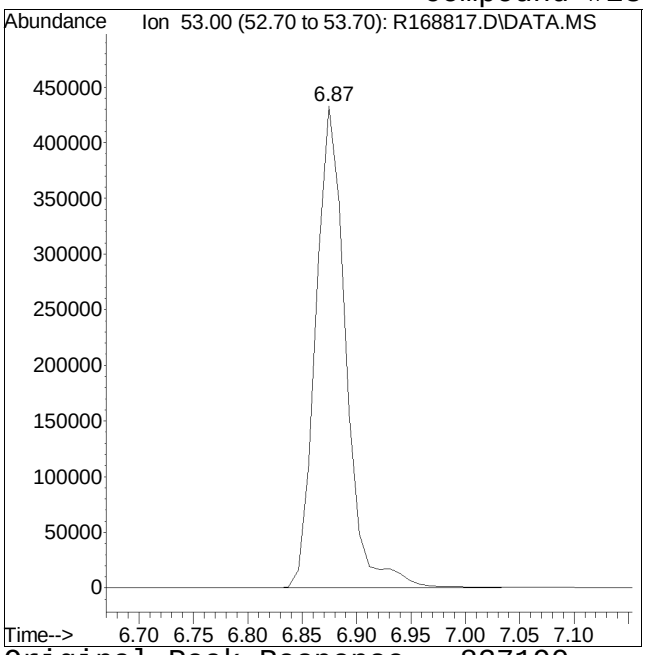
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

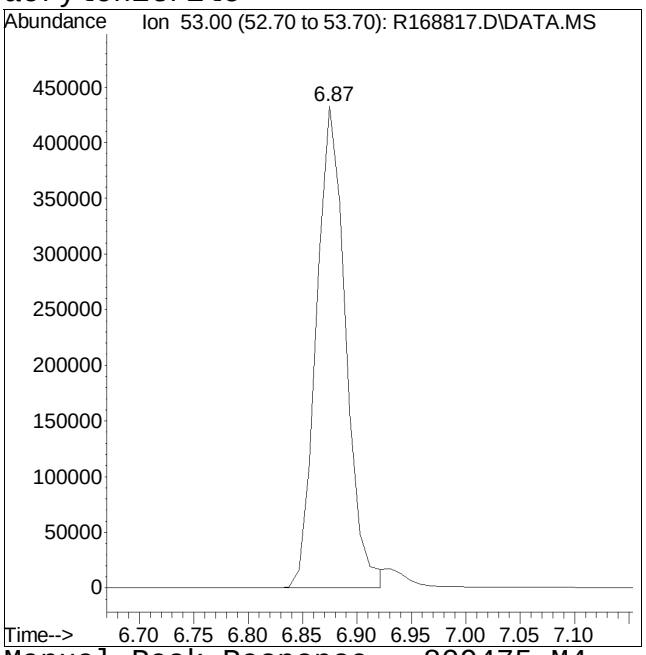
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168817.D
Date Inj'd : 10/23/2019 6:11 pm
Sample : ITO15-LLSTD100.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #23: acrylonitrile



Original Peak Response = 837190



Manual Peak Response = 809475 M4

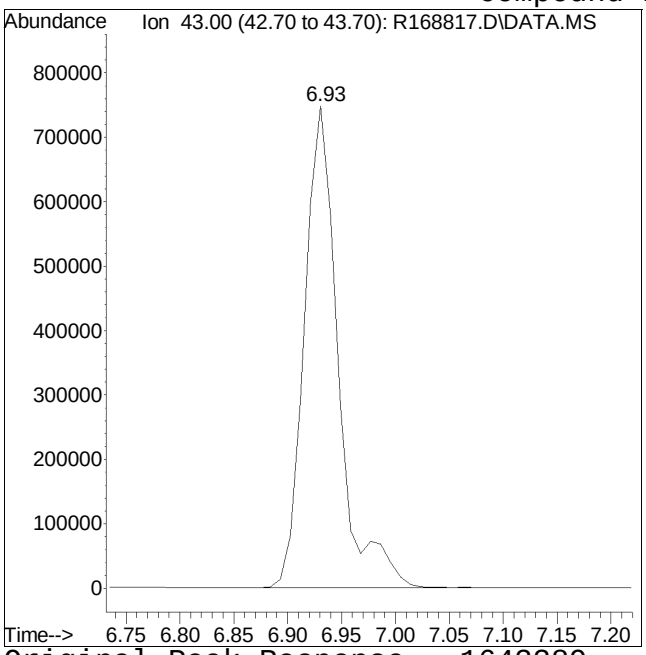
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

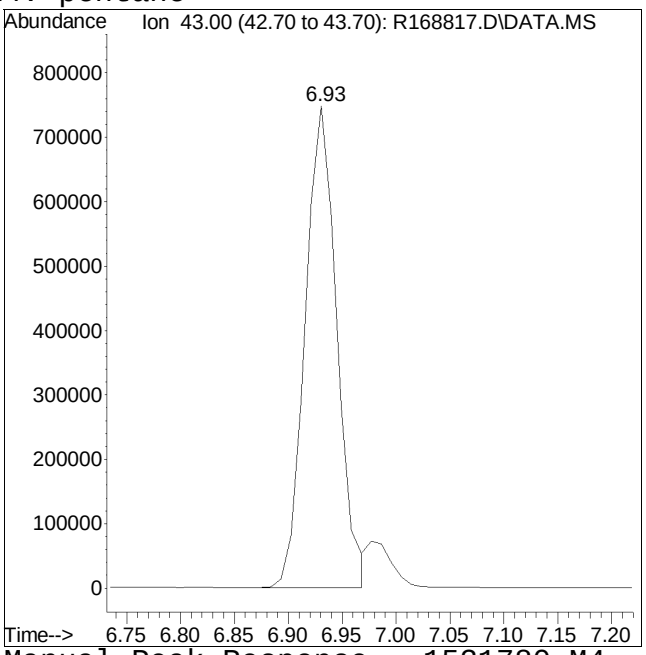
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168817.D
Date Inj'd : 10/23/2019 6:11 pm
Sample : ITO15-LLSTD100.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:27 am

Compound #24: pentane



Original Peak Response = 1643389



Manual Peak Response = 1531780 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	108	0.00
2		chlorodifluoromethane	0.652	0.590	9.5	99	0.00
3		propylene	0.298	0.324	-8.7	119	0.00
4		propane	0.250	0.219	12.4	93	0.00
5		dichlorodifluoromethane	0.960	0.814	15.2	95	0.00
6	C	chloromethane	0.326	0.323	0.9	106	0.00
7		Freon-114	1.117	1.170	-4.7	110	0.00
8	C	methanol	0.095	0.084	11.6	89	-0.01
9	C	vinyl chloride	0.401	0.410	-2.2	111	0.00
10	C	1,3-butadiene	0.291	0.317	-8.9	116	0.00
11		butane	0.248	0.209	15.7	94	0.00
13	C	bromomethane	0.439	0.449	-2.3	113	0.00
14	C	chloroethane	0.193	0.200	-3.6	113	0.00
15		ethanol	0.218	0.189	13.3	93	0.00
16		dichlorofluoromethane	0.874	0.815	6.8	103	0.00
17	C	vinyl bromide	0.437	0.446	-2.1	112	0.00
18	C	acrolein	0.153	0.141	7.8	104	0.00
19		acetone	0.601	0.513	14.6	89	0.00
20	C	acetonitrile	0.307	0.268	12.7	101	0.00
21		trichlorofluoromethane	1.009	1.046	-3.7	112	0.00
22		isopropyl alcohol	0.665	0.588	11.6	98	0.00
23	C	acrylonitrile	0.279	0.262	6.1	108	0.00
24		pentane	0.583	0.516	11.5	105	0.00
25		ethyl ether	0.360	0.320	11.1	99	0.00
26	C	1,1-dichloroethene	0.632	0.653	-3.3	113	0.00
27		tertiary butyl alcohol	0.784	0.802	-2.3	111	0.00
28	C	methylene chloride	0.436	0.441	-1.1	109	0.00
29	C	3-chloropropene	0.483	0.480	0.6	120	0.00
30	C	carbon disulfide	1.277	1.232	3.5	107	0.00
31		Freon 113	0.864	0.917	-6.1	114	0.00
32		trans-1,2-dichloroethene	0.652	0.603	7.5	111	0.00
33	C	1,1-dichloroethane	0.824	0.761	7.6	112	0.00
34	C	MTBE	1.203	1.145	4.8	104	0.00
35	C	vinyl acetate	0.846	0.864	-2.1	108	0.00
36	C	2-butanone	0.884	0.905	-2.4	108	0.00
37		cis-1,2-dichloroethene	0.687	0.772	-12.4	112	0.00
38		Ethyl Acetate	0.201	0.214	-6.5	115	-0.01
39	C	chloroform	1.226	1.294	-5.5	112	0.00
40		Tetrahydrofuran	0.531	0.517	2.6	111	-0.01

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	1.029	0.988	4.0	104	0.00
42	C	1,2-dichloroethane	0.600	0.601	-0.2	108	-0.01
43	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00
44	C	hexane	0.388	0.391	-0.8	110	0.00
45		diisopropyl ether	0.210	0.201	4.3	107	0.00
46		tert-butyl ethyl ether	0.604	0.570	5.6	102	0.00
48	C	1,1,1-trichloroethane	0.395	0.408	-3.3	116	0.00
49		1,1-dichloropropene	0.317	0.317	0.0	111	0.00
50	C	benzene	0.641	0.645	-0.6	111	0.00
52	C	carbon tetrachloride	0.406	0.415	-2.2	112	0.00
53		cyclohexane	0.316	0.317	-0.3	112	0.00
54		tert-amyl methyl ether	0.585	0.571	2.4	108	0.00
55		dibromomethane	0.262	0.251	4.2	106	-0.01
56	C	1,2-dichloropropane	0.242	0.245	-1.2	111	0.00
57		bromodichloromethane	0.471	0.493	-4.7	113	0.00
58	C	1,4-dioxane	0.145	0.157	-8.3	113	0.00
59	C	trichloroethene	0.296	0.317	-7.1	115	0.00
60	C	2,2,4-trimethylpentane	0.987	1.028	-4.2	113	-0.01
61		methyl methacrylate	0.302	0.244	19.2	81	0.00
62		heptane	0.355	0.354	0.3	111	0.00
63	C	cis-1,3-dichloropropene	0.347	0.382	-10.1	117	0.00
64	C	4-methyl-2-pentanone	0.458	0.480	-4.8	110	-0.02
65		trans-1,3-dichloropropene	0.337	0.324	3.9	102	0.00
66	C	1,1,2-trichloroethane	0.270	0.291	-7.8	118	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	105	0.00
68	C	toluene	4.728	4.906	-3.8	111	0.00
71		1,3-dichloropropane	2.095	2.128	-1.6	106	0.00
72		2-hexanone	2.417	2.770	-14.6	111	0.00
74		dibromochloromethane	2.929	3.284	-12.1	113	0.00
75	C	1,2-dibromoethane	2.637	2.848	-8.0	113	0.00
76		butyl acetate	0.481	0.492	-2.3	105	0.00
77		octane	1.303	1.308	-0.4	106	0.00
78	C	tetrachloroethene	2.304	2.471	-7.2	112	0.00
79		1,1,1,2-tetrachloroethane	1.962	1.958	0.2	105	0.00
80	C	chlorobenzene	3.776	4.060	-7.5	113	0.00
81	C	ethylbenzene	5.979	6.209	-3.8	111	0.00
83	C	m+p-xylene	4.599	4.810	-4.6	111	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	3.015	3.316	-10.0	113	0.00
85 C	styrene	3.683	3.910	-6.2	110	0.00
86 C	1,1,2,2-tetrachloroethane	3.706	3.954	-6.7	107	0.00
87 C	o-xylene	4.657	4.996	-7.3	111	0.00
88	1,2,3-trichloropropane	2.791	2.726	2.3	103	0.00
89	nonane	3.076	2.916	5.2	100	0.00
91 C	isopropylbenzene	6.383	6.521	-2.2	107	0.00
92	bromobenzene	3.353	3.301	1.6	104	0.00
93	2-chlorotoluene	1.928	1.826	5.3	102	0.00
94	n-propylbenzene	1.902	1.920	-0.9	103	0.00
95	4-chlorotoluene	4.944	4.751	3.9	101	0.00
96	4-ethyl toluene	7.086	7.443	-5.0	108	0.00
97	1,3,5-trimethylbenzene	5.594	5.934	-6.1	108	0.00
98	tert-butylbenzene	5.863	6.031	-2.9	103	0.00
99	1,2,4-trimethylbenzene	5.479	6.039	-10.2	108	0.00
100	decane	3.571	3.695	-3.5	103	0.00
101 C	Benzyl Chloride	4.732	5.067	-7.1	102	0.00
102	1,3-dichlorobenzene	4.134	4.412	-6.7	107	0.00
103 C	1,4-dichlorobenzene	4.179	4.410	-5.5	105	0.00
104	sec-butylbenzene	8.116	8.250	-1.7	103	0.00
106	p-isopropyltoluene	7.310	6.960	4.8	95	0.00
107	1,2-dichlorobenzene	3.937	4.239	-7.7	107	0.00
108	n-butylbenzene	6.626	7.083	-6.9	104	0.00
111 C	1,2-dibromo-3-chloropropane	1.689	1.636	3.1	92	0.00
112	undecane	3.939	4.384	-11.3	101	0.00
114	dodecane	3.729	4.557	-22.2	97	0.00
115 C	1,2,4-trichlorobenzene	3.265	3.974	-21.7	98	0.00
116	naphthalene	7.845	7.740	1.3	87	0.00
117	1,2,3-trichlorobenzene	3.084	3.511	-13.8	92	0.00
119 C	hexachlorobutadiene	2.754	3.464	-25.8	106	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.11	49	326488	10.000	ppbV	0.00
Standard Area = 301797			Recovery = 108.18%			
43) 1,4-difluorobenzene	12.35	114	767589	10.000	ppbV	0.00
Standard Area = 707136			Recovery = 108.55%			
67) chlorobenzene-D5	16.80	54	125887	10.000	ppbV	0.00
Standard Area = 120451			Recovery = 104.51%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	3.88	51	192639	9.047	ppbV	99
3) propylene	3.91	41	105703M6	10.864	ppbV	
4) propane	3.95	29	71491	8.766	ppbV	93
5) dichlorodifluoromethane	4.01	85	265649	8.478	ppbV	99
6) chloromethane	4.23	50	105305	9.880	ppbV	91
7) Freon-114	4.38	85	382074	10.474	ppbV	97
8) methanol	4.47	31	136612	43.876	ppbV	97
9) vinyl chloride	4.54	62	133927	10.236	ppbV	99
10) 1,3-butadiene	4.73	54	103439	10.871	ppbV	96
11) butane	4.82	43	68316	8.425	ppbV	99
13) bromomethane	5.12	94	146470	10.220	ppbV	99
14) chloroethane	5.37	64	65448	10.364	ppbV	97
15) ethanol	5.58	31	308973	43.435	ppbV	96
16) dichlorofluoromethane	5.52	67	265934	9.318	ppbV	99
17) vinyl bromide	5.86	106	145764	10.228	ppbV	96
18) acrolein	6.04	56	46128	9.223	ppbV	97
19) acetone	6.22	43	836737	42.640	ppbV	100
20) acetonitrile	5.87	41	87628	8.753	ppbV	98
21) trichlorofluoromethane	6.44	101	341550	10.368	ppbV	99
22) isopropyl alcohol	6.60	45	479995	22.106	ppbV	100
23) acrylonitrile	6.87	53	85532M6	9.386	ppbV	
24) pentane	6.93	43	168516	8.848	ppbV	98
25) ethyl ether	6.99	31	104559	8.893	ppbV	98
26) 1,1-dichloroethene	7.28	61	213123	10.334	ppbV	99
27) tertiary butyl alcohol	7.40	59	261842	10.227	ppbV	99
28) methylene chloride	7.47	49	143846	10.114	ppbV	96
29) 3-chloropropene	7.62	41	156702	9.945	ppbV	96
30) carbon disulfide	7.79	76	402156	9.648	ppbV	99
31) Freon 113	7.81	101	299253	10.614	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.65	61	197001	9.248	ppbV	99
33) 1,1-dichloroethane	8.90	63	248483	9.235	ppbV	99
34) MTBE	8.99	73	373867	9.515	ppbV	98
35) vinyl acetate	9.11	43	282048	10.214	ppbV	98
36) 2-butanone	9.41	43	295374	10.234	ppbV	97
37) cis-1,2-dichloroethene	9.92	61	251907	11.237	ppbV	99
38) Ethyl Acetate	10.21	61	69961	10.637	ppbV	96
39) chloroform	10.27	83	422596	10.561	ppbV	100
40) Tetrahydrofuran	10.74	42	168805M4	9.730	ppbV	
41) 2,2-dichloropropane	10.28	77	322486	9.601	ppbV	99
42) 1,2-dichloroethane	11.12	62	196116	10.012	ppbV	99
44) hexane	10.16	57	300309	10.087	ppbV	98
45) diisopropyl ether	10.17	87	154476	9.585	ppbV	94
46) tert-butyl ethyl ether	10.80	59	437744	9.439	ppbV	99
48) 1,1,1-trichloroethane	11.40	97	313078	10.315	ppbV	99
49) 1,1-dichloropropene	11.77	75	243352	10.001	ppbV	99
50) benzene	11.93	78	495187	10.063	ppbV	98
52) carbon tetrachloride	12.10	117	318580	10.229	ppbV	98
53) cyclohexane	12.24	56	243415	10.048	ppbV	99
54) tert-amyl methyl ether	12.62	73	438238	9.753	ppbV	99
55) dibromomethane	12.84	93	192401	9.550	ppbV	98
56) 1,2-dichloropropane	12.87	63	187957	10.109	ppbV	100
57) bromodichloromethane	13.09	83	378151	10.456	ppbV	98
58) 1,4-dioxane	13.15	88	120594	10.809	ppbV	97
59) trichloroethene	13.14	130	243023	10.694	ppbV	99
60) 2,2,4-trimethylpentane	13.16	57	789083	10.412	ppbV	99
61) methyl methacrylate	13.36	41	187007	8.063	ppbV	98
62) heptane	13.47	43	271453	9.954	ppbV	99
63) cis-1,3-dichloropropene	14.12	75	293270	11.002	ppbV	98
64) 4-methyl-2-pentanone	14.16	43	368523	10.484	ppbV	98
65) trans-1,3-dichloropropene	14.71	75	248976	9.627	ppbV	97
66) 1,1,2-trichloroethane	14.91	97	223241	10.781	ppbV	99
68) toluene	15.19	91	617641	10.378	ppbV	100
71) 1,3-dichloropropane	15.22	76	267866	10.158	ppbV	97
72) 2-hexanone	15.45	43	348736	11.460	ppbV #	83
74) dibromochloromethane	15.61	129	413465	11.213	ppbV	98
75) 1,2-dibromoethane	15.85	107	358516	10.800	ppbV	99
76) butyl acetate	16.02	73	61974	10.244	ppbV	89
77) octane	16.11	85	164666	10.040	ppbV	95
78) tetrachloroethene	16.25	166	311045	10.723	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023T_ICAL\R168814.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.82	131	246518	9.979	ppbV	99
80)	chlorobenzene	16.84	112	511090	10.752	ppbV	100
81)	ethylbenzene	17.13	91	781593	10.384	ppbV	98
83)	m+p-xylene	17.28	91	1211158	20.918	ppbV	99
84)	bromoform	17.35	173	417438	10.999	ppbV	100
85)	styrene	17.56	104	492280	10.619	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.64	83	497800	10.670	ppbV	99
87)	o-xylene	17.64	91	628894	10.726	ppbV	98
88)	1,2,3-trichloropropane	17.74	75	343214	9.767	ppbV	98
89)	nonane	17.78	43	367026	9.479	ppbV	98
91)	isopropylbenzene	18.08	105	820918	10.216	ppbV	98
92)	bromobenzene	18.17	77	415513	9.844	ppbV	97
93)	2-chlorotoluene	18.45	126	229842	9.470	ppbV	94
94)	n-propylbenzene	18.47	120	241688	10.095	ppbV	97
95)	4-chlorotoluene	18.50	91	598059	9.609	ppbV	100
96)	4-ethyl toluene	18.57	105	936965	10.504	ppbV	99
97)	1,3,5-trimethylbenzene	18.63	105	747010	10.608	ppbV	100
98)	tert-butylbenzene	18.94	119	759256	10.288	ppbV	100
99)	1,2,4-trimethylbenzene	18.94	105	760256	11.023	ppbV	97
100)	decane	18.97	57	465203	10.348	ppbV	100
101)	Benzyl Chloride	19.05	91	637892	10.709	ppbV	99
102)	1,3-dichlorobenzene	19.07	146	555399	10.673	ppbV	98
103)	1,4-dichlorobenzene	19.12	146	555201	10.554	ppbV	98
104)	sec-butylbenzene	19.14	105	1038595	10.165	ppbV	100
106)	p-isopropyltoluene	19.25	119	876230	9.522	ppbV	100
107)	1,2-dichlorobenzene	19.38	146	533637	10.767	ppbV	98
108)	n-butylbenzene	19.57	91	891601	10.690	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.72	75	205917	9.682	ppbV	95
112)	undecane	19.92	57	551872	11.129	ppbV	97
114)	dodecane	20.82	57	573714	12.220	ppbV	97
115)	1,2,4-trichlorobenzene	20.81	180	500239	12.169	ppbV	98
116)	naphthalene	20.93	128	974352	9.865	ppbV	99
117)	1,2,3-trichlorobenzene	21.18	180	442051	11.388	ppbV	99
119)	hexachlorobutadiene	21.24	225	436087	12.579	ppbV	97

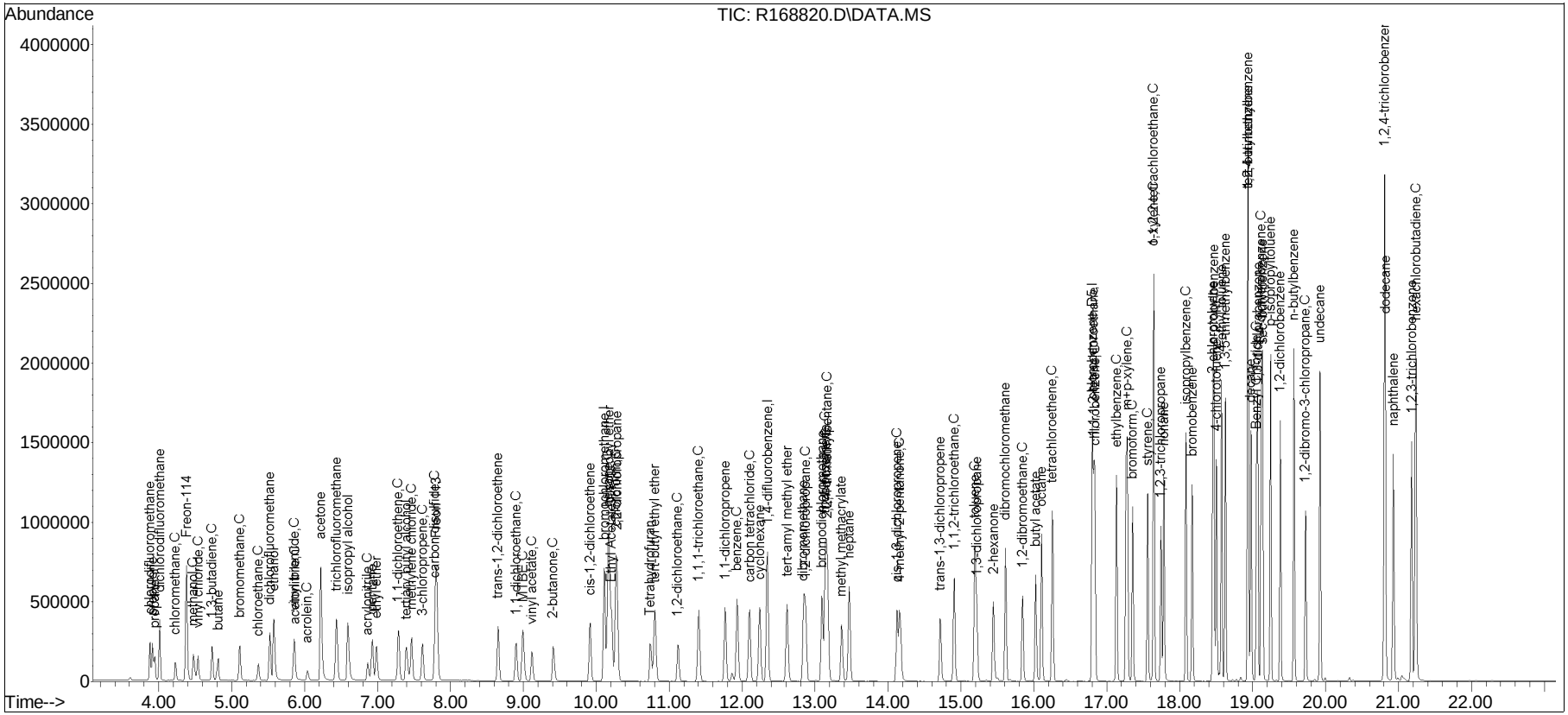
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023T_ICAL\
Data File : R168820.D
Acq On : 24 Oct 2019 8:27 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG1300074
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 08:58:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023T_ICAL\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listedAL\R168814.D

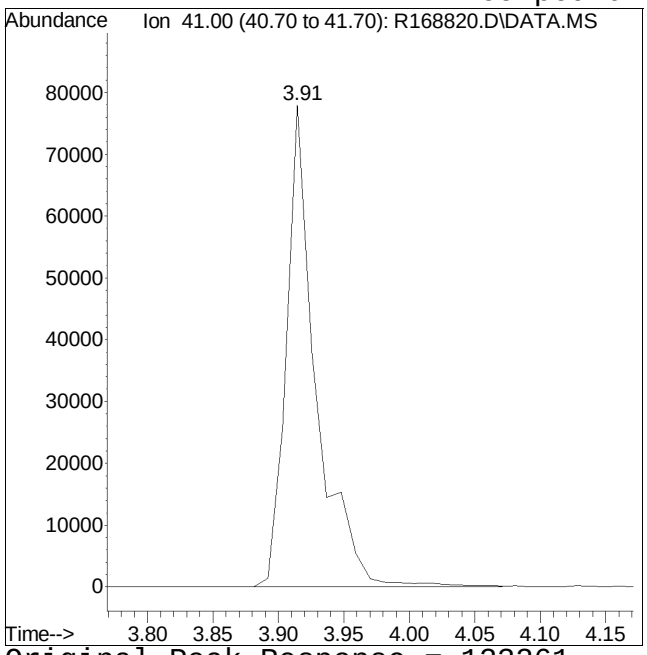


Manual Integration/Negative Proof Report

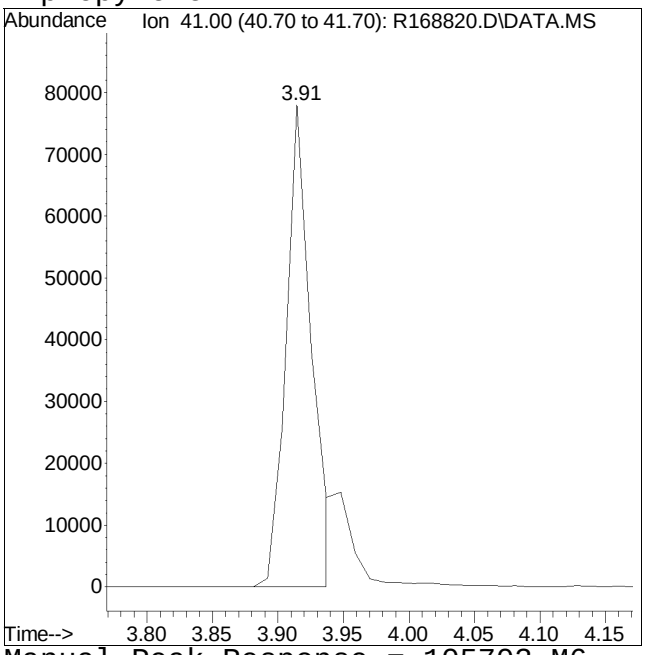
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168820.D
Date Inj'd : 10/24/2019 8:27 am
Sample : CTO15-LLSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:56 am

Compound #3: propylene



Original Peak Response = 123261



Manual Peak Response = 105703 M6

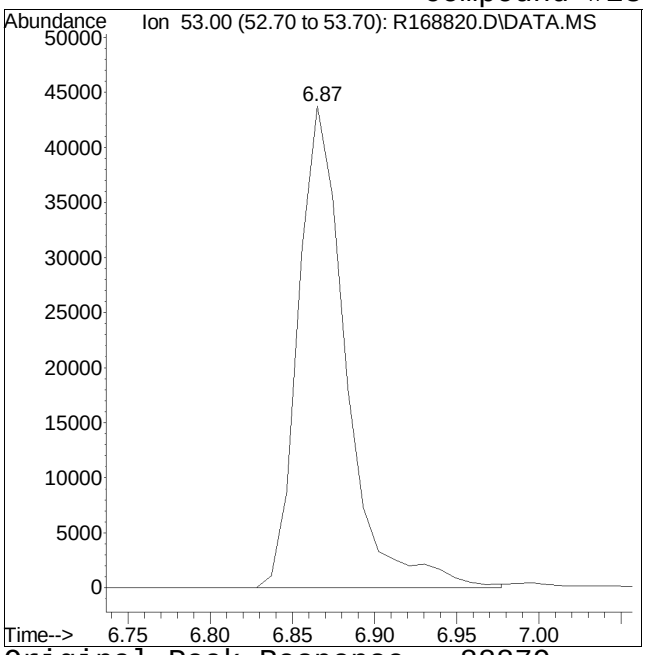
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

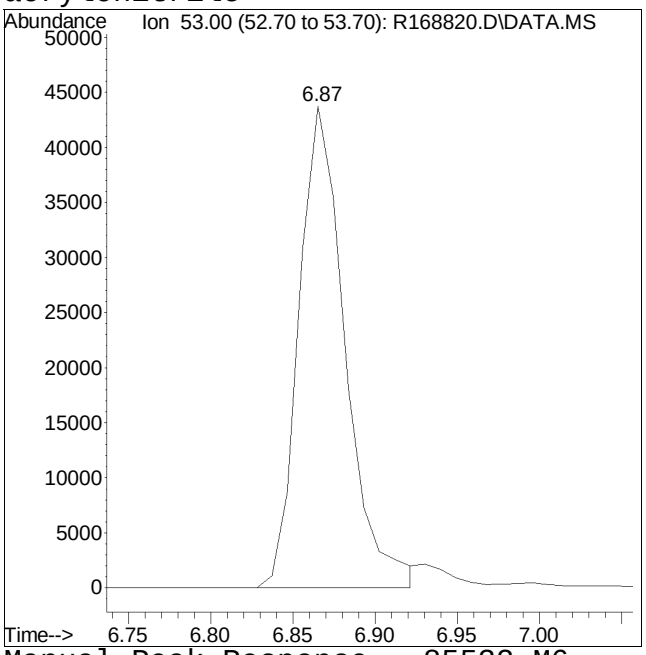
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168820.D
Date Inj'd : 10/24/2019 8:27 am
Sample : CTO15-LLSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:56 am

Compound #23: acrylonitrile



Original Peak Response = 88879



Manual Peak Response = 85532 M6

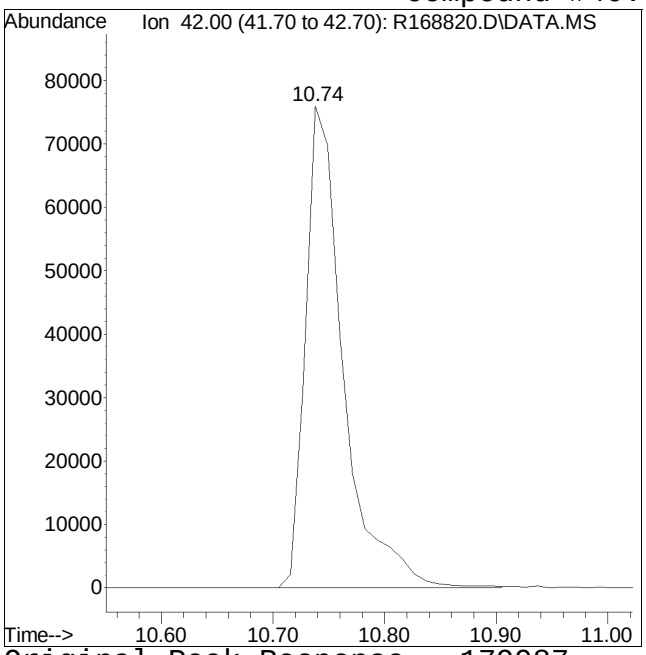
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

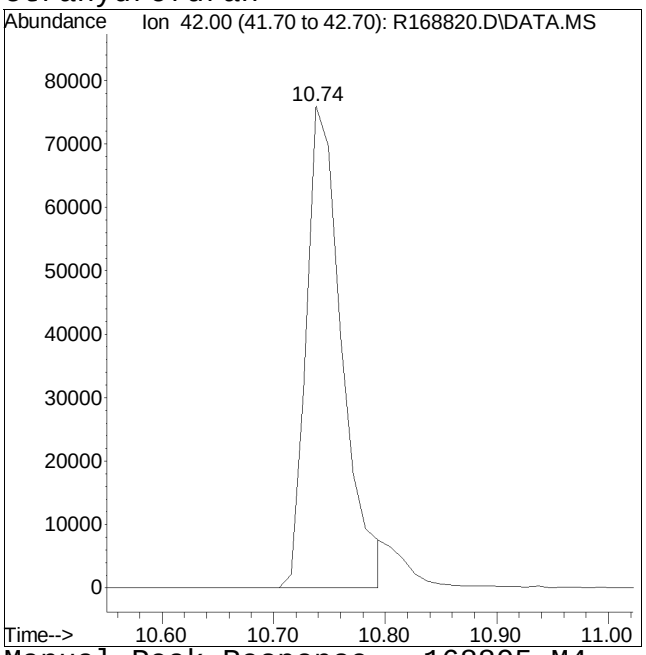
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168820.D
Date Inj'd : 10/24/2019 8:27 am
Sample : CTO15-LLSTD10.0

Method : TFS1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 8:56 am

Compound #40: Tetrahydrofuran





Original Peak Response = 179987 Manual Peak Response = 168805 M4
M4 = Poor automated baseline construction.

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Calibration Date	: 10/24/19 13:30
Lab File ID	: R168824	Init. Calib. Date(s)	: 10/23/19 10/23/19
Sample No	: WG1300314-2	Init. Calib. Times	: 14:26 18:11
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	108	0
chlorodifluoromethane	0.652	0.566	-	13.2	30	95	0
propylene	0.298	0.32	-	-7.4	30	117	0
propane	0.25	0.228	-	8.8	30	97	0
dichlorodifluoromethane	0.96	0.858	-	10.6	30	100	0
chloromethane	0.326	0.319	-	2.1	30	104	0
Freon-114	1.117	1.109	-	0.7	30	104	0
methanol	0.095	0.082	-	13.7	30	87	-.01
vinyl chloride	0.401	0.394	-	1.7	30	106	0
1,3-butadiene	0.291	0.286	-	1.7	30	104	0
butane	0.248	0.206	-	16.9	30	92	0
bromomethane	0.439	0.417	-	5	30	104	0
chloroethane	0.193	0.19	-	1.6	30	106	0
ethanol	0.218	0.185	-	15.1	30	91	0
dichlorofluoromethane	0.874	0.77	-	11.9	30	97	0
vinyl bromide	0.437	0.418	-	4.3	30	104	0
acrolein	0.153	0.14	-	8.5	30	103	0
acetone	0.601	0.489	-	18.6	30	85	0
acetonitrile	0.307	0.263	-	14.3	30	99	0
trichlorofluoromethane	1.009	0.995	-	1.4	30	106	0
isopropyl alcohol	0.665	0.556	-	16.4	30	92	0
acrylonitrile	0.279	0.248	-	11.1	30	102	0
pentane	0.583	0.479	-	17.8	30	97	0
ethyl ether	0.36	0.309	-	14.2	30	95	0
1,1-dichloroethene	0.632	0.613	-	3	30	106	0
tertiary butyl alcohol	0.784	0.737	-	6	30	102	0
methylene chloride	0.436	0.417	-	4.4	30	103	0
3-chloropropene	0.483	0.453	-	6.2	30	113	0
carbon disulfide	1.277	1.159	-	9.2	30	100	0
Freon 113	0.864	0.862	-	0.2	30	107	0
trans-1,2-dichloroethene	0.652	0.67	-	-2.8	30	123	0
1,1-dichloroethane	0.824	0.837	-	-1.6	30	123	0
MTBE	1.203	1.207	-	-0.3	30	109	0
vinyl acetate	0.846	0.854	-	-0.9	30	107	0
2-butanone	0.884	0.867	-	1.9	30	103	0
cis-1,2-dichloroethene	0.687	0.738	-	-7.4	30	107	0
Ethyl Acetate	0.201	0.199	-	1	30	106	-.01
chloroform	1.226	1.229	-	-0.2	30	106	0
Tetrahydrofuran	0.531	0.499	-	6	30	107	-.01
2,2-dichloropropane	1.029	0.941	-	8.6	30	99	0
1,2-dichloroethane	0.6	0.57	-	5	30	102	-.01
1,4-difluorobenzene	1	1	-	0	30	105	0
hexane	0.388	0.39	-	-0.5	30	106	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Calibration Date	: 10/24/19 13:30
Lab File ID	: R168824	Init. Calib. Date(s)	: 10/23/19 10/23/19
Sample No	: WG1300314-2	Init. Calib. Times	: 14:26 18:11
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.21	0.198	-	5.7	30	101	0
tert-butyl ethyl ether	0.604	0.562	-	7	30	97	0
1,1,1-trichloroethane	0.395	0.4	-	-1.3	30	110	0
1,1-dichloropropene	0.317	0.309	-	2.5	30	104	0
benzene	0.641	0.628	-	2	30	104	0
carbon tetrachloride	0.406	0.411	-	-1.2	30	107	0
cyclohexane	0.316	0.314	-	0.6	30	107	0
tert-amyl methyl ether	0.585	0.56	-	4.3	30	102	0
dibromomethane	0.262	0.248	-	5.3	30	101	-.01
1,2-dichloropropane	0.242	0.25	-	-3.3	30	110	0
bromodichloromethane	0.471	0.49	-	-4	30	108	0
1,4-dioxane	0.145	0.15	-	-3.4	30	105	0
trichloroethene	0.296	0.307	-	-3.7	30	108	0
2,2,4-trimethylpentane	0.987	1.004	-	-1.7	30	107	-.01
methyl methacrylate	0.302	0.239	-	20.9	30	77	0
heptane	0.355	0.366	-	-3.1	30	111	0
cis-1,3-dichloropropene	0.347	0.384	-	-10.7	30	113	0
4-methyl-2-pentanone	0.458	0.476	-	-3.9	30	106	-.02
trans-1,3-dichloropropene	0.337	0.316	-	6.2	30	96	0
1,1,2-trichloroethane	0.27	0.281	-	-4.1	30	110	0
chlorobenzene-D5	1	1	-	0	30	103	0
toluene	4.728	4.732	-	-0.1	30	105	0
1,3-dichloropropane	2.095	2.01	-	4.1	30	98	0
2-hexanone	2.417	2.758	-	-14.1	30	108	0
dibromochloromethane	2.929	3.166	-	-8.1	30	107	0
1,2-dibromoethane	2.637	2.709	-	-2.7	30	105	0
butyl acetate	0.481	0.467	-	2.9	30	98	0
octane	1.303	1.237	-	5.1	30	98	0
tetrachloroethene	2.304	2.38	-	-3.3	30	106	0
1,1,1,2-tetrachloroethane	1.962	1.885	-	3.9	30	100	0
chlorobenzene	3.776	3.905	-	-3.4	30	106	0
ethylbenzene	5.979	6.114	-	-2.3	30	107	0
m+p-xylene	4.599	4.732	-	-2.9	30	107	0
bromoform	3.015	3.239	-	-7.4	30	109	0
styrene	3.683	3.756	-	-2	30	104	0
1,1,2,2-tetrachloroethane	3.706	3.911	-	-5.5	30	104	0
o-xylene	4.657	4.887	-	-4.9	30	107	0
1,2,3-trichloropropane	2.791	2.648	-	5.1	30	98	0
nonane	3.076	2.92	-	5.1	30	98	0
isopropylbenzene	6.383	6.407	-	-0.4	30	103	0
bromobenzene	3.353	3.247	-	3.2	30	100	0
2-chlorotoluene	1.928	1.767	-	8.4	30	97	0
n-propylbenzene	1.902	1.866	-	1.9	30	99	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Calibration Date	: 10/24/19 13:30
Lab File ID	: R168824	Init. Calib. Date(s)	: 10/23/19 10/23/19
Sample No	: WG1300314-2	Init. Calib. Times	: 14:26 18:11
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	4.944	4.634	-	6.3	30	97	0
4-ethyl toluene	7.086	7.188	-	-1.4	30	102	0
1,3,5-trimethylbenzene	5.594	5.739	-	-2.6	30	103	0
tert-butylbenzene	5.863	5.912	-	-0.8	30	99	0
1,2,4-trimethylbenzene	5.479	5.889	-	-7.5	30	104	0
decane	3.571	3.642	-	-2	30	100	0
Benzyl Chloride	4.732	5.057	-	-6.9	30	100	0
1,3-dichlorobenzene	4.134	4.279	-	-3.5	30	102	0
1,4-dichlorobenzene	4.179	4.301	-	-2.9	30	101	0
sec-butylbenzene	8.116	8.078	-	0.5	30	99	0
p-isopropyltoluene	7.31	6.808	-	6.9	30	91	0
1,2-dichlorobenzene	3.937	4.147	-	-5.3	30	103	0
n-butylbenzene	6.626	6.978	-	-5.3	30	101	0
1,2-dibromo-3-chloropropan	1.689	1.67	-	1.1	30	92	0
undecane	3.939	4.33	-	-9.9	30	98	0
dodecane	3.729	4.368	-	-17.1	30	91	0
1,2,4-trichlorobenzene	3.265	3.901	-	-19.5	30	94	0
naphthalene	7.845	7.601	-	3.1	30	84	0
1,2,3-trichlorobenzene	3.084	3.442	-	-11.6	30	89	0
hexachlorobutadiene	2.754	3.366	-	-22.2	30	101	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	108	0.00
2		chlorodifluoromethane	0.652	0.566	13.2	95	0.00
3		propylene	0.298	0.320	-7.4	117	0.00
4		propane	0.250	0.228	8.8	97	0.00
5		dichlorodifluoromethane	0.960	0.858	10.6	100	0.00
6	C	chloromethane	0.326	0.319	2.1	104	0.00
7		Freon-114	1.117	1.109	0.7	104	0.00
8	C	methanol	0.095	0.082	13.7	87	-0.01
9	C	vinyl chloride	0.401	0.394	1.7	106	0.00
10	C	1,3-butadiene	0.291	0.286	1.7	104	0.00
11		butane	0.248	0.206	16.9	92	0.00
13	C	bromomethane	0.439	0.417	5.0	104	0.00
14	C	chloroethane	0.193	0.190	1.6	106	0.00
15		ethanol	0.218	0.185	15.1	91	0.00
16		dichlorofluoromethane	0.874	0.770	11.9	97	0.00
17	C	vinyl bromide	0.437	0.418	4.3	104	0.00
18	C	acrolein	0.153	0.140	8.5	103	0.00
19		acetone	0.601	0.489	18.6	85	0.00
20	C	acetonitrile	0.307	0.263	14.3	99	0.00
21		trichlorofluoromethane	1.009	0.995	1.4	106	0.00
22		isopropyl alcohol	0.665	0.556	16.4	92	0.00
23	C	acrylonitrile	0.279	0.248	11.1	102	0.00
24		pentane	0.583	0.479	17.8	97	0.00
25		ethyl ether	0.360	0.309	14.2	95	0.00
26	C	1,1-dichloroethene	0.632	0.613	3.0	106	0.00
27		tertiary butyl alcohol	0.784	0.737	6.0	102	0.00
28	C	methylene chloride	0.436	0.417	4.4	103	0.00
29	C	3-chloropropene	0.483	0.453	6.2	113	0.00
30	C	carbon disulfide	1.277	1.159	9.2	100	0.00
31		Freon 113	0.864	0.862	0.2	107	0.00
32		trans-1,2-dichloroethene	0.652	0.670	-2.8	123	0.00
33	C	1,1-dichloroethane	0.824	0.837	-1.6	123	0.00
34	C	MTBE	1.203	1.207	-0.3	109	0.00
35	C	vinyl acetate	0.846	0.854	-0.9	107	0.00
36	C	2-butanone	0.884	0.867	1.9	103	0.00
37		cis-1,2-dichloroethene	0.687	0.738	-7.4	107	0.00
38		Ethyl Acetate	0.201	0.199	1.0	106	-0.01
39	C	chloroform	1.226	1.229	-0.2	106	0.00
40		Tetrahydrofuran	0.531	0.499	6.0	107	-0.01

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	1.029	0.941	8.6	99	0.00
42	C	1,2-dichloroethane	0.600	0.570	5.0	102	-0.01
43	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00
44	C	hexane	0.388	0.390	-0.5	106	0.00
45		diisopropyl ether	0.210	0.198	5.7	101	0.00
46		tert-butyl ethyl ether	0.604	0.562	7.0	97	0.00
48	C	1,1,1-trichloroethane	0.395	0.400	-1.3	110	0.00
49		1,1-dichloropropene	0.317	0.309	2.5	104	0.00
50	C	benzene	0.641	0.628	2.0	104	0.00
52	C	carbon tetrachloride	0.406	0.411	-1.2	107	0.00
53		cyclohexane	0.316	0.314	0.6	107	0.00
54		tert-amyl methyl ether	0.585	0.560	4.3	102	0.00
55		dibromomethane	0.262	0.248	5.3	101	-0.01
56	C	1,2-dichloropropane	0.242	0.250	-3.3	110	0.00
57		bromodichloromethane	0.471	0.490	-4.0	108	0.00
58	C	1,4-dioxane	0.145	0.150	-3.4	105	0.00
59	C	trichloroethene	0.296	0.307	-3.7	108	0.00
60	C	2,2,4-trimethylpentane	0.987	1.004	-1.7	107	-0.01
61		methyl methacrylate	0.302	0.239	20.9	77	0.00
62		heptane	0.355	0.366	-3.1	111	0.00
63	C	cis-1,3-dichloropropene	0.347	0.384	-10.7	113	0.00
64	C	4-methyl-2-pentanone	0.458	0.476	-3.9	106	-0.02
65		trans-1,3-dichloropropene	0.337	0.316	6.2	96	0.00
66	C	1,1,2-trichloroethane	0.270	0.281	-4.1	110	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	103	0.00
68	C	toluene	4.728	4.732	-0.1	105	0.00
71		1,3-dichloropropane	2.095	2.010	4.1	98	0.00
72		2-hexanone	2.417	2.758	-14.1	108	0.00
74		dibromochloromethane	2.929	3.166	-8.1	107	0.00
75	C	1,2-dibromoethane	2.637	2.709	-2.7	105	0.00
76		butyl acetate	0.481	0.467	2.9	98	0.00
77		octane	1.303	1.237	5.1	98	0.00
78	C	tetrachloroethene	2.304	2.380	-3.3	106	0.00
79		1,1,1,2-tetrachloroethane	1.962	1.885	3.9	100	0.00
80	C	chlorobenzene	3.776	3.905	-3.4	106	0.00
81	C	ethylbenzene	5.979	6.114	-2.3	107	0.00
83	C	m+p-xylene	4.599	4.732	-2.9	107	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	3.015	3.239	-7.4	109	0.00
85 C	styrene	3.683	3.756	-2.0	104	0.00
86 C	1,1,2,2-tetrachloroethane	3.706	3.911	-5.5	104	0.00
87 C	o-xylene	4.657	4.887	-4.9	107	0.00
88	1,2,3-trichloropropane	2.791	2.648	5.1	98	0.00
89	nonane	3.076	2.920	5.1	98	0.00
91 C	isopropylbenzene	6.383	6.407	-0.4	103	0.00
92	bromobenzene	3.353	3.247	3.2	100	0.00
93	2-chlorotoluene	1.928	1.767	8.4	97	0.00
94	n-propylbenzene	1.902	1.866	1.9	99	0.00
95	4-chlorotoluene	4.944	4.634	6.3	97	0.00
96	4-ethyl toluene	7.086	7.188	-1.4	102	0.00
97	1,3,5-trimethylbenzene	5.594	5.739	-2.6	103	0.00
98	tert-butylbenzene	5.863	5.912	-0.8	99	0.00
99	1,2,4-trimethylbenzene	5.479	5.889	-7.5	104	0.00
100	decane	3.571	3.642	-2.0	100	0.00
101 C	Benzyl Chloride	4.732	5.057	-6.9	100	0.00
102	1,3-dichlorobenzene	4.134	4.279	-3.5	102	0.00
103 C	1,4-dichlorobenzene	4.179	4.301	-2.9	101	0.00
104	sec-butylbenzene	8.116	8.078	0.5	99	0.00
106	p-isopropyltoluene	7.310	6.808	6.9	91	0.00
107	1,2-dichlorobenzene	3.937	4.147	-5.3	103	0.00
108	n-butylbenzene	6.626	6.978	-5.3	101	0.00
111 C	1,2-dibromo-3-chloropropane	1.689	1.670	1.1	92	0.00
112	undecane	3.939	4.330	-9.9	98	0.00
114	dodecane	3.729	4.368	-17.1	91	0.00
115 C	1,2,4-trichlorobenzene	3.265	3.901	-19.5	94	0.00
116	naphthalene	7.845	7.601	3.1	84	0.00
117	1,2,3-trichlorobenzene	3.084	3.442	-11.6	89	0.00
119 C	hexachlorobutadiene	2.754	3.366	-22.2	101	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	325698	10.000	ppbV	0.00
Standard Area = 325698			Recovery = 100.00%			
43) 1,4-difluorobenzene	12.348	114	741488	10.000	ppbV	0.00
Standard Area = 741488			Recovery = 100.00%			
67) chlorobenzene-D5	16.796	54	123702	10.000	ppbV	0.00
Standard Area = 123702			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	3.881	51	184336	8.678	ppbV	99
3) propylene	3.915	41	104350M6	10.751	ppbV	
4) propane	3.948	29	74217	9.122	ppbV	98
5) dichlorodifluoromethane	4.015	85	279369	8.937	ppbV	98
6) chloromethane	4.227	50	103989	9.780	ppbV	96
7) Freon-114	4.384	85	361101	9.923	ppbV	98
8) methanol	4.473	31	133147	42.867	ppbV	96
9) vinyl chloride	4.540	62	128219	9.824	ppbV	99
10) 1,3-butadiene	4.730	54	93065	9.805	ppbV	95
11) butane	4.818	43	67154	8.302	ppbV	99
13) bromomethane	5.116	94	135794	9.498	ppbV	99
14) chloroethane	5.367	64	61731	9.799	ppbV	100
15) ethanol	5.581	31	300660	42.369	ppbV	99
16) dichlorofluoromethane	5.525	67	250795	8.808	ppbV	98
17) vinyl bromide	5.860	106	135994	9.566	ppbV	98
18) acrolein	6.037	56	45752	9.170	ppbV	98
19) acetone	6.223	43	796042	40.665	ppbV	100
20) acetonitrile	5.869	41	85769	8.588	ppbV	100
21) trichlorofluoromethane	6.437	101	324043	9.860	ppbV	97
22) isopropyl alcohol	6.595	45	452561	20.893	ppbV	100
23) acrylonitrile	6.865	53	80745M4	8.882	ppbV	
24) pentane	6.931	43	156040	8.213	ppbV	98
25) ethyl ether	6.986	31	100714	8.587	ppbV	97
26) 1,1-dichloroethene	7.284	61	199748	9.709	ppbV	98
27) tertiary butyl alcohol	7.396	59	240088	9.400	ppbV	99
28) methylene chloride	7.470	49	135715	9.565	ppbV	97
29) 3-chloropropene	7.619	41	147455	9.381	ppbV	99
30) carbon disulfide	7.787	76	377464	9.078	ppbV	100
31) Freon 113	7.805	101	280799	9.984	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.652	61	218216	10.269	ppbV	96
33) 1,1-dichloroethane	8.904	63	272733	10.161	ppbV	98
34) MTBE	8.993	73	393188	10.031	ppbV	99
35) vinyl acetate	9.115	43	278249	10.101	ppbV	100
36) 2-butanone	9.407	43	282456	9.810	ppbV	99
37) cis-1,2-dichloroethene	9.917	61	240500	10.754	ppbV	98
38) Ethyl Acetate	10.207	61	64802	9.876	ppbV	91
39) chloroform	10.271	83	400400	10.031	ppbV	99
40) Tetrahydrofuran	10.738	42	162493M6	9.389	ppbV	
41) 2,2-dichloropropane	10.281	77	306509	9.147	ppbV	100
42) 1,2-dichloroethane	11.116	62	185697	9.503	ppbV	98
44) hexane	10.164	57	289370	10.061	ppbV	92
45) diisopropyl ether	10.175	87	146711	9.424	ppbV	96
46) tert-butyl ethyl ether	10.805	59	416949	9.307	ppbV	100
48) 1,1,1-trichloroethane	11.404	97	296302	10.106	ppbV	97
49) 1,1-dichloropropene	11.766	75	229323	9.756	ppbV	98
50) benzene	11.929	78	465464	9.792	ppbV	100
52) carbon tetrachloride	12.104	117	304482	10.121	ppbV	96
53) cyclohexane	12.244	56	233173	9.965	ppbV	98
54) tert-amyl methyl ether	12.616	73	415417	9.571	ppbV	99
55) dibromomethane	12.837	93	183735	9.441	ppbV	97
56) 1,2-dichloropropane	12.872	63	185110	10.307	ppbV	99
57) bromodichloromethane	13.093	83	363250	10.397	ppbV	99
58) 1,4-dioxane	13.151	88	111257	10.323	ppbV	97
59) trichloroethene	13.140	130	227572	10.367	ppbV	99
60) 2,2,4-trimethylpentane	13.163	57	744474	10.170	ppbV	99
61) methyl methacrylate	13.361	41	177268	7.912	ppbV	99
62) heptane	13.466	43	271367	10.301	ppbV	99
63) cis-1,3-dichloropropene	14.123	75	285020	11.068	ppbV	98
64) 4-methyl-2-pentanone	14.158	43	352779	10.390	ppbV	99
65) trans-1,3-dichloropropene	14.713	75	234486	9.386	ppbV	99
66) 1,1,2-trichloroethane	14.909	97	208016	10.399	ppbV	98
68) toluene	15.188	91	585331	10.009	ppbV	100
71) 1,3-dichloropropane	15.219	76	248659	9.596	ppbV	97
72) 2-hexanone	15.446	43	341198	11.411	ppbV #	82
74) dibromochloromethane	15.611	129	391625	10.809	ppbV	99
75) 1,2-dibromoethane	15.848	107	335075	10.272	ppbV	99
76) butyl acetate	16.024	73	57794	9.722	ppbV	95
77) octane	16.106	85	153031	9.496	ppbV	97
78) tetrachloroethene	16.251	166	294415	10.329	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

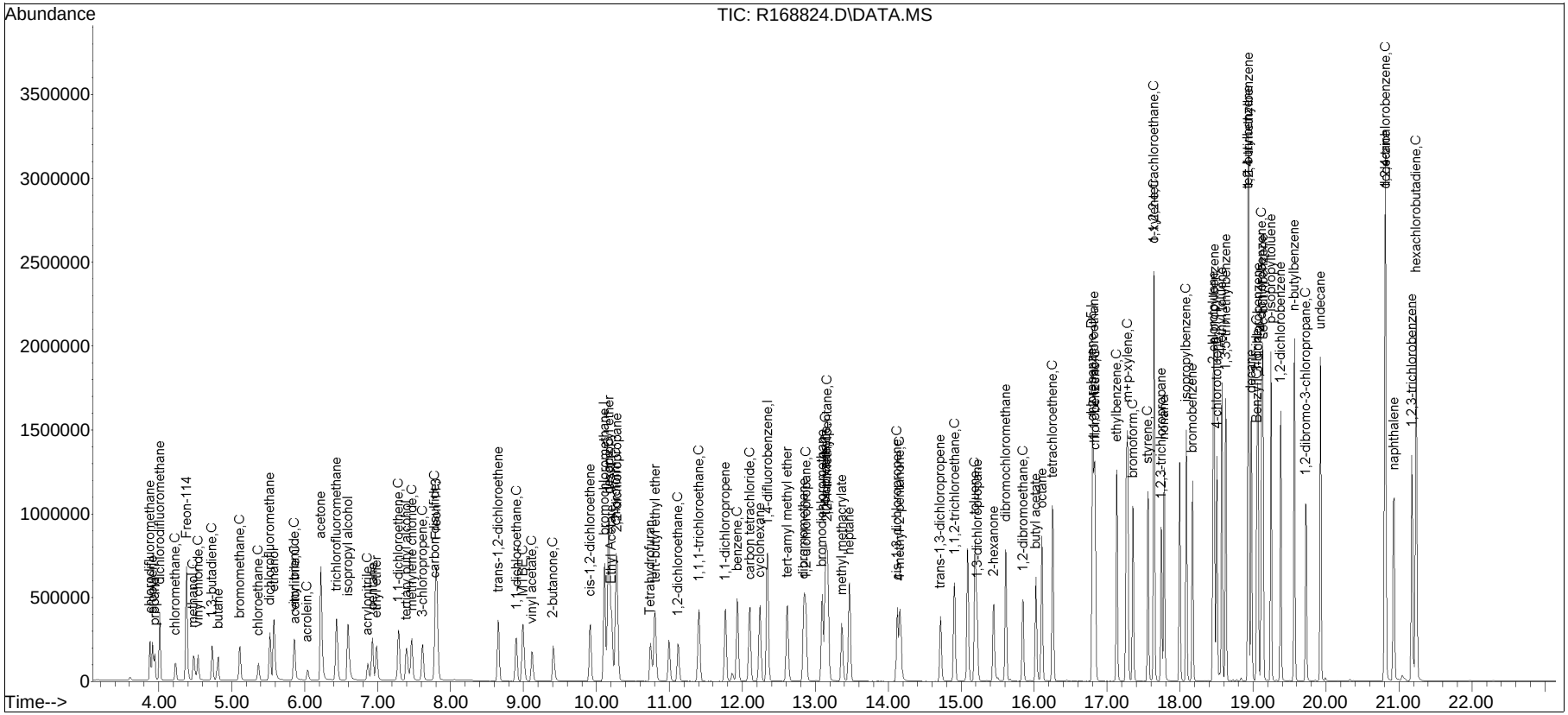
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.821	131	233119	9.603	ppbV	97
80)	chlorobenzene	16.836	112	483007	10.340	ppbV	99
81)	ethylbenzene	17.134	91	756302	10.225	ppbV	100
83)	m+p-xylene	17.278	91	1170747	20.577	ppbV	99
84)	bromoform	17.353	173	400694	10.745	ppbV	99
85)	styrene	17.557	104	464684	10.201	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.642	83	483759	10.552	ppbV	99
87)	o-xylene	17.642	91	604497	10.492	ppbV	98
88)	1,2,3-trichloropropane	17.741	75	327511	9.485	ppbV	97
89)	nonane	17.781	43	361251	9.495	ppbV	98
91)	isopropylbenzene	18.085	105	792576	10.037	ppbV	97
92)	bromobenzene	18.169	77	401623	9.683	ppbV	99
93)	2-chlorotoluene	18.453	126	218626	9.167	ppbV	91
94)	n-propylbenzene	18.468	120	230830	9.811	ppbV	95
95)	4-chlorotoluene	18.503	91	573199	9.372	ppbV	100
96)	4-ethyl toluene	18.572	105	889163	10.144	ppbV	98
97)	1,3,5-trimethylbenzene	18.627	105	709941	10.260	ppbV	99
98)	tert-butylbenzene	18.931	119	731325	10.084	ppbV	100
99)	1,2,4-trimethylbenzene	18.937	105	728467	10.749	ppbV	97
100)	decane	18.973	57	450499	10.198	ppbV	97
101)	Benzyl Chloride	19.052	91	625518	10.687	ppbV	99
102)	1,3-dichlorobenzene	19.070	146	529301	10.351	ppbV	98
103)	1,4-dichlorobenzene	19.118	146	532099	10.293	ppbV	99
104)	sec-butylbenzene	19.137	105	999252	9.953	ppbV	99
106)	p-isopropyltoluene	19.245	119	842168	9.313	ppbV	98
107)	1,2-dichlorobenzene	19.378	146	512966	10.533	ppbV	99
108)	n-butylbenzene	19.566	91	863203	10.532	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.723	75	206626	9.887	ppbV	94
112)	undecane	19.922	57	535575	10.991	ppbV	98
114)	dodecane	20.814	57	540382	11.713	ppbV	100
115)	1,2,4-trichlorobenzene	20.814	180	482565	11.947	ppbV	97
116)	naphthalene	20.934	128	940267	9.688	ppbV	98
117)	1,2,3-trichlorobenzene	21.174	180	425742	11.161	ppbV	96
119)	hexachlorobutadiene	21.234	225	416369	12.223	ppbV	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed68824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-2,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

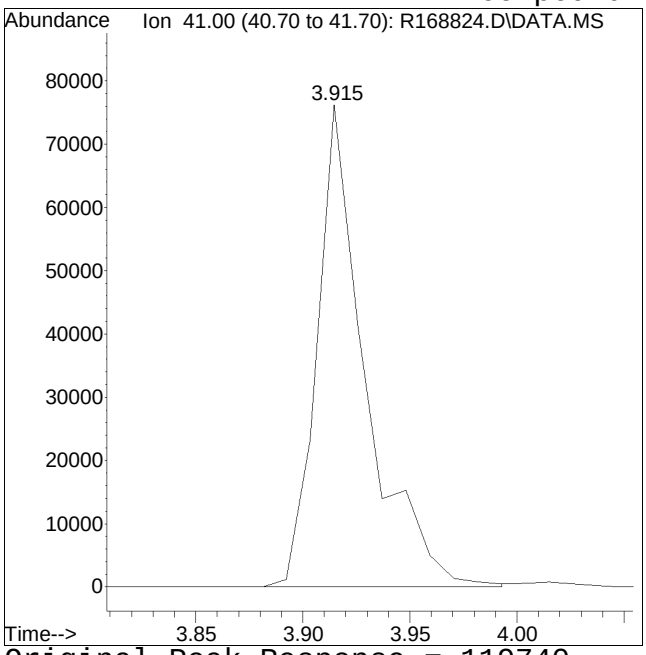


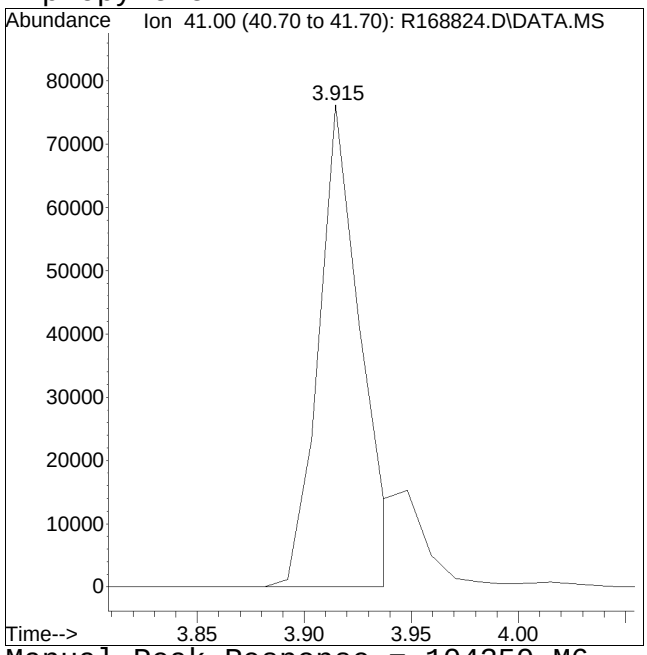
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168824.D
Date Inj'd : 10/24/2019 1:30 pm
Sample : WG1300314-2,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/24/2019 2:11 pm

Compound #3: propylene





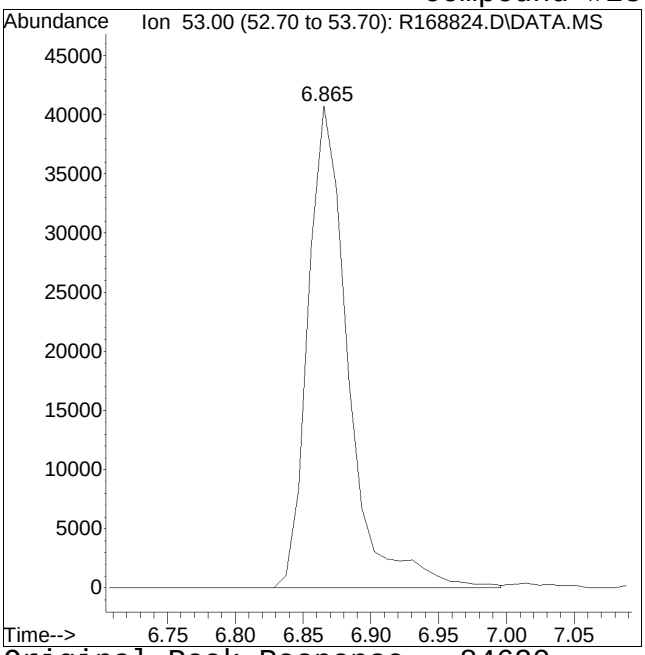
Original Peak Response = 119740 Manual Peak Response = 104350 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

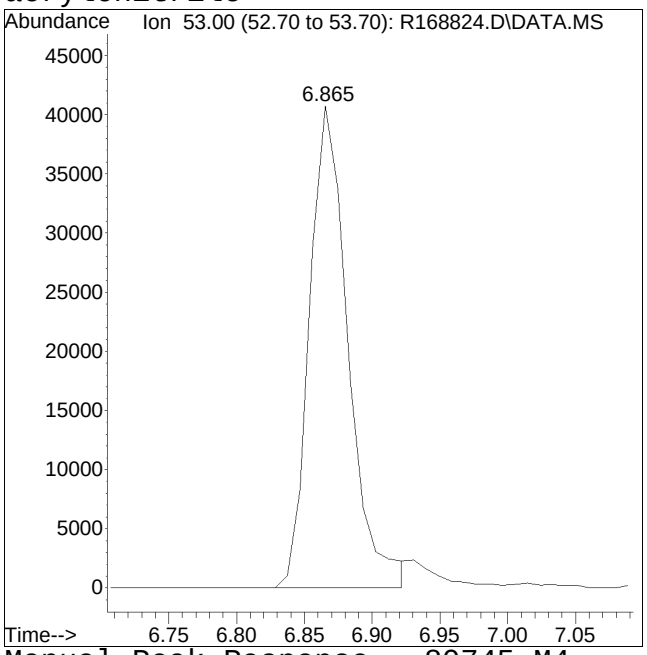
Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168824.D
Date Inj'd : 10/24/2019 1:30 pm
Sample : WG1300314-2,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/24/2019 2:11 pm

Compound #23: acrylonitrile



Original Peak Response = 84620



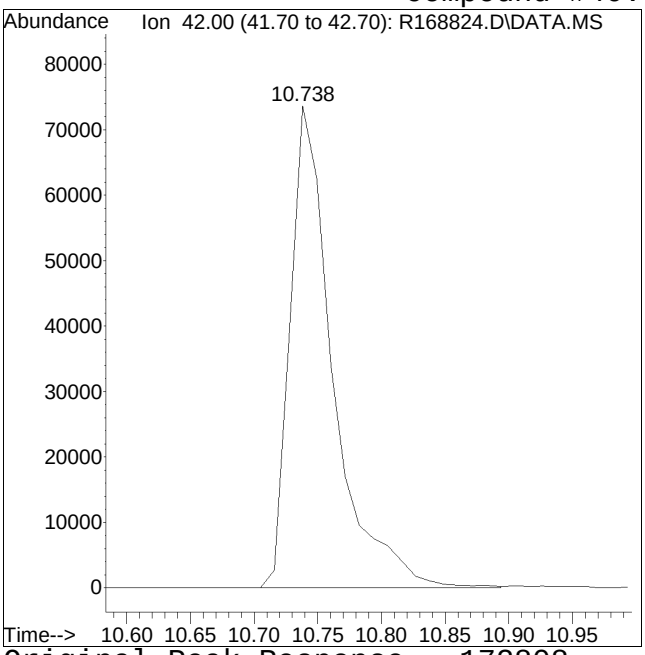
Manual Peak Response = 80745 M4

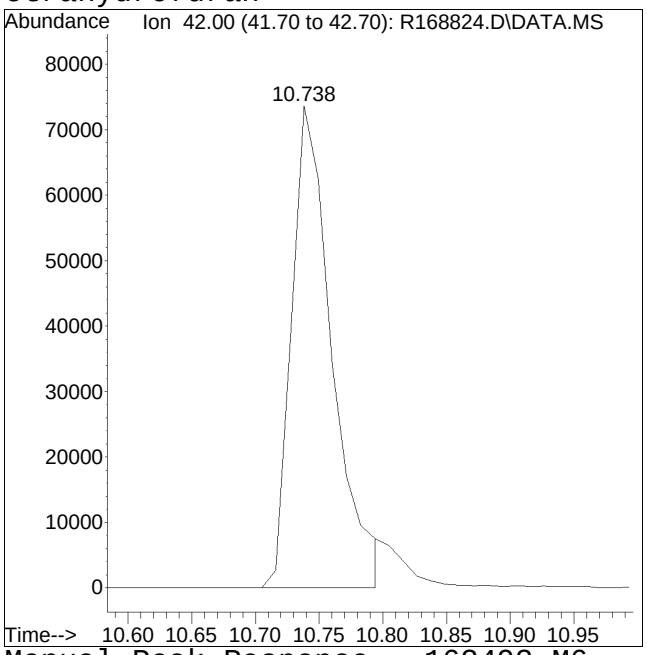
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TFS1_191023.M
Data File : R168824.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 1:30 pm Instrument : Air Piano 1
Sample : WG1300314-2,3,250,250 Quant Date : 10/24/2019 2:11 pm

Compound #40: Tetrahydrofuran





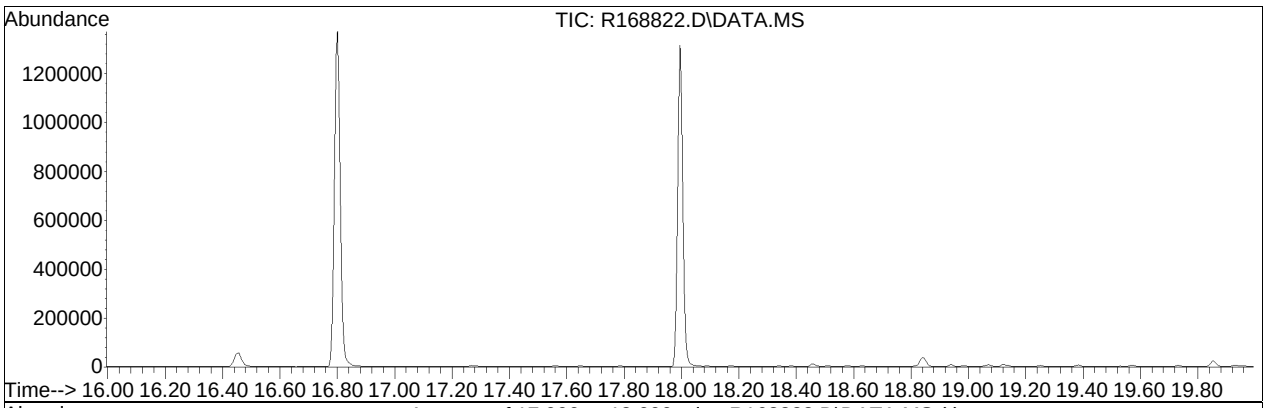
Original Peak Response = 172808 Manual Peak Response = 162493 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

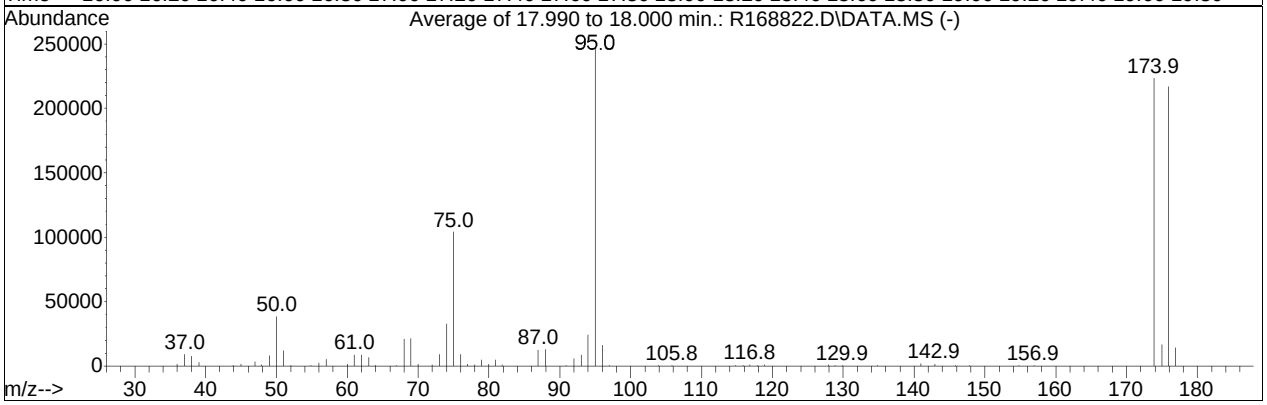
BFB

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168822.D
Acq On : 24 Oct 2019 12:26 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-1,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Oct 24 08:41:35 2019





Spectrum Information: Average of 17.990 to 18.000 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.5	38421	PASS
75	95	30	66	42.0	104051	PASS
95	95	100	100	100.0	247872	PASS
96	95	5	9	6.6	16367	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.3	223808	PASS
175	174	4	9	7.5	16694	PASS
176	174	93	101	97.0	217067	PASS
177	176	5	9	6.6	14328	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-4,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:49:19 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.110	49	309183	10.000	ppbV	0.00
Standard Area = 325698			Recovery =	94.93%		
43) 1,4-difluorobenzene	12.348	114	697048	10.000	ppbV	0.00
Standard Area = 741488			Recovery =	94.01%		
67) chlorobenzene-D5	16.801	54	119050	10.000	ppbV	0.00
Standard Area = 123702			Recovery =	96.24%		
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.926	41	1029	0.112	ppbV	95
5) dichlorodifluoromethane	0.000		0	N.D.		
6) chloromethane	0.000		0	N.D.		
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	5.125		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.627	31	17900	2.657	ppbV	97
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.307	43	2694M3	0.145	ppbV	
21) trichlorofluoromethane	0.000		0	N.D.		
22) isopropyl alcohol	6.670		0	N.D.		
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	7.517		0	N.D.		
28) methylene chloride	7.461		0	N.D.		
29) 3-chloropropene	7.619		0	N.D.		
30) carbon disulfide	7.796		0	N.D.		
31) Freon 113	0.000		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
35) vinyl acetate	9.123		0	N.D.		
36) 2-butanone	9.504		0	N.D.		
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-4,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:49:19 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40)	Tetrahydrofuran	0.000		0	N.D.		
42)	1,2-dichloroethane	0.000		0	N.D.		
44)	hexane	0.000		0	N.D.		
48)	1,1,1-trichloroethane	0.000		0	N.D.		
50)	benzene	0.000		0	N.D.		
52)	carbon tetrachloride	0.000		0	N.D.		
53)	cyclohexane	0.000		0	N.D.	d	
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
59)	trichloroethene	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	0.000		0	N.D.		
62)	heptane	0.000		0	N.D.		
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	0.000		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	15.188		0	N.D.		
72)	2-hexanone	0.000		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
78)	tetrachloroethene	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.139		0	N.D.		
83)	m+p-xylene	17.283		0	N.D.		
84)	bromoform	0.000		0	N.D.		
85)	styrene	0.000		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	17.651		0	N.D.		
96)	4-ethyl toluene	18.632		0	N.D.		
97)	1,3,5-trimethylbenzene	18.632		0	N.D.		
99)	1,2,4-trimethylbenzene	18.943		0	N.D.		
101)	Benzyl Chloride	0.000		0	N.D.		
102)	1,3-dichlorobenzene	19.070		0	N.D.		
103)	1,4-dichlorobenzene	19.124		0	N.D.		
107)	1,2-dichlorobenzene	19.384		0	N.D.		
115)	1,2,4-trichlorobenzene	20.820		0	N.D.		
119)	hexachlorobutadiene	21.252		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-4,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:49:19 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

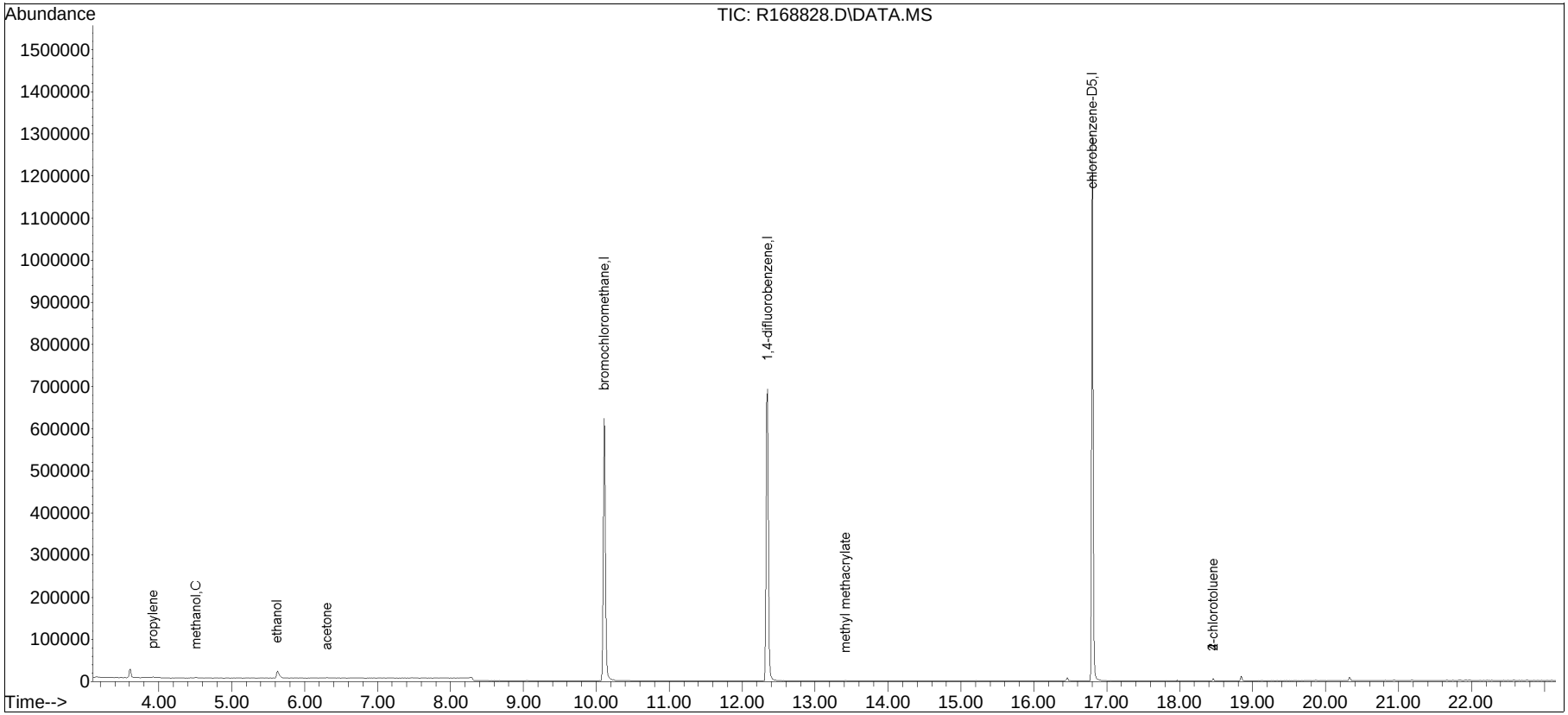
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

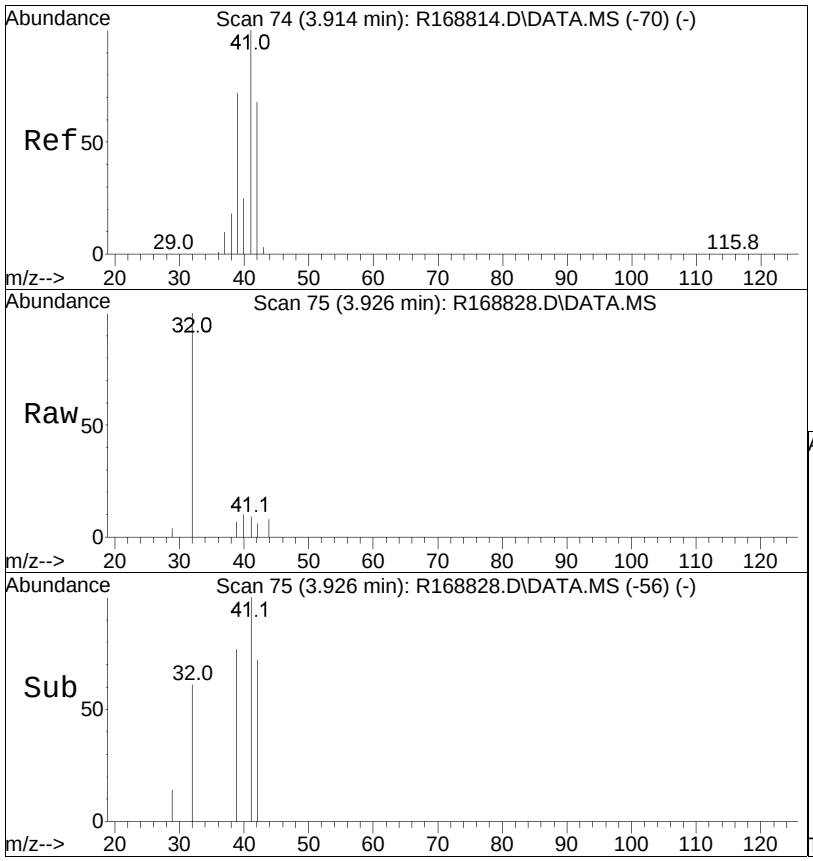
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed68824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-4,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:49:19 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

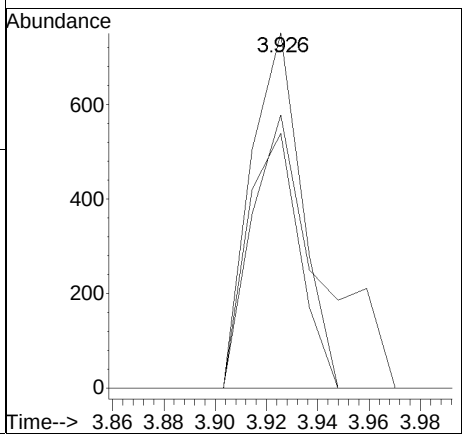


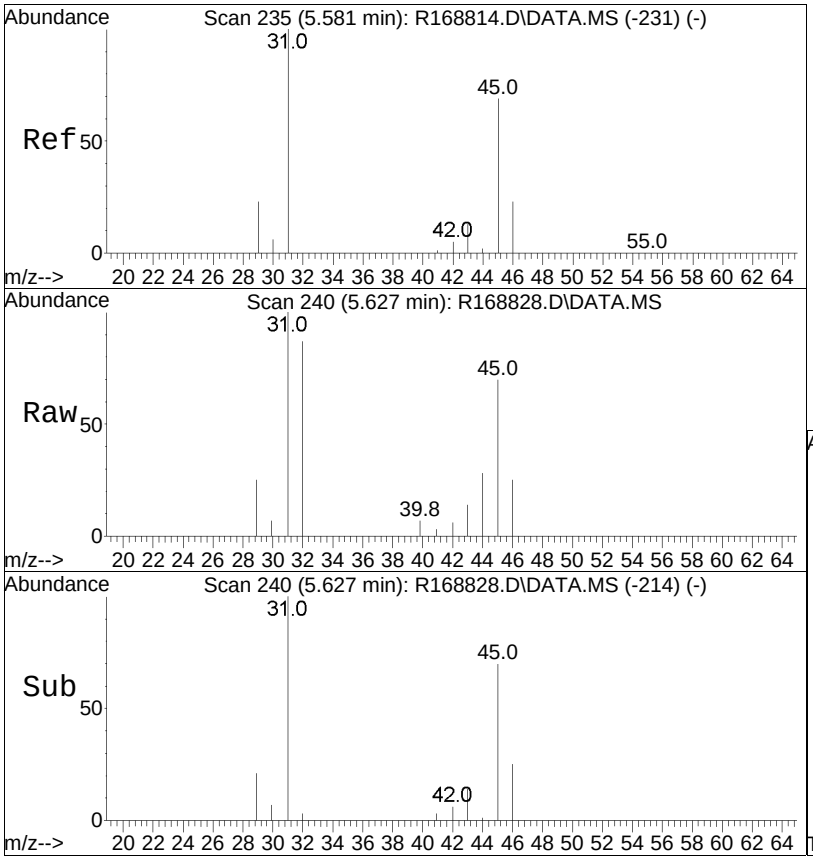


#3
propylene
Concen: 0.11 ppbV
RT: 3.926 min Scan# 75
Delta R.T. 0.011 min
Lab File: R168828.D
Acq: 24 Oct 2019 4:24 pm

Tgt Ion: 41 Resp: 1029

Ion	Ratio	Lower	Upper
41	100		
42	71.8	54.3	81.5
39	77.0	57.9	86.9

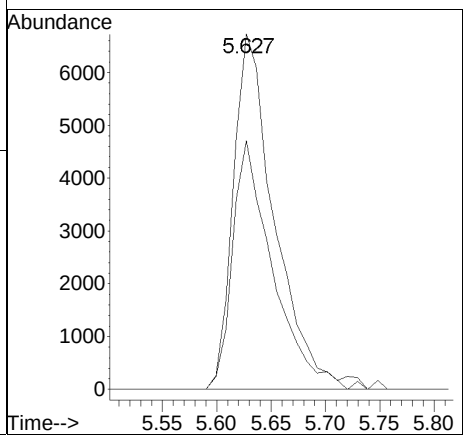


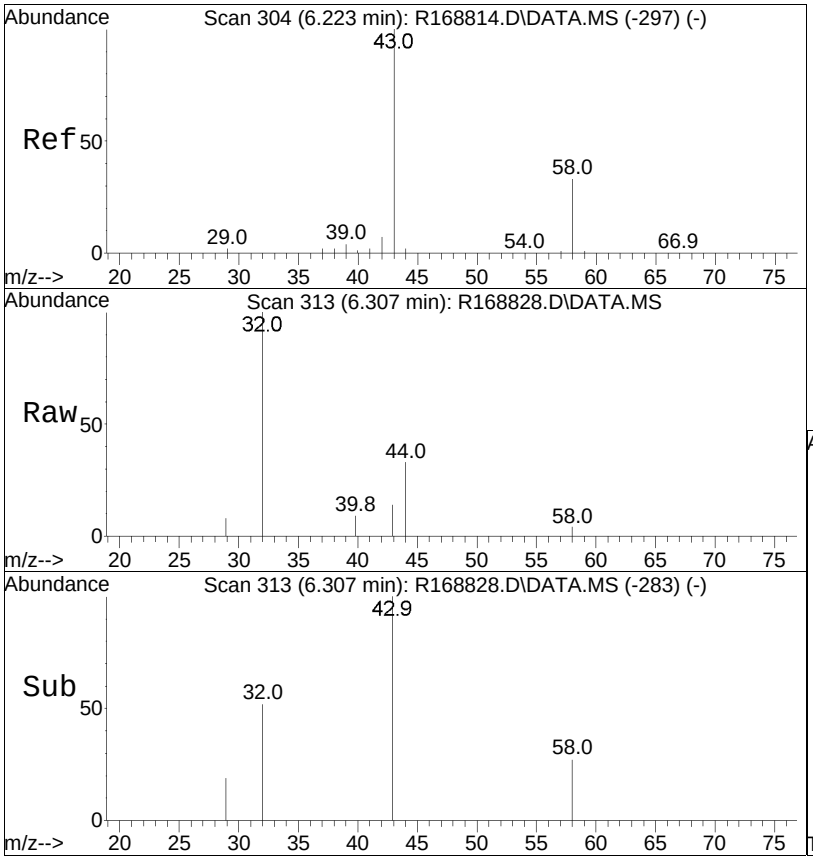


#15
ethanol
Concen: 2.66 ppbV
RT: 5.627 min Scan# 240
Delta R.T. 0.046 min
Lab File: R168828.D
Acq: 24 Oct 2019 4:24 pm

Tgt Ion: 31 Resp: 17900

Ion	Ratio	Lower	Upper
31	100		
45	70.0	54.3	81.5

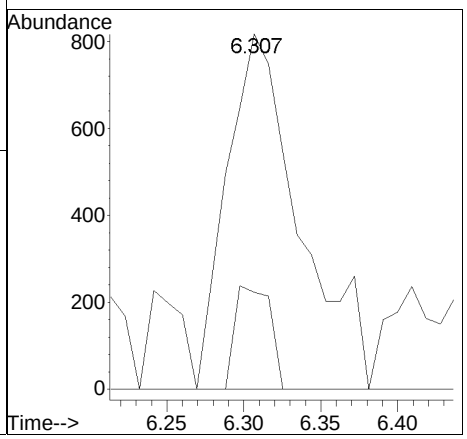




#19
acetone
Concen: 0.14 ppbV m
RT: 6.307 min Scan# 313
Delta R.T. 0.084 min
Lab File: R168828.D
Acq: 24 Oct 2019 4:24 pm

Tgt Ion: 43 Resp: 2694

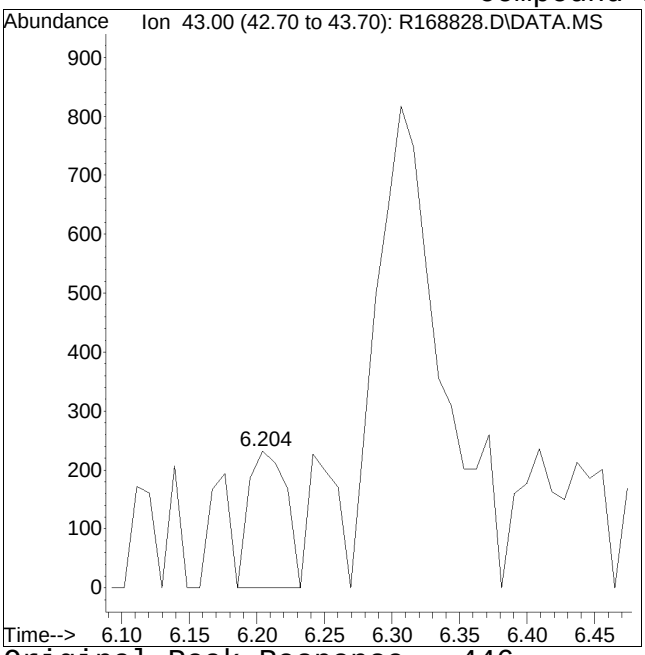
Ion	Ratio	Lower	Upper
43	100		
58	27.3	26.5	39.7
57	0.0	0.8	1.2#

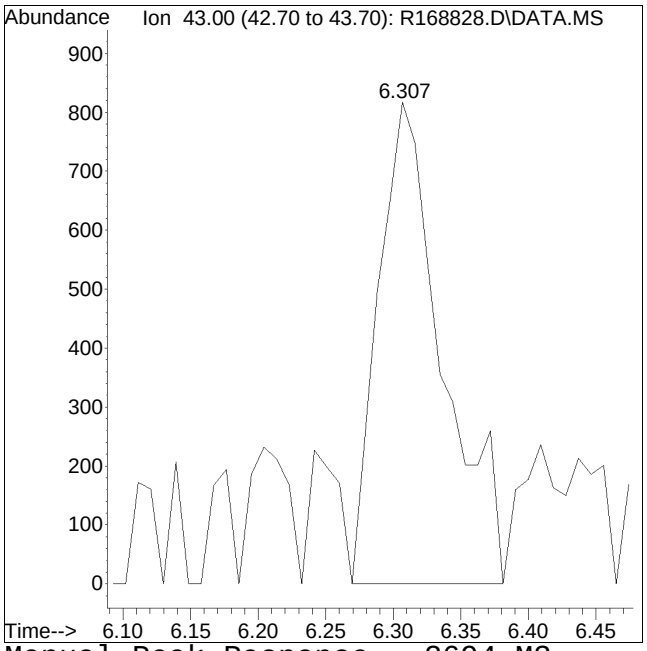


Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TFS1_191023.M
Data File : R168828.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 4:24 pm Instrument : Air Piano 1
Sample : WG1300314-4,3,250,250 Quant Date : 10/24/2019 4:48 pm

Compound #19: acetone





Original Peak Response = 446 Manual Peak Response = 2694 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	108	0.00
2		chlorodifluoromethane	10.000	8.678	13.2	95	0.00
3		propylene	10.000	10.751	-7.5	117	0.00
4		propane	10.000	9.122	8.8	97	0.00
5		dichlorodifluoromethane	10.000	8.937	10.6	100	0.00
6	C	chloromethane	10.000	9.780	2.2	104	0.00
7		Freon-114	10.000	9.923	0.8	104	0.00
8	C	methanol	50.000	42.867	14.3	87	-0.01
9	C	vinyl chloride	10.000	9.824	1.8	106	0.00
10	C	1,3-butadiene	10.000	9.805	2.0	104	0.00
11		butane	10.000	8.302	17.0	92	0.00
13	C	bromomethane	10.000	9.498	5.0	104	0.00
14	C	chloroethane	10.000	9.799	2.0	106	0.00
15		ethanol	50.000	42.369	15.3	91	0.00
16		dichlorofluoromethane	10.000	8.808	11.9	97	0.00
17	C	vinyl bromide	10.000	9.566	4.3	104	0.00
18	C	acrolein	10.000	9.170	8.3	103	0.00
19		acetone	50.000	40.665	18.7	85	0.00
20	C	acetonitrile	10.000	8.588	14.1	99	0.00
21		trichlorofluoromethane	10.000	9.860	1.4	106	0.00
22		isopropyl alcohol	25.000	20.893	16.4	92	0.00
23	C	acrylonitrile	10.000	8.882	11.2	102	0.00
24		pentane	10.000	8.213	17.9	97	0.00
25		ethyl ether	10.000	8.587	14.1	95	0.00
26	C	1,1-dichloroethene	10.000	9.709	2.9	106	0.00
27		tertiary butyl alcohol	10.000	9.400	6.0	102	0.00
28	C	methylene chloride	10.000	9.565	4.4	103	0.00
29	C	3-chloropropene	10.000	9.381	6.2	113	0.00
30	C	carbon disulfide	10.000	9.078	9.2	100	0.00
31		Freon 113	10.000	9.984	0.2	107	0.00
32		trans-1,2-dichloroethene	10.000	10.269	-2.7	123	0.00
33	C	1,1-dichloroethane	10.000	10.161	-1.6	123	0.00
34	C	MTBE	10.000	10.031	-0.3	109	0.00
35	C	vinyl acetate	10.000	10.101	-1.0	107	0.00
36	C	2-butanone	10.000	9.810	1.9	103	0.00
37		cis-1,2-dichloroethene	10.000	10.754	-7.5	107	0.00
38		Ethyl Acetate	10.000	9.876	1.2	106	-0.01
39	C	chloroform	10.000	10.031	-0.3	106	0.00
40		Tetrahydrofuran	10.000	9.389	6.1	107	-0.01

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	10.000	9.147	8.5	99	0.00
42	C	1,2-dichloroethane	10.000	9.503	5.0	102	-0.01
43	I	1,4-difluorobenzene	10.000	10.000	0.0	105	0.00
44	C	hexane	10.000	10.061	-0.6	106	0.00
45		diisopropyl ether	10.000	9.424	5.8	101	0.00
46		tert-butyl ethyl ether	10.000	9.307	6.9	97	0.00
48	C	1,1,1-trichloroethane	10.000	10.106	-1.1	110	0.00
49		1,1-dichloropropene	10.000	9.756	2.4	104	0.00
50	C	benzene	10.000	9.792	2.1	104	0.00
52	C	carbon tetrachloride	10.000	10.121	-1.2	107	0.00
53		cyclohexane	10.000	9.965	0.4	107	0.00
54		tert-amyl methyl ether	10.000	9.571	4.3	102	0.00
55		dibromomethane	10.000	9.441	5.6	101	-0.01
56	C	1,2-dichloropropane	10.000	10.307	-3.1	110	0.00
57		bromodichloromethane	10.000	10.397	-4.0	108	0.00
58	C	1,4-dioxane	10.000	10.323	-3.2	105	0.00
59	C	trichloroethene	10.000	10.367	-3.7	108	0.00
60	C	2,2,4-trimethylpentane	10.000	10.170	-1.7	107	-0.01
61		methyl methacrylate	10.000	7.912	20.9	77	0.00
62		heptane	10.000	10.301	-3.0	111	0.00
63	C	cis-1,3-dichloropropene	10.000	11.068	-10.7	113	0.00
64	C	4-methyl-2-pentanone	10.000	10.390	-3.9	106	-0.02
65		trans-1,3-dichloropropene	10.000	9.386	6.1	96	0.00
66	C	1,1,2-trichloroethane	10.000	10.399	-4.0	110	0.00
67	I	chlorobenzene-D5	10.000	10.000	0.0	103	0.00
68	C	toluene	10.000	10.009	-0.1	105	0.00
71		1,3-dichloropropane	10.000	9.596	4.0	98	0.00
72		2-hexanone	10.000	11.411	-14.1	108	0.00
74		dibromochloromethane	10.000	10.809	-8.1	107	0.00
75	C	1,2-dibromoethane	10.000	10.272	-2.7	105	0.00
76		butyl acetate	10.000	9.722	2.8	98	0.00
77		octane	10.000	9.496	5.0	98	0.00
78	C	tetrachloroethene	10.000	10.329	-3.3	106	0.00
79		1,1,1,2-tetrachloroethane	10.000	9.603	4.0	100	0.00
80	C	chlorobenzene	10.000	10.340	-3.4	106	0.00
81	C	ethylbenzene	10.000	10.225	-2.2	107	0.00
83	C	m+p-xylene	20.000	20.577	-2.9	107	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84	C	bromoform	10.000	10.745	-7.4	109	0.00
85	C	styrene	10.000	10.201	-2.0	104	0.00
86	C	1,1,2,2-tetrachloroethane	10.000	10.552	-5.5	104	0.00
87	C	o-xylene	10.000	10.492	-4.9	107	0.00
88		1,2,3-trichloropropane	10.000	9.485	5.2	98	0.00
89		nonane	10.000	9.495	5.1	98	0.00
91	C	isopropylbenzene	10.000	10.037	-0.4	103	0.00
92		bromobenzene	10.000	9.683	3.2	100	0.00
93		2-chlorotoluene	10.000	9.167	8.3	97	0.00
94		n-propylbenzene	10.000	9.811	1.9	99	0.00
95		4-chlorotoluene	10.000	9.372	6.3	97	0.00
96		4-ethyl toluene	10.000	10.144	-1.4	102	0.00
97		1,3,5-trimethylbenzene	10.000	10.260	-2.6	103	0.00
98		tert-butylbenzene	10.000	10.084	-0.8	99	0.00
99		1,2,4-trimethylbenzene	10.000	10.749	-7.5	104	0.00
100		decane	10.000	10.198	-2.0	100	0.00
101	C	Benzyl Chloride	10.000	10.687	-6.9	100	0.00
102		1,3-dichlorobenzene	10.000	10.351	-3.5	102	0.00
103	C	1,4-dichlorobenzene	10.000	10.293	-2.9	101	0.00
104		sec-butylbenzene	10.000	9.953	0.5	99	0.00
106		p-isopropyltoluene	10.000	9.313	6.9	91	0.00
107		1,2-dichlorobenzene	10.000	10.533	-5.3	103	0.00
108		n-butylbenzene	10.000	10.532	-5.3	101	0.00
111	C	1,2-dibromo-3-chloropropane	10.000	9.887	1.1	92	0.00
112		undecane	10.000	10.991	-9.9	98	0.00
114		dodecane	10.000	11.713	-17.1	91	0.00
115	C	1,2,4-trichlorobenzene	10.000	11.947	-19.5	94	0.00
116		naphthalene	10.000	9.688	3.1	84	0.00
117		1,2,3-trichlorobenzene	10.000	11.161	-11.6	89	0.00
119	C	hexachlorobutadiene	10.000	12.223	-22.2	101	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	325698	10.000	ppbV	0.00
Standard Area = 325698			Recovery = 100.00%			
43) 1,4-difluorobenzene	12.348	114	741488	10.000	ppbV	0.00
Standard Area = 741488			Recovery = 100.00%			
67) chlorobenzene-D5	16.796	54	123702	10.000	ppbV	0.00
Standard Area = 123702			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	3.915	41	104350M6	10.751	ppbV	
5) dichlorodifluoromethane	4.015	85	279369	8.937	ppbV	98
6) chloromethane	4.227	50	103989	9.780	ppbV	96
7) Freon-114	4.384	85	361101	9.923	ppbV	98
9) vinyl chloride	4.540	62	128219	9.824	ppbV	99
10) 1,3-butadiene	4.730	54	93065	9.805	ppbV	95
13) bromomethane	5.116	94	135794	9.498	ppbV	99
14) chloroethane	5.367	64	61731	9.799	ppbV	100
15) ethanol	5.581	31	300660	42.369	ppbV	99
17) vinyl bromide	5.860	106	135994	9.566	ppbV	98
19) acetone	6.223	43	796042	40.665	ppbV	100
21) trichlorofluoromethane	6.437	101	324043	9.860	ppbV	97
22) isopropyl alcohol	6.595	45	452561	20.893	ppbV	100
26) 1,1-dichloroethene	7.284	61	199748	9.709	ppbV	98
27) tertiary butyl alcohol	7.396	59	240088	9.400	ppbV	99
28) methylene chloride	7.470	49	135715	9.565	ppbV	97
29) 3-chloropropene	7.619	41	147455	9.381	ppbV	99
30) carbon disulfide	7.787	76	377464	9.078	ppbV	100
31) Freon 113	7.805	101	280799	9.984	ppbV	97
32) trans-1,2-dichloroethene	8.652	61	218216	10.269	ppbV	96
33) 1,1-dichloroethane	8.904	63	272733	10.161	ppbV	98
34) MTBE	8.993	73	393188	10.031	ppbV	99
35) vinyl acetate	9.115	43	278249	10.101	ppbV	100
36) 2-butanone	9.407	43	282456	9.810	ppbV	99
37) cis-1,2-dichloroethene	9.917	61	240500	10.754	ppbV	98
38) Ethyl Acetate	10.207	61	64802	9.876	ppbV	91
39) chloroform	10.271	83	400400	10.031	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	Tetrahydrofuran	10.738	42	162493M6	9.389	ppbV		
42)	1,2-dichloroethane	11.116	62	185697	9.503	ppbV		98
44)	hexane	10.164	57	289370	10.061	ppbV		92
48)	1,1,1-trichloroethane	11.404	97	296302	10.106	ppbV		97
50)	benzene	11.929	78	465464	9.792	ppbV		100
52)	carbon tetrachloride	12.104	117	304482	10.121	ppbV		96
53)	cyclohexane	12.244	56	233173	9.965	ppbV		98
56)	1,2-dichloropropane	12.872	63	185110	10.307	ppbV		99
57)	bromodichloromethane	13.093	83	363250	10.397	ppbV		99
58)	1,4-dioxane	13.151	88	111257	10.323	ppbV		97
59)	trichloroethene	13.140	130	227572	10.367	ppbV		99
60)	2,2,4-trimethylpentane	13.163	57	744474	10.170	ppbV		99
62)	heptane	13.466	43	271367	10.301	ppbV		99
63)	cis-1,3-dichloropropene	14.123	75	285020	11.068	ppbV		98
64)	4-methyl-2-pentanone	14.158	43	352779	10.390	ppbV		99
65)	trans-1,3-dichloropropene	14.713	75	234486	9.386	ppbV		99
66)	1,1,2-trichloroethane	14.909	97	208016	10.399	ppbV		98
68)	toluene	15.188	91	585331	10.009	ppbV		100
72)	2-hexanone	15.446	43	341198	11.411	ppbV	#	82
74)	dibromochloromethane	15.611	129	391625	10.809	ppbV		99
75)	1,2-dibromoethane	15.848	107	335075	10.272	ppbV		99
78)	tetrachloroethene	16.251	166	294415	10.329	ppbV		98
80)	chlorobenzene	16.836	112	483007	10.340	ppbV		99
81)	ethylbenzene	17.134	91	756302	10.225	ppbV		100
83)	m+p-xylene	17.278	91	1170747	20.577	ppbV		99
84)	bromoform	17.353	173	400694	10.745	ppbV		99
85)	styrene	17.557	104	464684	10.201	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.642	83	483759	10.552	ppbV		99
87)	o-xylene	17.642	91	604497	10.492	ppbV		98
96)	4-ethyl toluene	18.572	105	889163	10.144	ppbV		98
97)	1,3,5-trimethylbenzene	18.627	105	709941	10.260	ppbV		99
99)	1,2,4-trimethylbenzene	18.937	105	728467	10.749	ppbV		97
101)	Benzyl Chloride	19.052	91	625518	10.687	ppbV		99
102)	1,3-dichlorobenzene	19.070	146	529301	10.351	ppbV		98
103)	1,4-dichlorobenzene	19.118	146	532099	10.293	ppbV		99
107)	1,2-dichlorobenzene	19.378	146	512966	10.533	ppbV		99
115)	1,2,4-trichlorobenzene	20.814	180	482565	11.947	ppbV		97
119)	hexachlorobutadiene	21.234	225	416369	12.223	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : Default-LCS-AP2 - All compounds listed

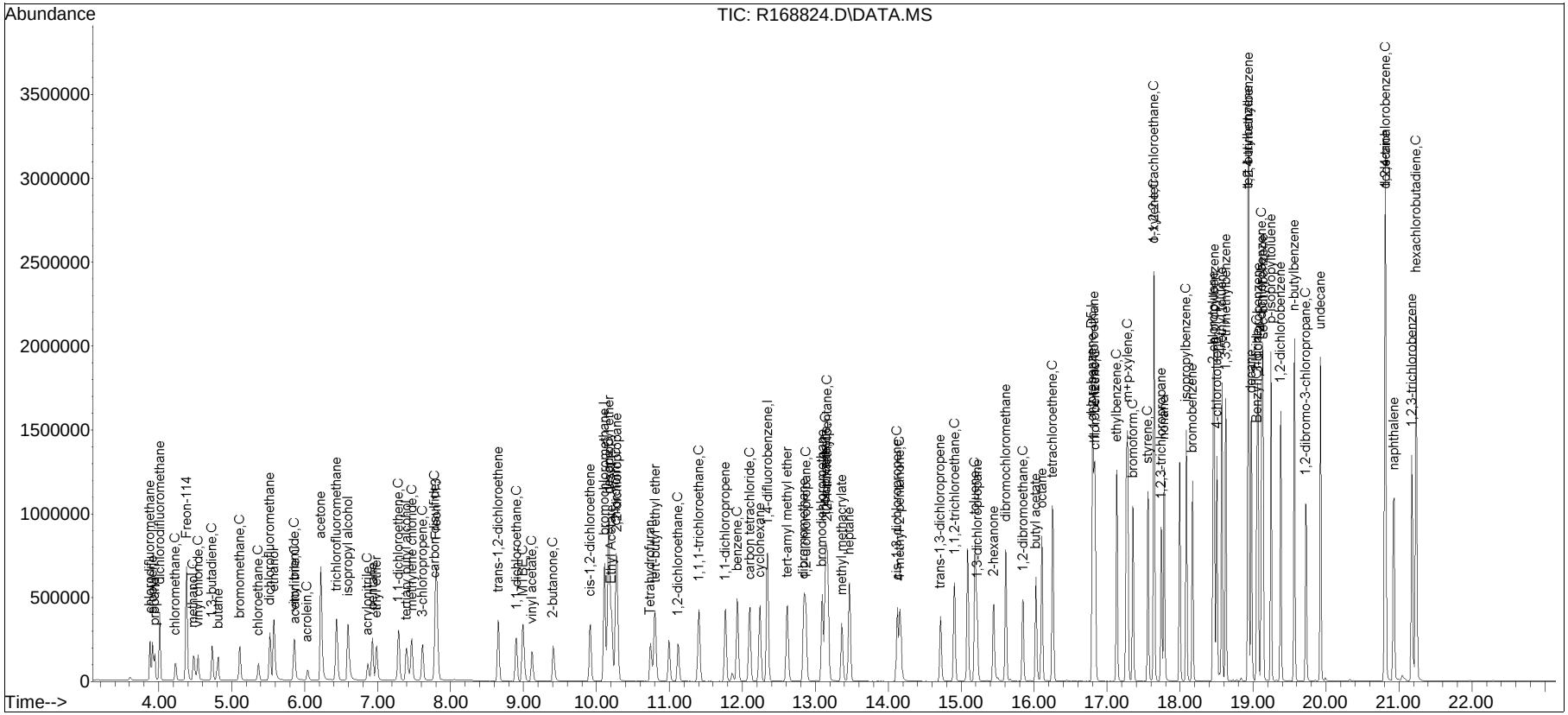
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

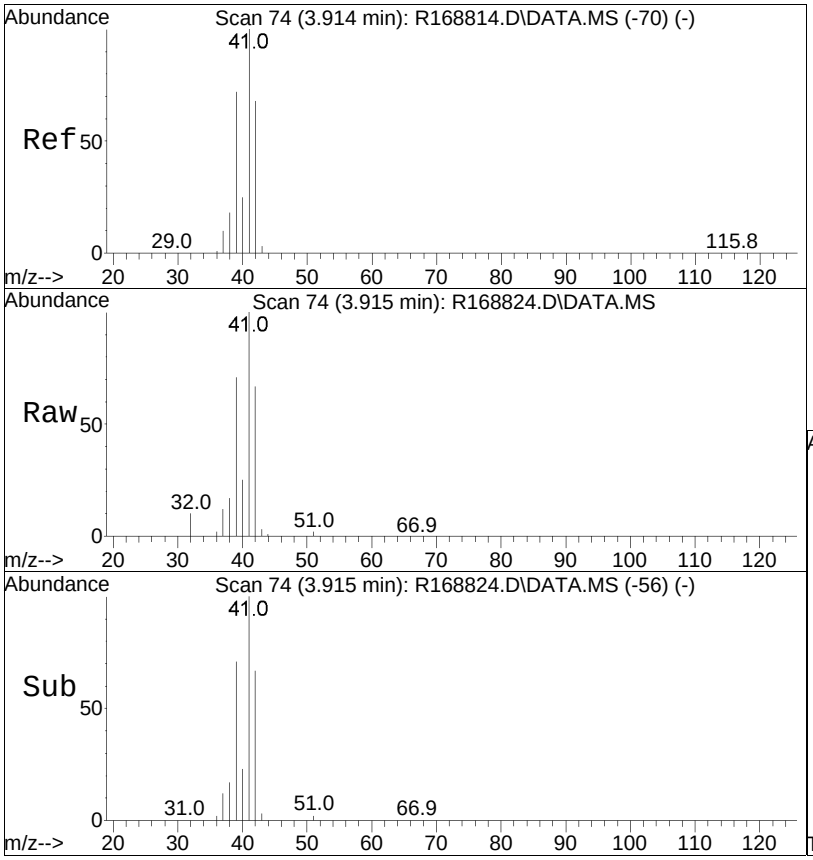
Sub List : Default-LCS-AP2 - All compounds listed68824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168824.D
Acq On : 24 Oct 2019 1:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-3,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:12:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration



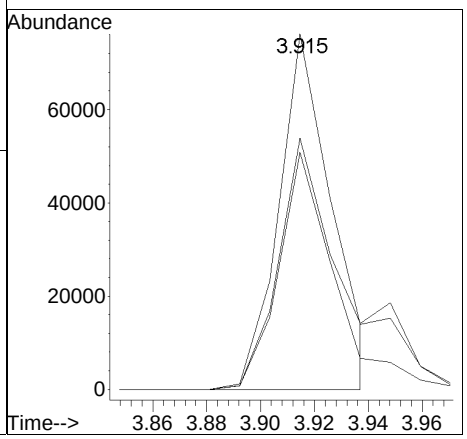
TFS1_191023.M Fri Oct 25 14:51:40 2019 Page: 4

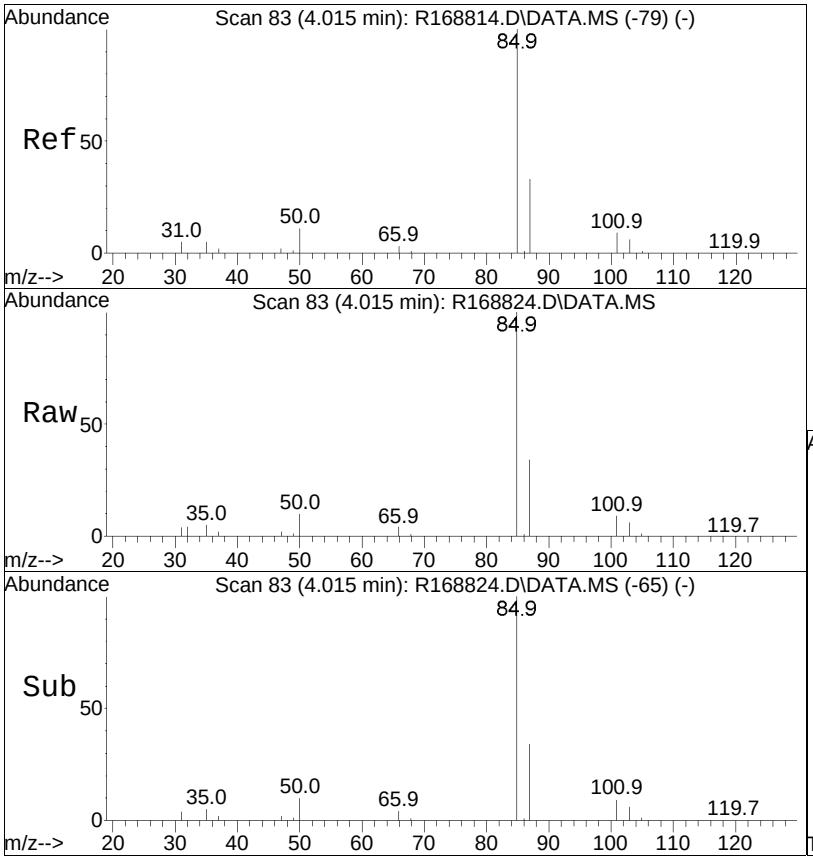


#3
propylene
Concen: 10.75 ppbV m
RT: 3.915 min Scan# 74
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 41 Resp: 104350

Ion	Ratio	Lower	Upper
41	100		
42	66.7	54.3	81.5
39	70.7	57.9	86.9

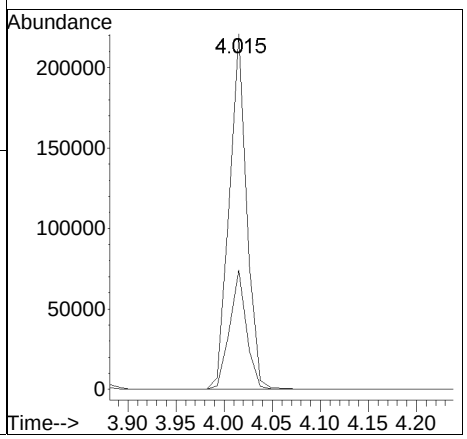


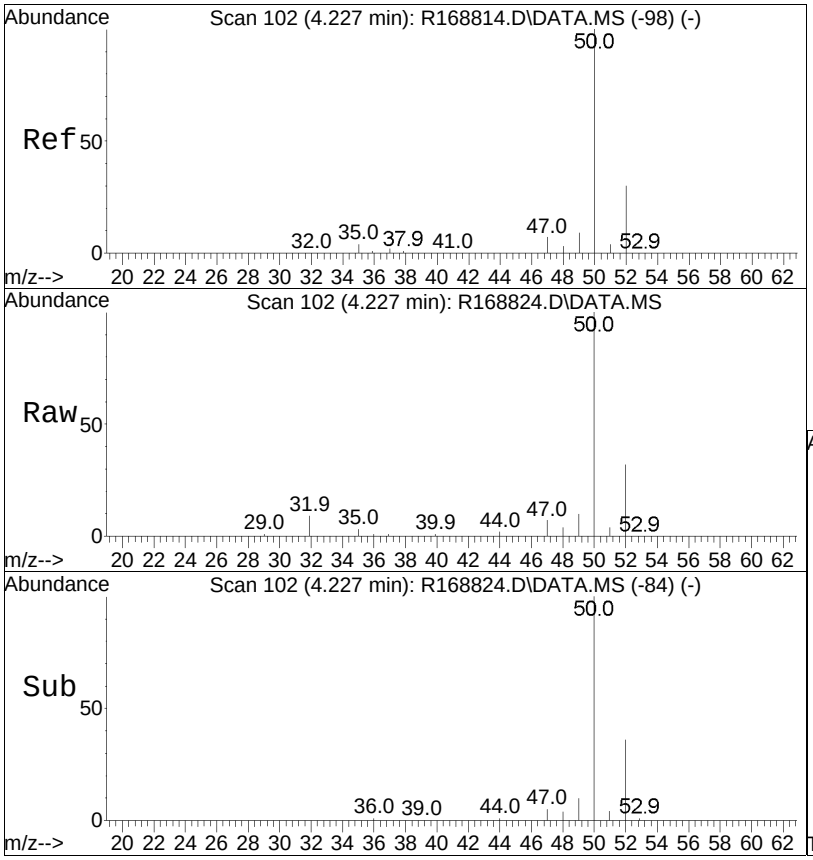


#5
dichlorodifluoromethane
Concen: 8.94 ppbV
RT: 4.015 min Scan# 83
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 85 Resp: 279369

Ion	Ratio	Lower	Upper
85	100		
87	33.6	26.1	39.1

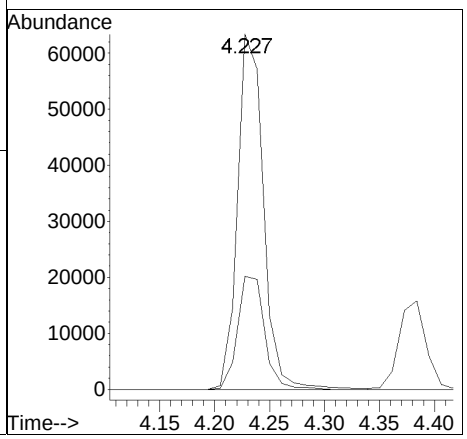


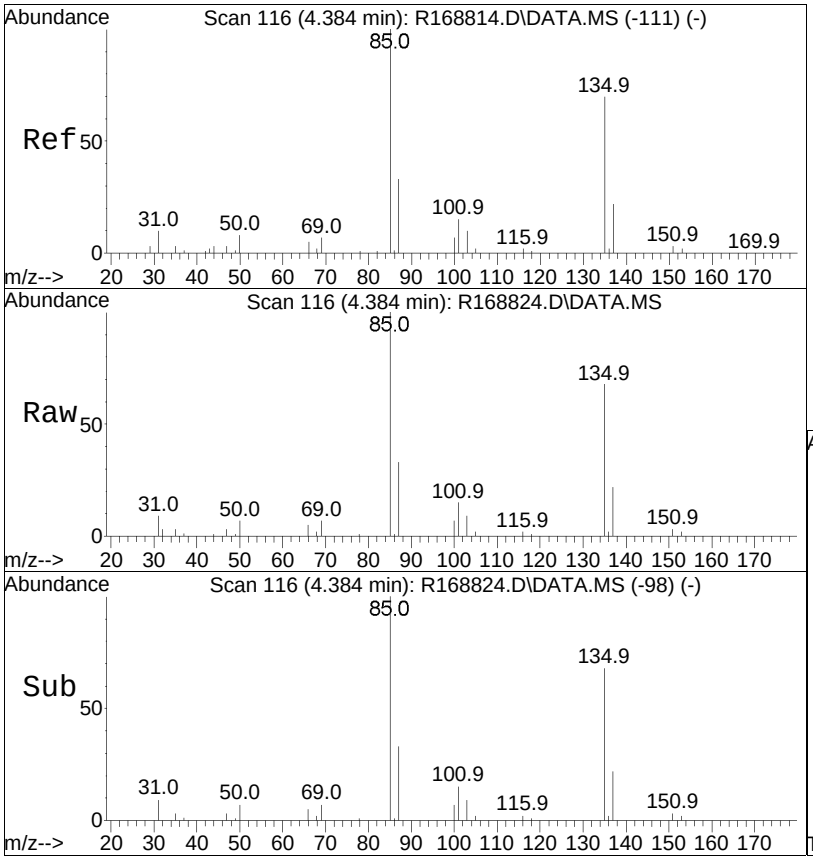


#6
chloromethane
Concen: 9.78 ppbV
RT: 4.227 min Scan# 102
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 50 Resp: 103989

Ion	Ratio	Lower	Upper
50	100		
52	31.8	23.7	35.5

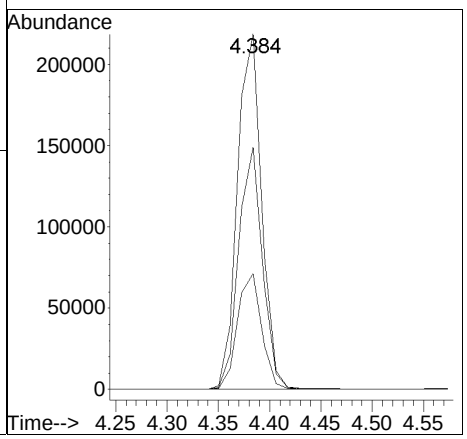


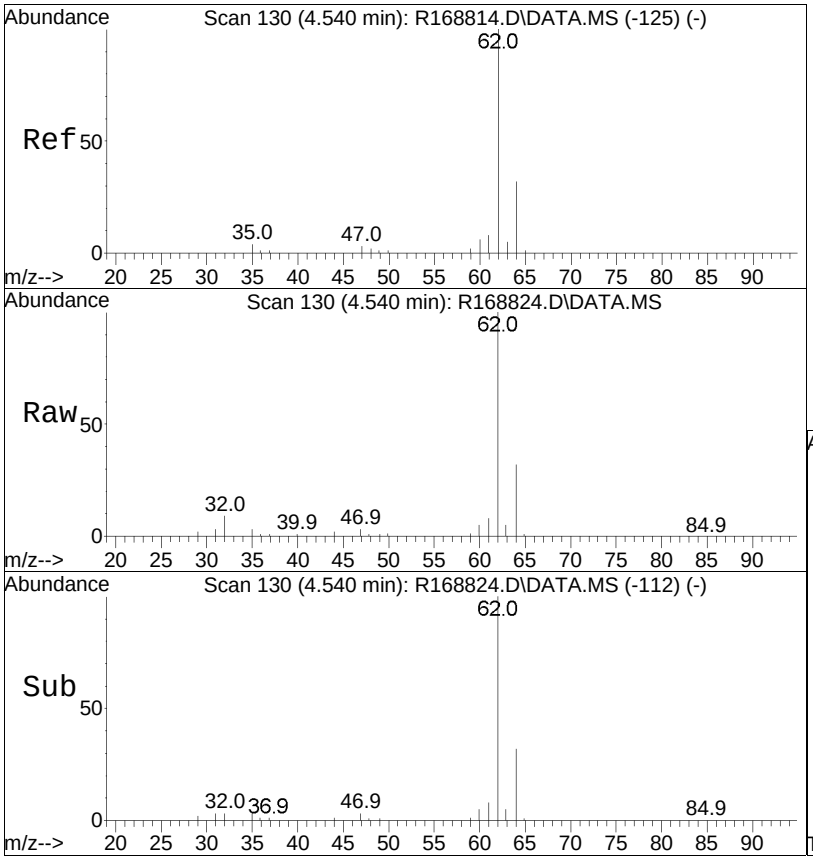


#7
Freon-114
Concen: 9.92 ppbV
RT: 4.384 min Scan# 116
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 85 Resp: 361101

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.6	40.0
135	68.2	55.8	83.6

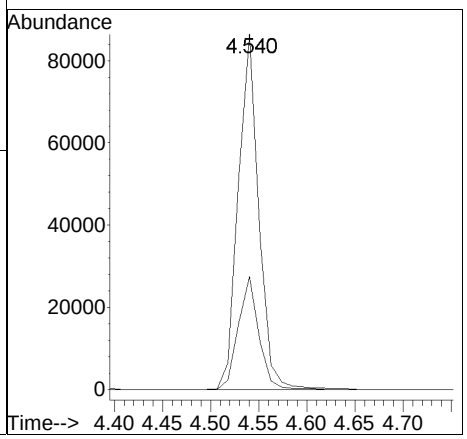


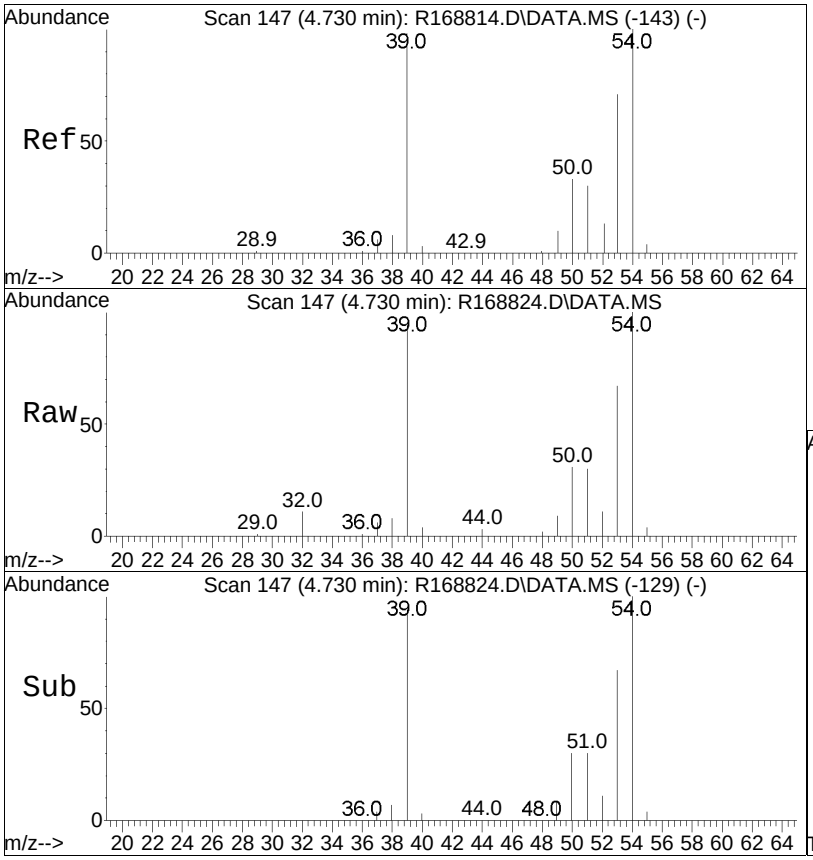


#9
vinyl chloride
Concen: 9.82 ppbV
RT: 4.540 min Scan# 130
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 62 Resp: 128219

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.7	38.5

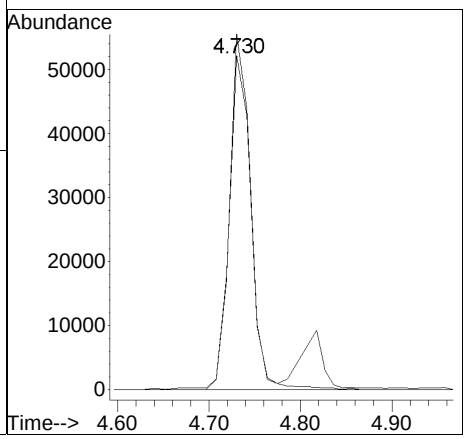


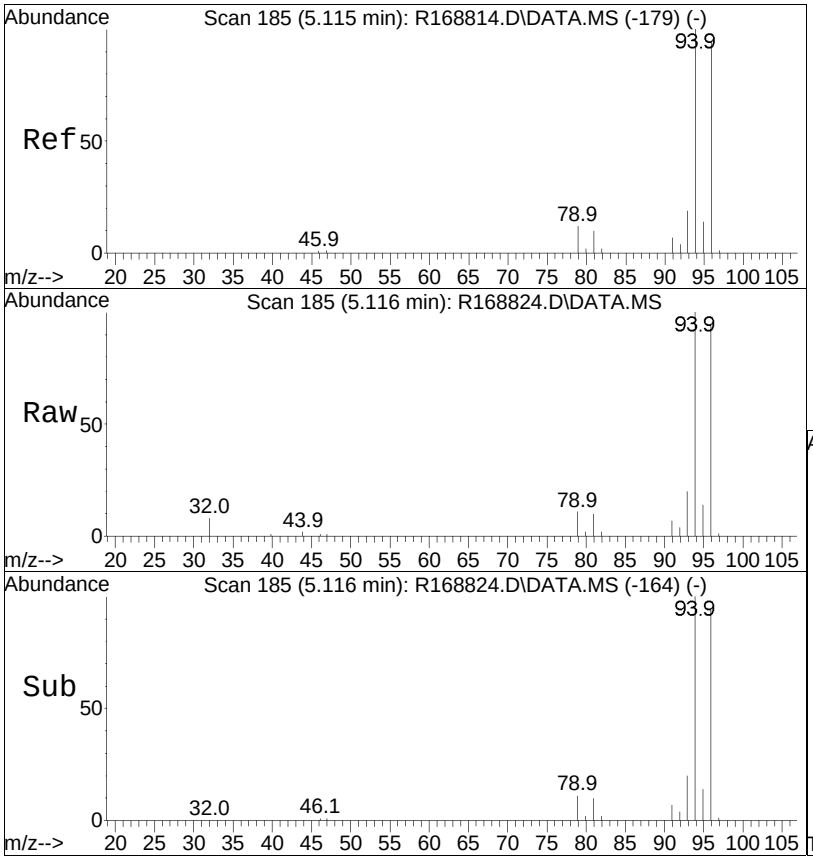


#10
1,3-butadiene
Concen: 9.80 ppbV
RT: 4.730 min Scan# 147
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 54 Resp: 93065

Ion	Ratio	Lower	Upper
54	100		
39	93.9	79.2	118.8

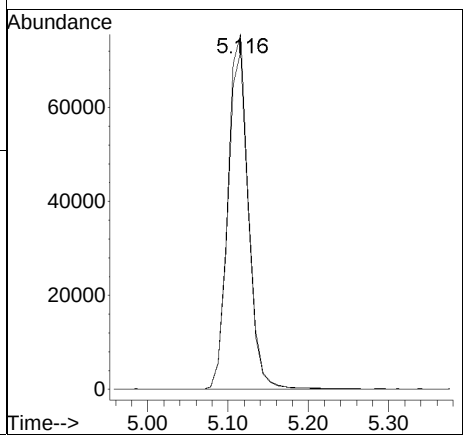


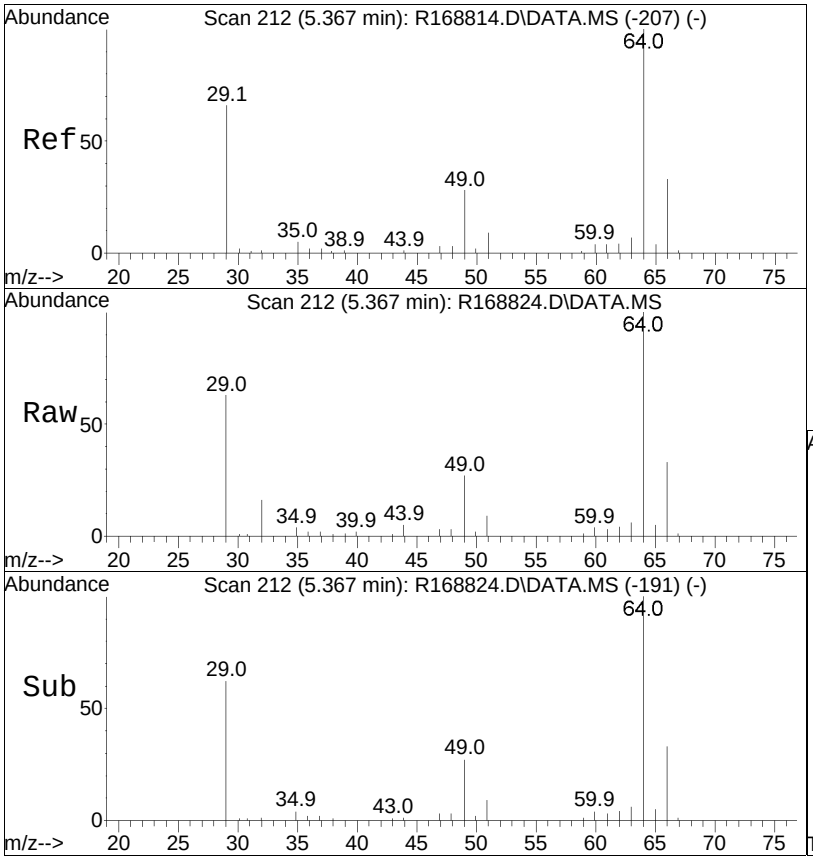


#13
bromomethane
Concen: 9.50 ppbV
RT: 5.116 min Scan# 185
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 94 Resp: 135794

Ion	Ratio	Lower	Upper
94	100		
96	95.2	75.6	113.4

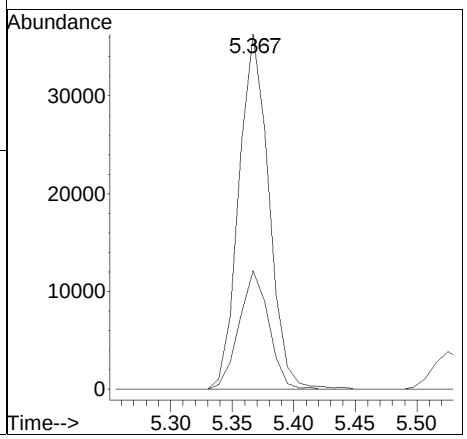


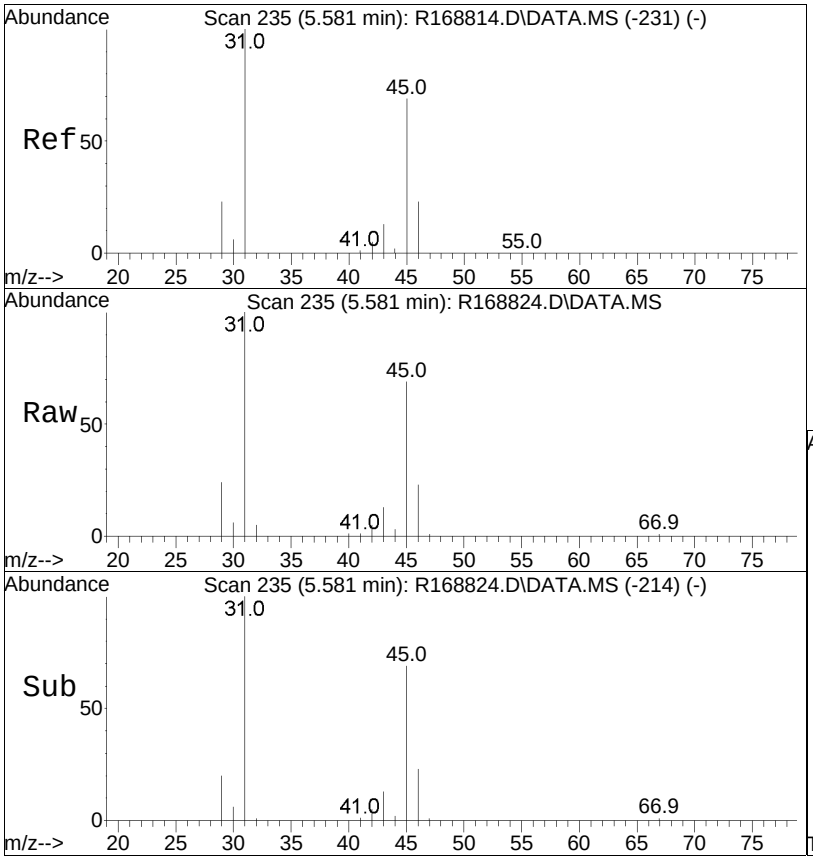


#14
chloroethane
Concen: 9.80 ppbV
RT: 5.367 min Scan# 212
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 64 Resp: 61731

Ion	Ratio	Lower	Upper
64	100		
66	33.4	26.6	39.8

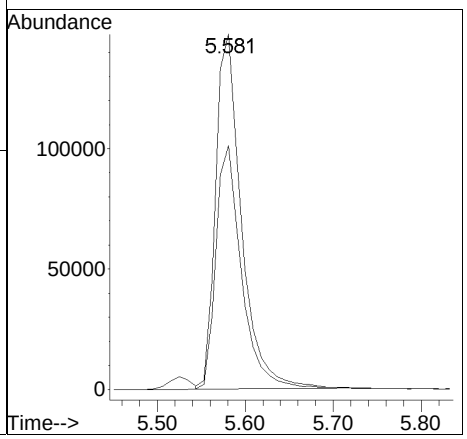


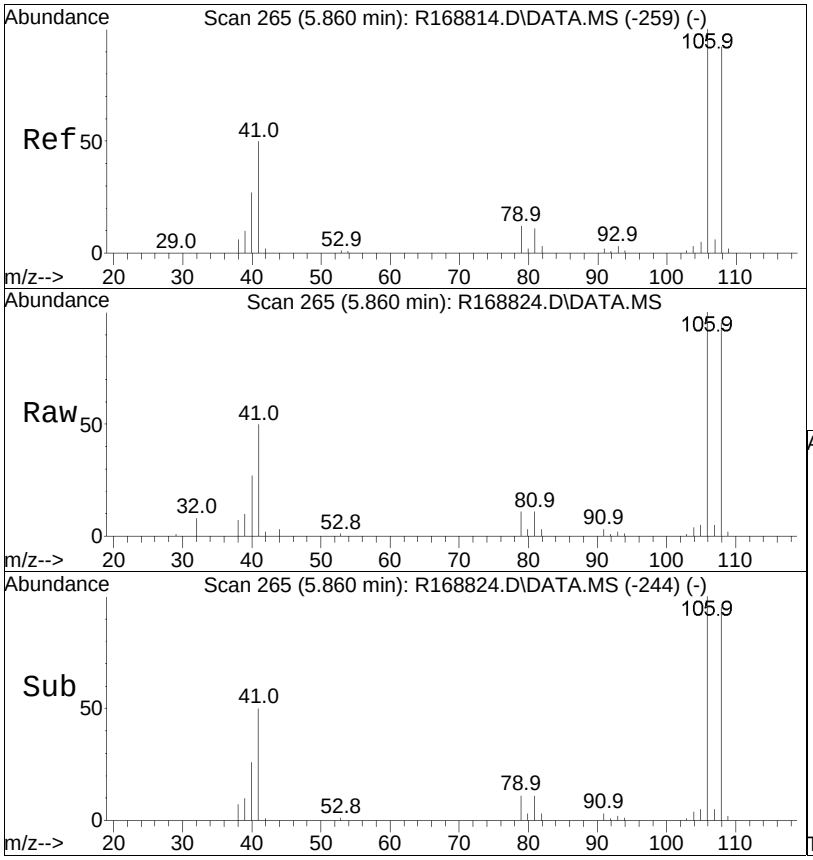


#15
ethanol
Concen: 42.37 ppbV
RT: 5.581 min Scan# 235
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 31 Resp: 300660

Ion	Ratio	Lower	Upper
31	100		
45	68.6	54.3	81.5

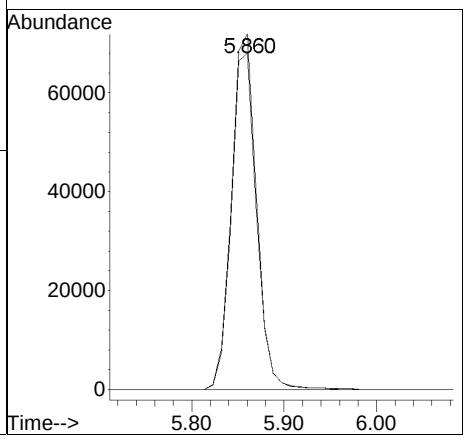


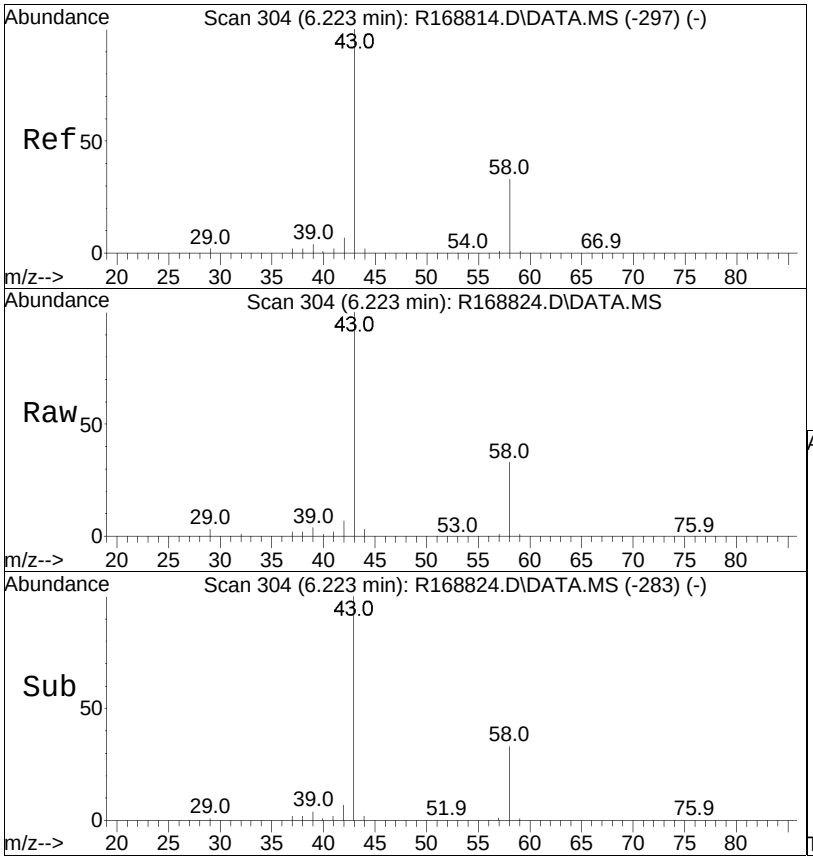


#17
vinyl bromide
Concen: 9.57 ppbV
RT: 5.860 min Scan# 265
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:106 Resp: 135994

Ion	Ratio	Lower	Upper
106	100		
108	94.6	73.8	110.8

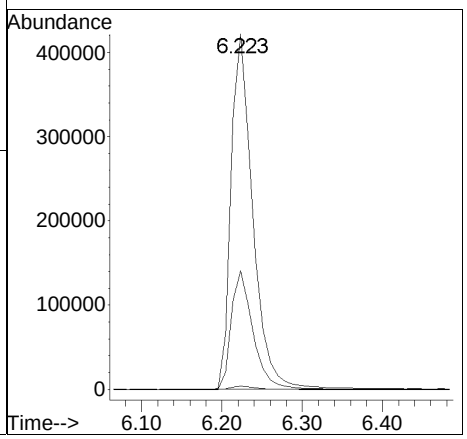


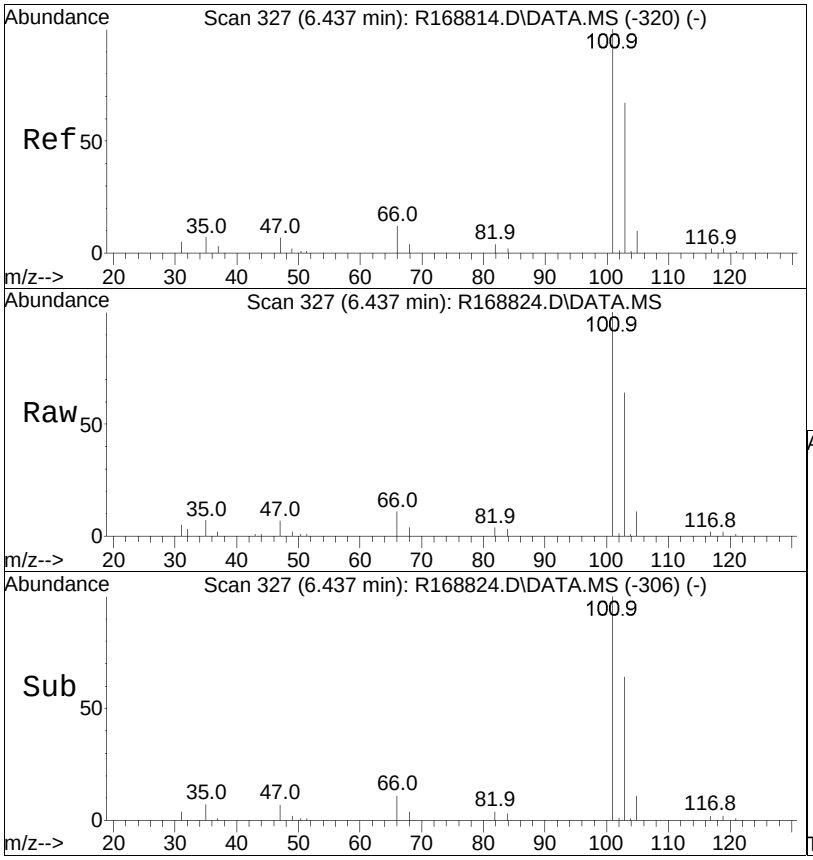


#19
acetone
Concen: 40.66 ppbV
RT: 6.223 min Scan# 304
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 796042

Ion	Ratio	Lower	Upper
43	100		
58	33.4	26.5	39.7
57	0.9	0.8	1.2

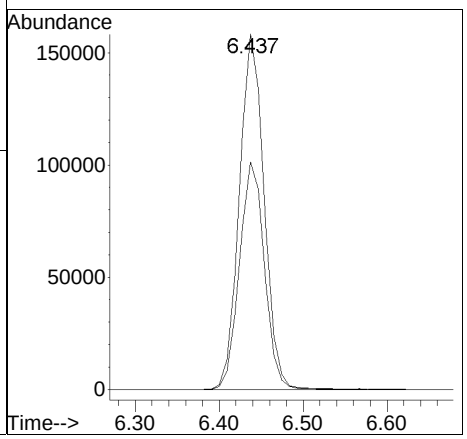


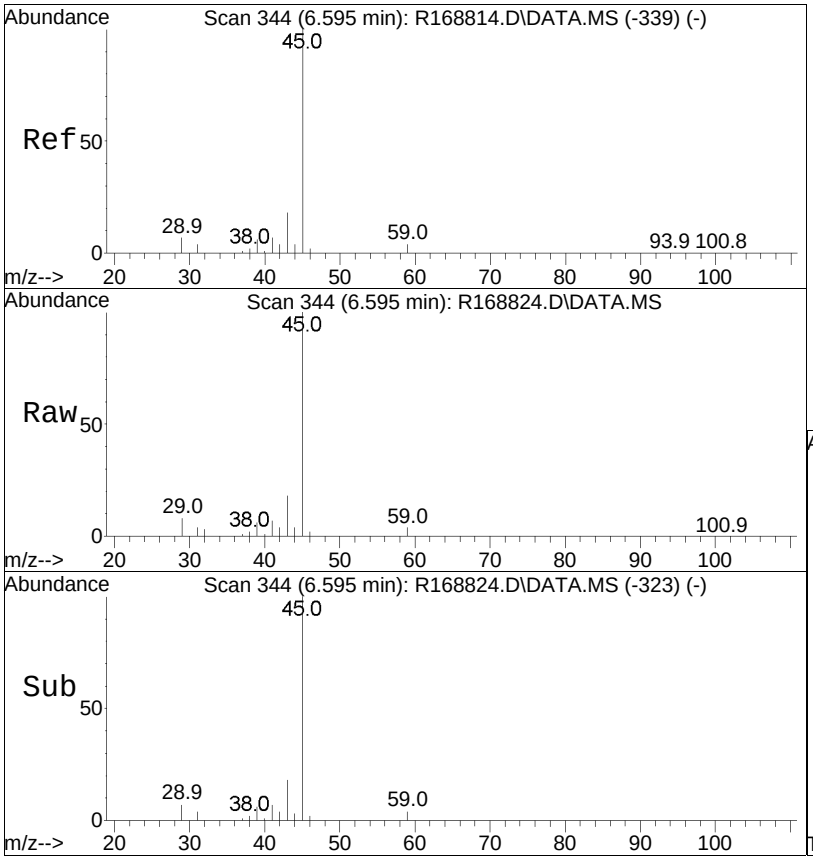


#21
trichlorofluoromethane
Concen: 9.86 ppbV
RT: 6.437 min Scan# 327
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:101 Resp: 324043

Ion	Ratio	Lower	Upper
101	100		
103	64.1	53.4	80.2

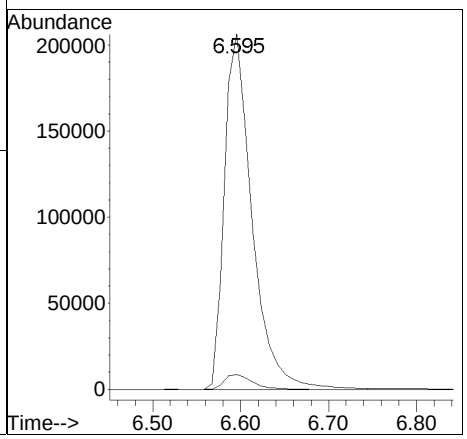


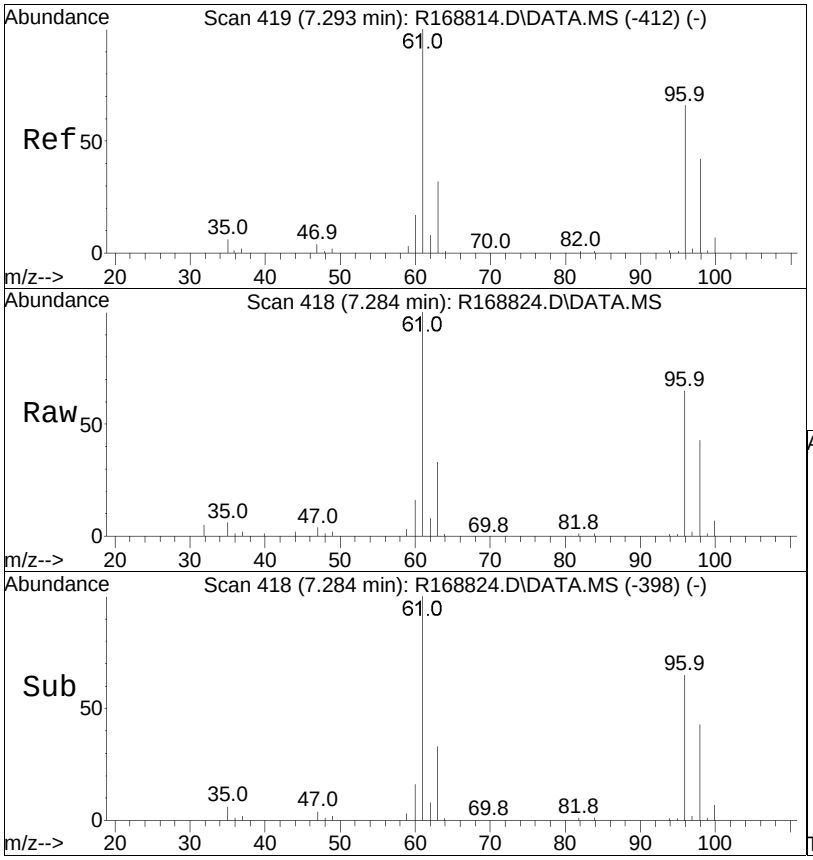


#22
isopropyl alcohol
Concen: 20.89 ppbV
RT: 6.595 min Scan# 344
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 45 Resp: 452561

Ion	Ratio	Lower	Upper
45	100		
59	4.2	3.4	5.0

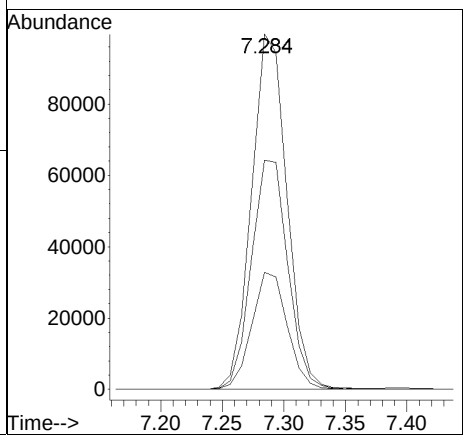


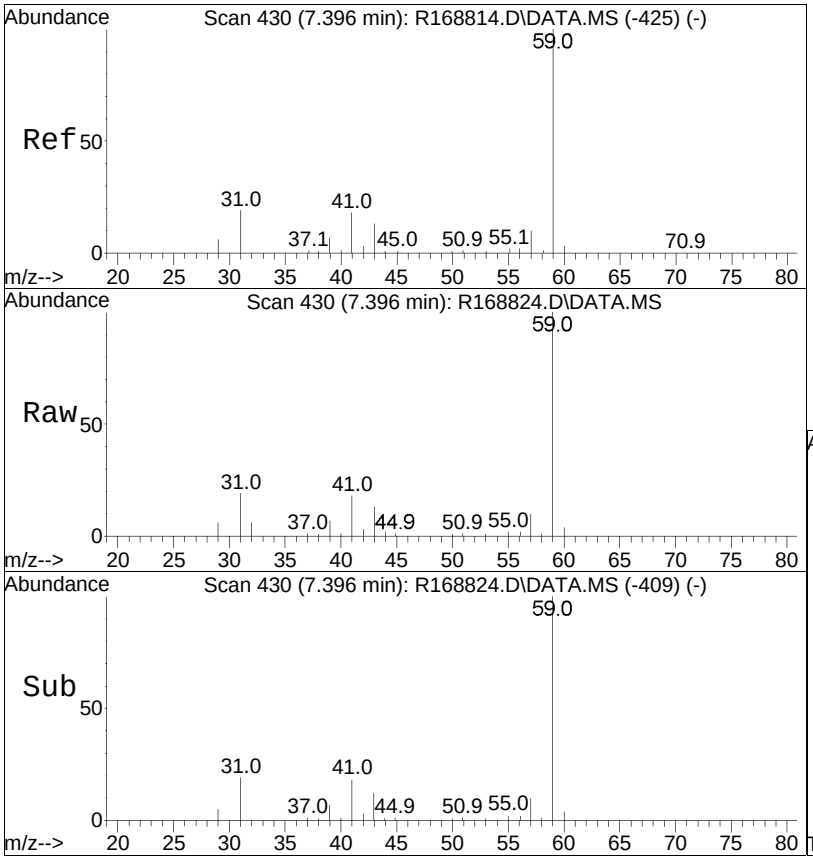


#26
1,1-dichloroethene
Concen: 9.71 ppbV
RT: 7.284 min Scan# 418
Delta R.T. -0.009 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 61 Resp: 199748

Ion	Ratio	Lower	Upper
61	100		
96	64.5	53.0	79.6
63	33.0	25.9	38.9

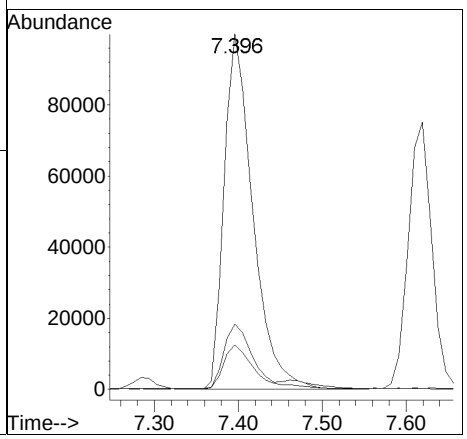


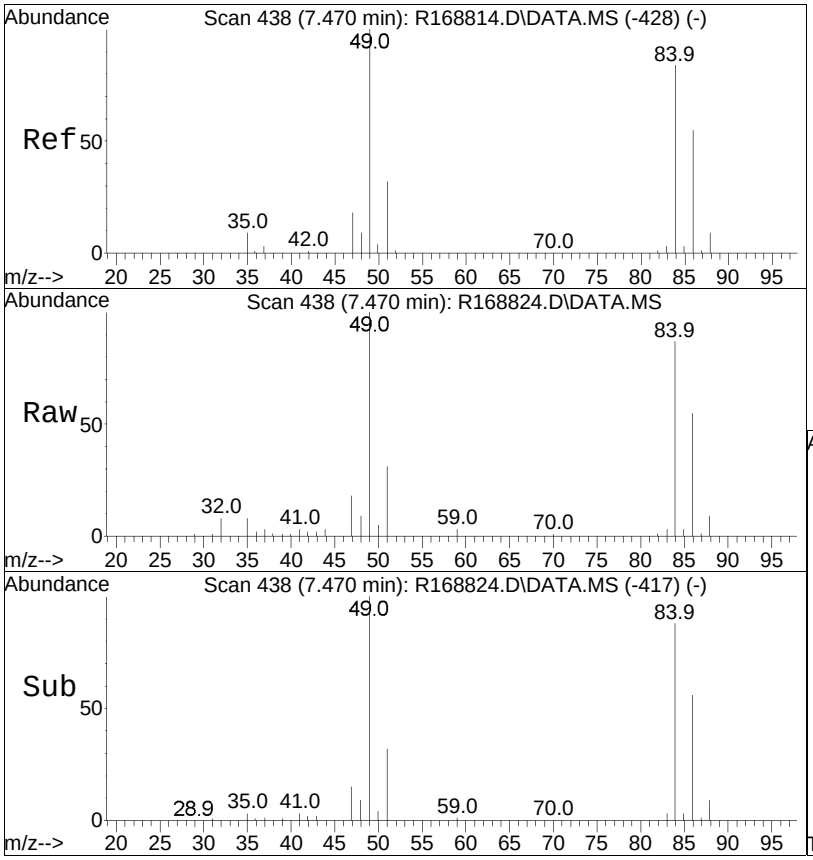


#27
tertiary butyl alcohol
Concen: 9.40 ppbV
RT: 7.396 min Scan# 430
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 59 Resp: 240088

Ion	Ratio	Lower	Upper
59	100		
41	18.4	14.9	22.3
43	12.6	10.6	15.8

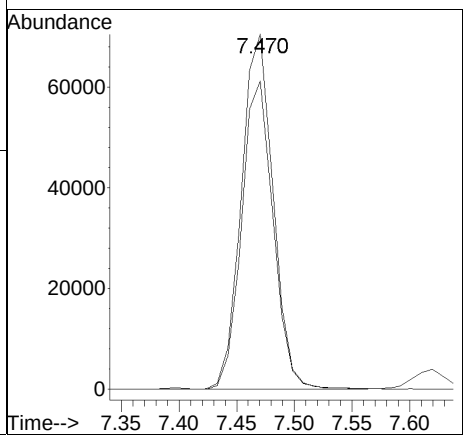


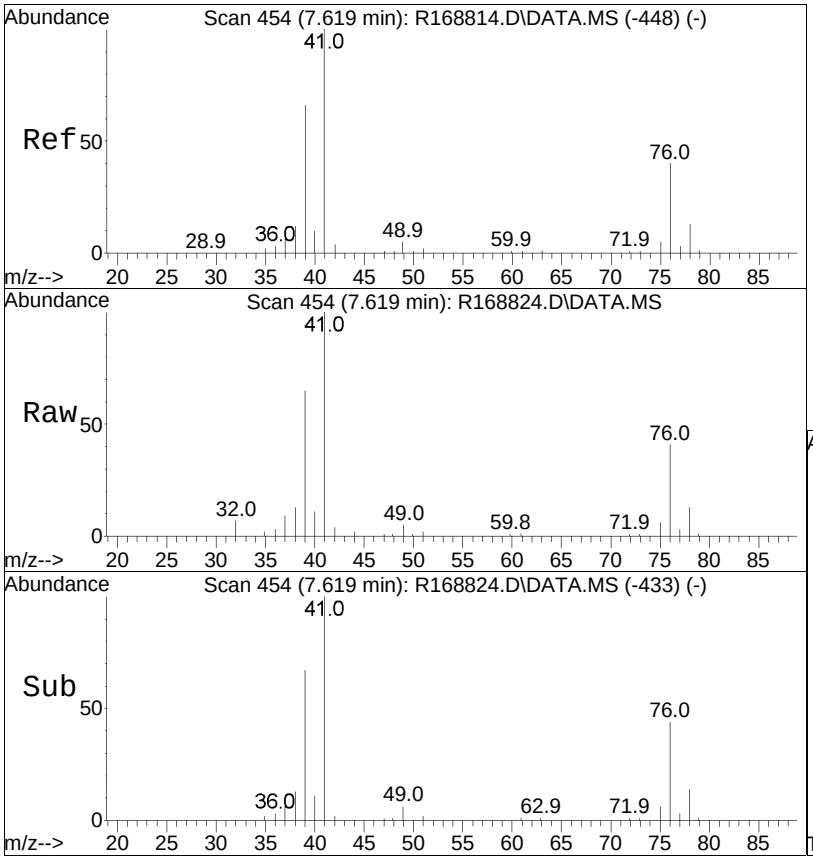


#28
methylene chloride
Concen: 9.57 ppbV
RT: 7.470 min Scan# 438
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 49 Resp: 135715

Ion	Ratio	Lower	Upper
49	100		
84	86.9	67.3	100.9

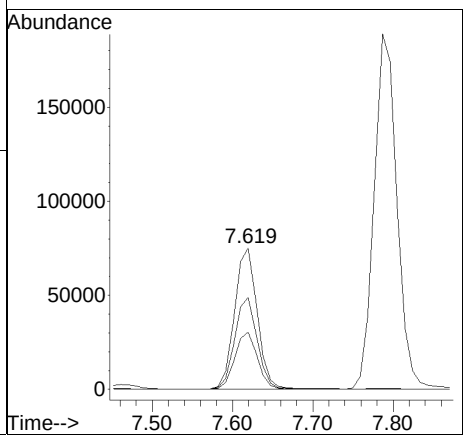


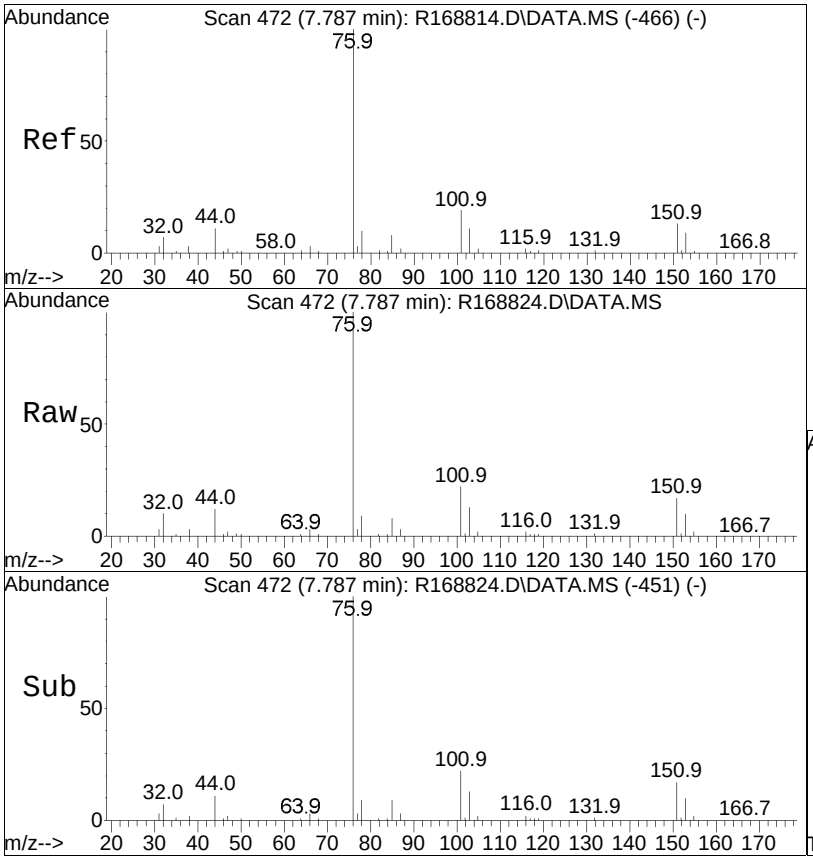


#29
3-chloropropene
Concen: 9.38 ppbV
RT: 7.619 min Scan# 454
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 41 Resp: 147455

Ion	Ratio	Lower	Upper
41	100		
39	65.0	52.5	78.7
76	40.5	31.7	47.5

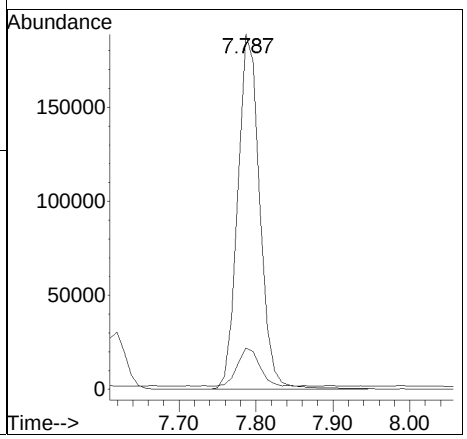


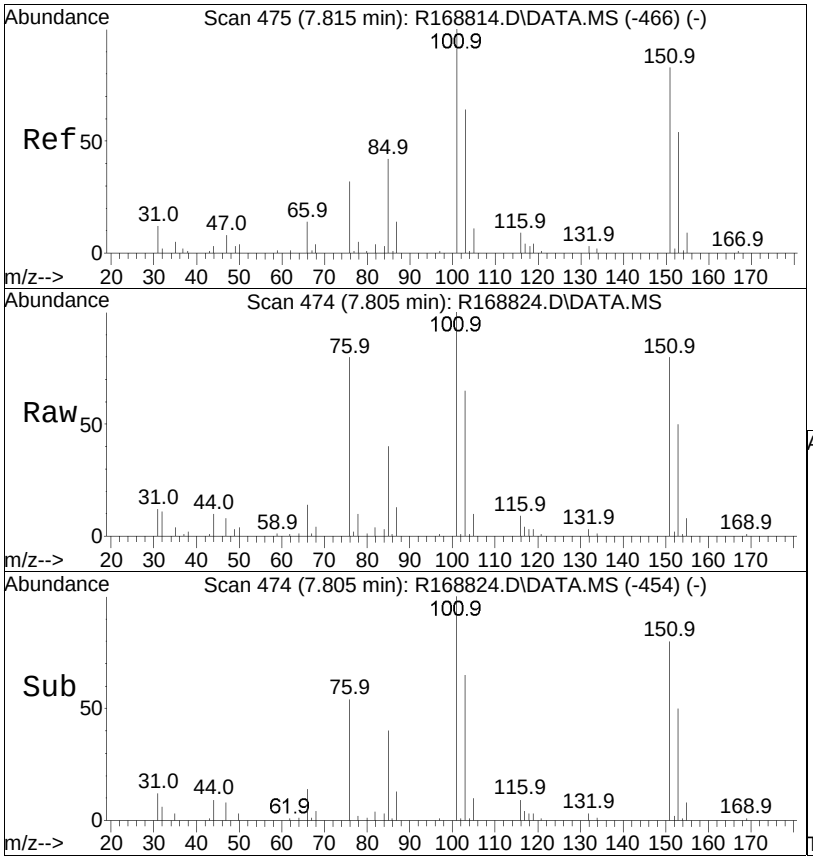


#30
carbon disulfide
Concen: 9.08 ppbV
RT: 7.787 min Scan# 472
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 76 Resp: 377464

Ion	Ratio	Lower	Upper
76	100		
44	11.6	9.3	13.9

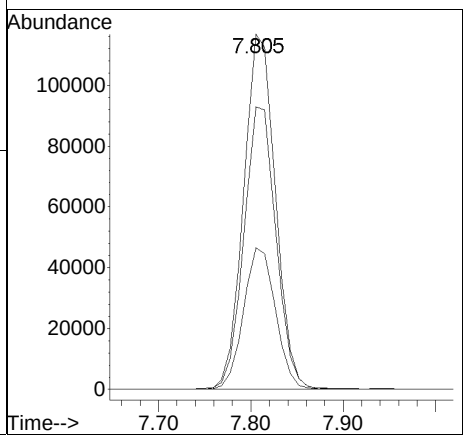


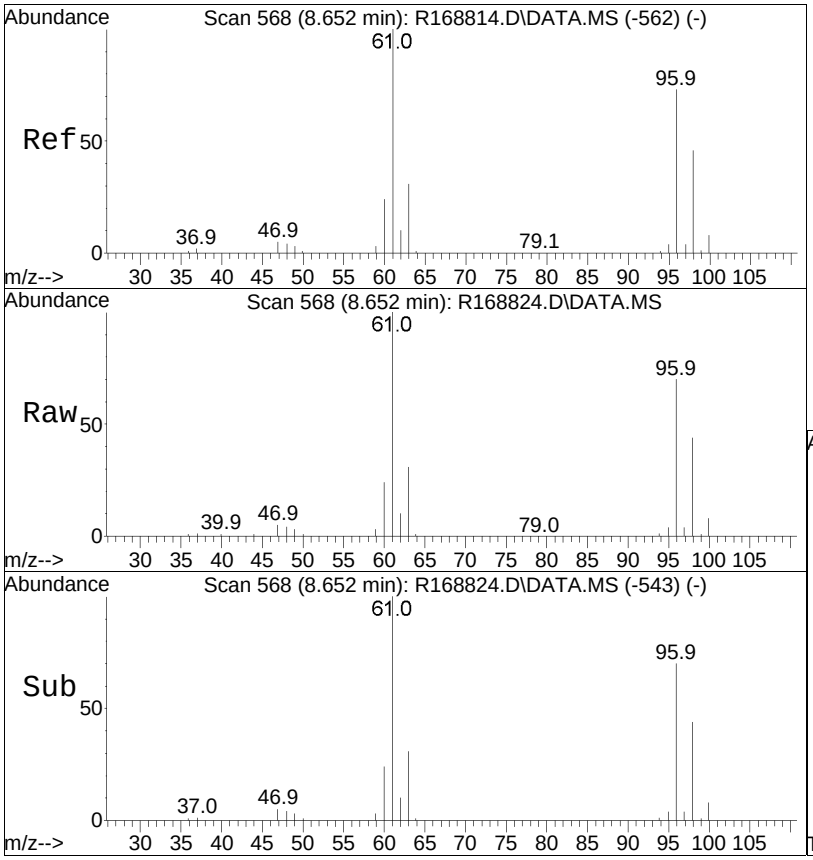


#31
Freon 113
Concen: 9.98 ppbV
RT: 7.805 min Scan# 474
Delta R.T. -0.009 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:101 Resp: 280799

Ion	Ratio	Lower	Upper
101	100		
85	39.9	33.2	49.8
151	79.5	66.2	99.2

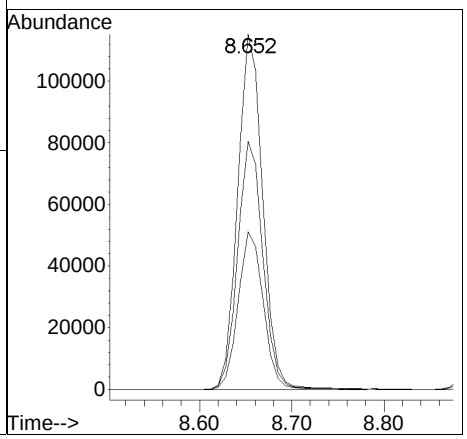


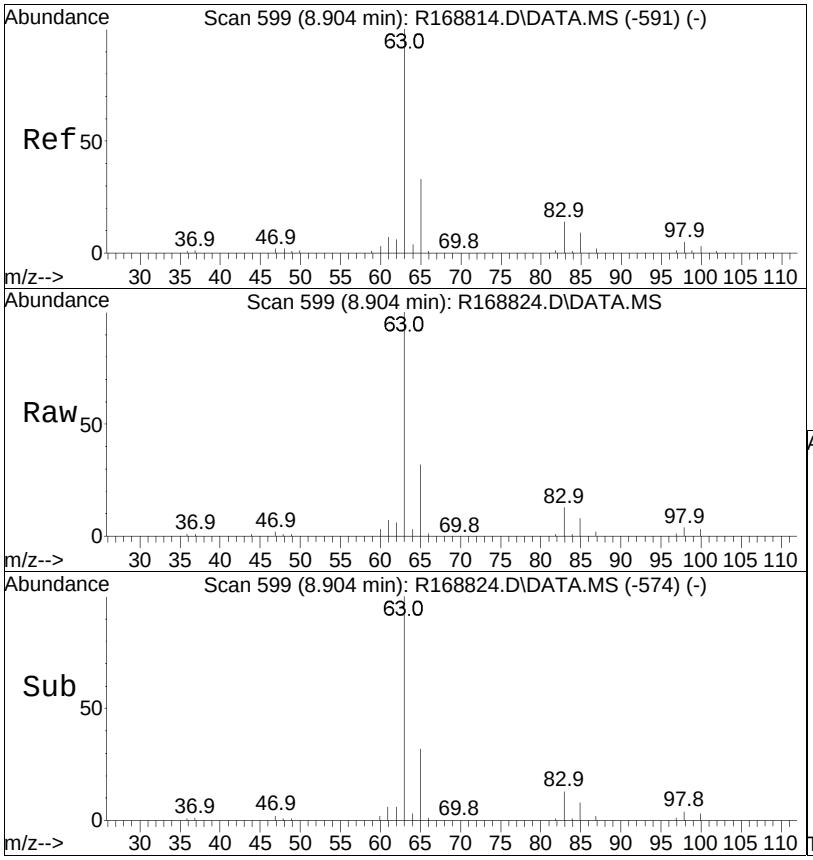


#32
trans-1,2-dichloroethene
Concen: 10.27 ppbV
RT: 8.652 min Scan# 568
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 61 Resp: 218216

Ion	Ratio	Lower	Upper
61	100		
96	69.8	58.7	88.1
98	44.4	36.7	55.1

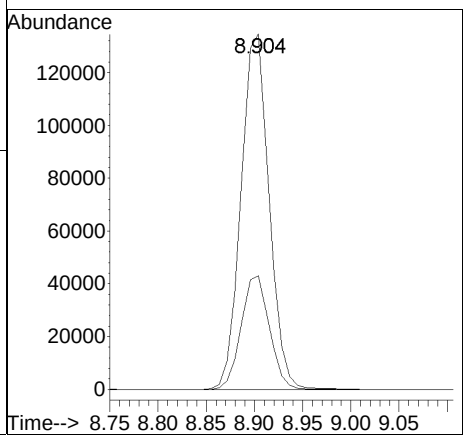


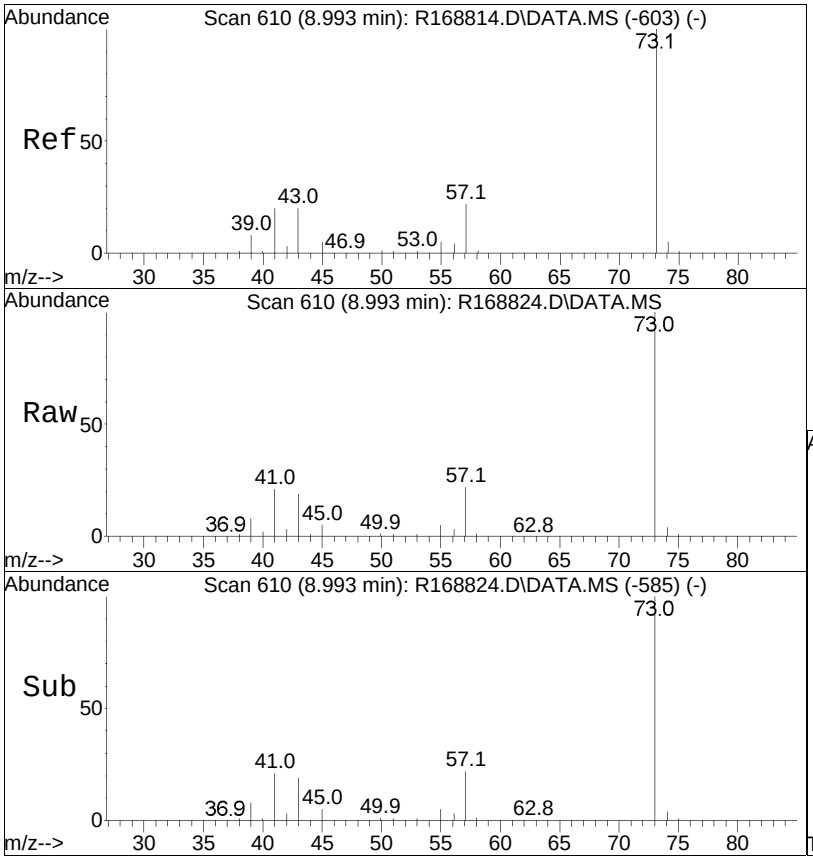


#33
1,1-dichloroethane
Concen: 10.16 ppbV
RT: 8.904 min Scan# 599
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 63 Resp: 272733

Ion	Ratio	Lower	Upper
63	100		
65	32.0	26.3	39.5

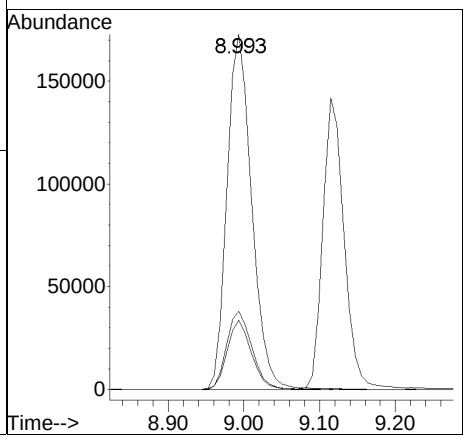


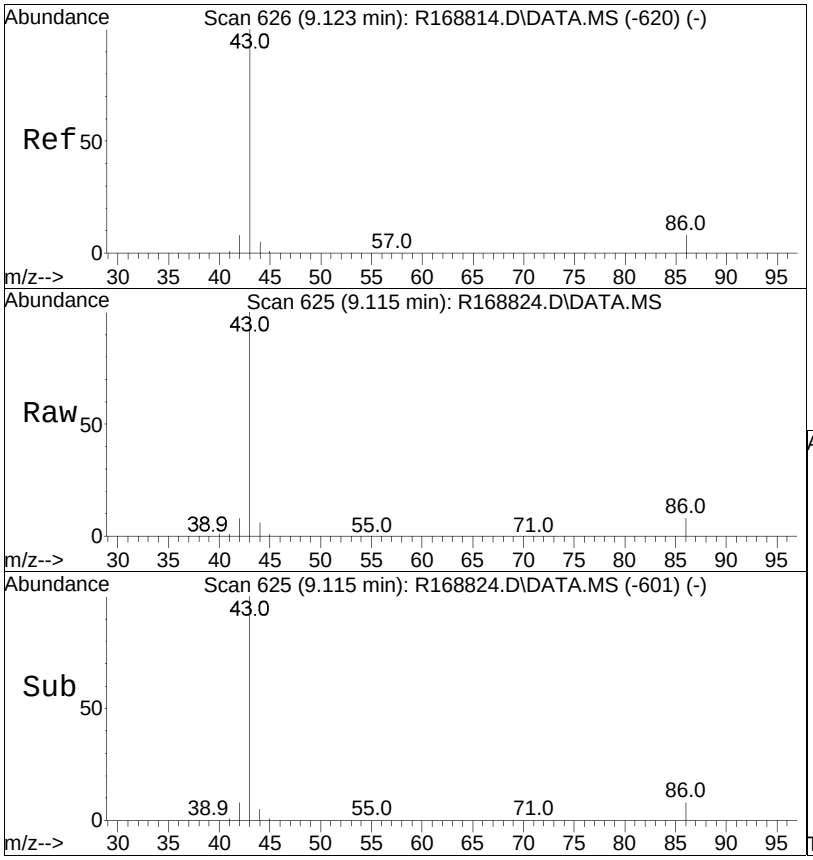


#34
MTBE
Concen: 10.03 ppbV
RT: 8.993 min Scan# 610
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 73 Resp: 393188

Ion	Ratio	Lower	Upper
73	100		
57	22.0	17.2	25.8
43	19.4	16.0	24.0

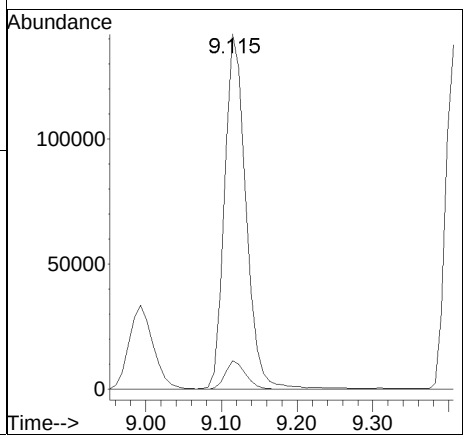


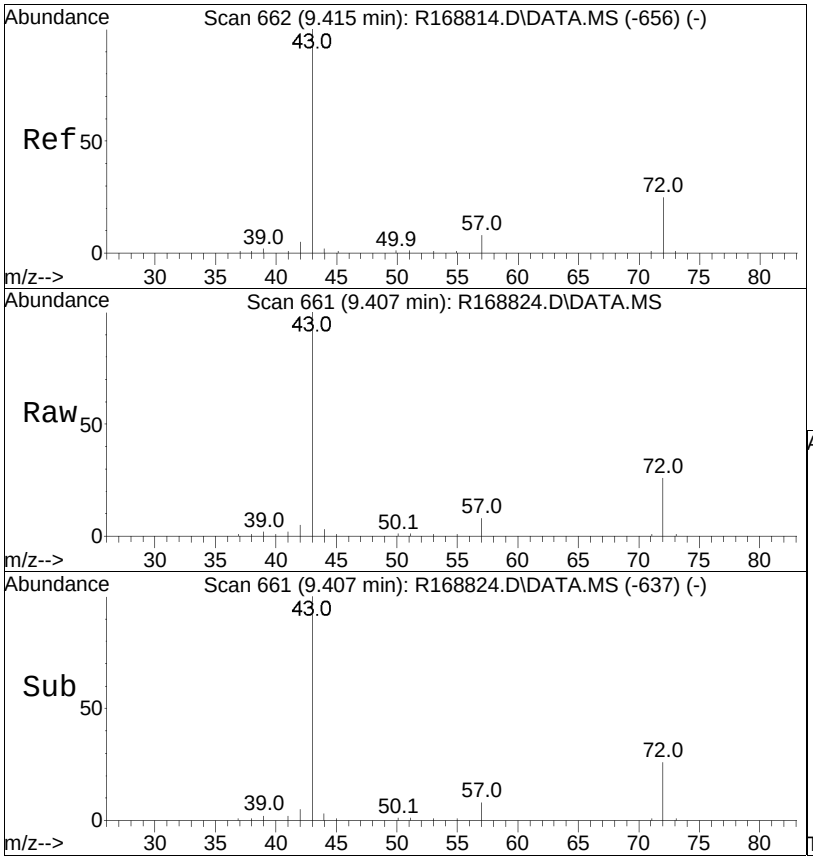


#35
vinyl acetate
Concen: 10.10 ppbV
RT: 9.115 min Scan# 625
Delta R.T. -0.008 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 278249

Ion	Ratio	Lower	Upper
43	100		
86	8.1	6.4	9.6

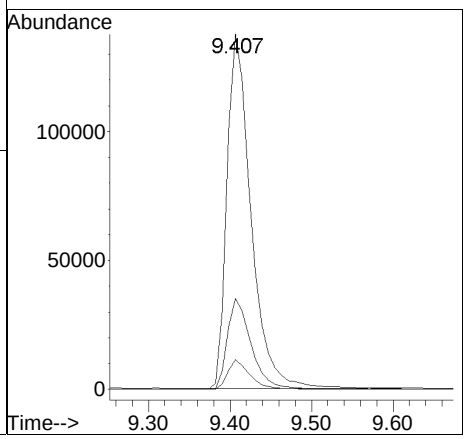


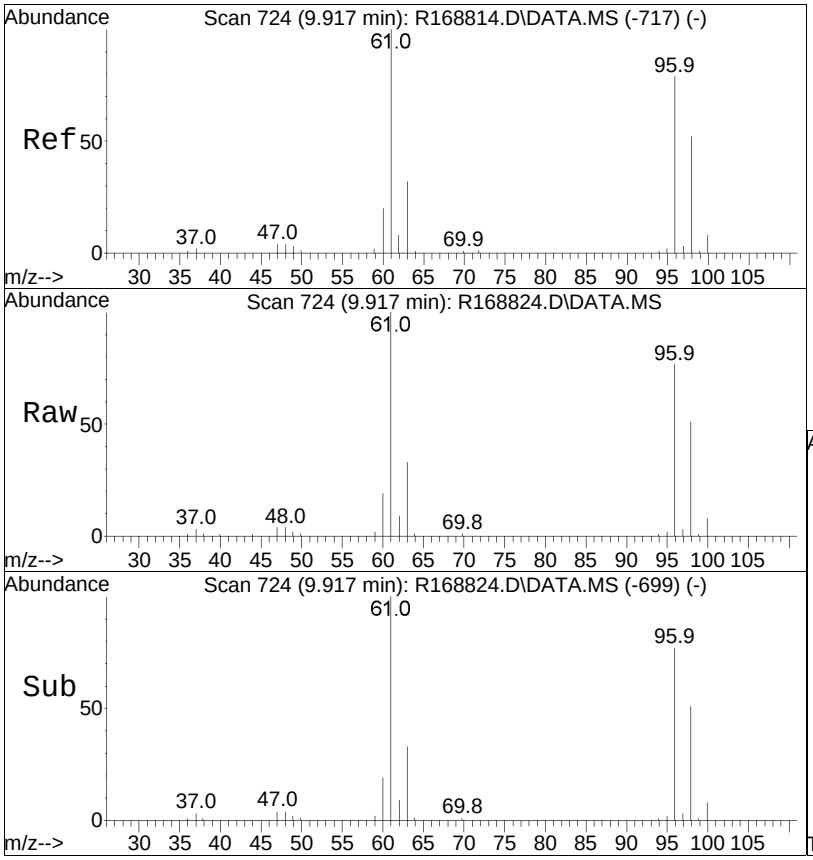


#36
2-butanone
Concen: 9.81 ppbV
RT: 9.407 min Scan# 661
Delta R.T. -0.008 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 282456

Ion	Ratio	Lower	Upper
43	100		
72	25.6	20.0	30.0
57	8.4	6.3	9.5

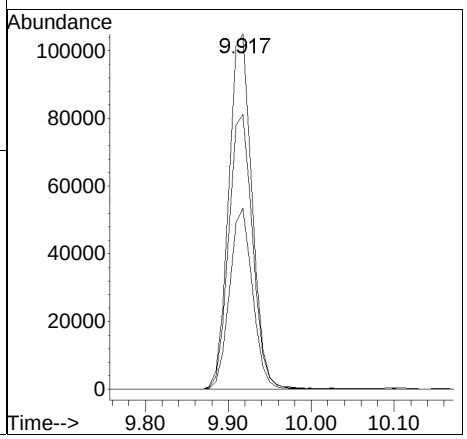


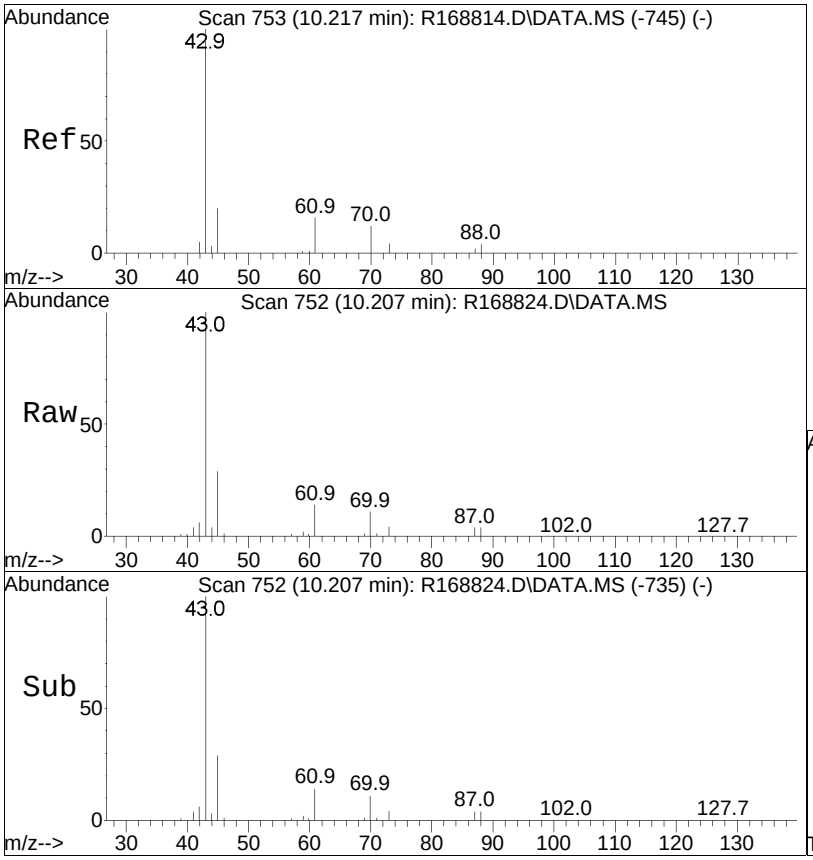


#37
cis-1,2-dichloroethene
Concen: 10.75 ppbV
RT: 9.917 min Scan# 724
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 61 Resp: 240500

Ion	Ratio	Lower	Upper
61	100		
96	77.4	63.4	95.2
98	50.9	41.7	62.5

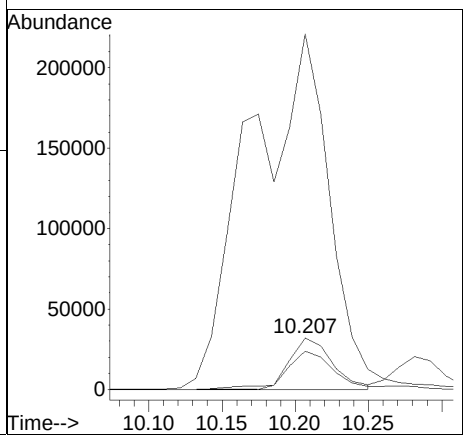


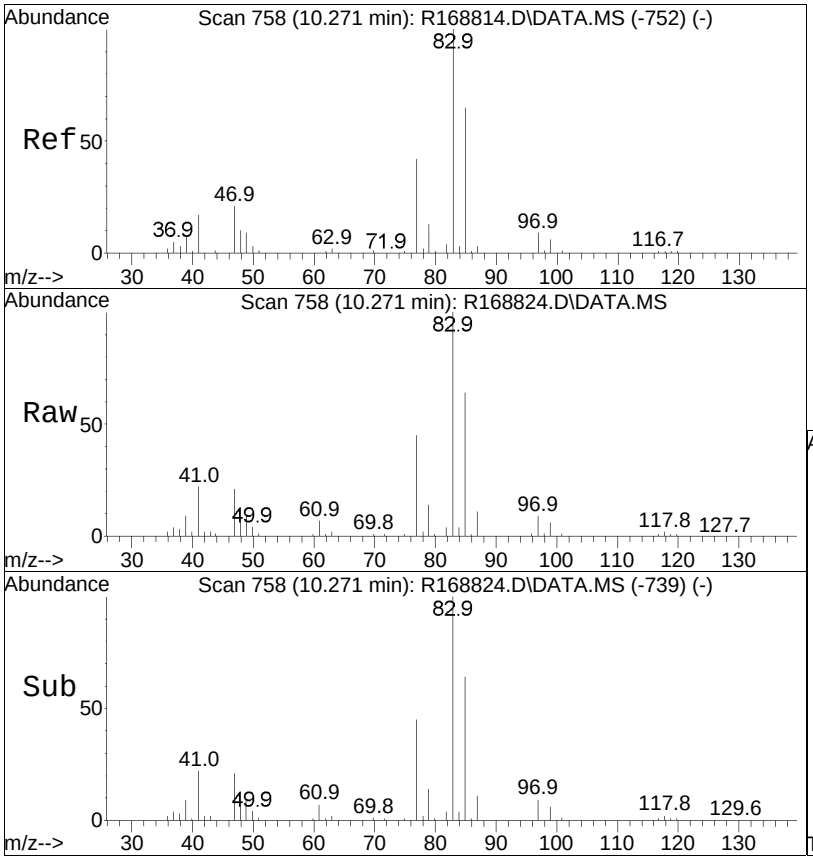


#38
Ethyl Acetate
Concen: 9.88 ppbV
RT: 10.207 min Scan# 752
Delta R.T. -0.011 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 61 Resp: 64802

Ion	Ratio	Lower	Upper
61	100		
70	74.6	61.0	91.4
43	692.7	528.6	793.0

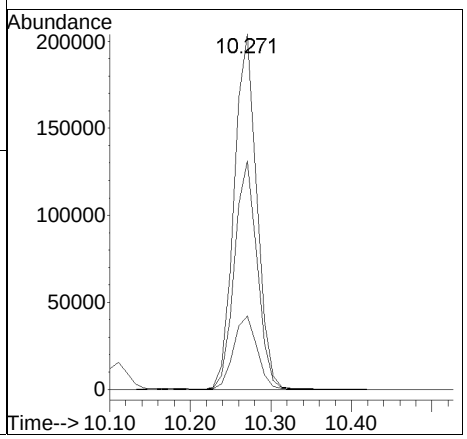


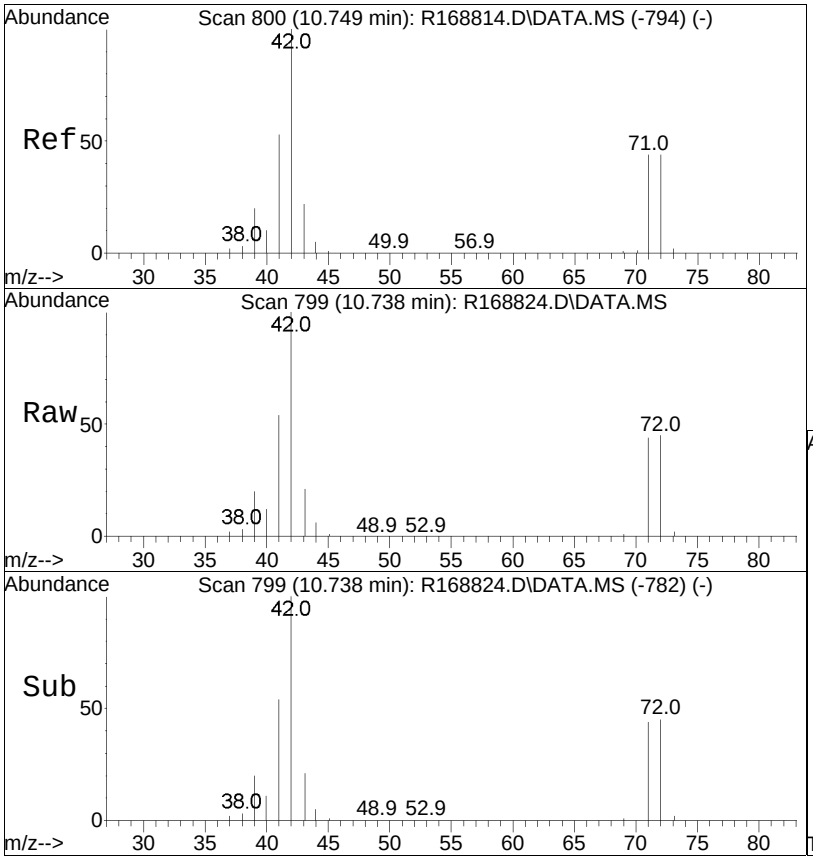


#39
chloroform
Concen: 10.03 ppbV
RT: 10.271 min Scan# 758
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 83 Resp: 400400

Ion	Ratio	Lower	Upper
83	100		
85	64.3	52.1	78.1
47	20.6	17.3	25.9

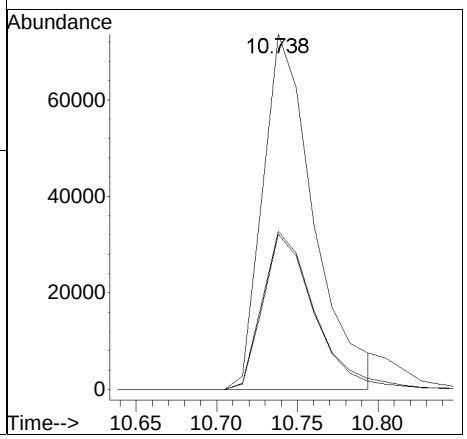


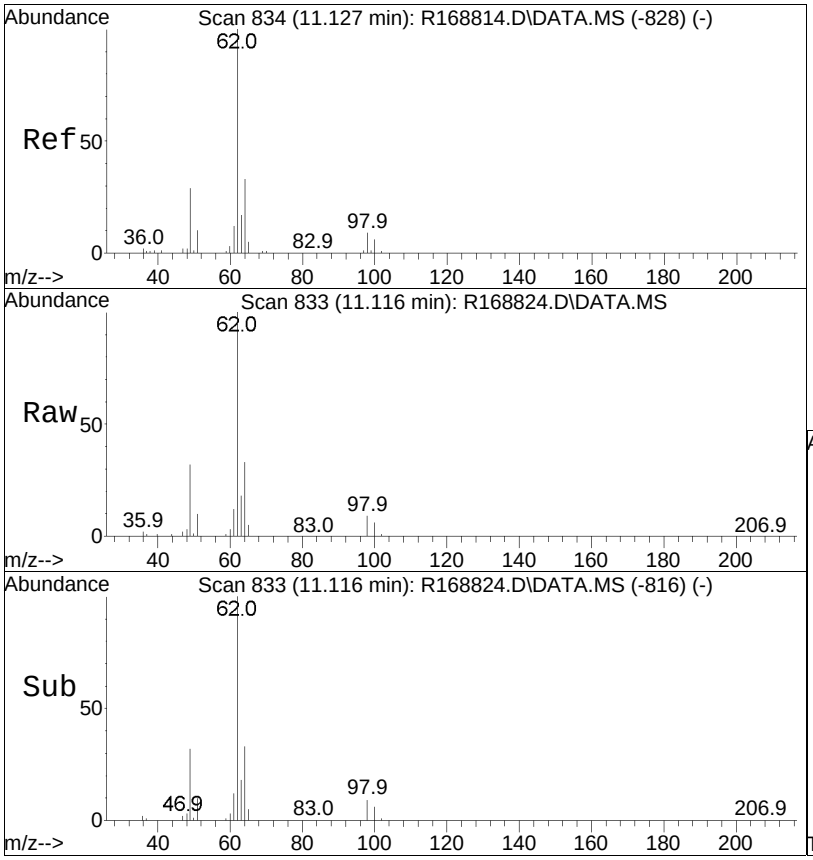


#40
Tetrahydrofuran
Concen: 9.39 ppbV m
RT: 10.738 min Scan# 799
Delta R.T. -0.011 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 42 Resp: 162493

Ion	Ratio	Lower	Upper
42	100		
71	43.7	35.0	52.4
72	44.5	35.5	53.3

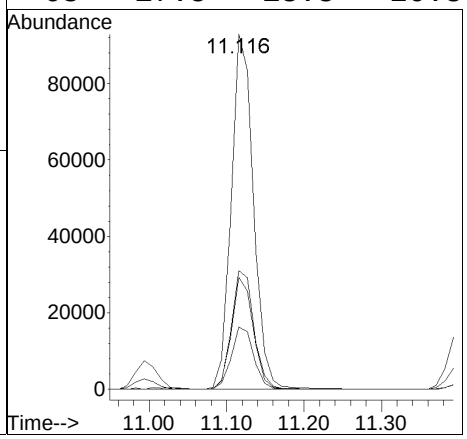


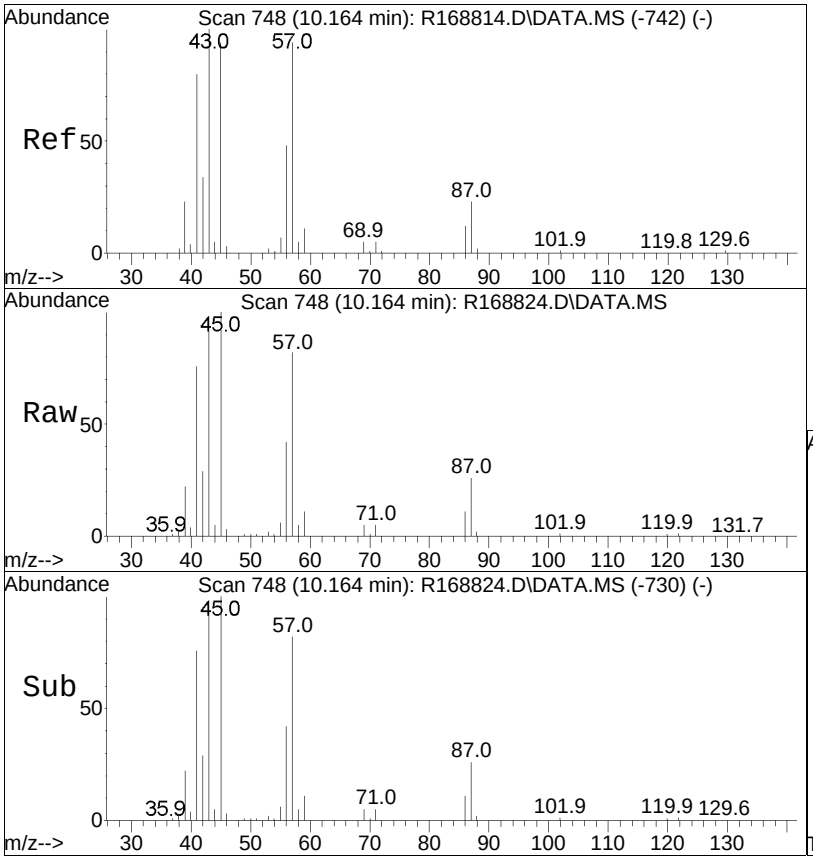


#42
1,2-dichloroethane
Concen: 9.50 ppbV
RT: 11.116 min Scan# 833
Delta R.T. -0.011 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 62 Resp: 185697

Ion	Ratio	Lower	Upper
62	100		
64	33.5	26.2	39.4
49	31.6	23.4	35.2
63	17.5	13.8	20.8

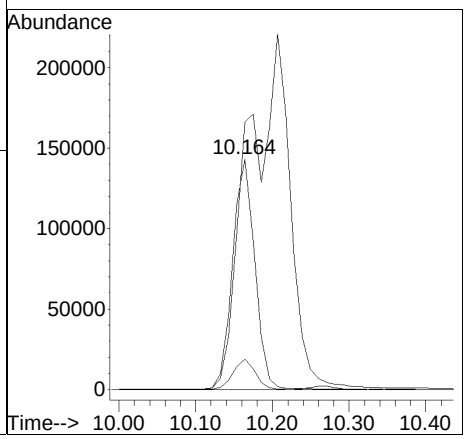


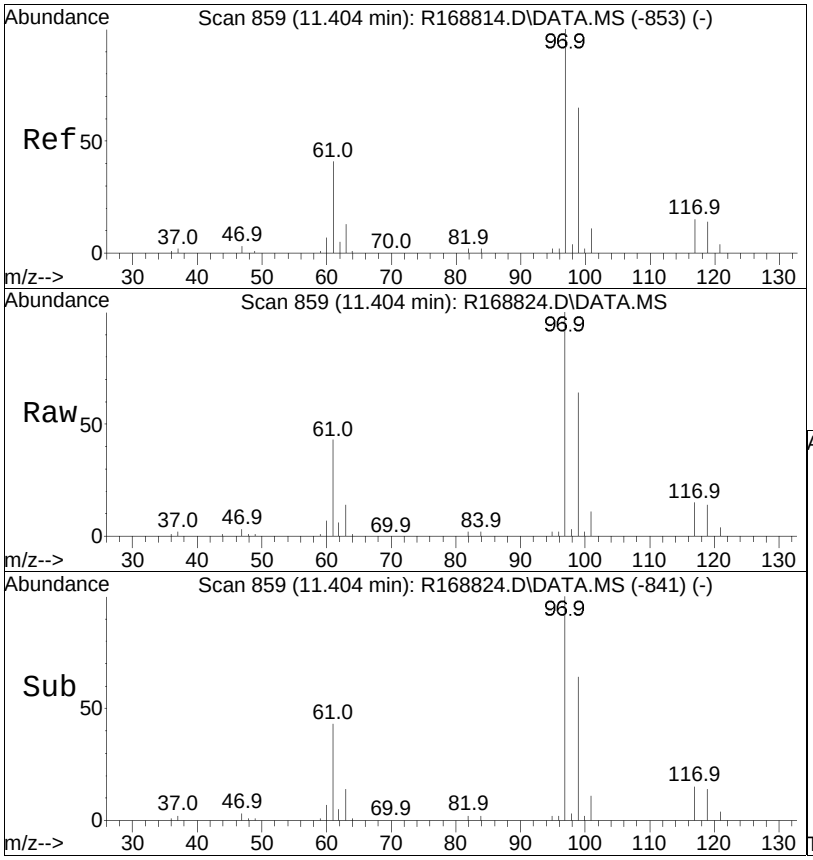


#44
hexane
Concen: 10.06 ppbV
RT: 10.164 min Scan# 748
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 57 Resp: 289370

Ion	Ratio	Lower	Upper
57	100		
43	116.2	85.5	128.3
86	13.2	10.5	15.7

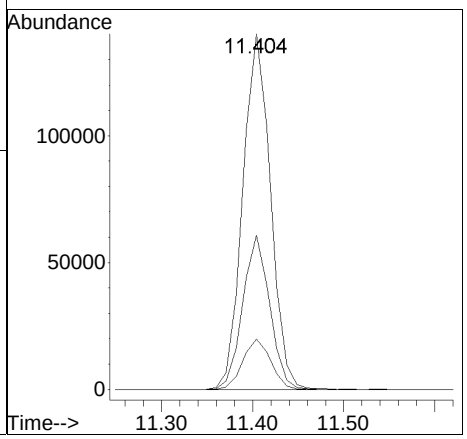


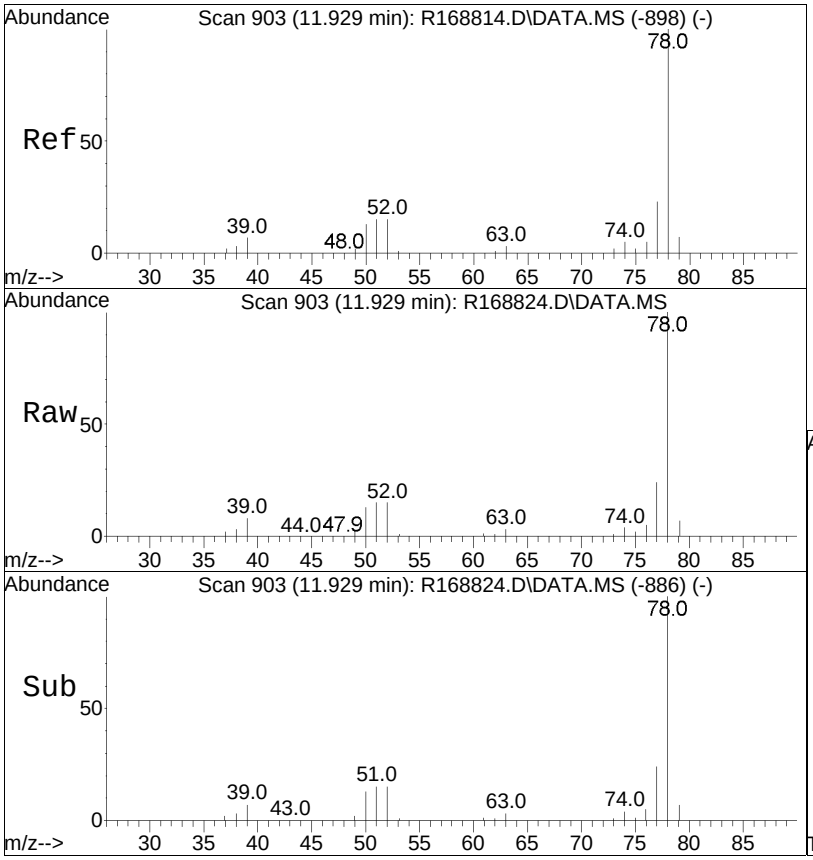


#48
1,1,1-trichloroethane
Concen: 10.11 ppbV
RT: 11.404 min Scan# 859
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 97 Resp: 296302

Ion	Ratio	Lower	Upper
97	100		
61	43.4	33.0	49.4
119	14.2	11.2	16.8

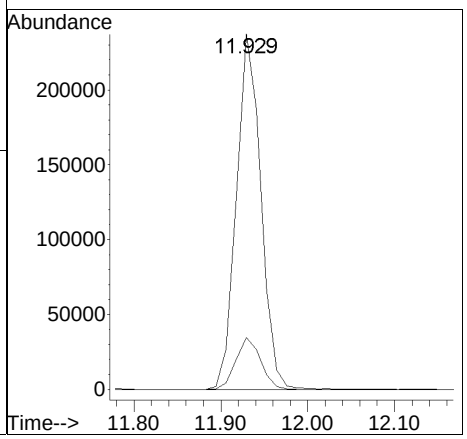


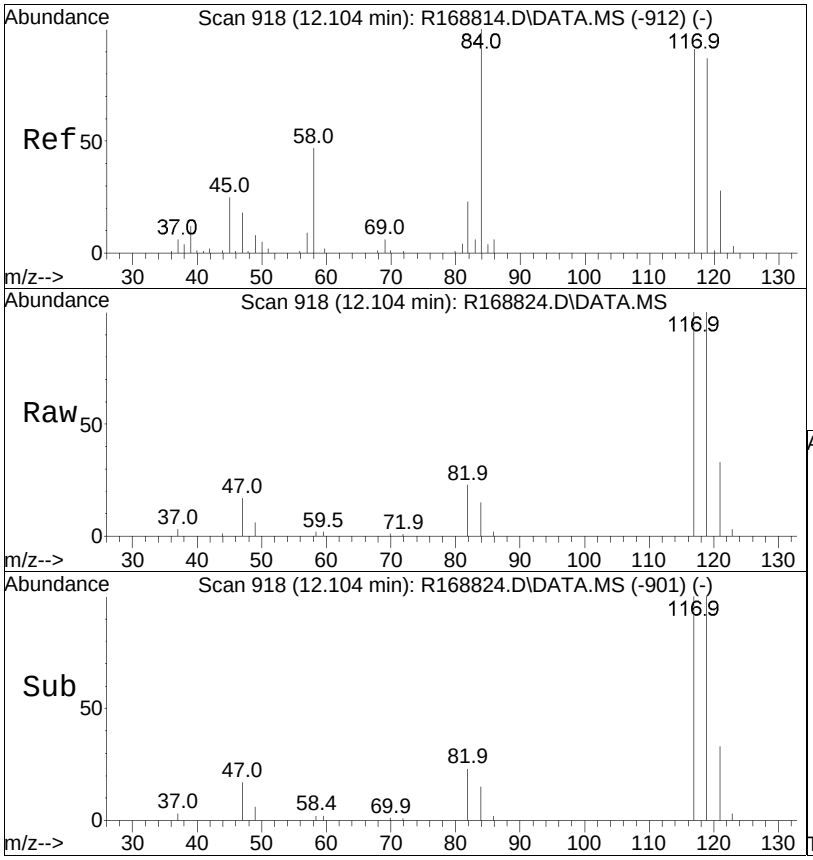


#50
benzene
Concen: 9.79 ppbV
RT: 11.929 min Scan# 903
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 78 Resp: 465464

Ion	Ratio	Lower	Upper
78	100		
52	14.6	11.7	17.5

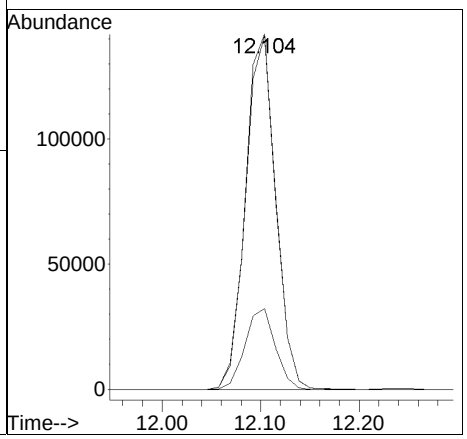


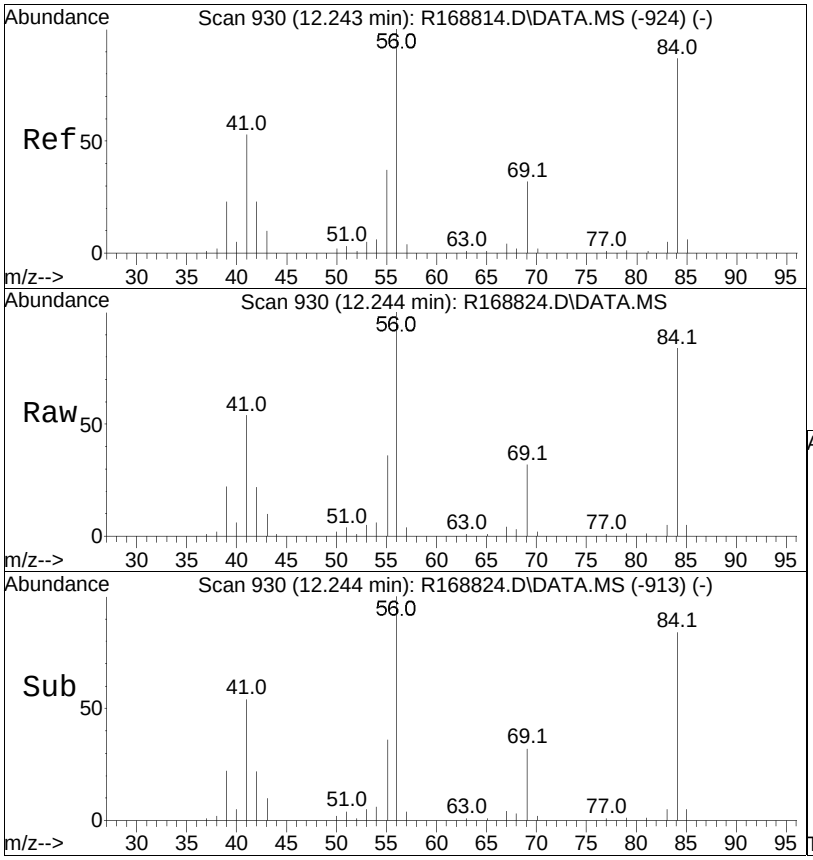


#52
carbon tetrachloride
Concen: 10.12 ppbV
RT: 12.104 min Scan# 918
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:117 Resp: 304482

Ion	Ratio	Lower	Upper
117	100		
119	99.6	76.7	115.1
82	22.8	20.3	30.5

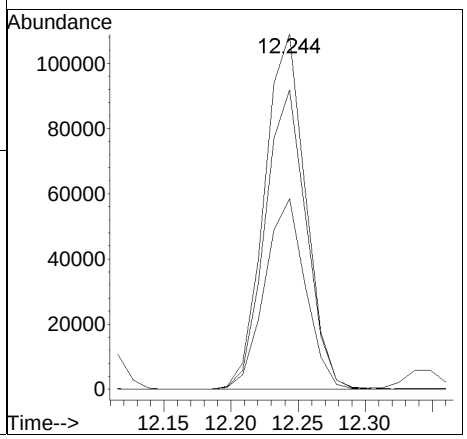


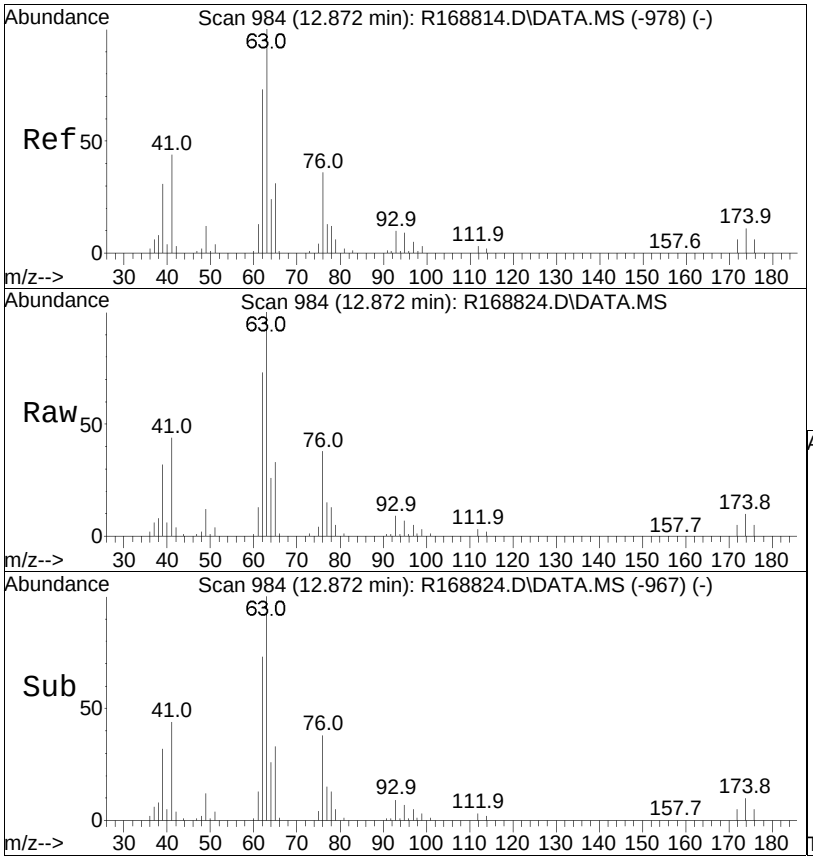


#53
cyclohexane
Concen: 9.96 ppbV
RT: 12.244 min Scan# 930
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 56 Resp: 233173

Ion	Ratio	Lower	Upper
56	100		
84	84.3	70.1	105.1
41	53.7	42.6	63.8

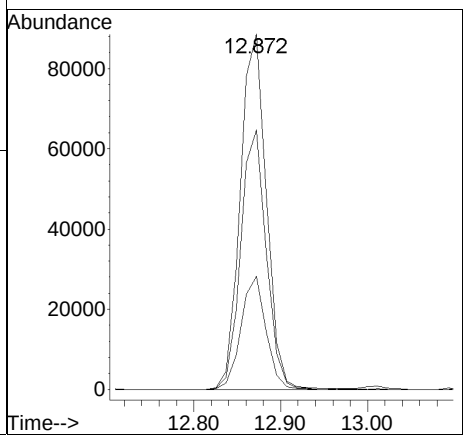


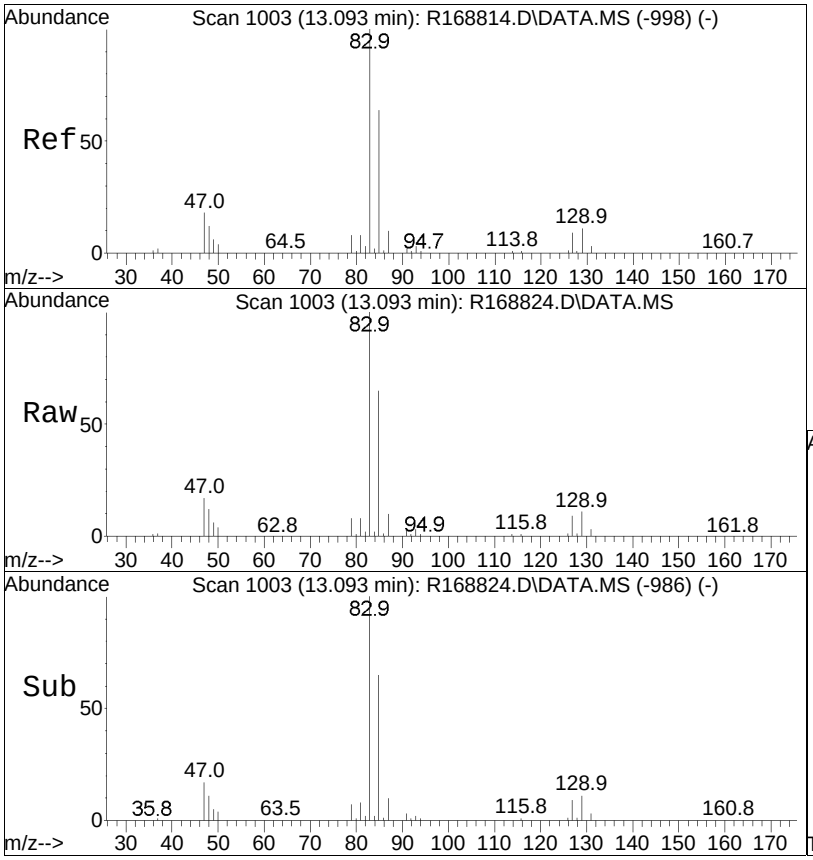


#56
1,2-dichloropropane
Concen: 10.31 ppbV
RT: 12.872 min Scan# 984
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 63 Resp: 185110

Ion	Ratio	Lower	Upper
63	100		
62	73.0	58.1	87.1
39	31.8	24.7	37.1

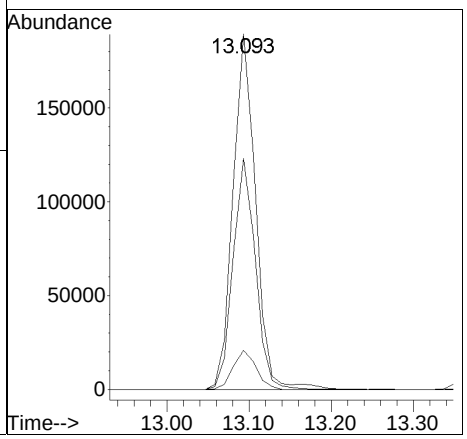


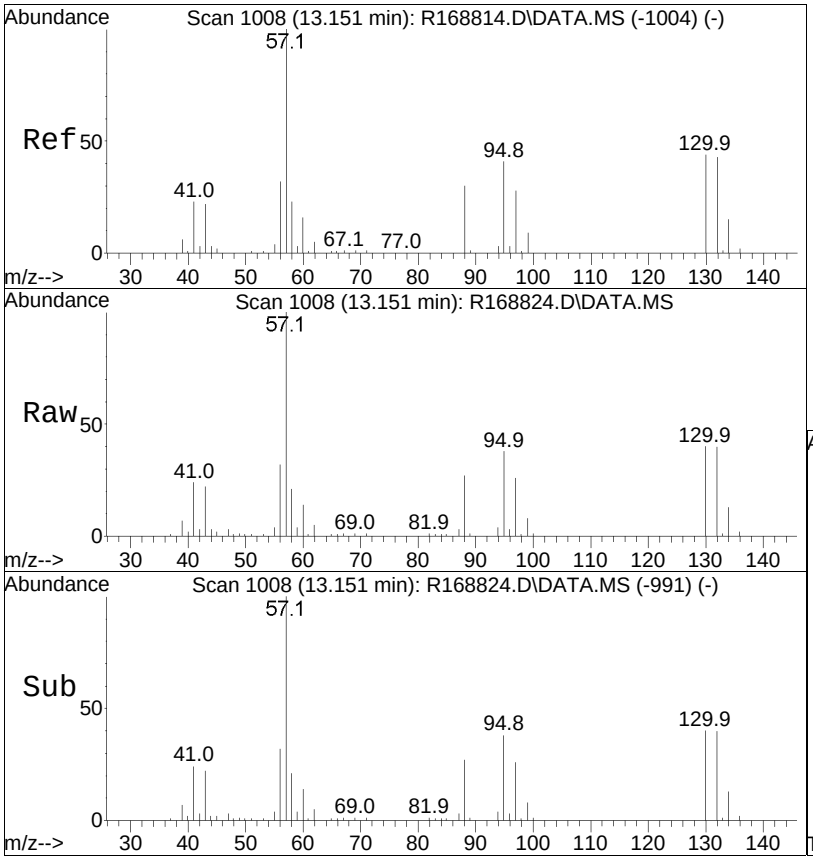


#57
bromodichloromethane
Concen: 10.40 ppbV
RT: 13.093 min Scan# 1003
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 83 Resp: 363250

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.4	77.2
129	11.0	9.2	13.8

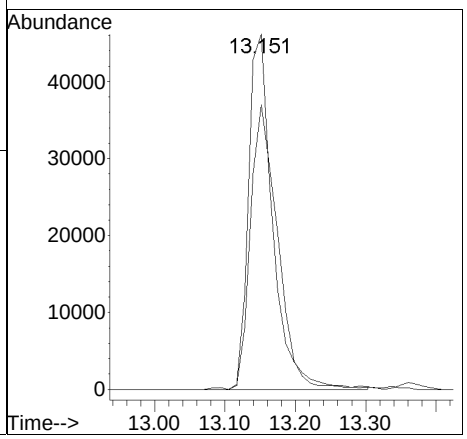


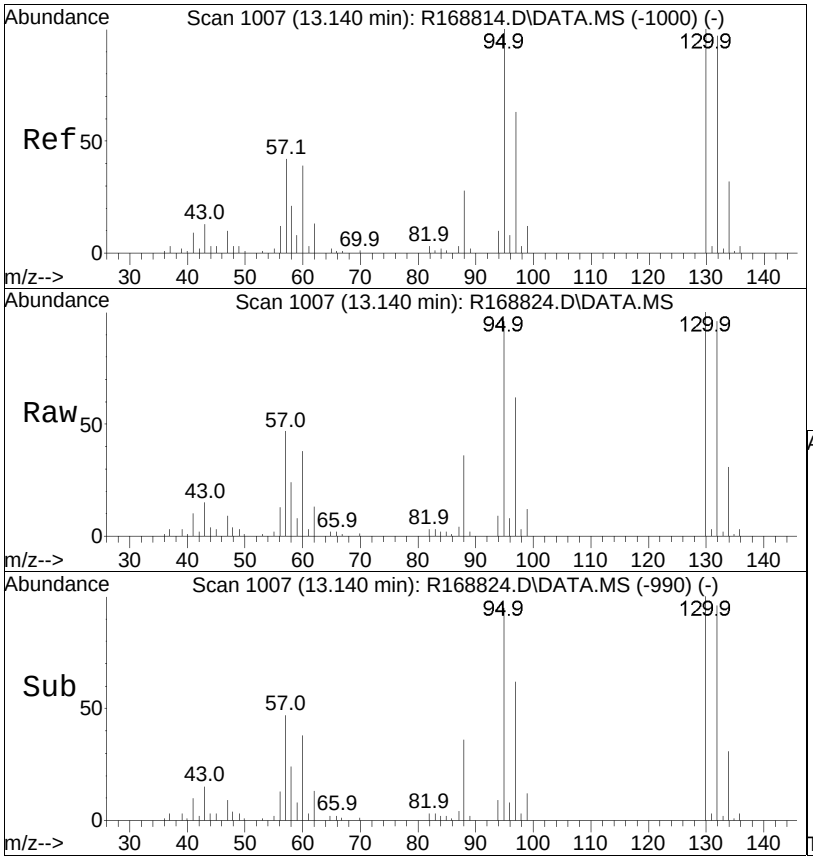


#58
1,4-dioxane
Concen: 10.32 ppbV
RT: 13.151 min Scan# 1008
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 88 Resp: 111257

Ion	Ratio	Lower	Upper
88	100		
58	80.1	61.7	92.5

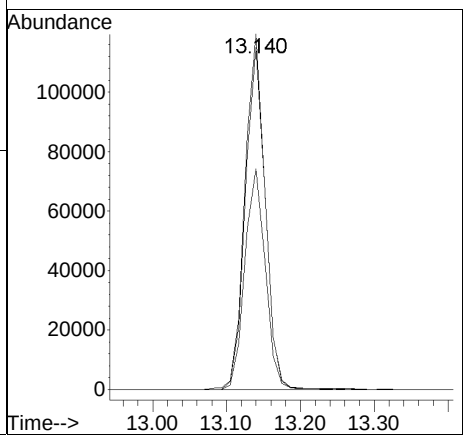


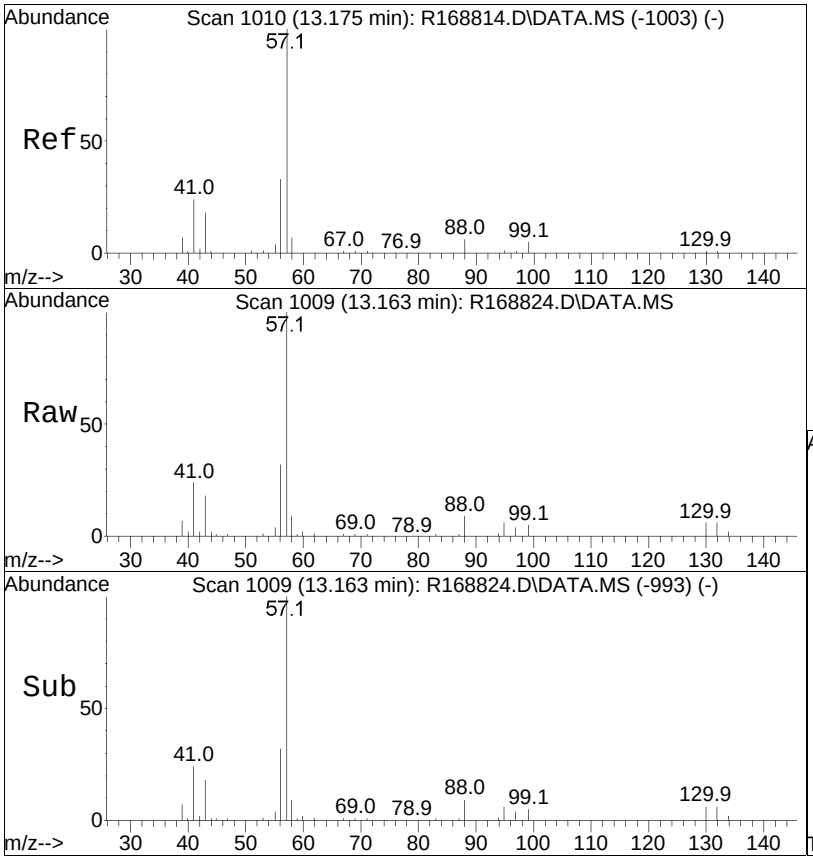


#59
trichloroethene
Concen: 10.37 ppbV
RT: 13.140 min Scan# 1007
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:130 Resp: 227572

Ion	Ratio	Lower	Upper
130	100		
132	96.3	77.3	115.9
97	62.1	50.6	76.0

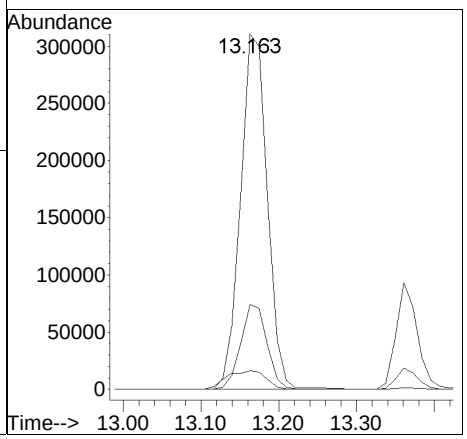


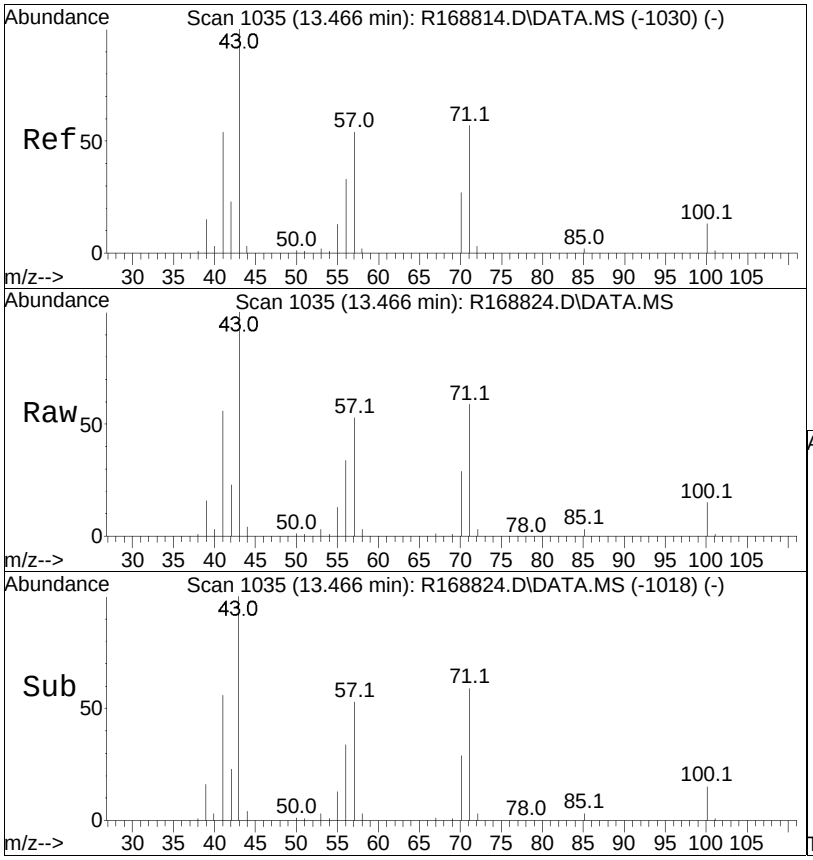


#60
2,2,4-trimethylpentane
Concen: 10.17 ppbV
RT: 13.163 min Scan# 1009
Delta R.T. -0.012 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 57 Resp: 744474

Ion	Ratio	Lower	Upper
57	100		
99	5.3	3.9	5.9
41	23.9	19.3	28.9

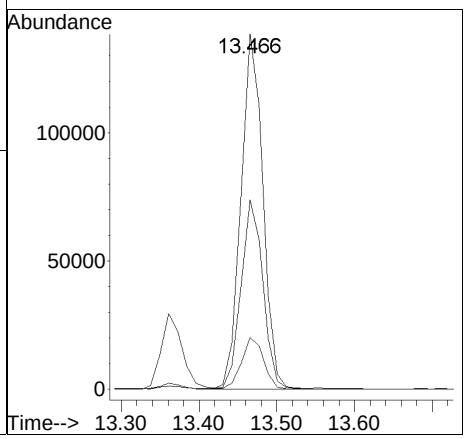


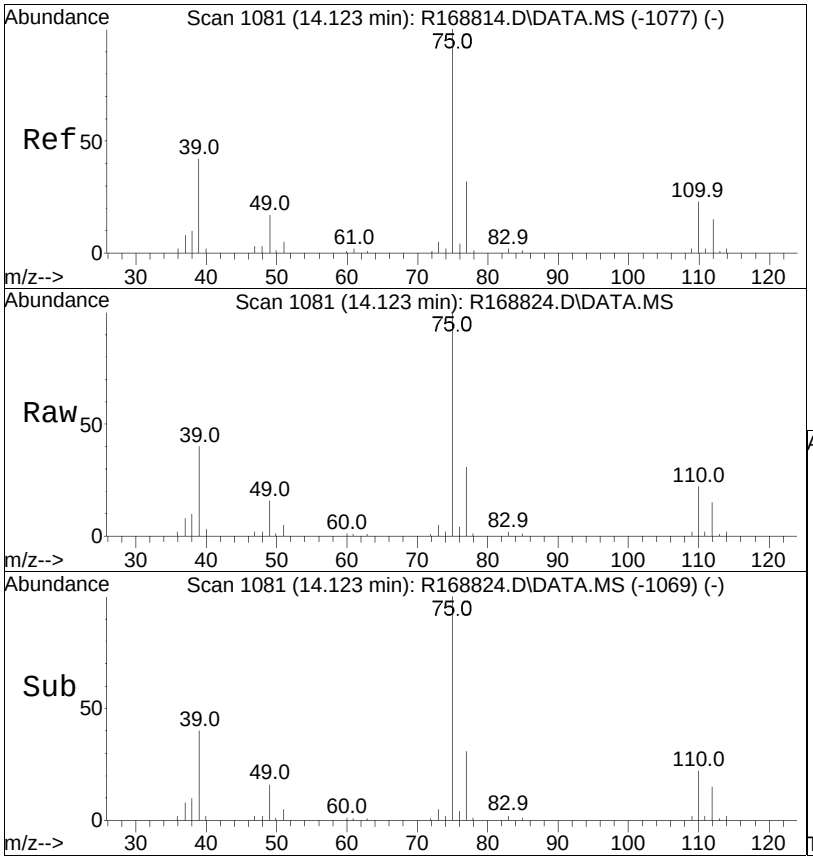


#62
heptane
Concen: 10.30 ppbV
RT: 13.466 min Scan# 1035
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 271367

Ion	Ratio	Lower	Upper
43	100		
57	53.3	43.4	65.0
100	14.6	11.2	16.8

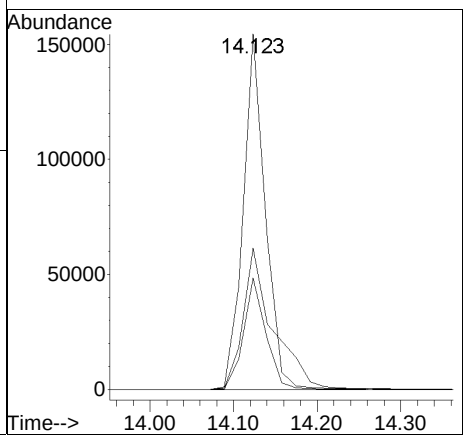


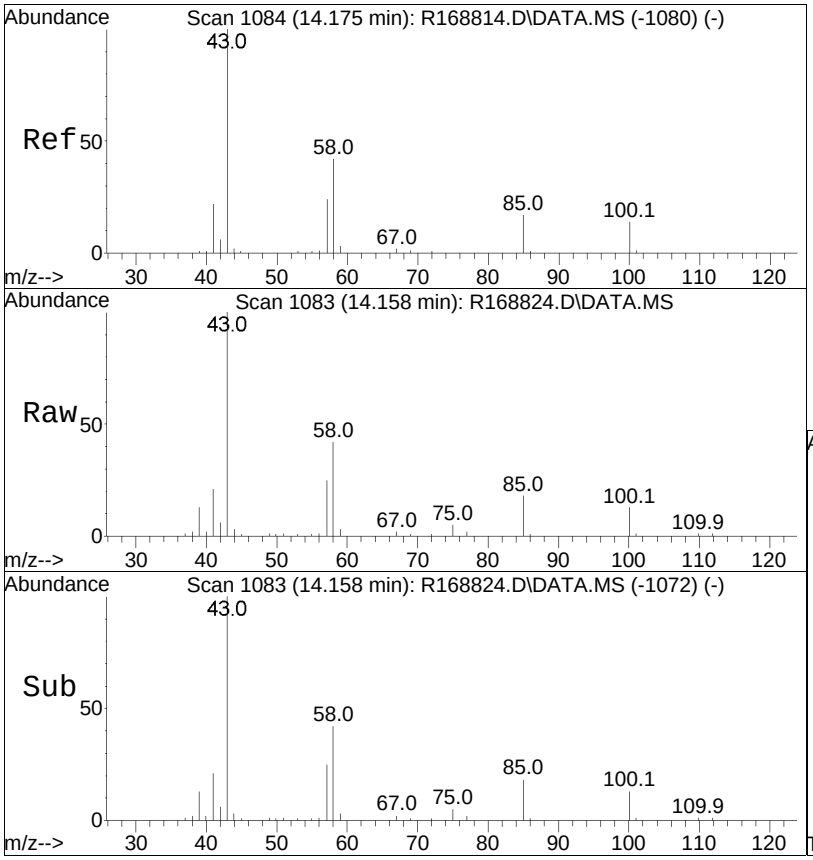


#63
cis-1,3-dichloropropene
Concen: 11.07 ppbV
RT: 14.123 min Scan# 1081
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 75 Resp: 285020

Ion	Ratio	Lower	Upper
75	100		
39	39.8	33.8	50.6
77	31.3	25.3	37.9

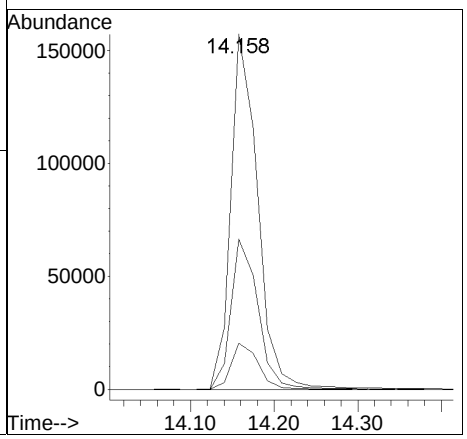


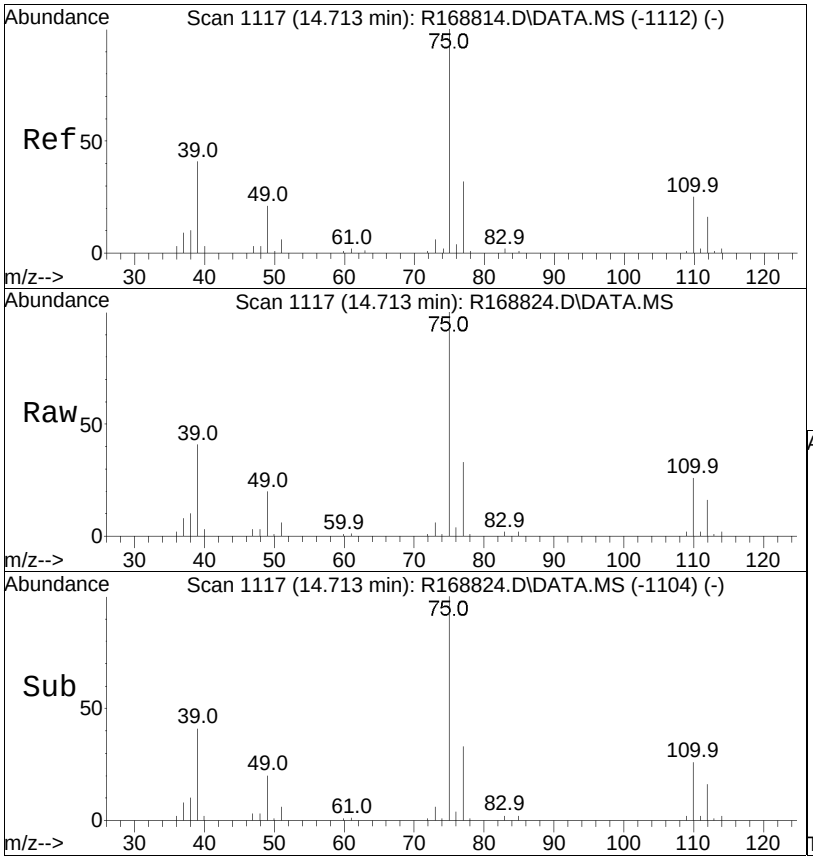


#64
4-methyl-2-pentanone
Concen: 10.39 ppbV
RT: 14.158 min Scan# 1083
Delta R.T. -0.017 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 352779

Ion	Ratio	Lower	Upper
43	100		
58	42.3	33.7	50.5
100	13.0	11.1	16.7

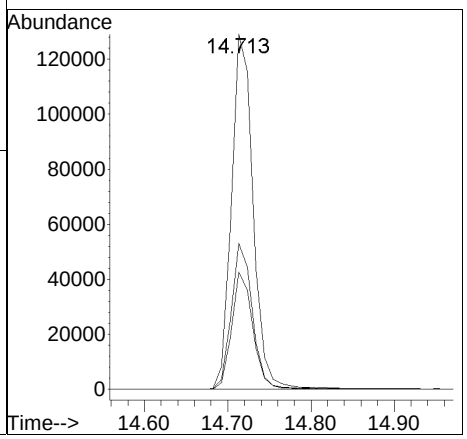


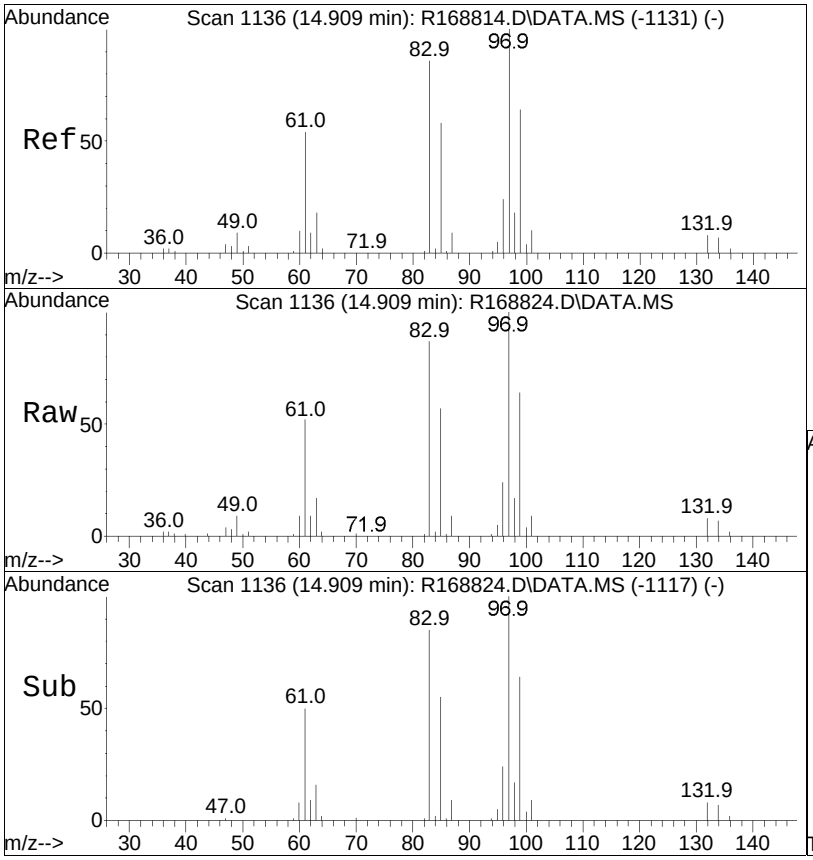


#65
trans-1,3-dichloropropene
Concen: 9.39 ppbV
RT: 14.713 min Scan# 1117
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 75 Resp: 234486

Ion	Ratio	Lower	Upper
75	100		
77	33.1	25.4	38.2
39	41.1	32.6	49.0

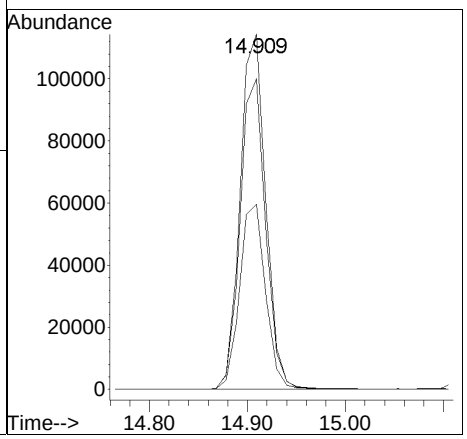


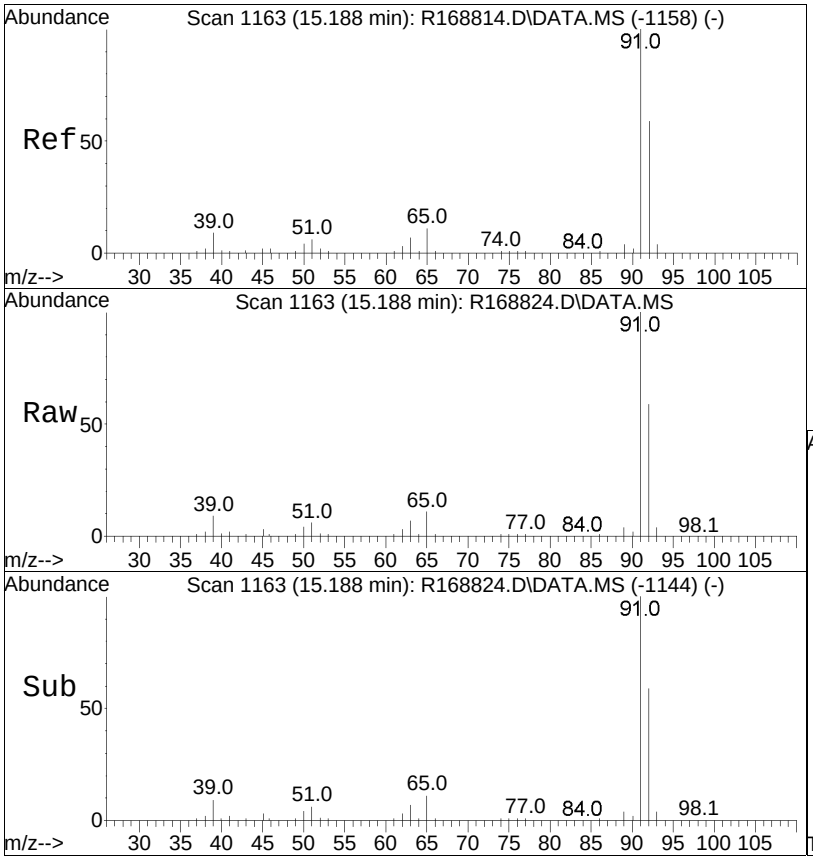


#66
1,1,2-trichloroethane
Concen: 10.40 ppbV
RT: 14.909 min Scan# 1136
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 97 Resp: 208016

Ion	Ratio	Lower	Upper
97	100		
83	87.4	68.7	103.1
61	52.1	43.0	64.4

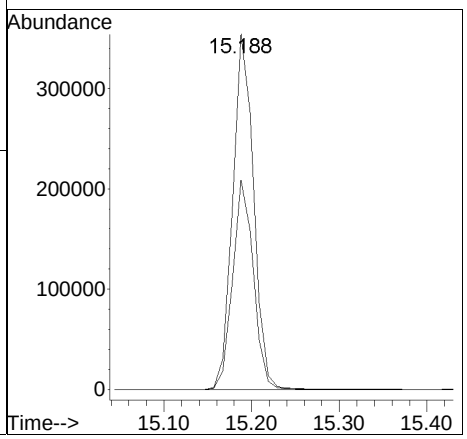


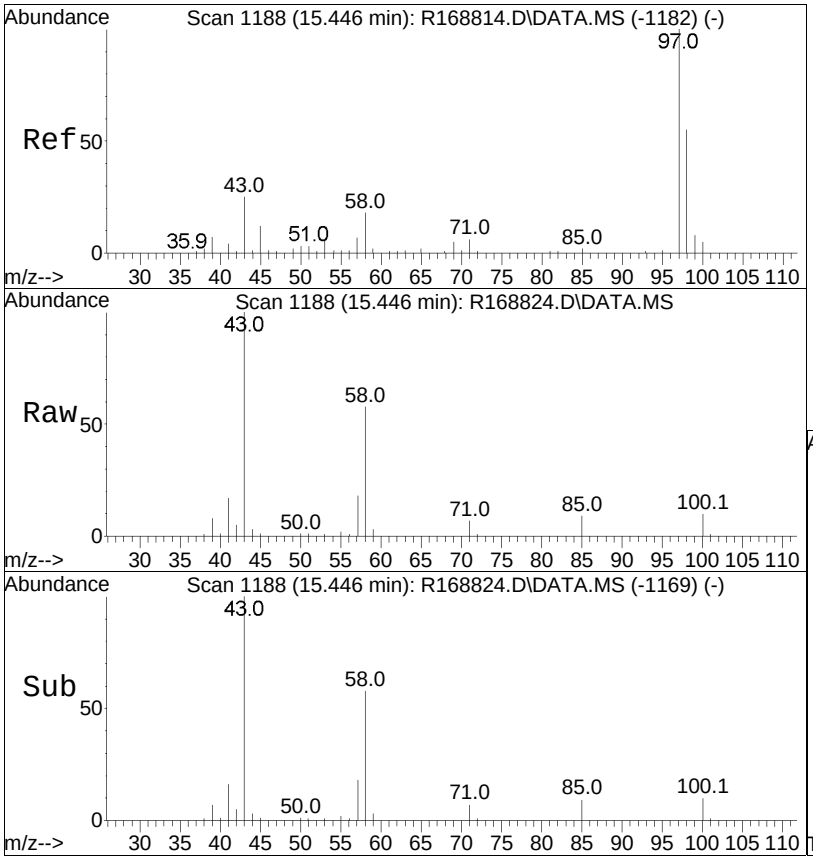


#68
toluene
Concen: 10.01 ppbV
RT: 15.188 min Scan# 1163
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 91 Resp: 585331

Ion	Ratio	Lower	Upper
91	100		
92	58.9	47.2	70.8

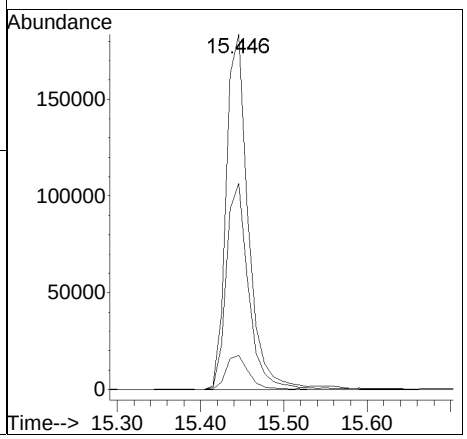


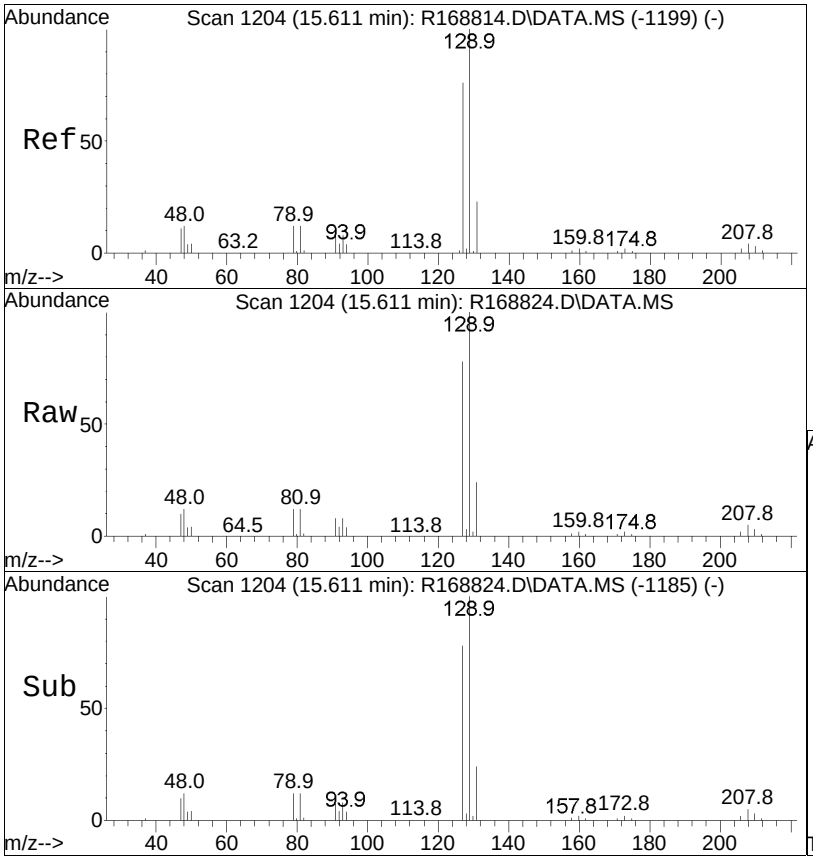


#72
2-hexanone
Concen: 11.41 ppbV
RT: 15.446 min Scan# 1188
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 43 Resp: 341198

Ion	Ratio	Lower	Upper
43	100		
58	58.0	57.7	86.5
100	9.6	16.2	24.2#

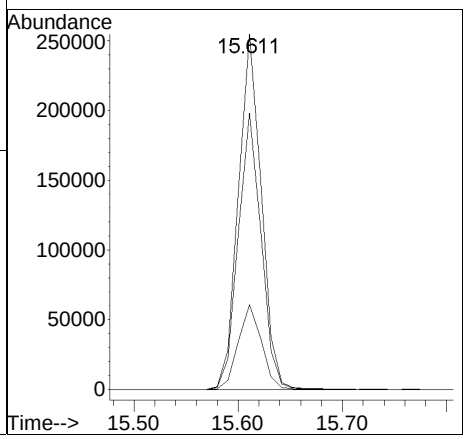


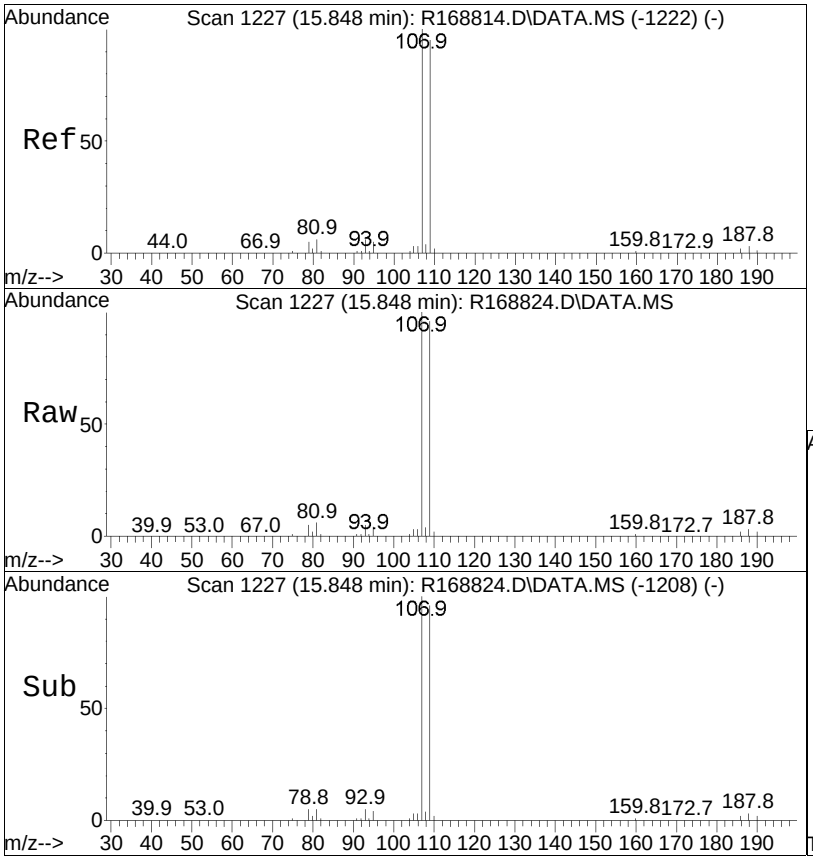


#74
dibromochloromethane
Concen: 10.81 ppbV
RT: 15.611 min Scan# 1204
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:129 Resp: 391625

Ion	Ratio	Lower	Upper
129	100		
127	77.8	61.2	91.8
131	23.9	18.7	28.1

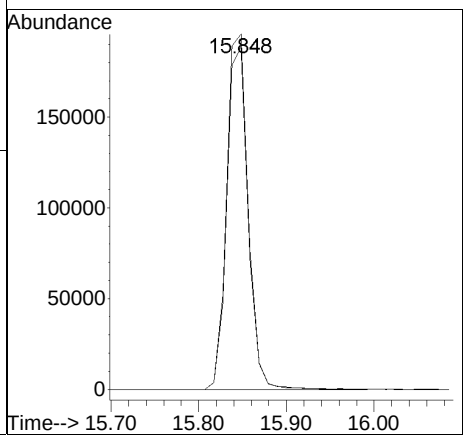


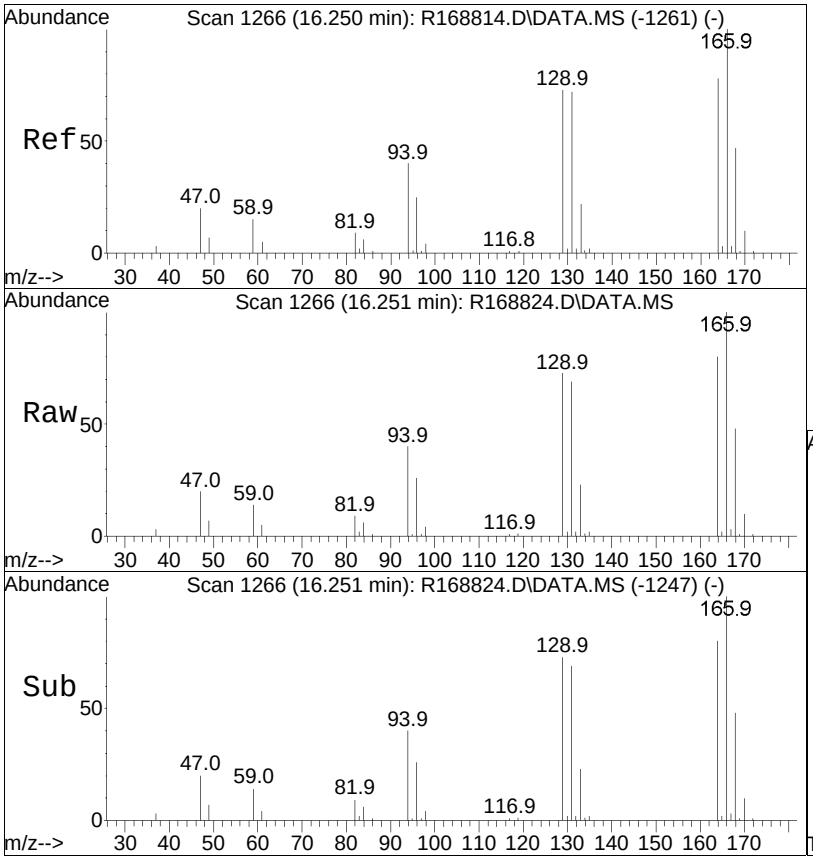


#75
1,2-dibromoethane
Concen: 10.27 ppbV
RT: 15.848 min Scan# 1227
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:107 Resp: 335075

Ion	Ratio	Lower	Upper
107	100		
109	96.4	76.1	114.1

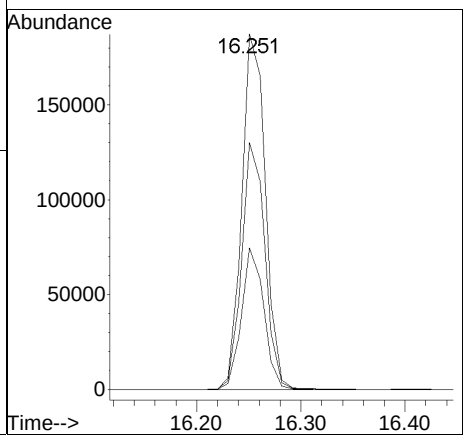


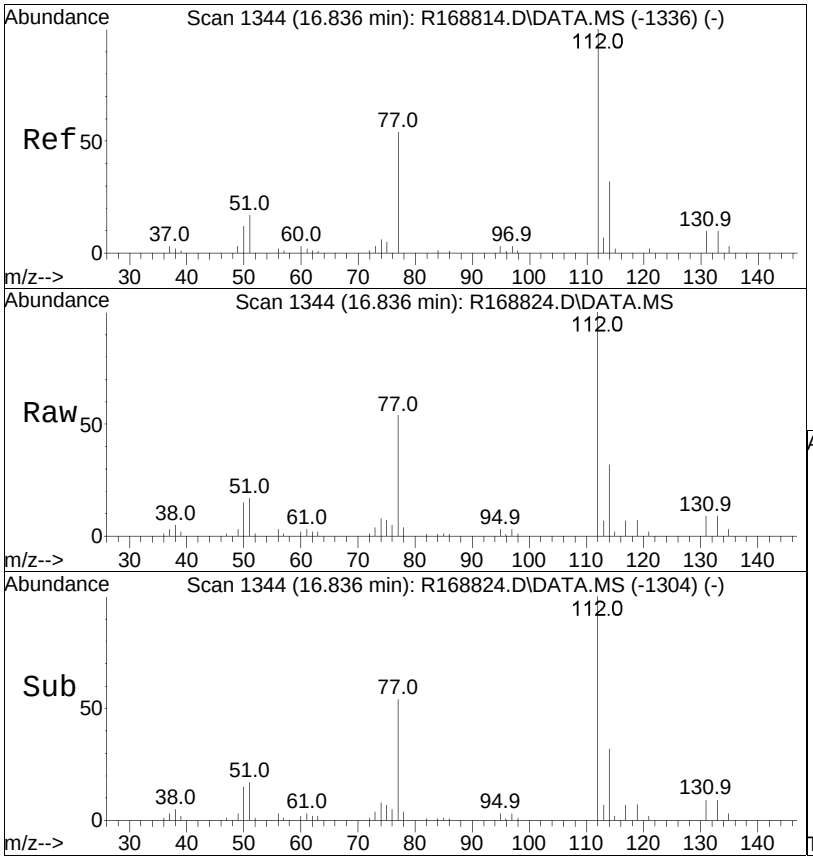


#78
tetrachloroethene
Concen: 10.33 ppbV
RT: 16.251 min Scan# 1266
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:166 Resp: 294415

Ion	Ratio	Lower	Upper
166	100		
131	69.4	57.3	85.9
94	39.9	31.7	47.5

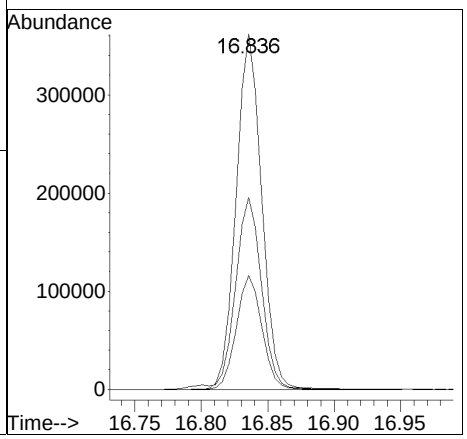


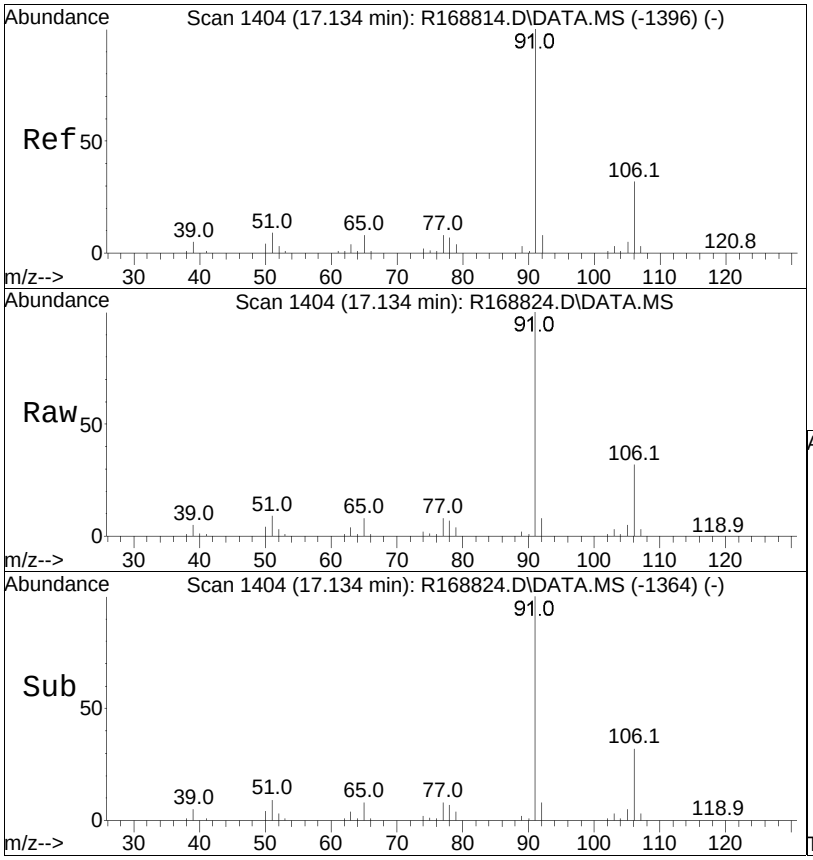


#80
chlorobenzene
Concen: 10.34 ppbV
RT: 16.836 min Scan# 1344
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:112 Resp: 483007

Ion	Ratio	Lower	Upper
112	100		
114	32.1	25.8	38.8
77	54.1	43.8	65.8

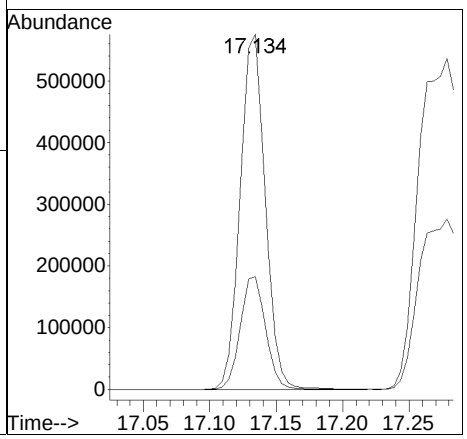


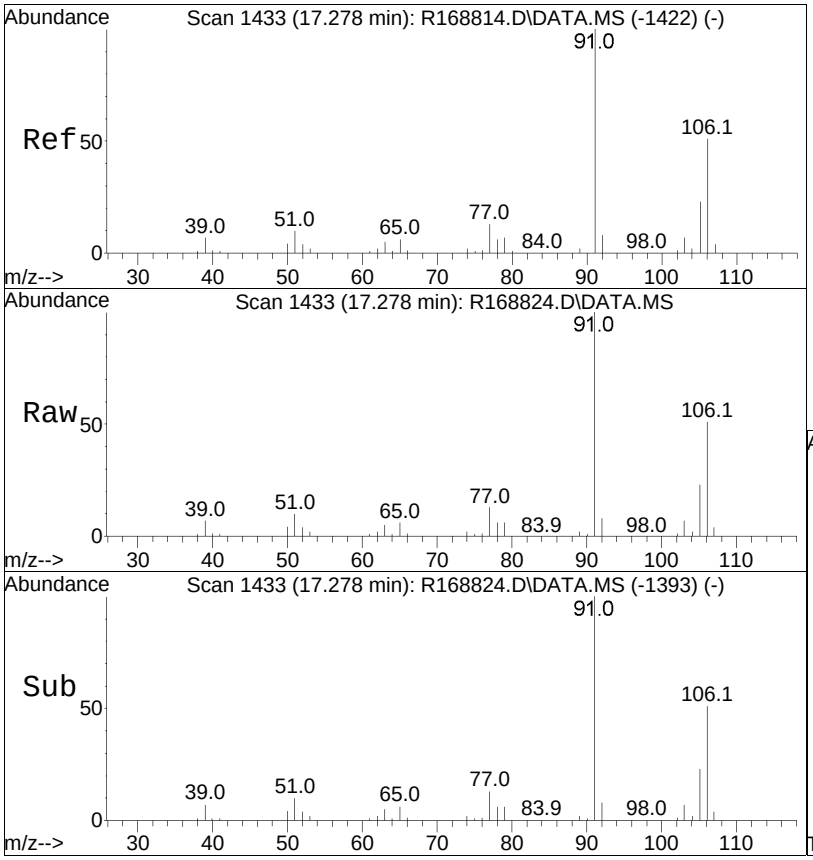


#81
ethylbenzene
Concen: 10.23 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 91 Resp: 756302

Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.3	37.9

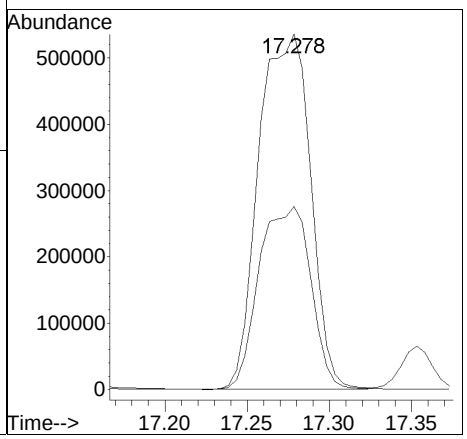


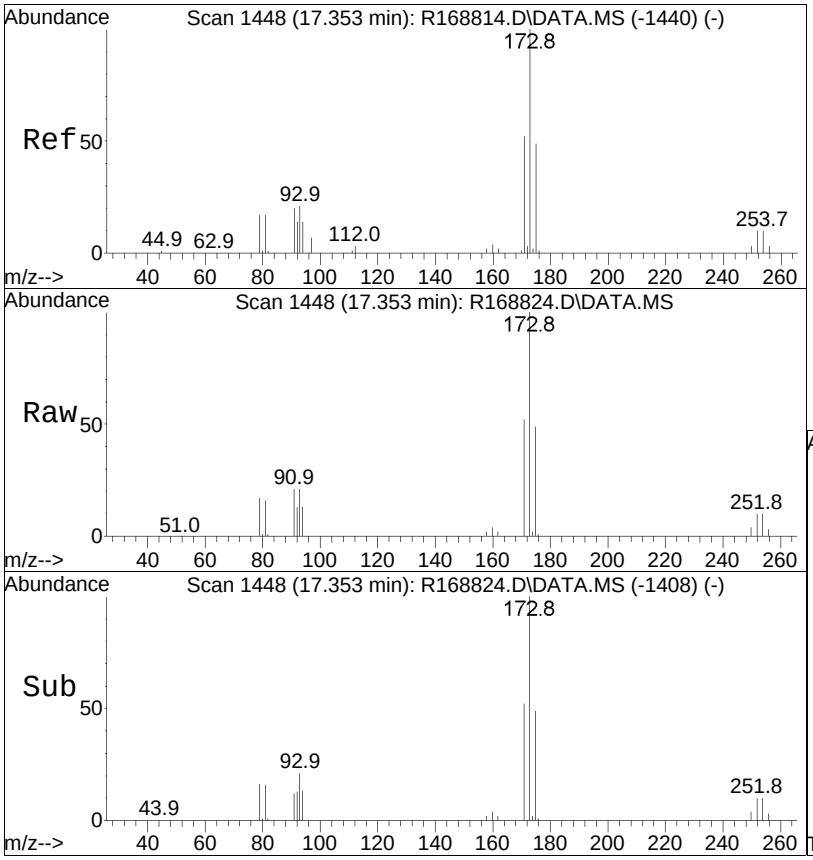


#83
m+p-xylene
Concen: 20.58 ppbV
RT: 17.278 min Scan# 1433
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 91 Resp: 1170747

Ion	Ratio	Lower	Upper
91	100		
106	51.5	40.8	61.2

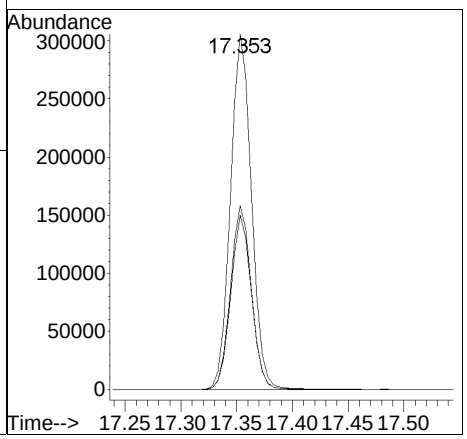


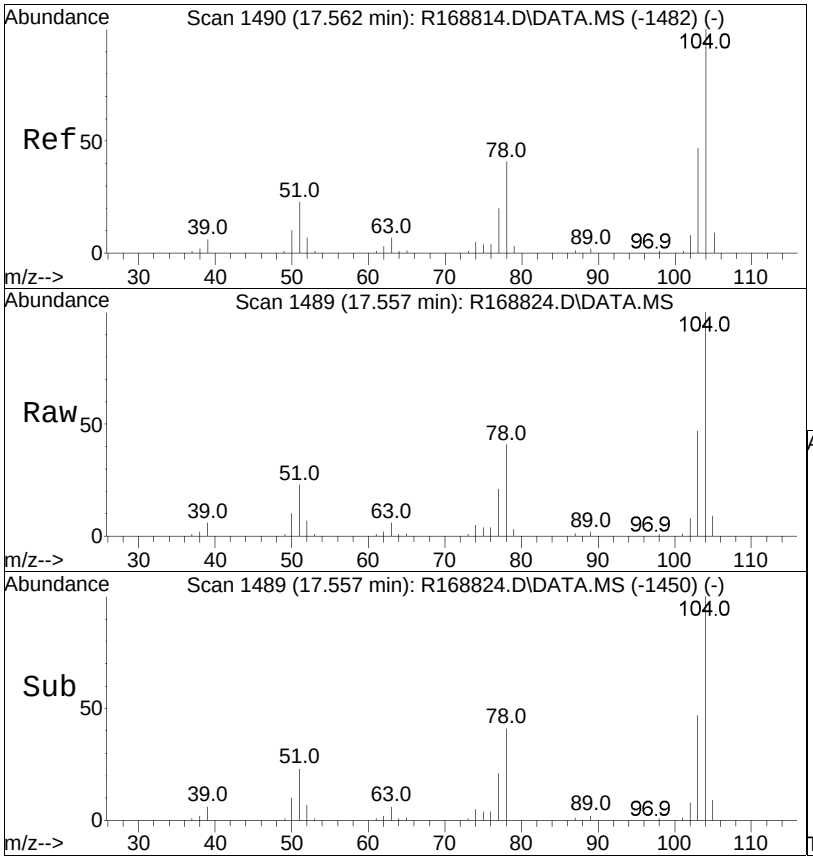


#84
bromoform
Concen: 10.74 ppbV
RT: 17.353 min Scan# 1448
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:173 Resp: 400694

Ion	Ratio	Lower	Upper
173	100		
175	49.1	39.5	59.3
171	51.8	41.8	62.8

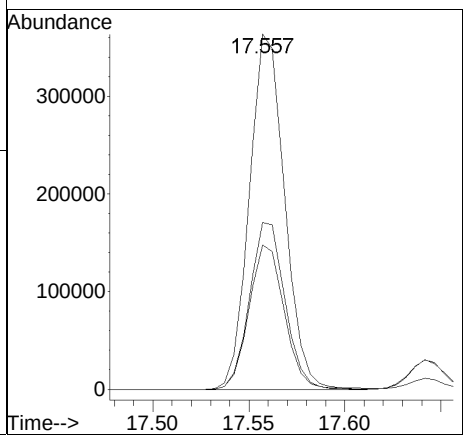


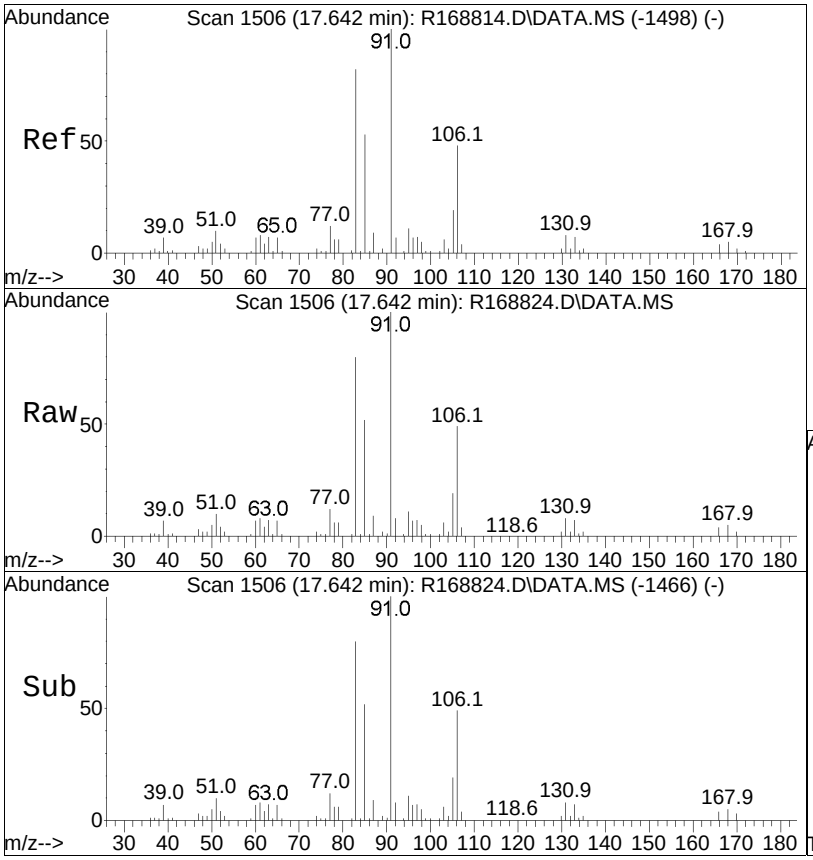


#85
styrene
Concen: 10.20 ppbV
RT: 17.557 min Scan# 1489
Delta R.T. -0.005 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:104 Resp: 464684

Ion	Ratio	Lower	Upper
104	100		
103	47.0	37.8	56.6
78	40.6	32.9	49.3

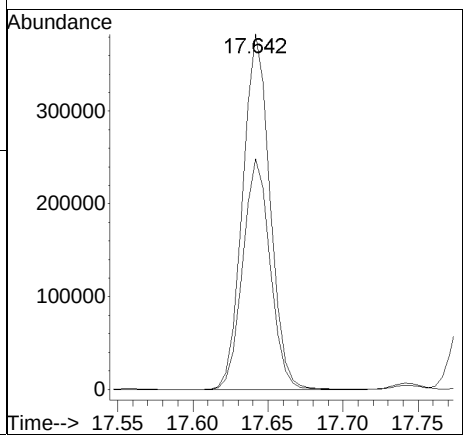


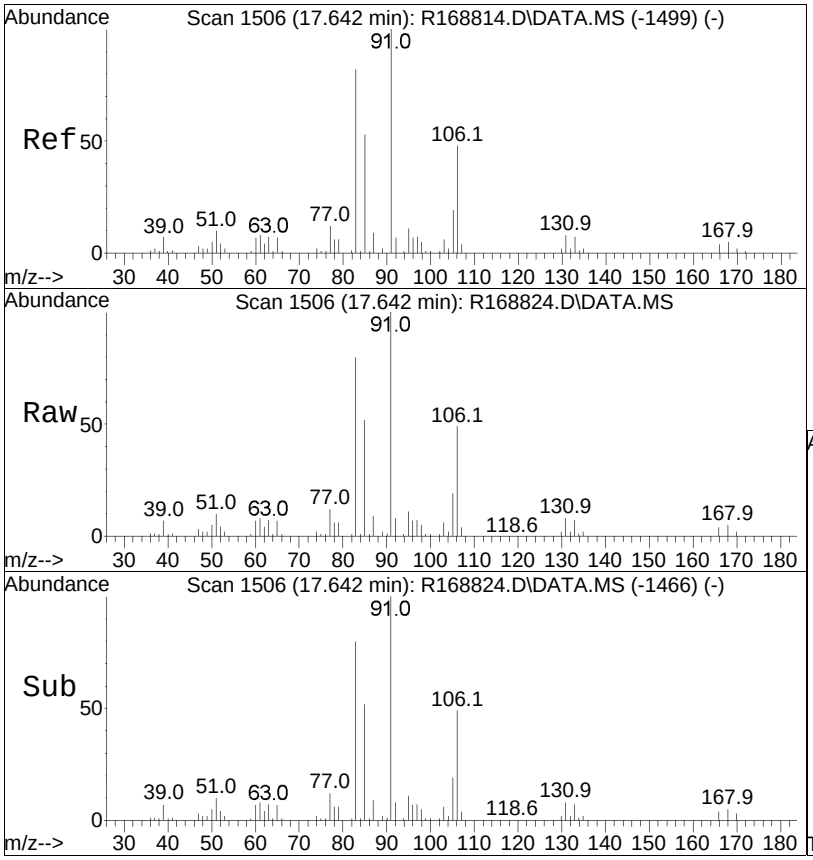


#86
1,1,2,2-tetrachloroethane
Concen: 10.55 ppbV
RT: 17.642 min Scan# 1506
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 83 Resp: 483759

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.2	76.8

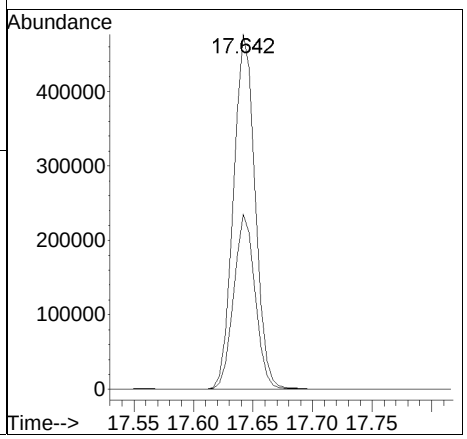


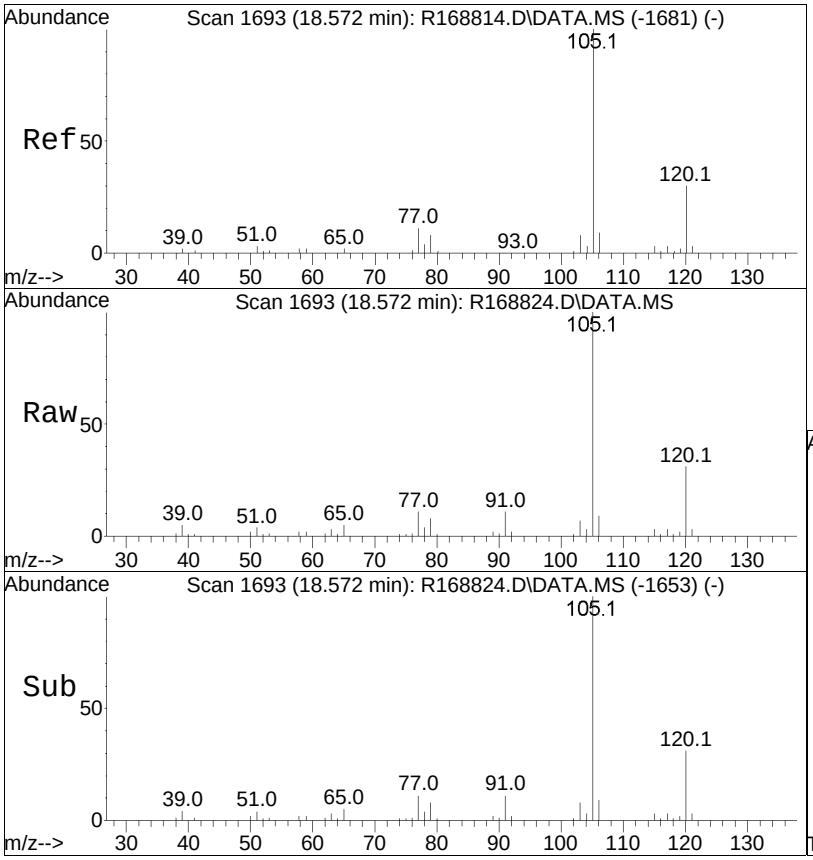


#87
o-xylene
Concen: 10.49 ppbV
RT: 17.642 min Scan# 1506
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 91 Resp: 604497

Ion	Ratio	Lower	Upper
91	100		
106	49.3	38.3	57.5

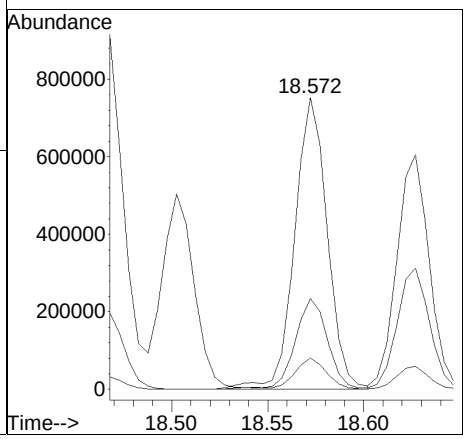


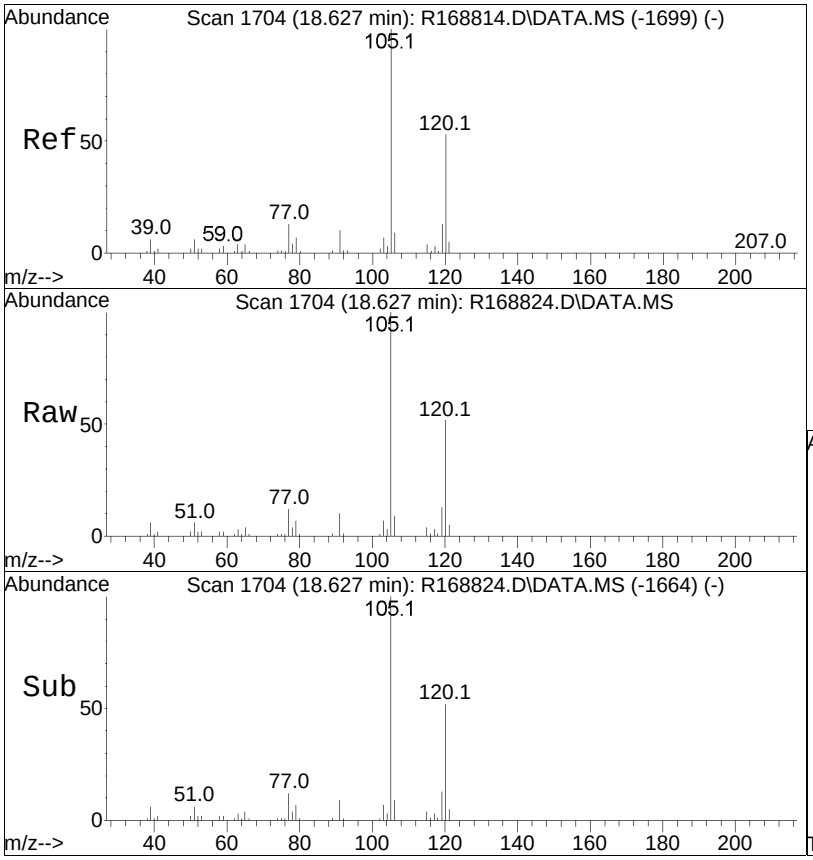


#96
4-ethyl toluene
Concen: 10.14 ppbV
RT: 18.572 min Scan# 1693
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:105 Resp: 889163

Ion	Ratio	Lower	Upper
105	100		
120	31.2	24.0	36.0
91	10.8	8.4	12.6

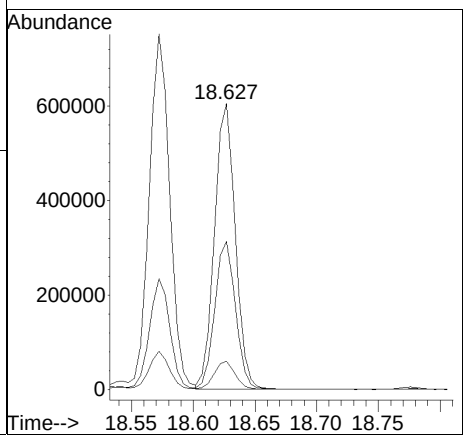


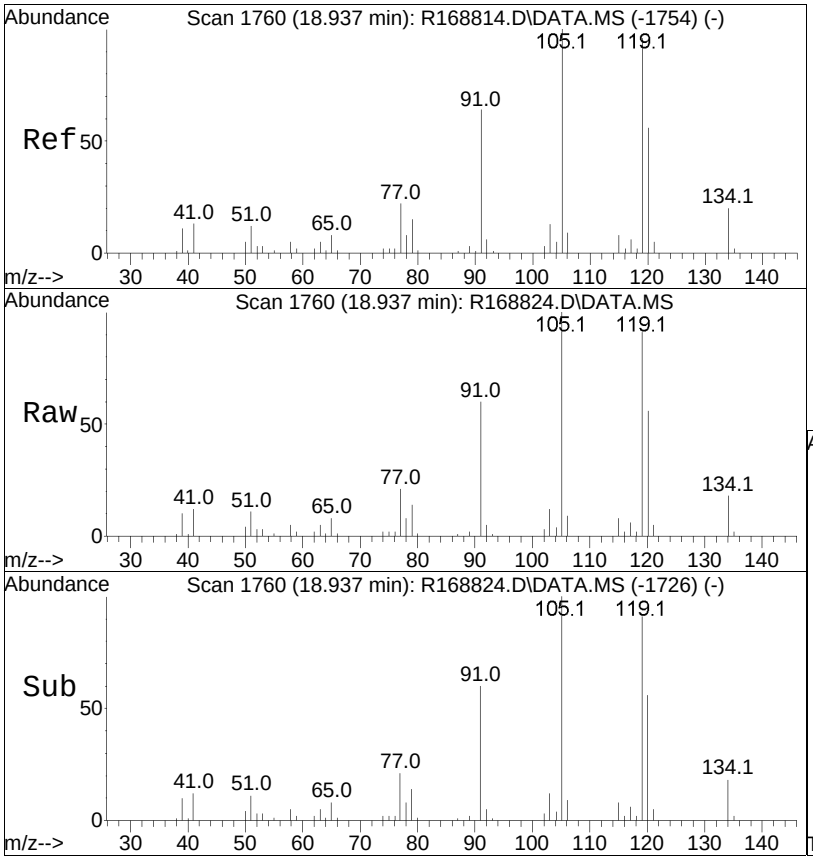


#97
1,3,5-trimethylbenzene
Concen: 10.26 ppbV
RT: 18.627 min Scan# 1704
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:105 Resp: 709941

Ion	Ratio	Lower	Upper
105	100		
120	51.7	41.9	62.9
91	9.9	8.0	12.0

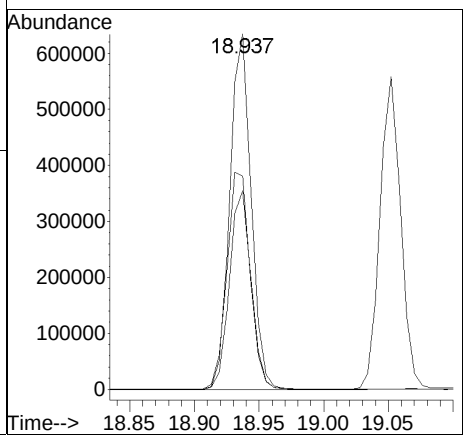


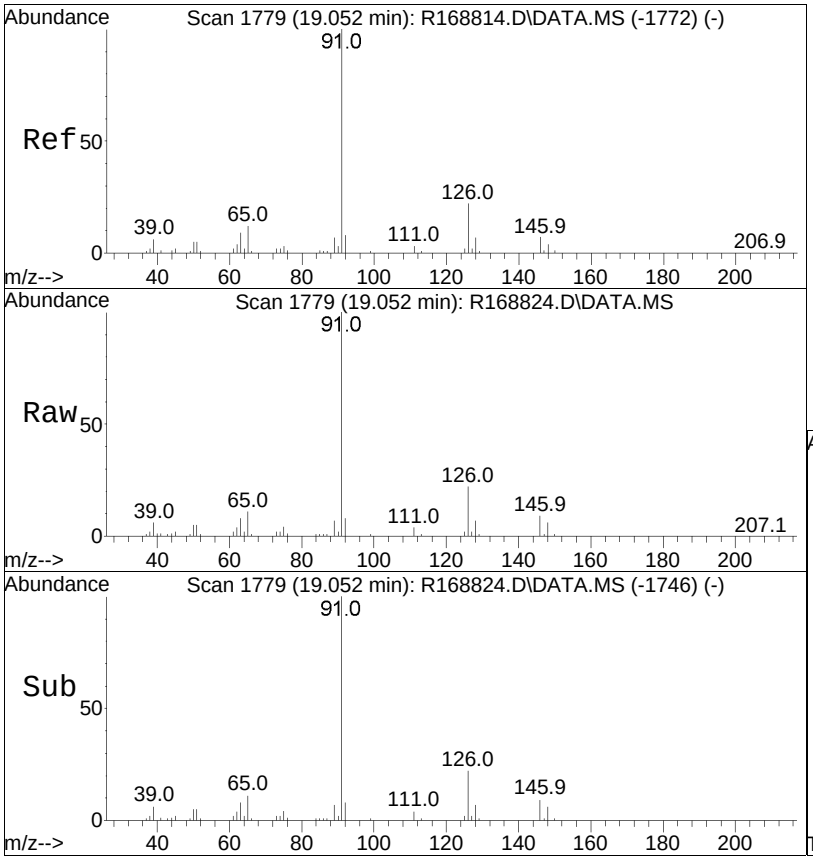


#99
1,2,4-trimethylbenzene
Concen: 10.75 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:105 Resp: 728467

Ion	Ratio	Lower	Upper
105	100		
120	55.9	44.5	66.7
91	60.1	51.4	77.2

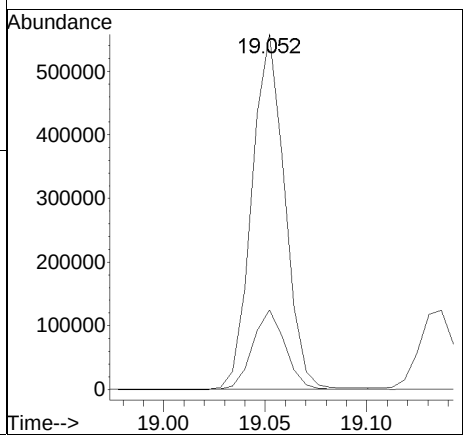


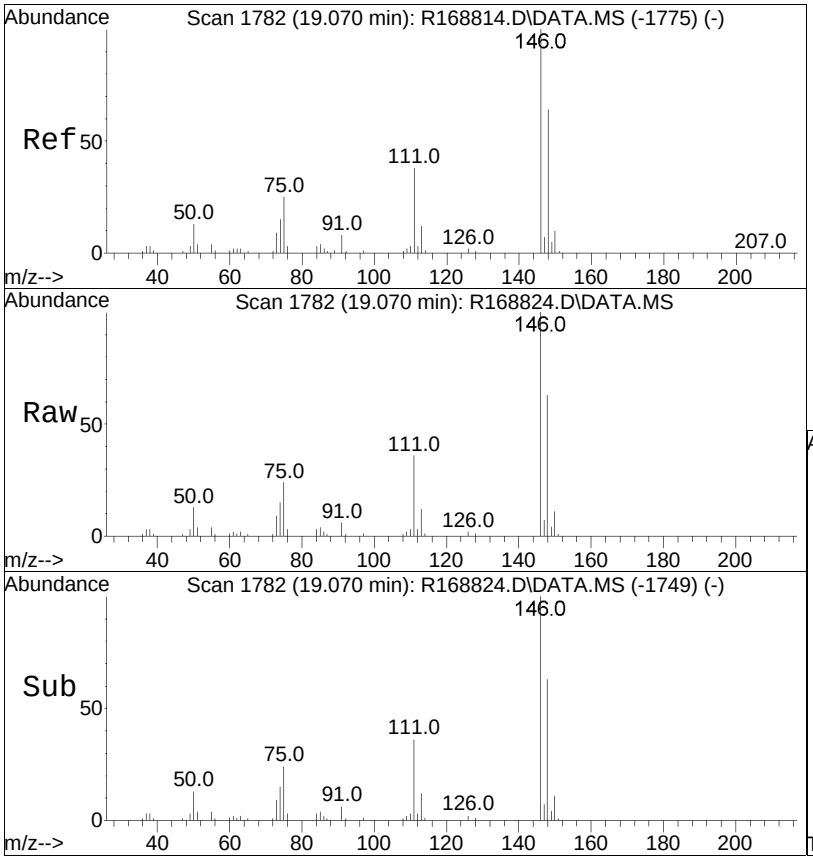


#101
Benzyl Chloride
Concen: 10.69 ppbV
RT: 19.052 min Scan# 1779
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion: 91 Resp: 625518

Ion	Ratio	Lower	Upper
91	100		
126	22.4	17.7	26.5

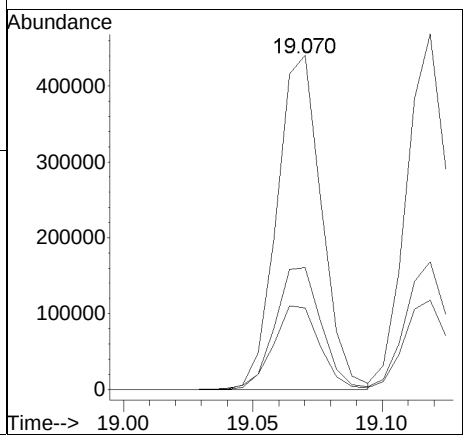


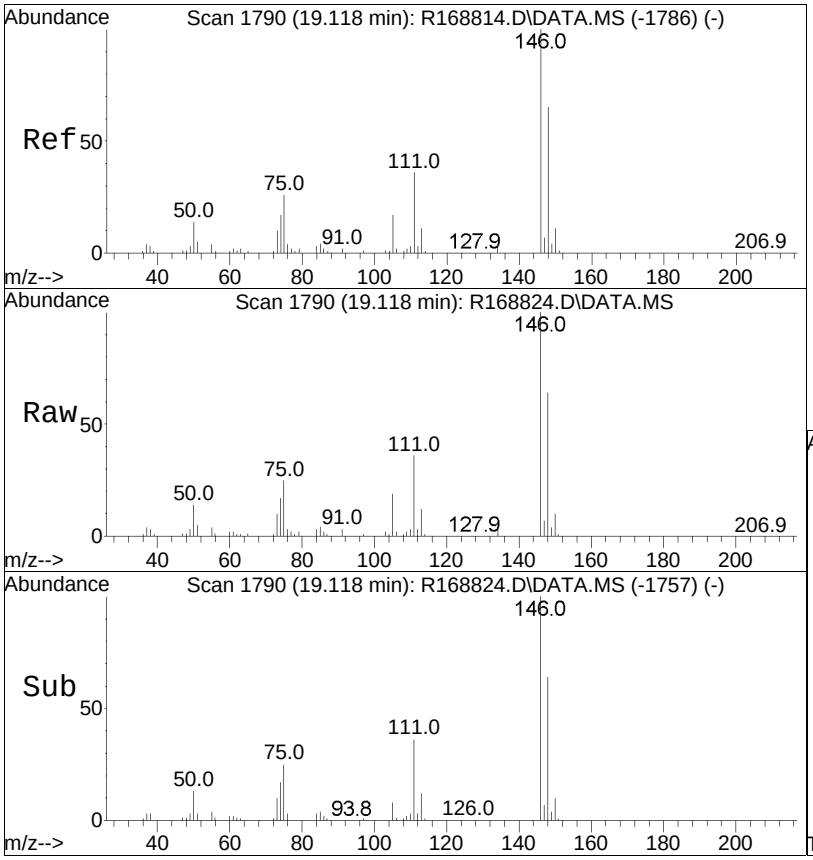


#102
1,3-dichlorobenzene
Concen: 10.35 ppbV
RT: 19.070 min Scan# 1782
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:146 Resp: 529301

Ion	Ratio	Lower	Upper
146	100		
111	36.4	30.2	45.4
75	24.4	19.8	29.6

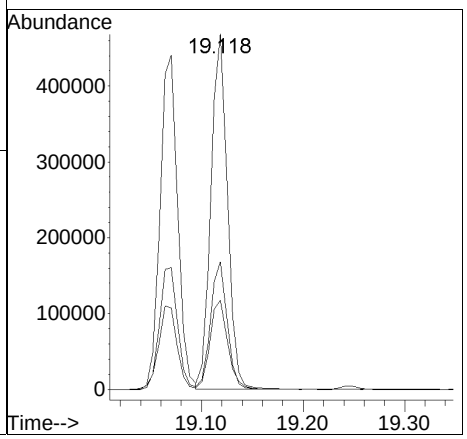


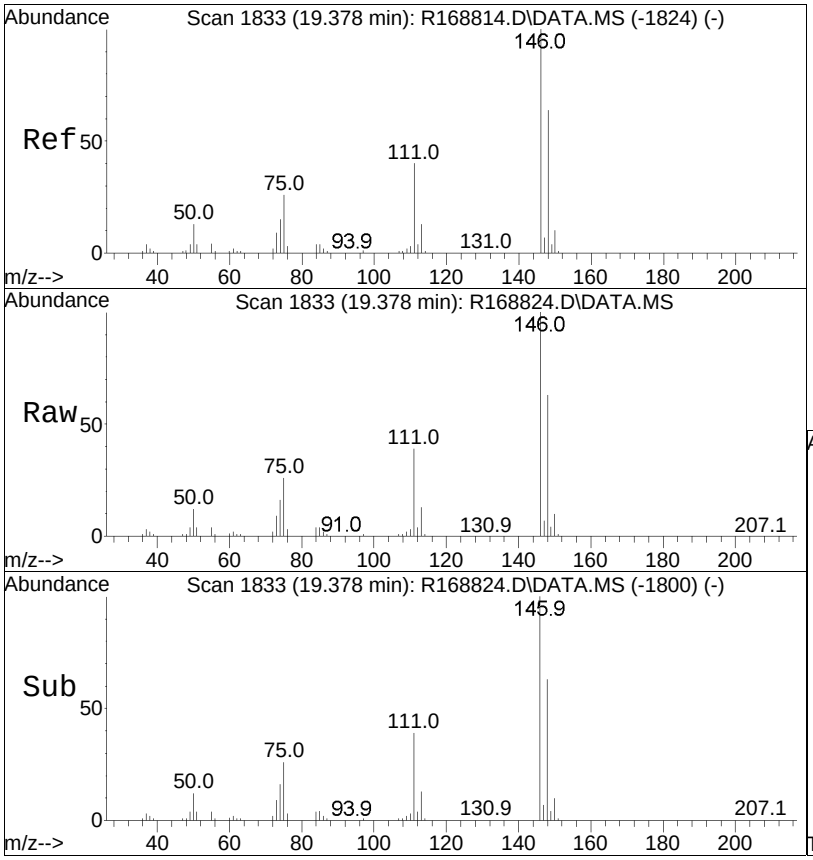


#103
1,4-dichlorobenzene
Concen: 10.29 ppbV
RT: 19.118 min Scan# 1790
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:146 Resp: 532099

Ion	Ratio	Lower	Upper
146	100		
111	35.9	29.0	43.6
75	25.1	21.0	31.4

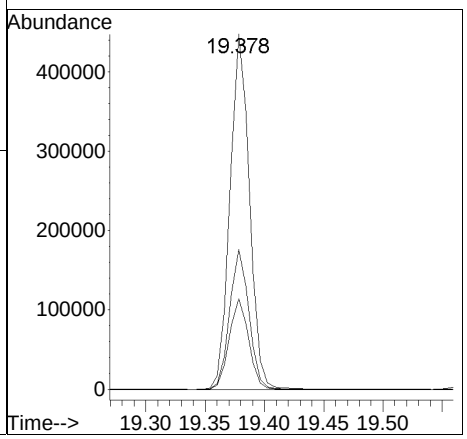


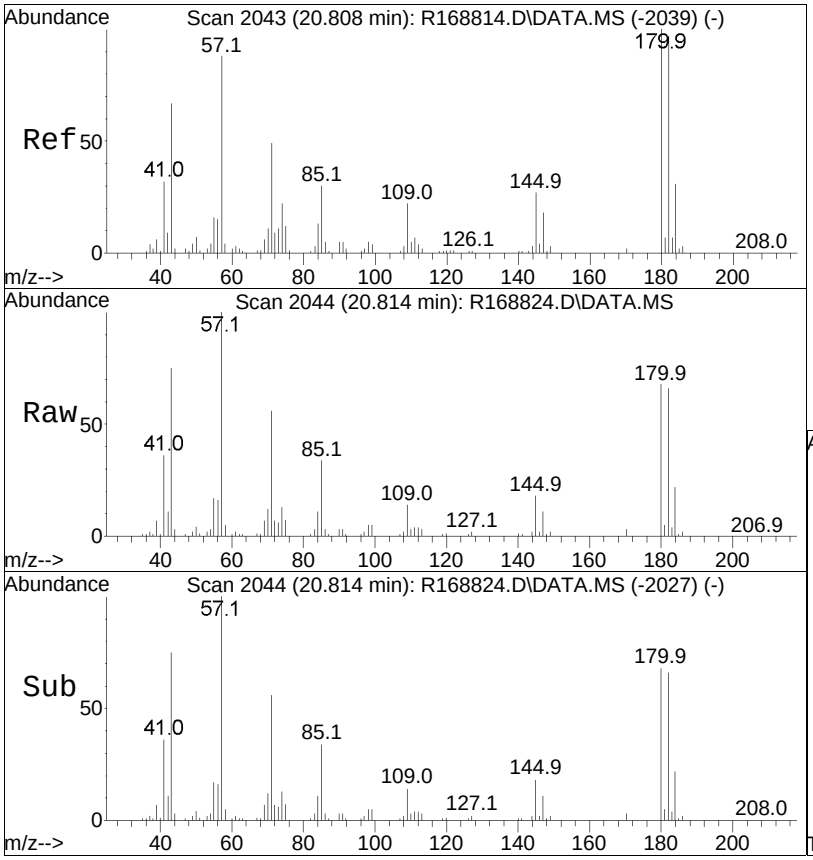


#107
1,2-dichlorobenzene
Concen: 10.53 ppbV
RT: 19.378 min Scan# 1833
Delta R.T. 0.000 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:146 Resp: 512966

Ion	Ratio	Lower	Upper
146	100		
111	39.4	31.7	47.5
75	25.5	21.0	31.6

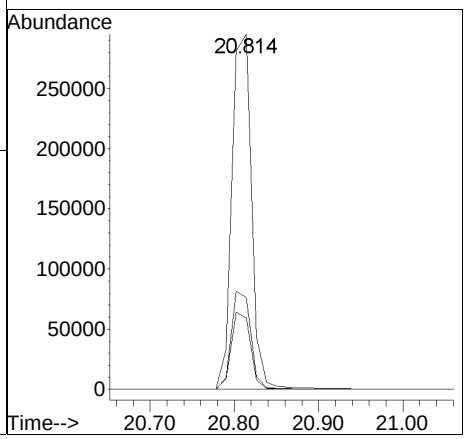


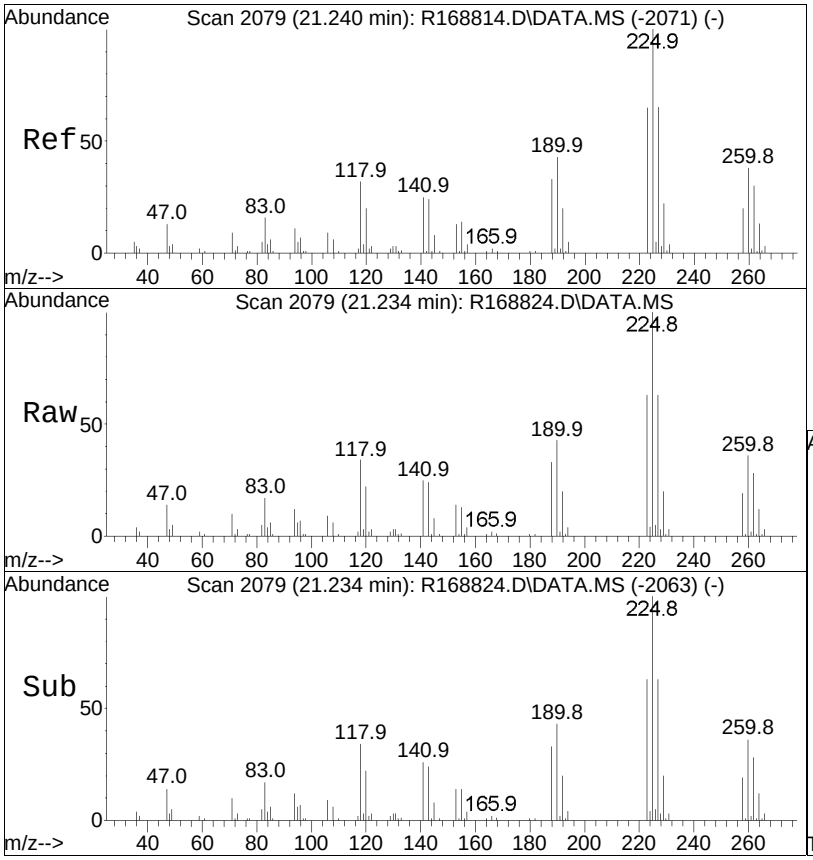


#115
1,2,4-trichlorobenzene
Concen: 11.95 ppbV
RT: 20.814 min Scan# 2044
Delta R.T. 0.006 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:180 Resp: 482565

Ion	Ratio	Lower	Upper
180	100		
145	25.8	21.9	32.9
109	20.1	17.2	25.8

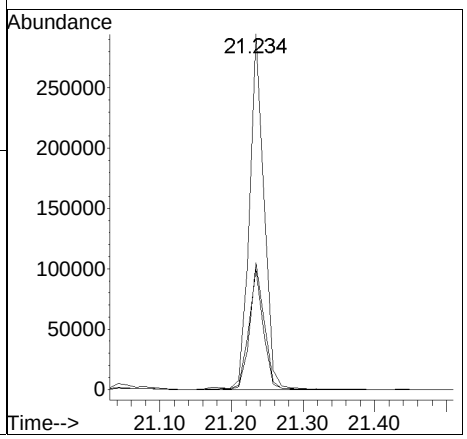




#119
hexachlorobutadiene
Concen: 12.22 ppbV
RT: 21.234 min Scan# 2079
Delta R.T. -0.006 min
Lab File: R168824.D
Acq: 24 Oct 2019 1:30 pm

Tgt Ion:225 Resp: 416369

Ion	Ratio	Lower	Upper
225	100		
260	35.6	30.2	45.4
118	33.8	25.7	38.5

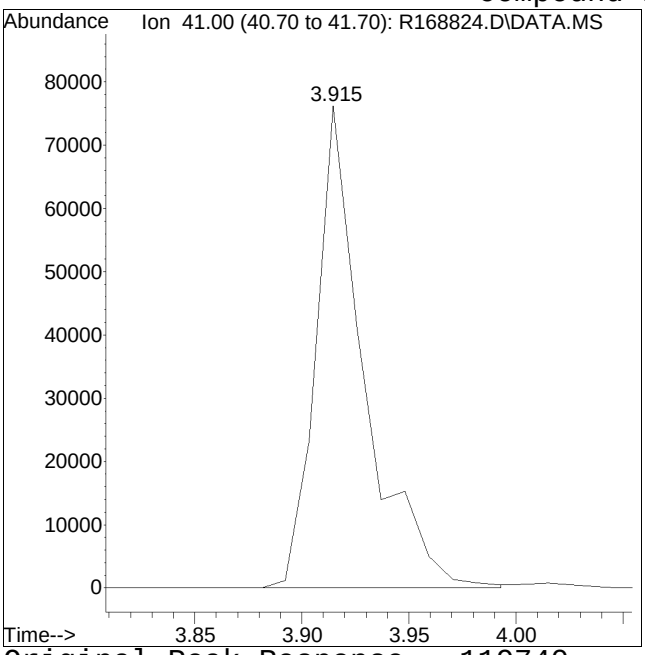


Manual Integration Report

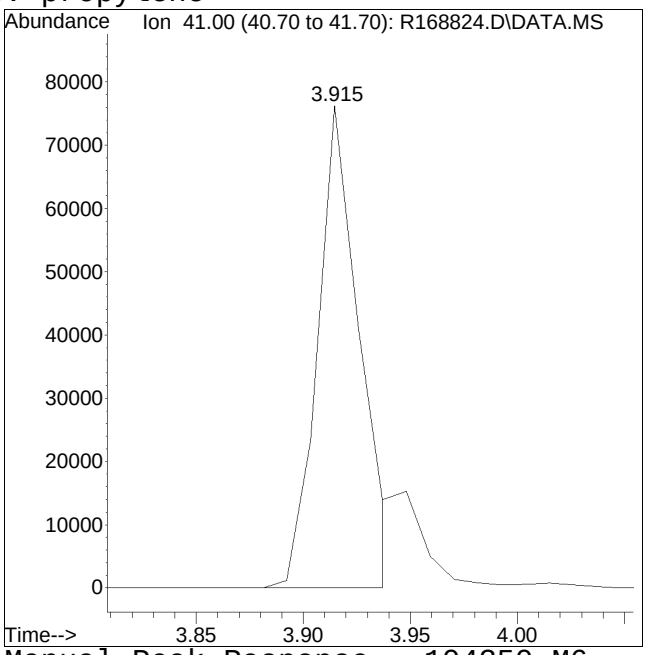
Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168824.D
Date Inj'd : 10/24/2019 1:30 pm
Sample : WG1300314-3,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/24/2019 2:11 pm

Compound #3: propylene



Original Peak Response = 119740



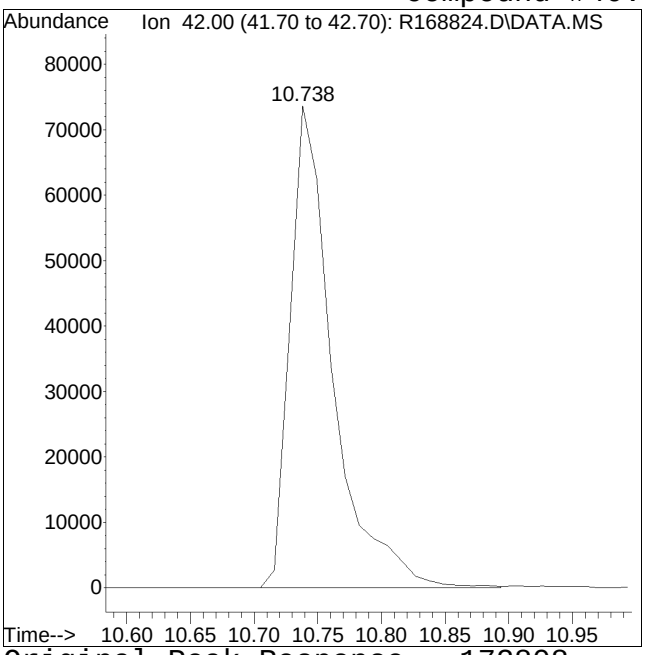
Manual Peak Response = 104350 M6

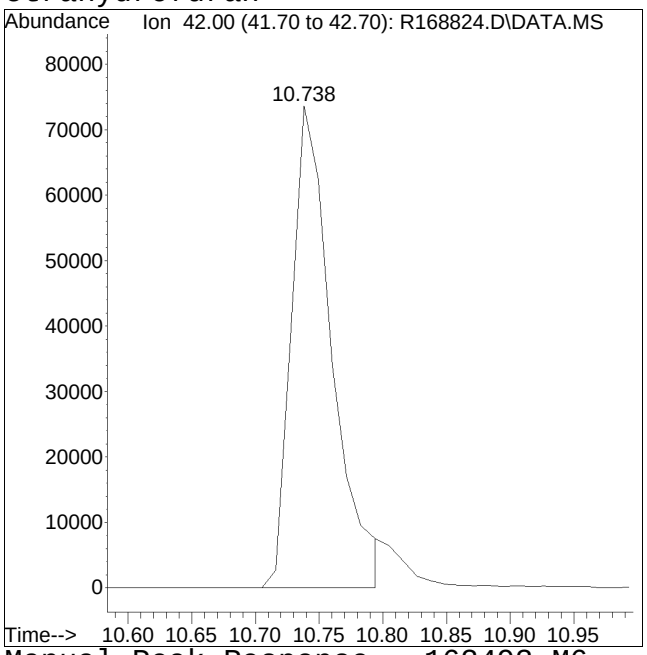
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TFS1_191023.M
Data File : R168824.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 1:30 pm Instrument : Air Piano 1
Sample : WG1300314-3,3,250,250 Quant Date : 10/24/2019 2:11 pm

Compound #40: Tetrahydrofuran





Original Peak Response = 172808 Manual Peak Response = 162493 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168833.D
Acq On : 24 Oct 2019 7:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-5,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:40:06 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.111	49	283607	10.000	ppbV	0.00
Standard Area = 325698			Recovery =		87.08%	
43) 1,4-difluorobenzene	12.348	114	633942	10.000	ppbV	0.00
Standard Area = 741488			Recovery =		85.50%	
67) chlorobenzene-D5	16.801	54	103471	10.000	ppbV	0.00
Standard Area = 123702			Recovery =		83.65%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.015	85	8533	0.313	ppbV	98
6) chloromethane	4.238	50	5104	0.551	ppbV	97
7) Freon-114	4.384		0	N.D.		
10) 1,3-butadiene	4.741	54	319	0.039	ppbV #	65
13) bromomethane	5.125		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.609	31	85783	13.883	ppbV	100
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.260	43	53085	3.114	ppbV #	94
21) trichlorofluoromethane	6.437	101	6491	0.227	ppbV	84
22) isopropyl alcohol	6.651	45	31812	1.687	ppbV	98
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.470	49	2549	0.206	ppbV	99
29) 3-chloropropene	7.601		0	N.D.		
30) carbon disulfide	7.796	76	1350	0.037	ppbV #	1
31) Freon 113	7.815	101	1372	0.056	ppbV	99
32) trans-1,2-dichloroethene	8.531		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	9.406		0	N.D.		
38) Ethyl Acetate	10.260		0	N.D.		
39) chloroform	10.271	83	1204	0.035	ppbV #	86
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	10.164	57	2668M3	0.109	ppbV	
50) benzene	11.941	78	3909	0.096	ppbV	100
53) cyclohexane	12.243	56	793	0.040	ppbV	92

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168833.D
Acq On : 24 Oct 2019 7:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-5,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:40:06 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024T\R168824.D
Sub List : TO15-NY-7-SIM - .

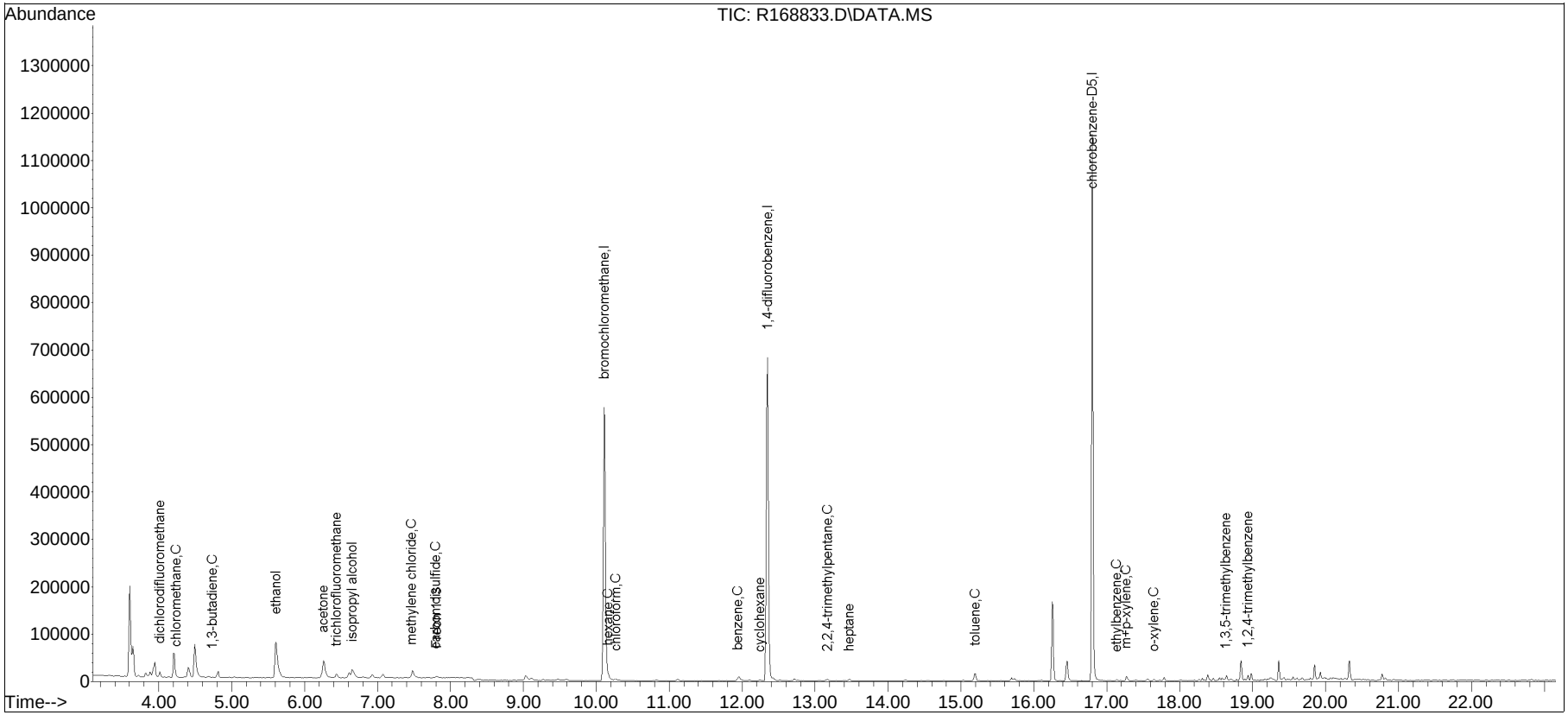
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	13.174	57	3212	0.051	ppbV #	72
62) heptane	13.465	43	2117	0.094	ppbV #	88
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	14.226		0	N.D.		
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	15.198	91	12293	0.251	ppbV	94
72) 2-hexanone	15.477		0	N.D.		
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	0.000		0	N.D.		
81) ethylbenzene	17.134	91	2483	0.040	ppbV #	85
83) m+p-xylene	17.268	91	6036	0.127	ppbV	97
84) bromoform	0.000		0	N.D.		
85) styrene	17.562		0	N.D.		
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.647	91	2296	0.048	ppbV	97
96) 4-ethyl toluene	18.577		0	N.D.		
97) 1,3,5-trimethylbenzene	18.632	105	1819	0.031	ppbV #	78
99) 1,2,4-trimethylbenzene	18.937	105	3948	0.070	ppbV #	65
101) Benzyl Chloride	18.937		0	N.D.		
102) 1,3-dichlorobenzene	19.124		0	N.D.		
103) 1,4-dichlorobenzene	19.124		0	N.D.		
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	20.820		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

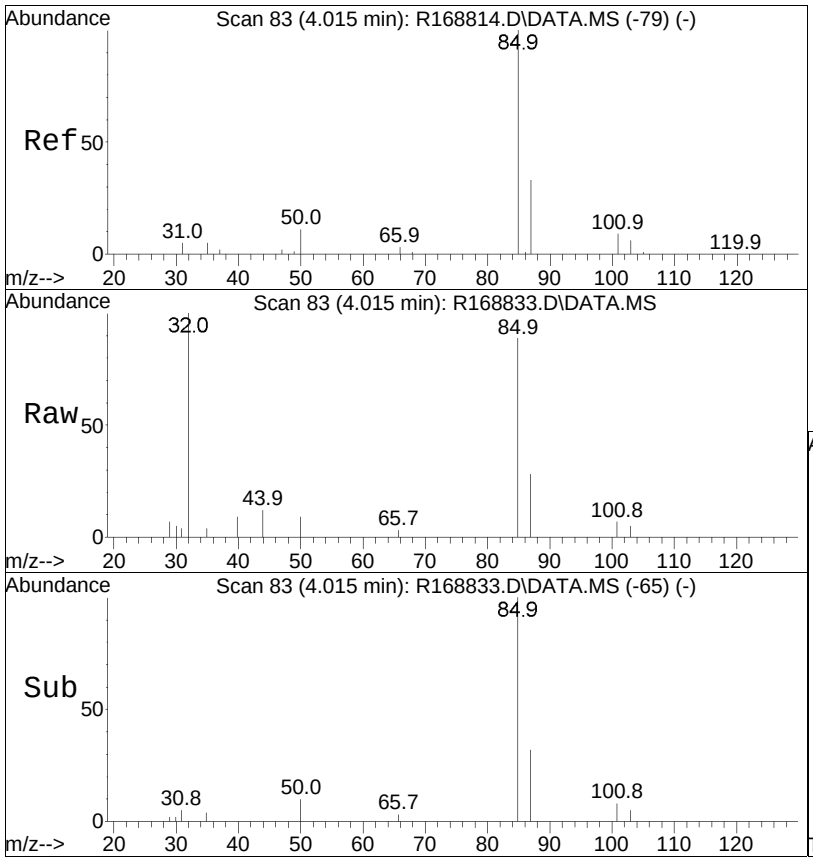
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15-NY-7-SIM - .\AIR1\2019\191024T\R168824.D

Data Path : O:\Forensics\Data\AIR1\2019\191024T\
Data File : R168833.D
Acq On : 24 Oct 2019 7:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300314-5,3,250,250
Misc : WG1300314,ICAL16241
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 14:40:06 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024T\TFS1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Oct 24 08:41:35 2019
Response via : Initial Calibration

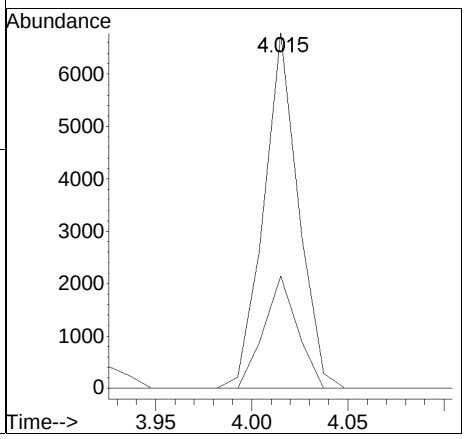


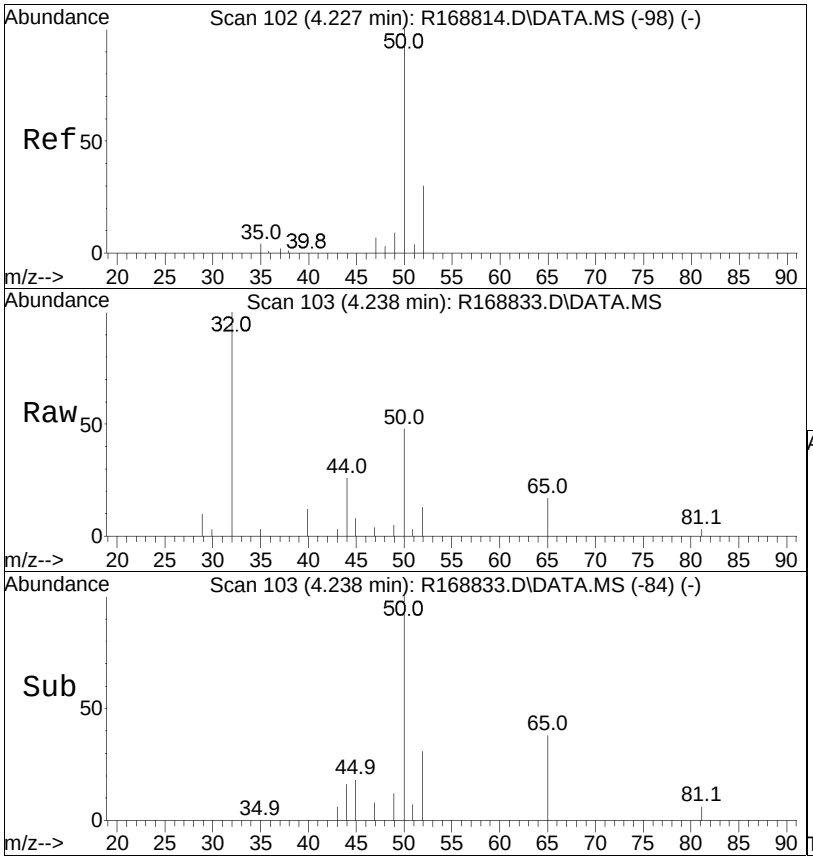


#5
dichlorodifluoromethane
Concen: 0.31 ppbV
RT: 4.015 min Scan# 83
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 85 Resp: 8533

Ion	Ratio	Lower	Upper
85	100		
87	31.6	26.1	39.1

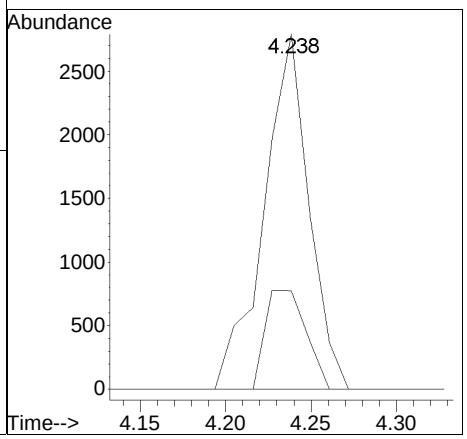


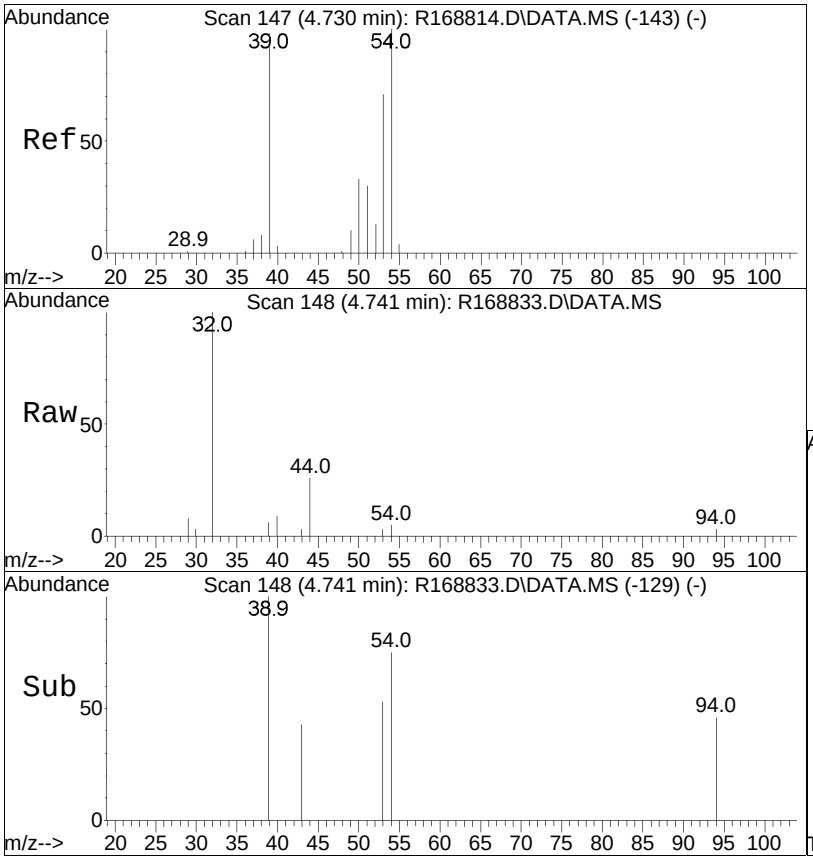


#6
chloromethane
Concen: 0.55 ppbV
RT: 4.238 min Scan# 103
Delta R.T. 0.011 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 50 Resp: 5104

Ion	Ratio	Lower	Upper
50	100		
52	27.8	23.7	35.5

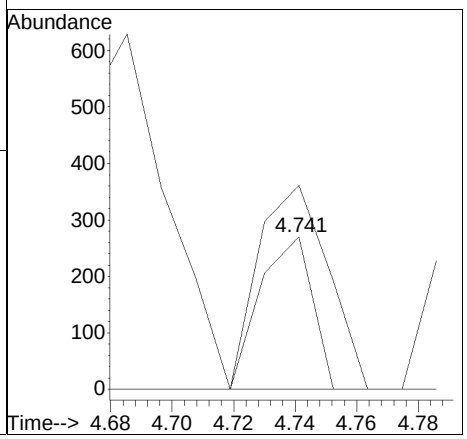


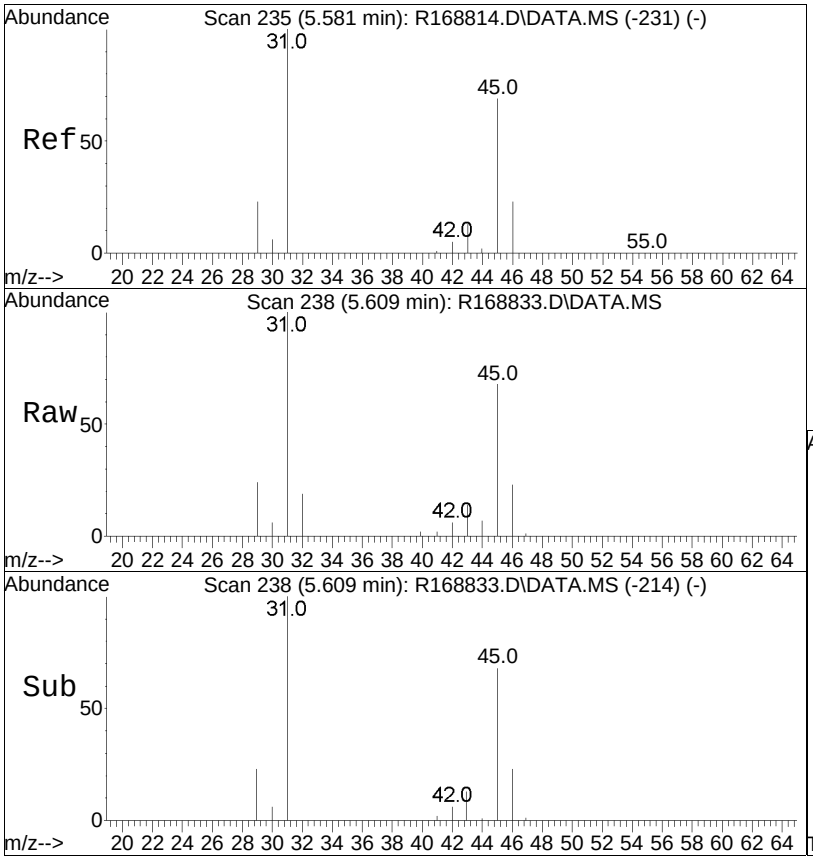


#10
1,3-butadiene
Concen: 0.04 ppbV
RT: 4.741 min Scan# 148
Delta R.T. 0.011 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 54 Resp: 319

Ion	Ratio	Lower	Upper
54	100		
39	133.7	79.2	118.8#

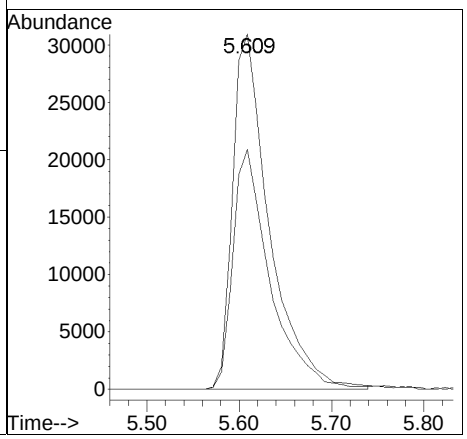


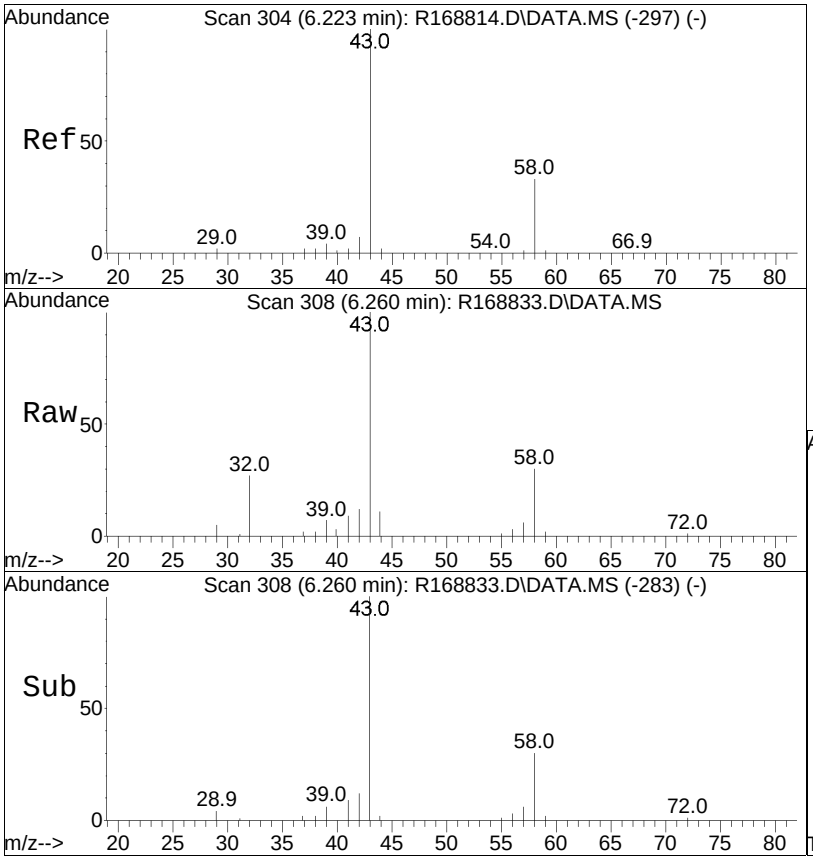


#15
ethanol
Concen: 13.88 ppbV
RT: 5.609 min Scan# 238
Delta R.T. 0.028 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 31 Resp: 85783

Ion	Ratio	Lower	Upper
31	100		
45	67.5	54.3	81.5

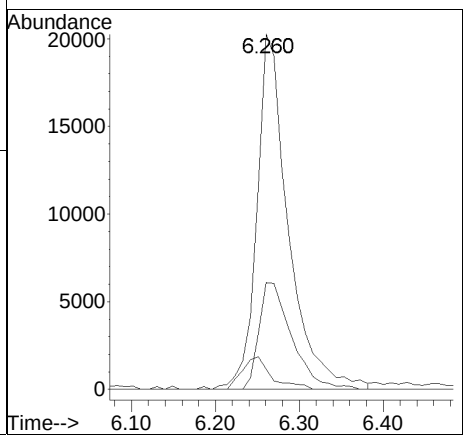


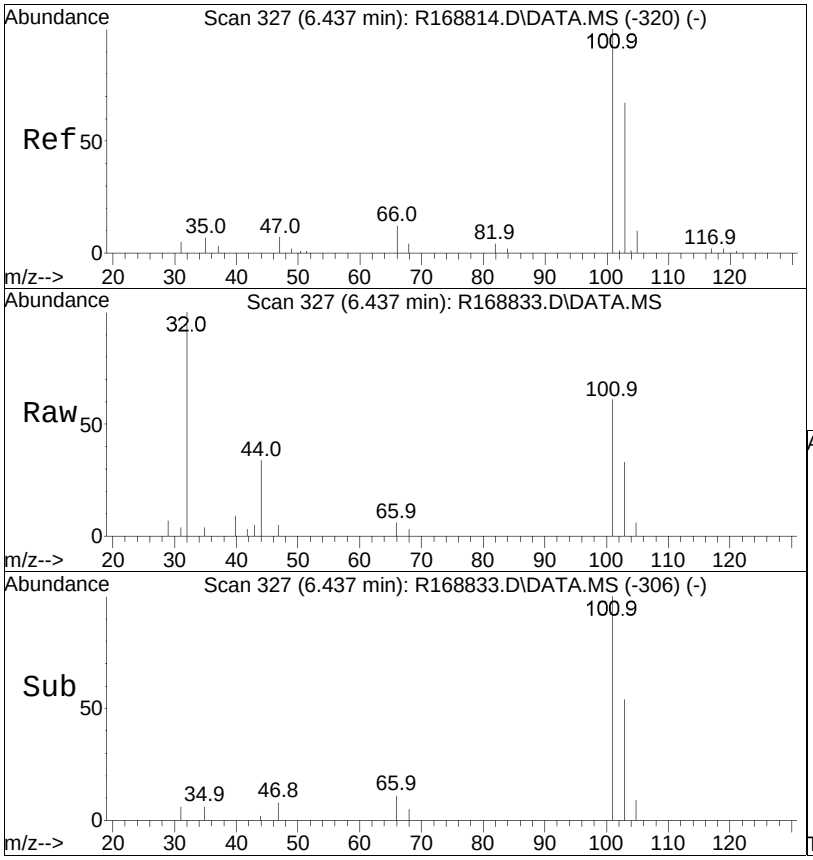


#19
acetone
Concen: 3.11 ppbV
RT: 6.260 min Scan# 308
Delta R.T. 0.037 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 43 Resp: 53085

Ion	Ratio	Lower	Upper
43	100		
58	30.1	26.5	39.7
57	5.7	0.8	1.2#

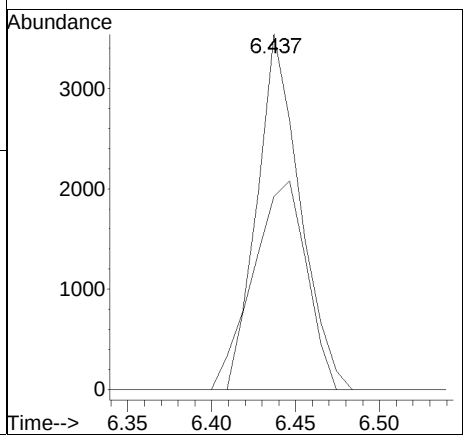


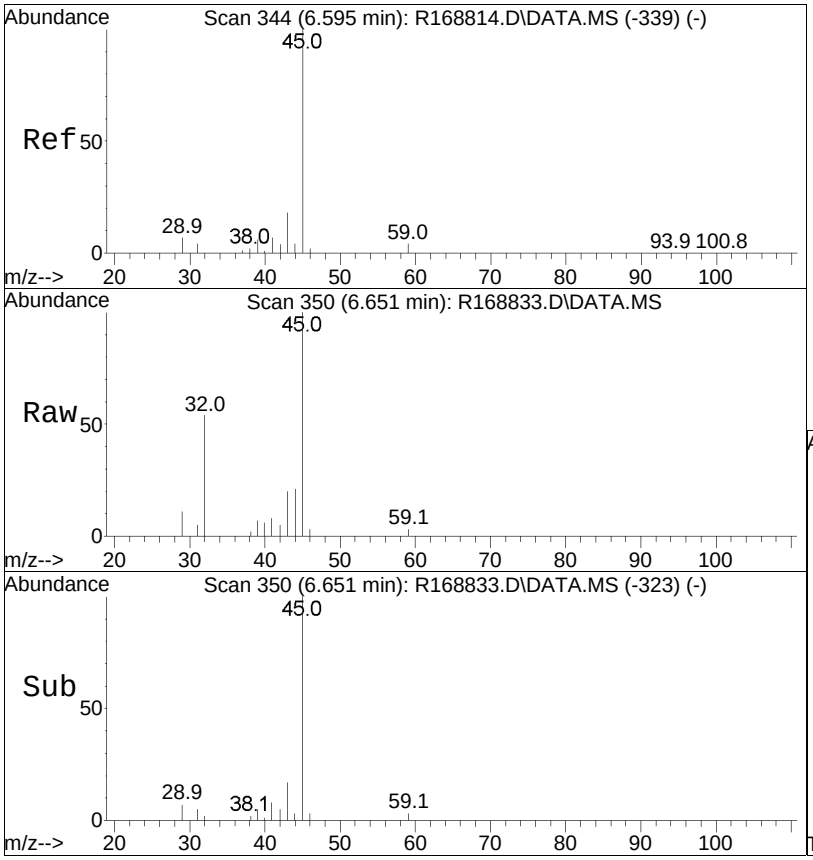


#21
trichlorofluoromethane
Concen: 0.23 ppbV
RT: 6.437 min Scan# 327
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:101 Resp: 6491

Ion	Ratio	Lower	Upper
101	100		
103	54.3	53.4	80.2

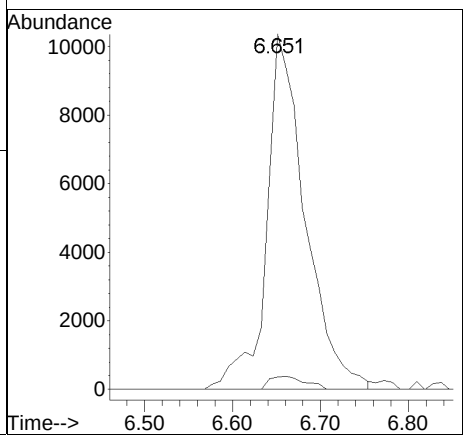


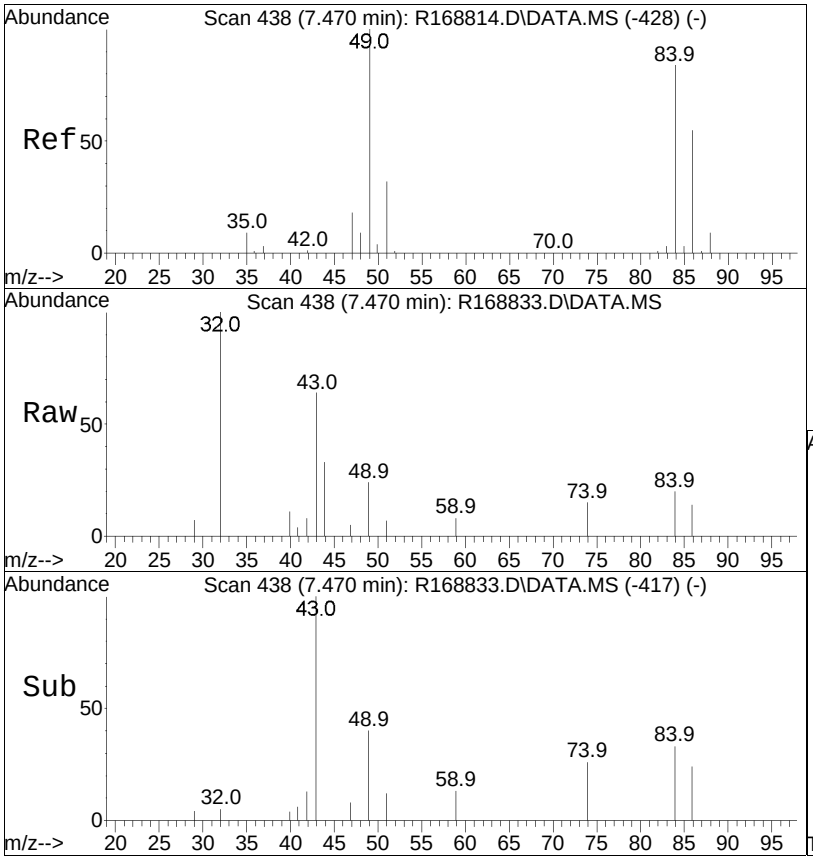


#22
isopropyl alcohol
Concen: 1.69 ppbV
RT: 6.651 min Scan# 350
Delta R.T. 0.056 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 45 Resp: 31812

Ion	Ratio	Lower	Upper
45	100		
59	3.5	3.4	5.0

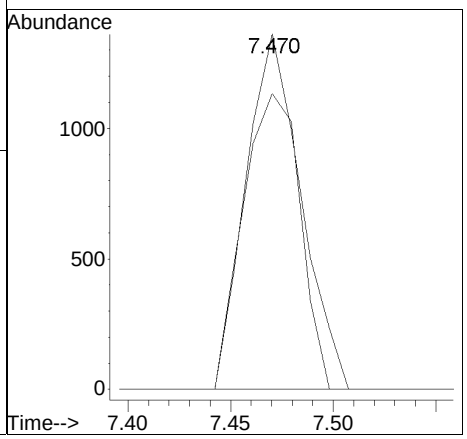


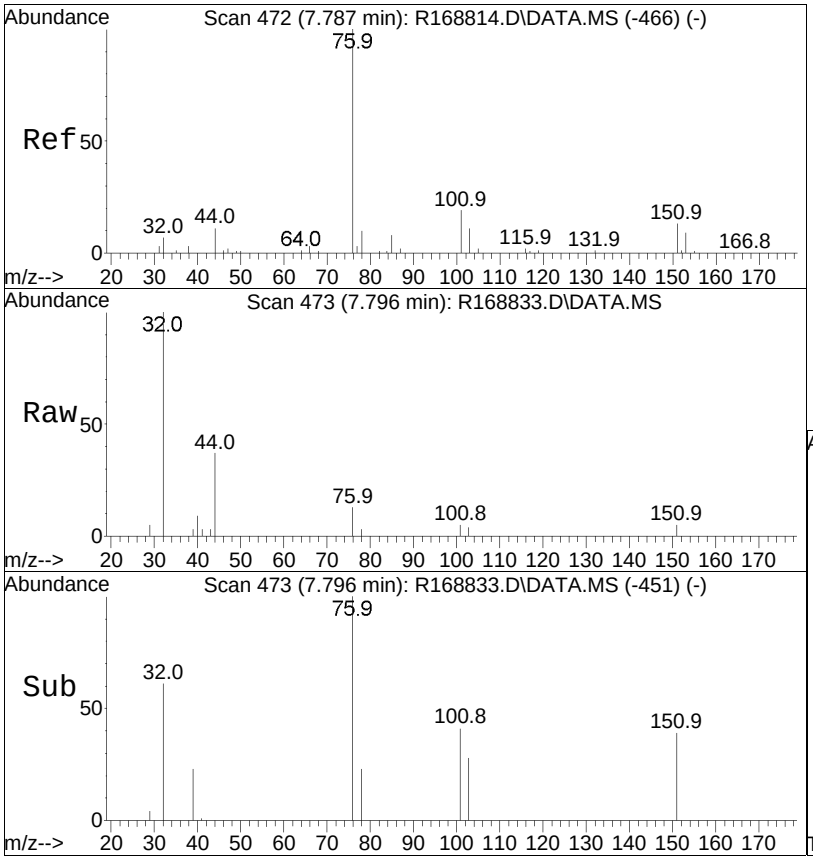


#28
methylene chloride
Concen: 0.21 ppbV
RT: 7.470 min Scan# 438
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 49 Resp: 2549

Ion	Ratio	Lower	Upper
49	100		
84	83.3	67.3	100.9

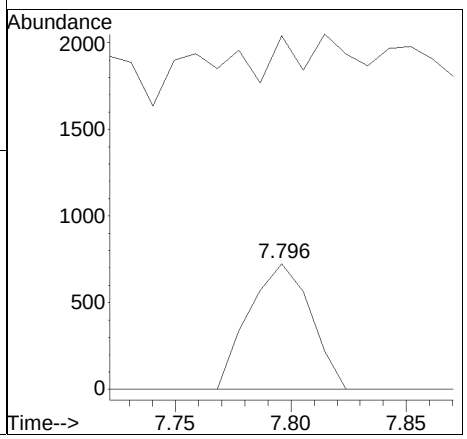


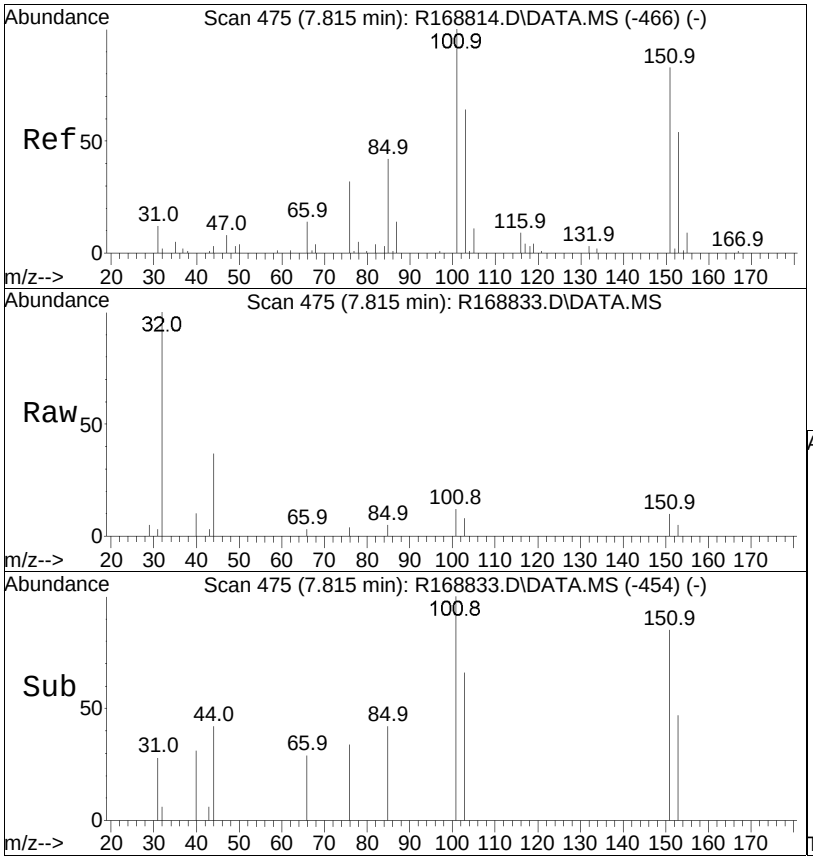


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.796 min Scan# 473
Delta R.T. 0.009 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 76 Resp: 1350

Ion	Ratio	Lower	Upper
76	100		
44	281.8	9.3	13.9#

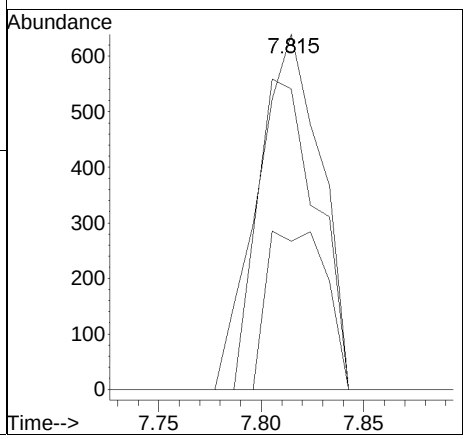


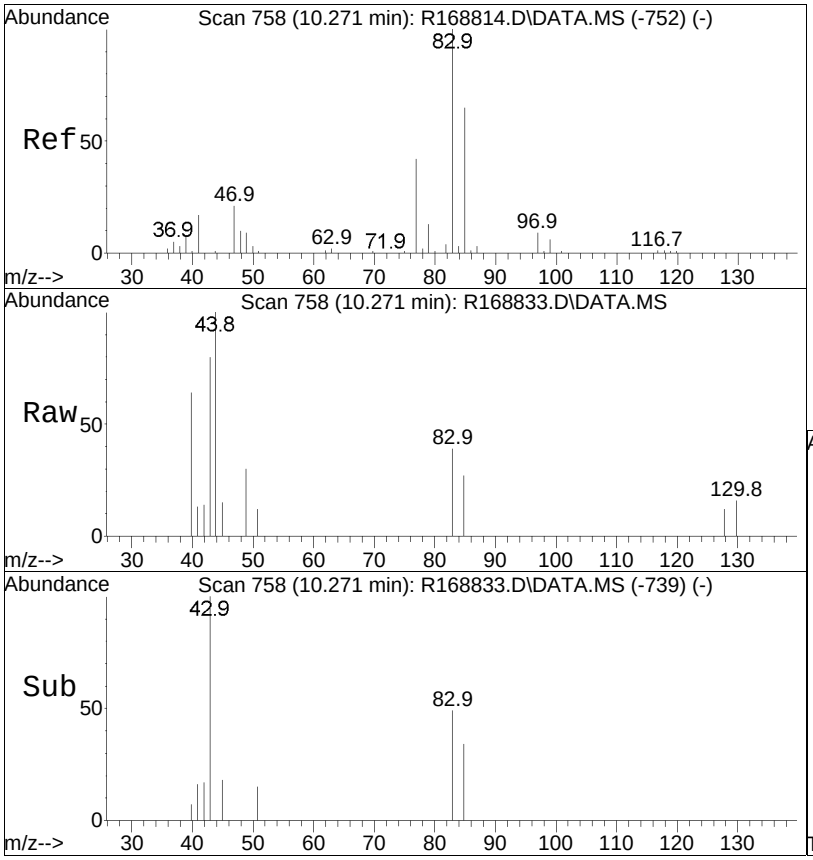


#31
Freon 113
Concen: 0.06 ppbV
RT: 7.815 min Scan# 475
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:101 Resp: 1372

Ion	Ratio	Lower	Upper
101	100		
85	41.7	33.2	49.8
151	84.5	66.2	99.2

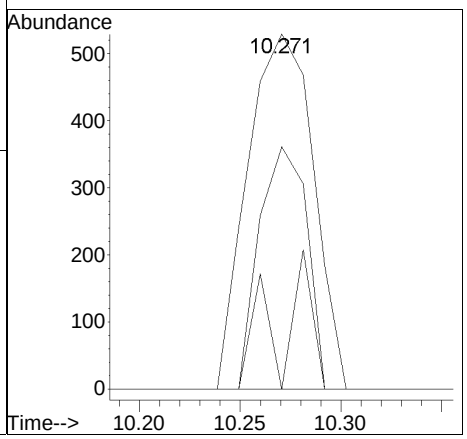


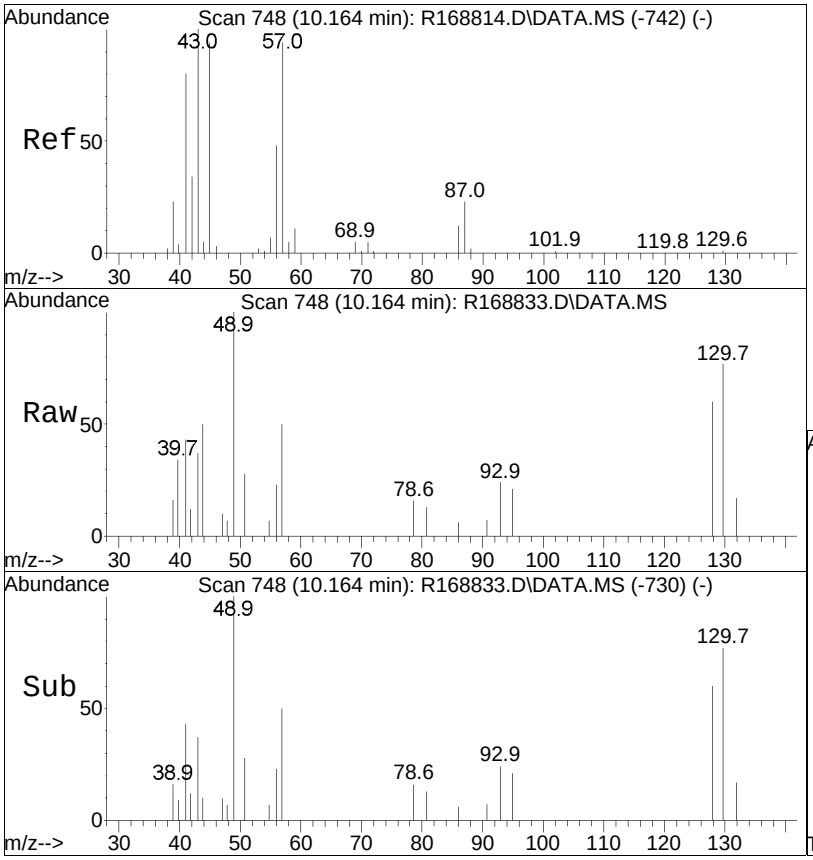


#39
chloroform
Concen: 0.03 ppbV
RT: 10.271 min Scan# 758
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 83 Resp: 1204

Ion	Ratio	Lower	Upper
83	100		
85	68.2	52.1	78.1
47	0.0	17.3	25.9#

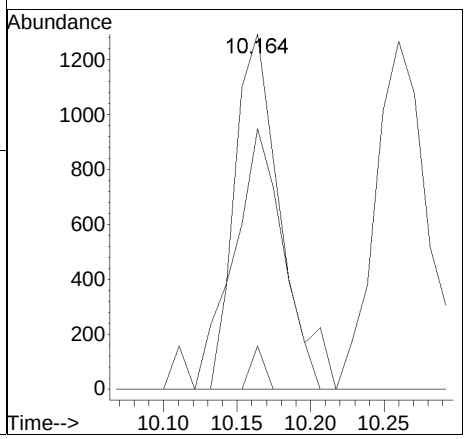


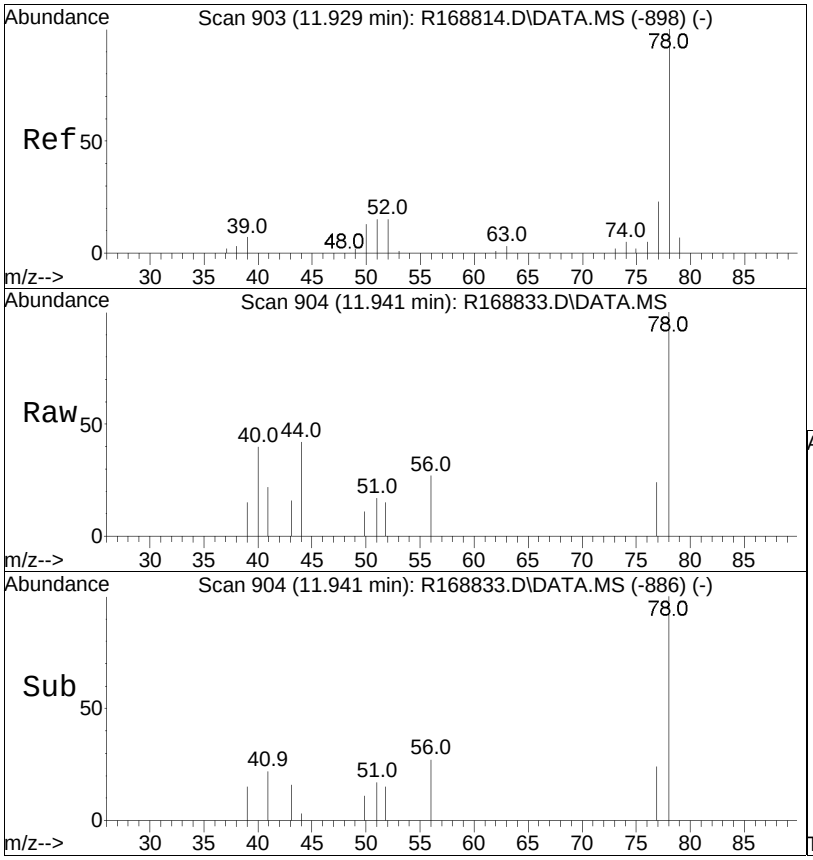


#44
hexane
Concen: 0.11 ppbV m
RT: 10.164 min Scan# 748
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 57 Resp: 2668

Ion	Ratio	Lower	Upper
57	100		
43	73.4	85.5	128.3#
86	12.2	10.5	15.7

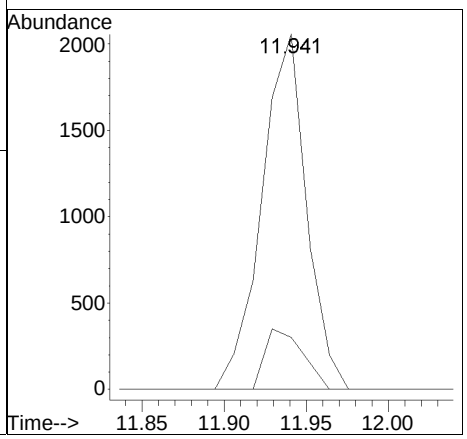


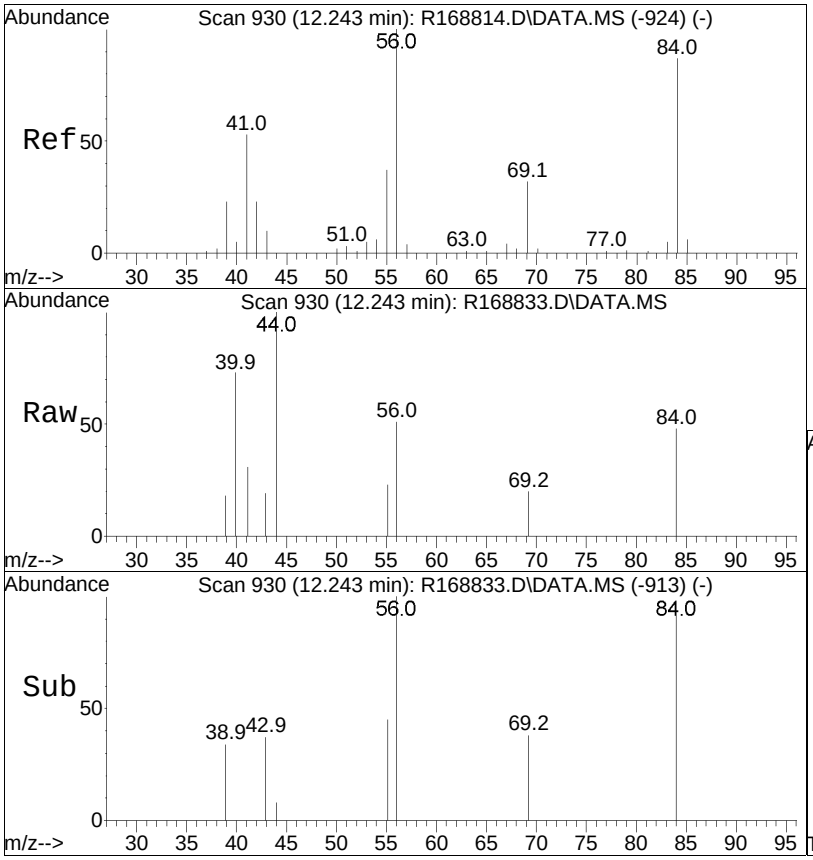


#50
benzene
Concen: 0.10 ppbV
RT: 11.941 min Scan# 904
Delta R.T. 0.012 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 78 Resp: 3909

Ion	Ratio	Lower	Upper
78	100		
52	14.6	11.7	17.5

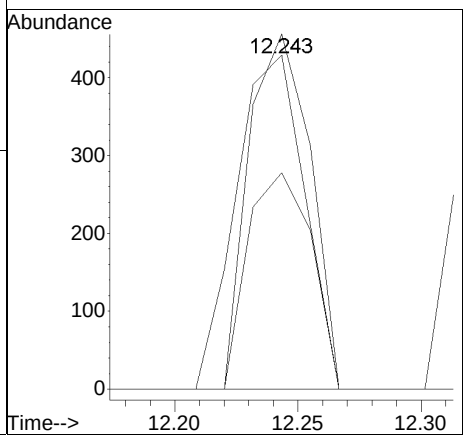


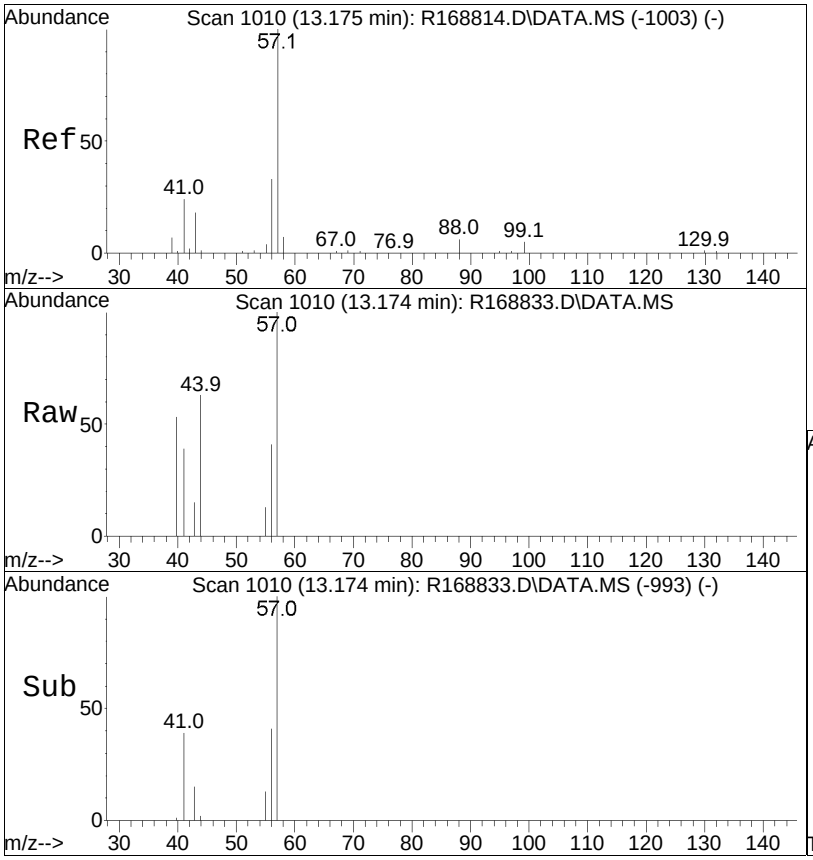


#53
cyclohexane
Concen: 0.04 ppbV
RT: 12.243 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 56 Resp: 793

Ion	Ratio	Lower	Upper
56	100		
84	94.1	70.1	105.1
41	61.0	42.6	63.8

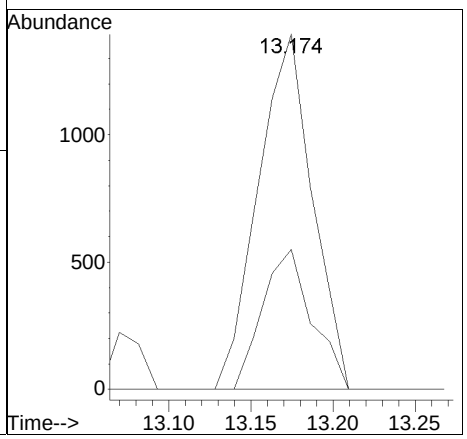


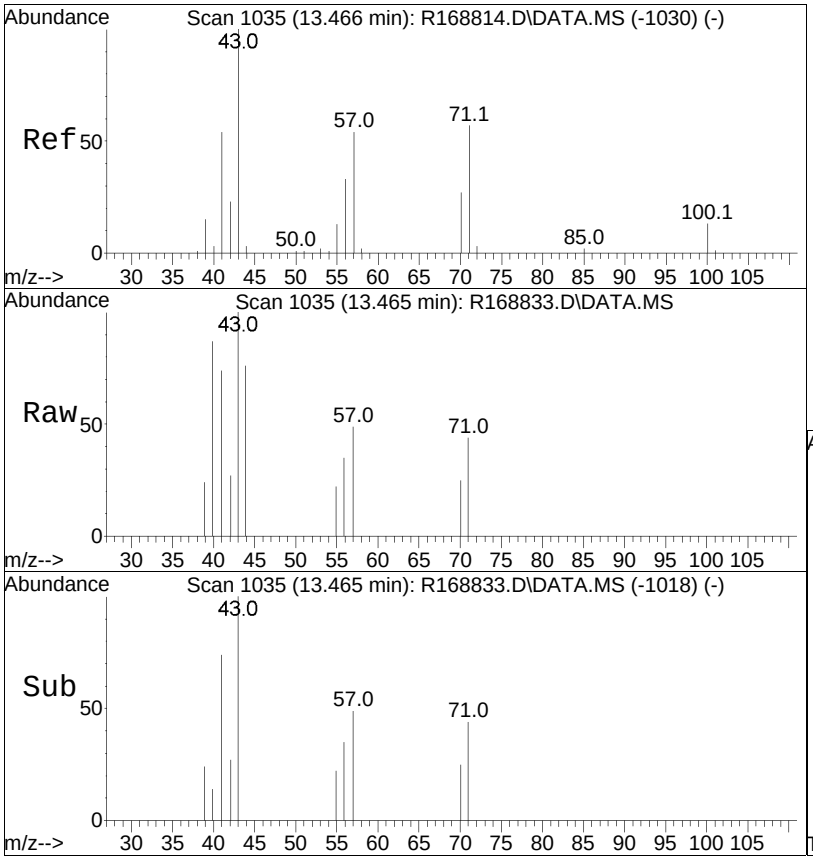


#60
2,2,4-trimethylpentane
Concen: 0.05 ppbV
RT: 13.174 min Scan# 1010
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 57 Resp: 3212

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.9	5.9#
41	39.4	19.3	28.9#

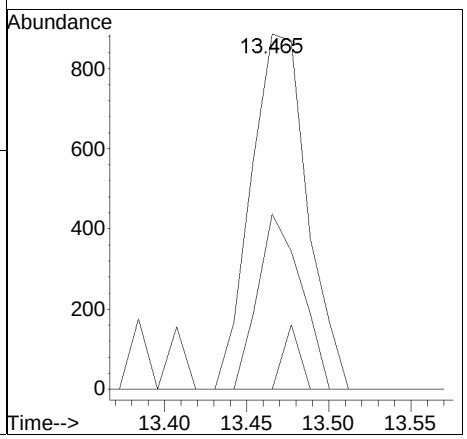


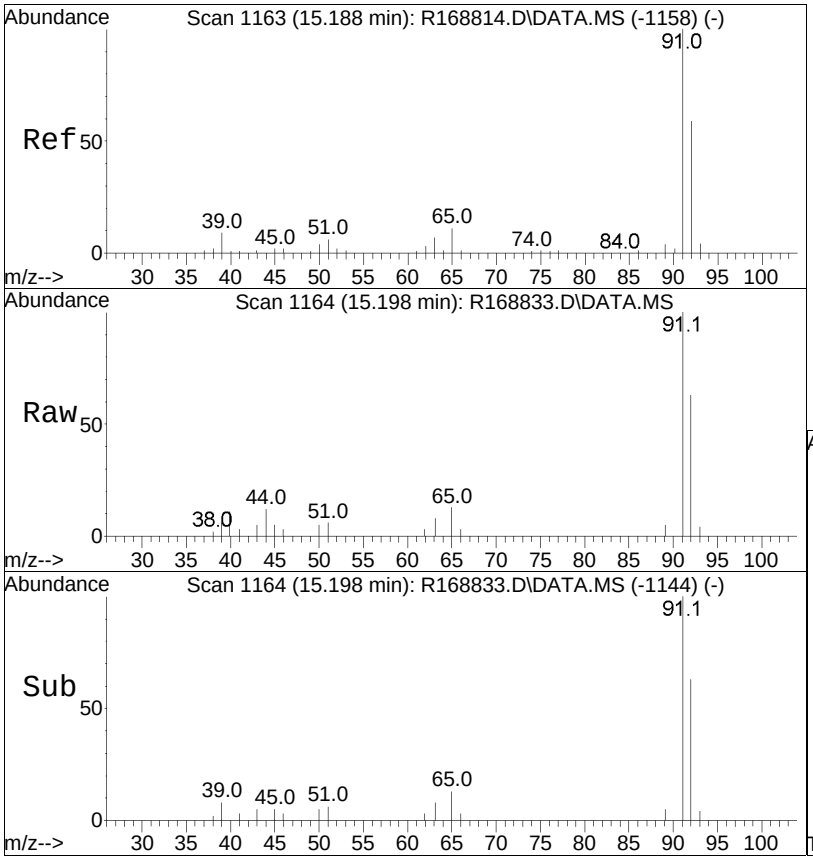


#62
heptane
Concen: 0.09 ppbV
RT: 13.465 min Scan# 1035
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 43 Resp: 2117

Ion	Ratio	Lower	Upper
43	100		
57	49.3	43.4	65.0
100	0.0	11.2	16.8#

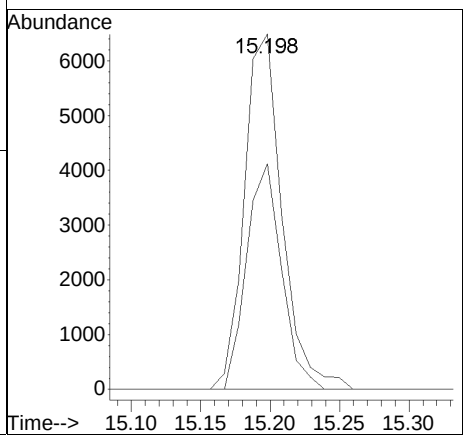


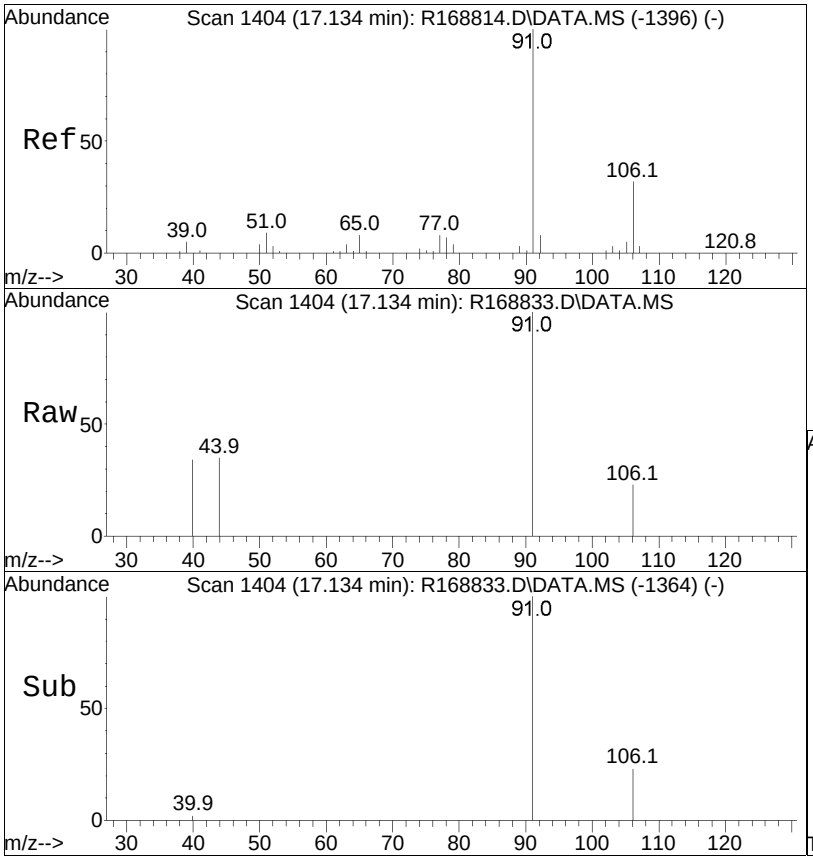


#68
toluene
Concen: 0.25 ppbV
RT: 15.198 min Scan# 1164
Delta R.T. 0.010 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 91 Resp: 12293

Ion	Ratio	Lower	Upper
91	100		
92	63.5	47.2	70.8

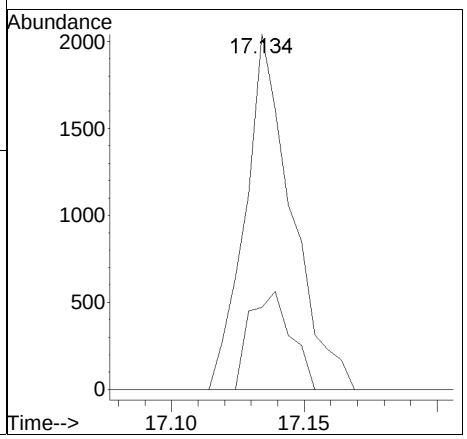


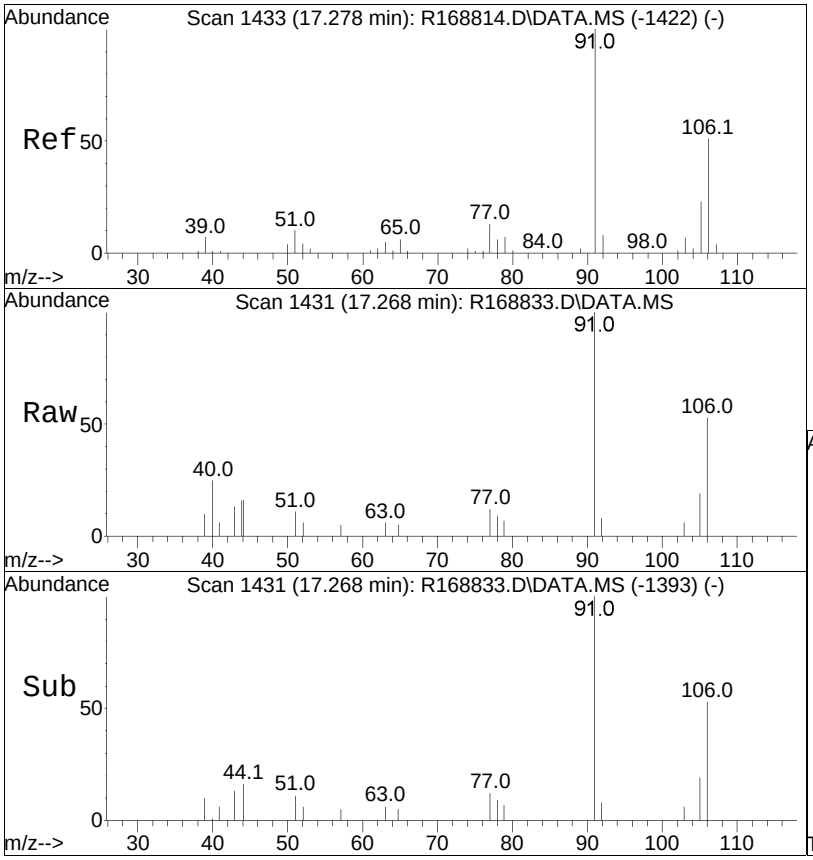


#81
ethylbenzene
Concen: 0.04 ppbV
RT: 17.134 min Scan# 1404
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 91 Resp: 2483

Ion	Ratio	Lower	Upper
91	100		
106	23.1	25.3	37.9#

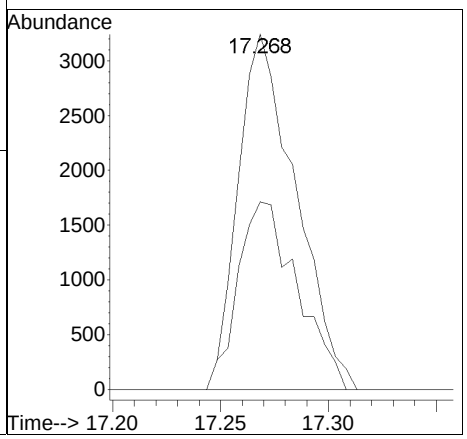


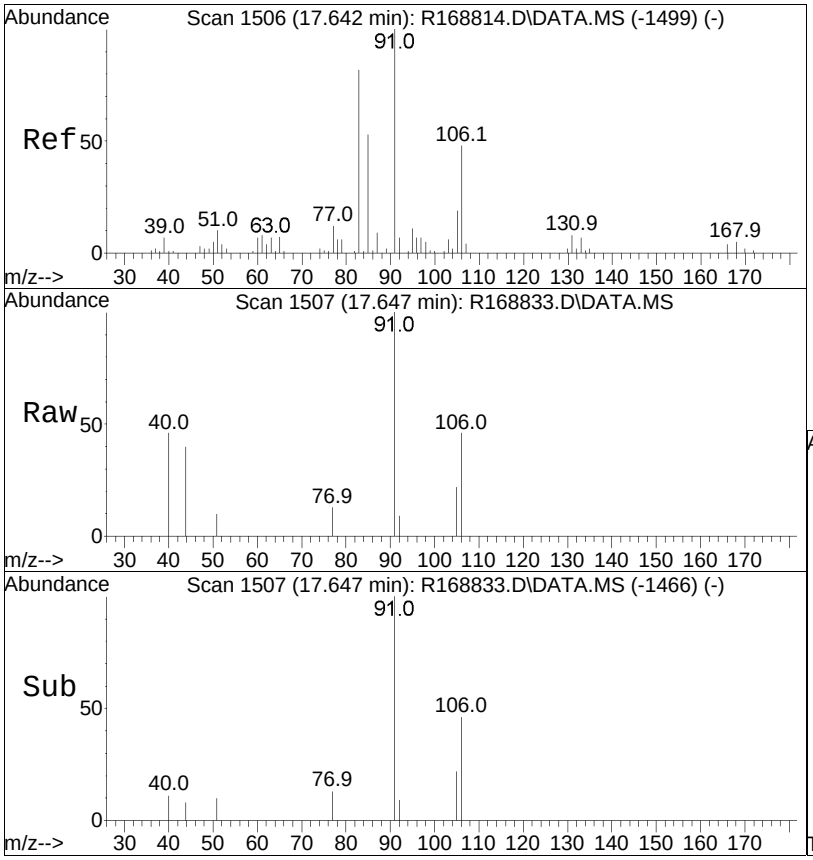


#83
m+p-xylene
Concen: 0.13 ppbV
RT: 17.268 min Scan# 1431
Delta R.T. -0.010 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 91 Resp: 6036

Ion	Ratio	Lower	Upper
91	100		
106	52.8	40.8	61.2

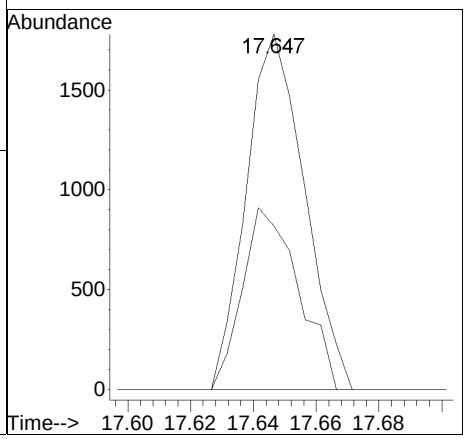


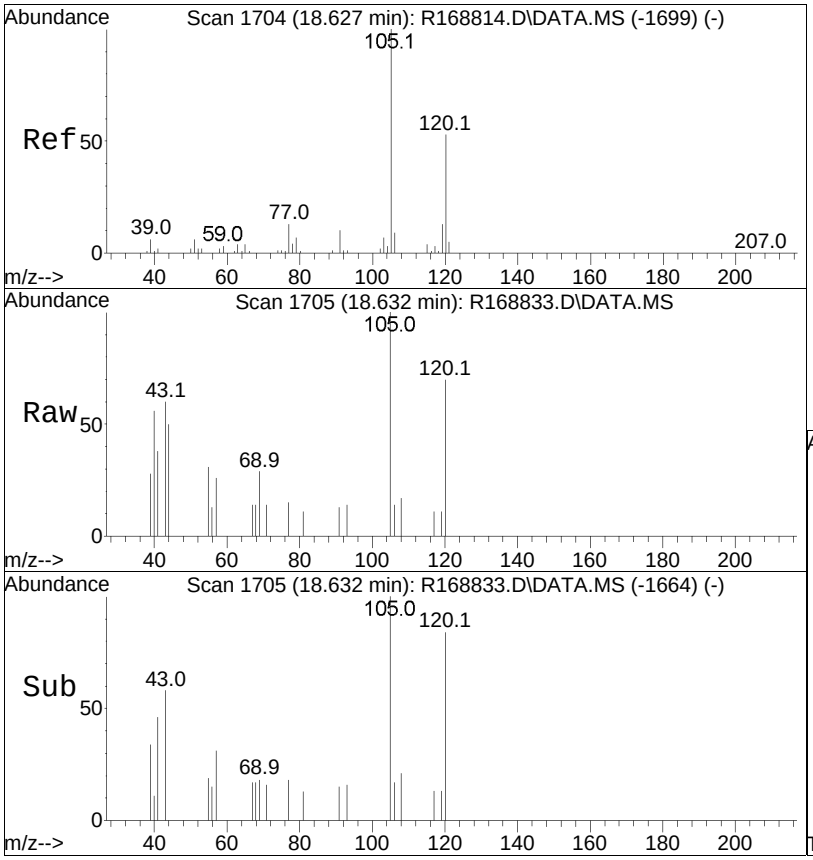


#87
o-xylene
Concen: 0.05 ppbV
RT: 17.647 min Scan# 1507
Delta R.T. 0.005 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 91 Resp: 2296

Ion	Ratio	Lower	Upper
91	100		
106	46.0	38.3	57.5

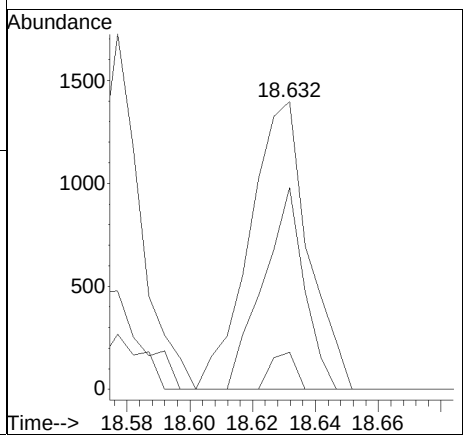


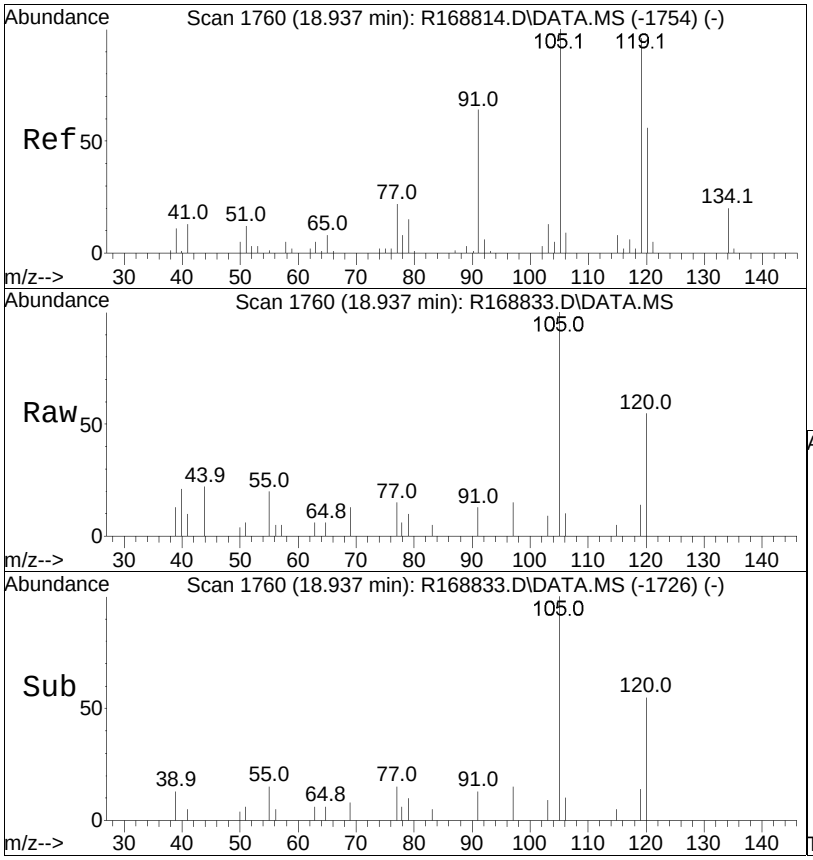


#97
1,3,5-trimethylbenzene
Concen: 0.03 ppbV
RT: 18.632 min Scan# 1705
Delta R.T. 0.005 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:105 Resp: 1819

Ion	Ratio	Lower	Upper
105	100		
120	70.1	41.9	62.9#
91	12.9	8.0	12.0#

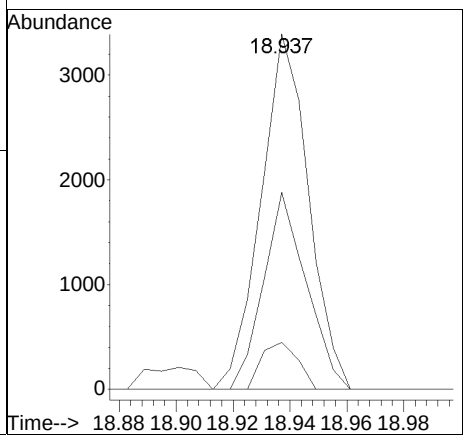




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.937 min Scan# 1760
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:105 Resp: 3948

Ion	Ratio	Lower	Upper
105	100		
120	55.4	44.5	66.7
91	13.2	51.4	77.2#

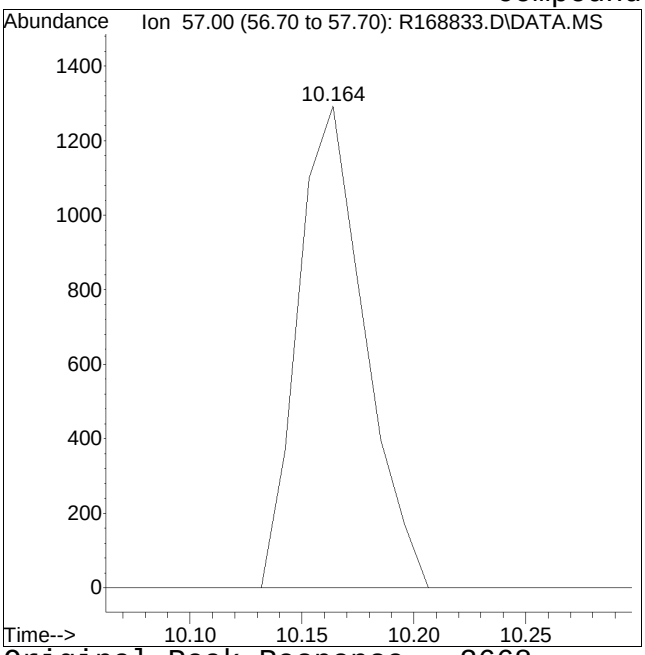


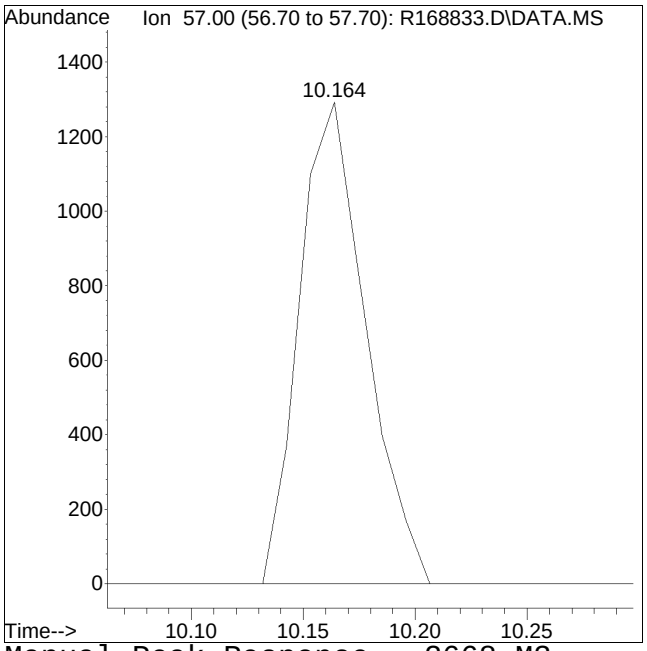
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168833.D
Date Inj'd : 10/24/2019 7:30 pm
Sample : WG1300314-5,3,250,250

Method : TFS1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/25/2019 7:49 am

Compound #44: hexane





Original Peak Response = 2668 Manual Peak Response = 2668 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
DF = V_{cf} / V_{ci}
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

V_{ci} = 2.7 * PI/14.696

Step 2: Calculate the volume in the canister after pressurization.

V_{cf} = 2.7 * PF/14.696

Step 3: Calculate the dilution factor.

DF = V_{cf} / V_{ci}

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Oct 25 2019, 03:54 pm

Work Group: WG1300314 for Department: 3 GC/MS

Created: 24-OCT-19 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1948939-01	IA19-58-01	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-02	IA19-58-02	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-03	IA19-58-03	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-04	IA19-58-04	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-05	IA19-58-05	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-06	IA19-58-DUP	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-07	OA19-58-01	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-6
L1949065-01	SSSG-1	S	TO15-LL	SOIL_VAPOR	DONE	U	1116	1025	S0	Can-2.7
L1949065-02	SSSG-2	S	TO15-LL	SOIL_VAPOR	DONE	U	1116	1025	S0	Can-2.7
L1949265-01	TS-AIR-ST4-BL	S	TO15-LL	AIR	DONE	U	1116	1025	S0	Can-2.7
WG1300314-1	MS BFB Tune Standard	S	TO15-LL	AIR	DONE	U				
WG1300314-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1300314-2	Continuing Calibrati	S	TO15-LL	AIR	DONE	U				
WG1300314-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1300314-3	Laboratory Control S	S	TO15-LL	AIR	DONE	U				
WG1300314-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1300314-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1300314-4	Laboratory Method Bl	S	TO15-LL	AIR	DONE	U				
WG1300314-5	Duplicate Sample	S	TO15-LL	AIR	DONE	U				
WG1300314-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				

Comments:

WG1300314-5 L1948939-03

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Date: 10/23/19

Analyst Initials: RY

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Internal Standard/Surrogate Volume: 100 ml

Sequence File Name: 191023.S

SIM ICAL# **Full Scan ICAL#** **TO12 ICAL#** **APH ICAL#** TO15-CTD 16116

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Check Pass ? Y/N
1	BA1102301	TO15_SFS	R168804	250ml			N/A
1	BA1102302	TO15_SFS	R168805	250ml			N/A
1	TA1102301	TO15_SFS	R168806	250ml	TUNE		N/A
5	ITO15-SIMSTD0.02	TO15_SFS	R168807	SS19-028D 50ML 0.02	SIM ONLY		N/A
5	ITO15-SIMSTD0.05	TO15_SFS	R168808	SS19-028D 125ML 0.05	SIM ONLY		N/A
5	ITO15-SIMSTD0.1	TO15_SFS	R168809	SS19-028D 250ML 0.1	SIM ONLY		N/A
6	ITO15-SIMSTD0.2	TO15_SFS	R168810	SS19-028C 50ML 0.2			N/A
6	ITO15-SIMSTD0.5	TO15_SFS	R168811	SS19-028C 125ML 0.5			N/A
6	ITO15-SIMSTD1.0	TO15_SFS	R168812	SS19-028C 250ML 1.0			N/A
7	ITO15-SIMSTD5.0	TO15_SFS	R168813	SS19-028B1 125ML 5.0			N/A
7	ITO15-SIMSTD10.0	TO15_SFS	R168814	SS19-028B1 250ML 10.0			N/A
8	ITO15-SIMSTD20.0	TO15_SFS	R168815	SS19-028A 50ML 20.0			N/A
8	ITO15-SIMSTD50.0	TO15_SFS	R168816	SS19-028A 125ML 50.0			N/A
8	ITO15-LLSTD100.0	TO15_SFS	R168817	SS19-028A 250ML 100.0	NOT USED FOR SIM		N/A
1	BA1102301	TO15_SFS	R168818	250ml			N/A
		Pause					N/A
1	BA1102302	TO15_SFS	R168819	250ml			N/A
2	CTO15-LLSTD10.0	TO15_SFS	R168820	SS19-029A 250ML 10.0	FULL SCAN ICV		N/A
2	CTO15-SIMSTD5.0	TO15_SFS	R168821	SS19-029A 125ML 5.0	SIM ICV		N/A

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

ID: Airpiano 1

Date: 10/24/19

Analyst Initials: RY

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Internal Standard/Surrogate Volume: 100 ml

Sequence File Name: 191024.S

SIM ICAL# 16240 **Full Scan ICAL# 16241** **TO12 ICAL#** **APH ICAL# 16238** TO15-CTD 16116

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Check Pass ? Y/N
1	TA1102401	TO15_SFS	R168822	250ml	TUNE		N/A
2	CA1102401	TO15_SFS	R168823	SS19-028G 250ML 10.0	NJ CC RUN AT WRONG LEVEL		N/A
3	CTO15-LLSTD10.0	TO15_SFS	R168824	SS19-029A 250ML 10.0	LL LCS		N/A
3	CTO15-SIMSTD5.0	TO15_SFS	R168825	SS19-029A 125ML 5.0	SIM LCS		N/A
1	BA1102401	TO15_SFS	R168826	250ml	BLANK FAILED		N/A
1	BA1102401	TO15_SFS	R168827	250ml	BLANK FAILED-PUMPDOWN AND REFILL		N/A
1	BA1102403	TO15_SFS	R168828	250ml	BLANK		N/A
1	L1948939-07,3,250,250	TO15_SFS	R168829	WG1300314,ICAL16241		NY/ 7 SIM	Y
2	L1948939-01,3,250,250	TO15_SFS	R168830	WG1300314,ICAL16241		NY/ 7 SIM	Y
3	L1948939-02,3,250,250	TO15_SFS	R168831	WG1300314,ICAL16241		NY/ 7 SIM	Y
4	L1948939-03,3,250,250	TO15_SFS	R168832	WG1300314,ICAL16241		NY/ 7 SIM	Y
4	L1948939-03DUP,3,250,250	TO15_SFS	R168833	WG1300314,ICAL16241	TO15-LL/ SIM DUP	NY/ 7 SIM	Y
5	L1948939-04,3,250,250	TO15_SFS	R168834	WG1300314,ICAL16241		NY/ 7 SIM	Y
6	L1948939-05,3,250,250	TO15_SFS	R168835	WG1300314,ICAL16241		NY/ 7 SIM	Y
7	L1948939-06,3,250,250	TO15_SFS	R168836	WG1300314,ICAL16241		NY/ 7 SIM	Y
8	L1949265-01,3,250,250	TO15_SFS	R168837	WG1300314,ICAL16241		STD + NAPH	Y
9	L1949104-01,3,250,250	TO15_SFS	R168838	WG1300312,ICAL16240		MCP-SIM	Y
10	L1949104-02,3,250,250	TO15_SFS	R168839	WG1300312,ICAL16240		MCP-SIM	Y
11	L1949104-03,3,250,250	TO15_SFS	R168840	WG1300312,ICAL16240		MCP-SIM	Y
12	L1949104-04,3,250,250	TO15_SFS	R168841	WG1300312,ICAL16240		MCP-SIM	Y
13	L1949104-05,3,250,250	TO15_SFS	R168842	WG1300312,ICAL16240		MCP-SIM	Y
13	L1949104-05DUP,3,250,250	TO15_SFS	R168843	WG1300312,ICAL16240	MCP-TO15-SIM DUP	MCP-SIM	Y

Alpha Analytical Air Lab
Instrument Run Log

14	L1949104-06,3,250,250	TO15_SFS	R168844	WG1300312,ICAL16240	CIS12DCE AND PCE OVERCAL	MCP-SIM	Y
15	L1949065-01D,3,60,250	TO15_SFS	R168845	WG1300314,ICAL16241		PA	Y
16	L1949065-02D,3,75,250	TO15_SFS	R168846	WG1300314,ICAL16241		PA	Y
2	L1949323-01,3,250,250	TO15_SFS	R168847	WG1300312,ICAL16240		MCP-SIM	Y
3	L1949323-02,3,250,250	TO15_SFS	R168848	WG1300312,ICAL16240		MCP-SIM	Y
14	L1949104-06D,3,75,250	TO15_SFS	R168849	WG1300312,ICAL16240		CIS12DCE AND PCE	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Client Sample ID	: IA19-58-03	Matrix	: AIR
Lab Sample ID	: L1948939-03	Analysis Date	: 10/24/19 18:58
Lab File ID	: R168832	DUP File ID	: R168833
Dup Sample ID	: WG1300315-5	DUP Analysis Date	: 10/24/19 19:30

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Vinyl chloride	ND	ND	NC	25
1,1-Dichloroethene	ND	ND	NC	25
cis-1,2-Dichloroethene	0.026	0.027	4	25
1,1,1-Trichloroethane	ND	ND	NC	25
Carbon tetrachloride	0.060	0.059	2	25
Trichloroethene	0.031	0.030	3	25
Tetrachloroethene	2.06	2.13	3	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Matrix	: AIR		
LCS Sample ID	: WG1300315-3	**Analysis Date** : 10/24/19 14:01	**File ID** : R168825
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Vinyl chloride	5	5.00	100				-	70-130	25
1,1-Dichloroethene	5	4.94	99				-	70-130	25
cis-1,2-Dichloroethene	5	5.24	105				-	70-130	25
1,1,1-Trichloroethane	5	5.08	102				-	70-130	25
Carbon tetrachloride	5	5.12	102				-	70-130	25
Trichloroethene	5	5.12	102				-	70-130	25
Tetrachloroethene	5	5.18	104				-	70-130	25

Method Blank Summary
Form 4
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Lab Sample ID	: WG1300315-4	**Lab File ID**	: R168828
Instrument ID	: AIRPIANO1		
Matrix	: AIR	**Analysis Date**	: 10/24/19 16:24

Client Sample No.	Lab Sample ID	Analysis Date
WG1300315-3LCS	WG1300315-3	10/24/19 14:01
OA19-58-01	L1948939-07	10/24/19 17:21
IA19-58-01	L1948939-01	10/24/19 17:53
IA19-58-02	L1948939-02	10/24/19 18:25
IA19-58-03	L1948939-03	10/24/19 18:58
IA19-58-03DUP	WG1300315-5	10/24/19 19:30
IA19-58-04	L1948939-04	10/24/19 20:02
IA19-58-05	L1948939-05	10/24/19 20:35
IA19-58-DUP	L1948939-06	10/24/19 21:07

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Analysis Date	: 10/23/19 12:21
Tune Standard	: WG1300076-1	Tune File ID	: R168806_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15.6
75	30.0 - 66.0% of mass 95	42.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	90.4
175	4.0 - 9.0% of mass 174	7 (7.7)1
176	93.0 - 101% of mass 174	87.5 (96.8)1
177	5.0 - 9.0% of mass 176	5.8 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.02	R1245958-1	R168807	10/23/19 12:51
STD0.05	R1245958-2	R168808	10/23/19 13:22
STD0.1	R1245958-3	R168809	10/23/19 13:56
STD0.2	R1245958-4	R168810	10/23/19 14:26
STD0.5	R1245958-5	R168811	10/23/19 14:57
STD1.0	R1245958-6	R168812	10/23/19 15:31
STD5.0	R1245958-7	R168813	10/23/19 16:02
STD10.0	R1245958-8	R168814	10/23/19 16:36
STD20.0	R1245958-9	R168815	10/23/19 17:06
STD50.0	R1245958-10	R168816	10/23/19 17:38
ICV QUANT	R1245958-11	R168821	10/24/19 08:57

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Analysis Date	: 10/24/19 12:26
Tune Standard	: WG1300315-1	Tune File ID	: R168822_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15.5
75	30.0 - 66.0% of mass 95	42
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	90.3
175	4.0 - 9.0% of mass 174	6.7 (7.5)1
176	93.0 - 101% of mass 174	87.6 (97)1
177	5.0 - 9.0% of mass 176	5.8 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1300315-2CCAL	WG1300315-2	R168825	10/24/19 14:01
WG1300315-3LCS	WG1300315-3	R168825	10/24/19 14:01
WG1300315-4BLANK	WG1300315-4	R168828	10/24/19 16:24
OA19-58-01	L1948939-07	R168829	10/24/19 17:21
IA19-58-01	L1948939-01	R168830	10/24/19 17:53
IA19-58-02	L1948939-02	R168831	10/24/19 18:25
IA19-58-03	L1948939-03	R168832	10/24/19 18:58
WG1300315-5DUP	WG1300315-5	R168833	10/24/19 19:30
IA19-58-04	L1948939-04	R168834	10/24/19 20:02
IA19-58-05	L1948939-05	R168835	10/24/19 20:35
IA19-58-DUP	L1948939-06	R168836	10/24/19 21:07

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Integral Consulting, Inc.	**Lab Number**	: L1948939
Project Name	: 135 KENT AVE	**Project Number**	: E051
Instrument ID	: AIRPIANO1	**Analysis Date**	: 10/24/19 14:01
Sample No	: WG1300315-2	**Lab File ID**	: R168825

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1300315-2	322366	10.10	829192	12.34	131868	16.80
Upper Limit	451312	10.43	1160869	12.67	184615	17.13
Lower Limit	193420	9.77	497515	12.01	79121	16.47
Sample ID						
WG1300315-3 LCS	322366	10.10	829192	12.34	131868	16.80
WG1300315-4 BLANK	315233	10.10	776235	12.34	127597	16.80
OA19-58-01	306178	10.10	726795	12.34	122880	16.80
IA19-58-01	288608	10.10	710027	12.34	112196	16.80
IA19-58-02	287830	10.10	697013	12.34	108704	16.80
IA19-58-03	289119	10.10	706030	12.34	113637	16.80
IA19-58-03 DUP	288198	10.10	706016	12.34	111484	16.80
IA19-58-04	277246	10.10	616002	12.34	111909	16.80
IA19-58-05	286605	10.10	680205	12.34	110898	16.80
IA19-58-DUP	288088	10.10	672674	12.34	112848	16.80

Area Upper Limit = +40% of internal standard area
Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT
RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits

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Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.02	0.006	ppbV	70-130	25		25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.02	0.006	ppbV	70-130	25		25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.02	0.007	ppbV	70-130	25		25	25			
1,1,2-Trichloroethane	79-00-5	0.02	0.004	ppbV	70-130	25		25	25			
1,1-Dichloroethane	75-34-3	0.02	0.007	ppbV	70-130	25		25	25			
1,1-Dichloroethene	75-35-4	0.02	0.007	ppbV	70-130	25		25	25			
1,2,4-Trimethylbenzene	95-63-6	0.02	0.007	ppbV	70-130	25		25	25			
1,2-Dibromoethane	106-93-4	0.02	0.008	ppbV	70-130	25		25	25			
1,2-Dichlorobenzene	95-50-1	0.02	0.006	ppbV	70-130	25		25	25			
1,2-Dichloroethane	107-06-2	0.02	0.005	ppbV	70-130	25		25	25			
1,2-Dichloropropane	78-87-5	0.02	0.008	ppbV	70-130	25		25	25			
1,3,5-Trimethylbenzene	108-67-8	0.02	0.005	ppbV	70-130	25		25	25			
1,3-Butadiene	106-99-0	0.02	0.007	ppbV	70-130	25		25	25			
1,3-Dichlorobenzene	541-73-1	0.02	0.006	ppbV	70-130	25		25	25			
1,4-Dichlorobenzene	106-46-7	0.02	0.008	ppbV	70-130	25		25	25			
1,4-Dioxane	123-91-1	0.1	0.014	ppbV	70-130	25		25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.027	ppbV	70-130	25		25	25			
2-Hexanone	591-78-6	0.2	0.03	ppbV	70-130	25		25	25			
3-Chloropropene	107-05-1	0.2	0.02	ppbV	70-130	25		25	25			
4-Ethyltoluene	622-96-8	0.02	0.01	ppbV	70-130	25		25	25			
Benzene	71-43-2	0.1	0.019	ppbV	70-130	25		25	25			
Benzyl chloride	100-44-7	0.2	0.037	ppbV	70-130	25		25	25			
Bromodichloromethane	75-27-4	0.02	0.008	ppbV	70-130	25		25	25			
Bromoform	75-25-2	0.02	0.015	ppbV	70-130	25		25	25			
Bromomethane	74-83-9	0.02	0.008	ppbV	70-130	25		25	25			
Carbon disulfide	75-15-0	0.2	0.063	ppbV	70-130	25		25	25			
Carbon tetrachloride	56-23-5	0.02	0.007	ppbV	70-130	25		25	25			
Chlorobenzene	108-90-7	0.1	0.007	ppbV	70-130	25		25	25			
Chloroethane	75-00-3	0.1	0.017	ppbV	70-130	25		25	25			
Chloroform	67-66-3	0.02	0.005	ppbV	70-130	25		25	25			
Chloromethane	74-87-3	0.2	0.048	ppbV	70-130	25		25	25			
cis-1,2-Dichloroethene	156-59-2	0.02	0.007	ppbV	70-130	25		25	25			
trans-1,2-Dichloroethene	156-60-5	0.02	0.006	ppbV	70-130	25		25	25			
1,2-Dichloroethene (total)	540-59-0	0.02	0.006	ppbV				25	25			
cis-1,3-Dichloropropene	10061-01-5	0.02	0.006	ppbV	70-130	25		25	25			
1,3-Dichloropropene, Total	542-75-6	0.02	0.006	ppbV				25	25			
Cyclohexane	110-82-7	0.2	0.03	ppbV	70-130	25		25	25			
Dibromochloromethane	124-48-1	0.02	0.008	ppbV	70-130	25		25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.0112	ppbV	70-130	25		25	25			
Ethyl Alcohol	GCDAI06	5	0.157	ppbV	70-130	25		25	25			
Ethyl Acetate	141-78-6	0.5	0.038	ppbV	70-130	25		25	25			
Ethylbenzene	100-41-4	0.02	0.007	ppbV	70-130	25		25	25			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
File: PM5830-1
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Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.05	0.0127	ppbV	70-130	25		25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.05	0.0116	ppbV	70-130	25		25	25			
Methylene chloride	75-09-2	0.5	0.25	ppbV	70-130	25		25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.006	ppbV	70-130	25		25	25			
Naphthalene	91-20-3	0.05	0.008	ppbV	70-130	25		25	25			
p/m-Xylene	179601-23-1	0.04	0.007	ppbV	70-130	25		25	25			
o-Xylene	95-47-6	0.02	0.008	ppbV	70-130	25		25	25			
Xylene (Total)	1330-20-7	0.02	0.007	ppbV				25	25			
Heptane	142-82-5	0.2	0.032	ppbV	70-130	25		25	25			
n-Hexane	110-54-3	0.2	0.033	ppbV	70-130	25		25	25			
Propylene	115-07-1	0.5	0.034	ppbV	70-130	25		25	25			
Styrene	100-42-5	0.02	0.007	ppbV	70-130	25		25	25			
Tetrachloroethene	127-18-4	0.02	0.008	ppbV	70-130	25		25	25			
Tetrahydrofuran	109-99-9	0.5	0.037	ppbV	70-130	25		25	25			
Toluene	108-88-3	0.05	0.006	ppbV	70-130	25		25	25			
trans-1,3-Dichloropropene	10061-02-6	0.02	0.008	ppbV	70-130	25		25	25			
Trichloroethene	79-01-6	0.02	0.007	ppbV	70-130	25		25	25			
1,2,4-Trichlorobenzene	120-82-1	0.05	0.01	ppbV	70-130	25		25	25			
Trichlorofluoromethane	75-69-4	0.05	0.0113	ppbV	70-130	25		25	25			
Vinyl acetate	108-05-4	1	0.027	ppbV	70-130	25		25	25			
Vinyl bromide	593-60-2	0.2	0.023	ppbV	70-130	25		25	25			
Hexachlorobutadiene	87-68-3	0.05	0.007	ppbV	70-130	25		25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.153	ppbV	70-130	25		25	25			
Vinyl chloride	75-01-4	0.02	0.006	ppbV	70-130	25		25	25			
Acrylonitrile	107-13-1	0.5	0.0248	ppbV	70-130	25		25	25			
n-Butylbenzene	104-51-8	0.2	0.008	ppbV	70-130	25		25	25			
sec-Butylbenzene	135-98-8	0.2	0.008	ppbV	70-130	25		25	25			
Isopropylbenzene	98-82-8	0.2	0.007	ppbV	70-130	25		25	25			
p-Isopropyltoluene	99-87-6	0.2	0.007	ppbV	70-130	25		25	25			
Acetone	67-64-1	1	0.366	ppbV	70-130	25		25	25			
2-Butanone	78-93-3	0.5	0.016	ppbV	70-130	25		25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.005	ppbV	70-130	25		25	25			
1,2,3-Trichlorobenzene	87-61-6	0.05	0.019	ppbV	70-130	25		25	25			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
Bromofluorobenzene	*460-00-4*									*70-130*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-01	Date Collected	: 10/17/19 17:48
Client ID	: IA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:53
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168830	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.437	0.020	--	1.73	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.058	0.020	--	0.365	0.126	--	
79-01-6	Trichloroethene	0.422	0.020	--	2.27	0.107	--	
127-18-4	Tetrachloroethene	31.9	0.020	--	216	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-02	Date Collected	: 10/17/19 17:45
Client ID	: IA19-58-02	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:25
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168831	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.029	0.020	--	0.115	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.056	0.020	--	0.352	0.126	--	
79-01-6	Trichloroethene	0.072	0.020	--	0.387	0.107	--	
127-18-4	Tetrachloroethene	2.67	0.020	--	18.1	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-03	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 18:58
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168832	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.026	0.020	--	0.103	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.060	0.020	--	0.377	0.126	--	
79-01-6	Trichloroethene	0.031	0.020	--	0.167	0.107	--	
127-18-4	Tetrachloroethene	2.06	0.020	--	14.0	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-04	Date Collected	: 10/17/19 17:36
Client ID	: IA19-58-04	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:02
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168834	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.020	0.020	--	0.079	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--	
79-01-6	Trichloroethene	0.028	0.020	--	0.150	0.107	--	
127-18-4	Tetrachloroethene	1.78	0.020	--	12.1	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-05	Date Collected	: 10/17/19 17:37
Client ID	: IA19-58-05	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 20:35
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168835	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.052	0.020	--	0.327	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.870	0.020	--	5.90	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-06	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-DUP	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 21:07
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168836	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.025	0.020	--	0.099	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--	
79-01-6	Trichloroethene	0.032	0.020	--	0.172	0.107	--	
127-18-4	Tetrachloroethene	2.06	0.020	--	14.0	0.136	--	

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: L1948939-07	Date Collected	: 10/17/19 17:33
Client ID	: OA19-58-01	Date Received	: 10/18/19
Sample Location	: 58 N 6TH ST.	Date Analyzed	: 10/24/19 17:21
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168829	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.067	0.020	--	0.421	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300315-4	Date Collected	: NA
Client ID	: WG1300315-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/24/19 16:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168828	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	ND	0.020	--	ND	0.126	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary
Form 1
Volatile Organics in Air by SIM

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Lab ID	: WG1300315-5	Date Collected	: 10/17/19 17:40
Client ID	: IA19-58-03DUP	Date Received	: 10/18/19
Sample Location	:	Date Analyzed	: 10/24/19 19:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TS
Lab File ID	: R168833	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	0.027	0.020	--	0.107	0.079	--	
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.059	0.020	--	0.371	0.126	--	
79-01-6	Trichloroethene	0.030	0.020	--	0.161	0.107	--	
127-18-4	Tetrachloroethene	2.13	0.020	--	14.4	0.136	--	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168829.D
Acq On : 24 Oct 2019 5:21 pm
Operator : AIRPIANO1:TS
Sample : L1948939-07,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 13:33:09 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	306178	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		94.98%	
33) 1,4-difluorobenzene	12.339	114	726795	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		87.65%	
51) chlorobenzene-D5	16.798	54	122880	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		93.18%	

System Monitoring Compounds

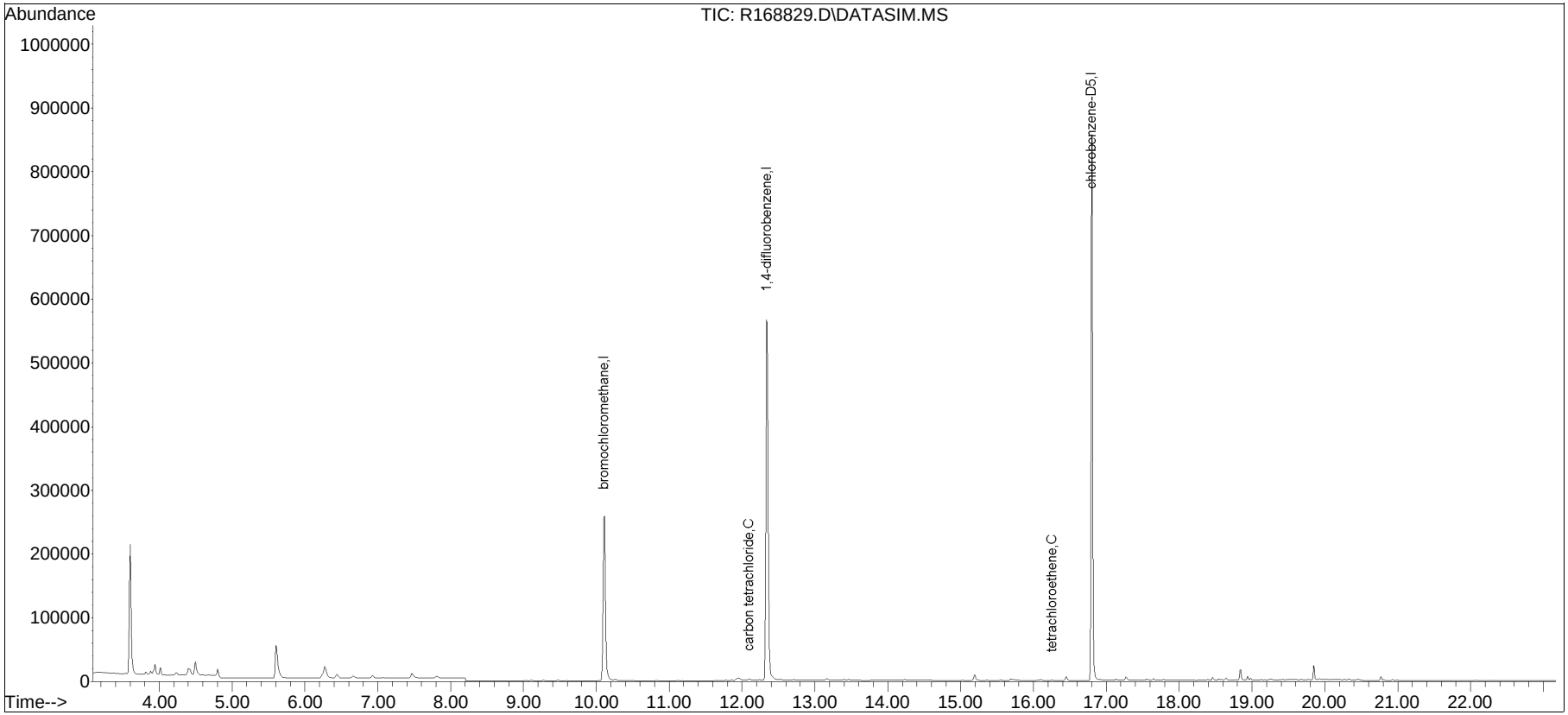
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.268		0	N.D.		
28) cis-1,2-dichloroethene	9.912		0	N.D.		
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.095	117	1925	0.067	ppbV	96
44) trichloroethene	13.142		0	N.D.		
57) tetrachloroethene	16.253	166	383	0.013	ppbV #	83

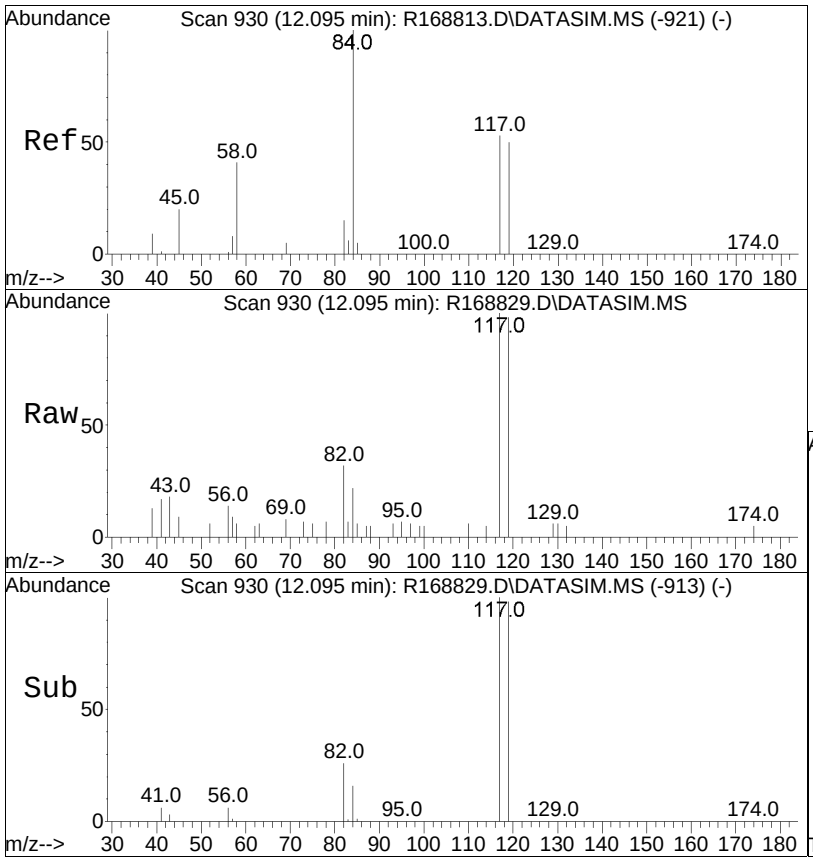
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168829.D
Acq On : 24 Oct 2019 5:21 pm
Operator : AIRPIANO1:TS
Sample : L1948939-07,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 13:33:09 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

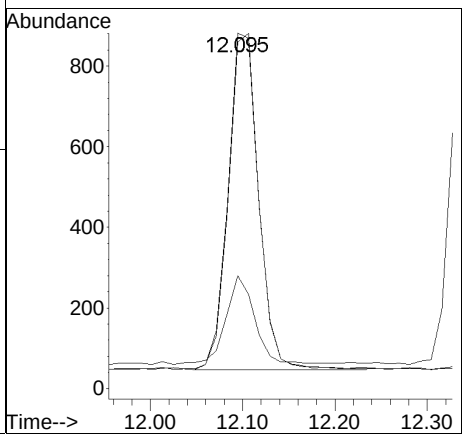


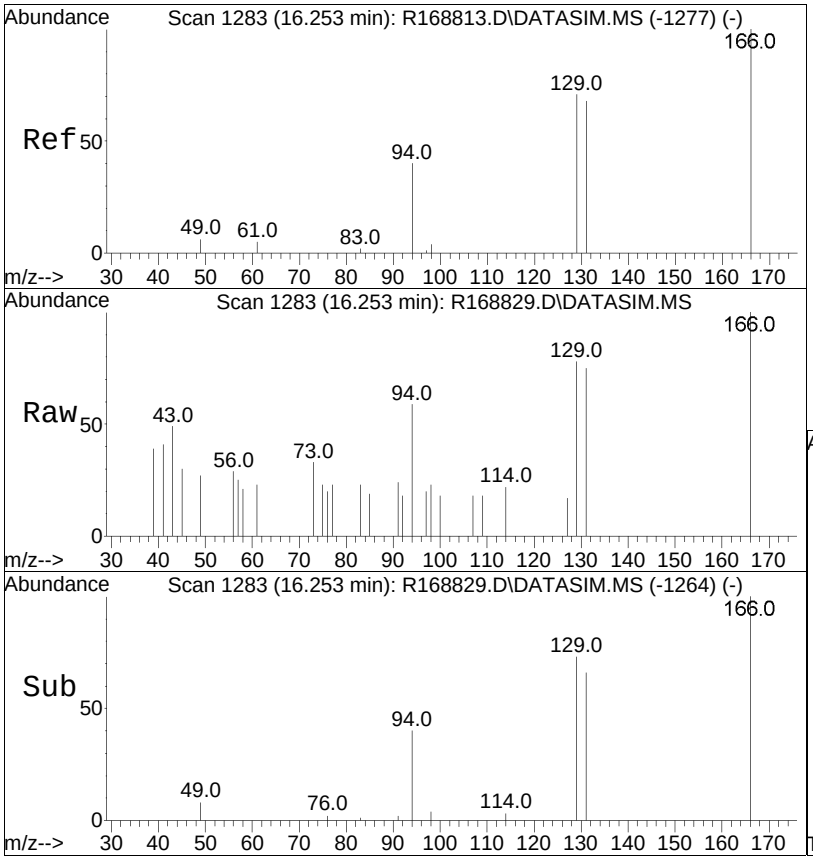


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.095 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion:117 Resp: 1925

Ion	Ratio	Lower	Upper
117	100		
119	97.5	75.6	113.4
82	31.7	23.1	34.7

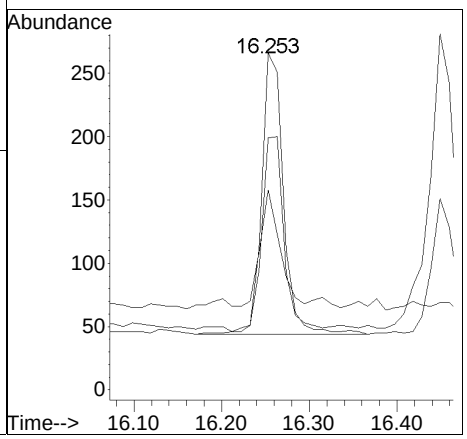




#57
tetrachloroethene
Concen: 0.01 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168829.D
Acq: 24 Oct 2019 5:21 pm

Tgt Ion:166 Resp: 383

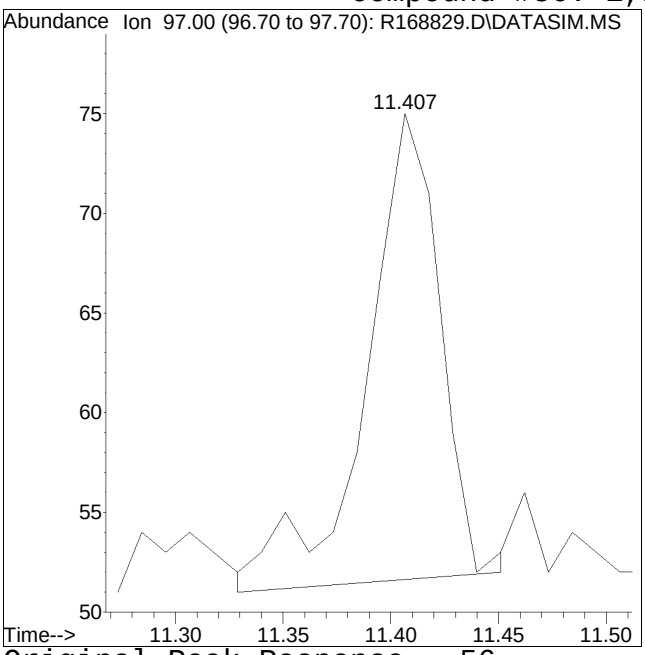
Ion	Ratio	Lower	Upper
166	100		
131	74.8	54.5	81.7
94	59.4	31.8	47.6#

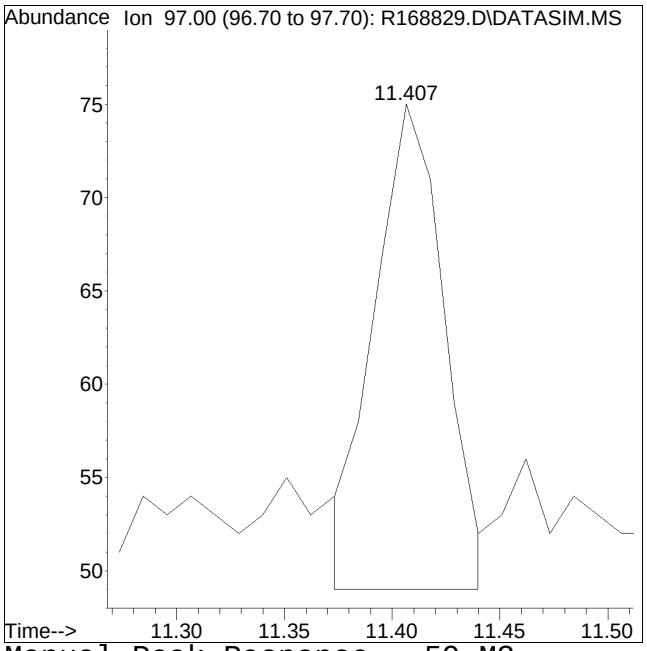


Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TSIM1_191023.M
Data File : R168829.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 5:21 pm Instrument : Air Piano 1
Sample : L1948939-07,3,250,250 Quant Date : 10/25/2019 7:41 am

Compound #36: 1,1,1-trichloroethane





Original Peak Response = 56 Manual Peak Response = 59 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168830.D
Acq On : 24 Oct 2019 5:53 pm
Operator : AIRPIANO1:TS
Sample : L1948939-01,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 25 07:42:53 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

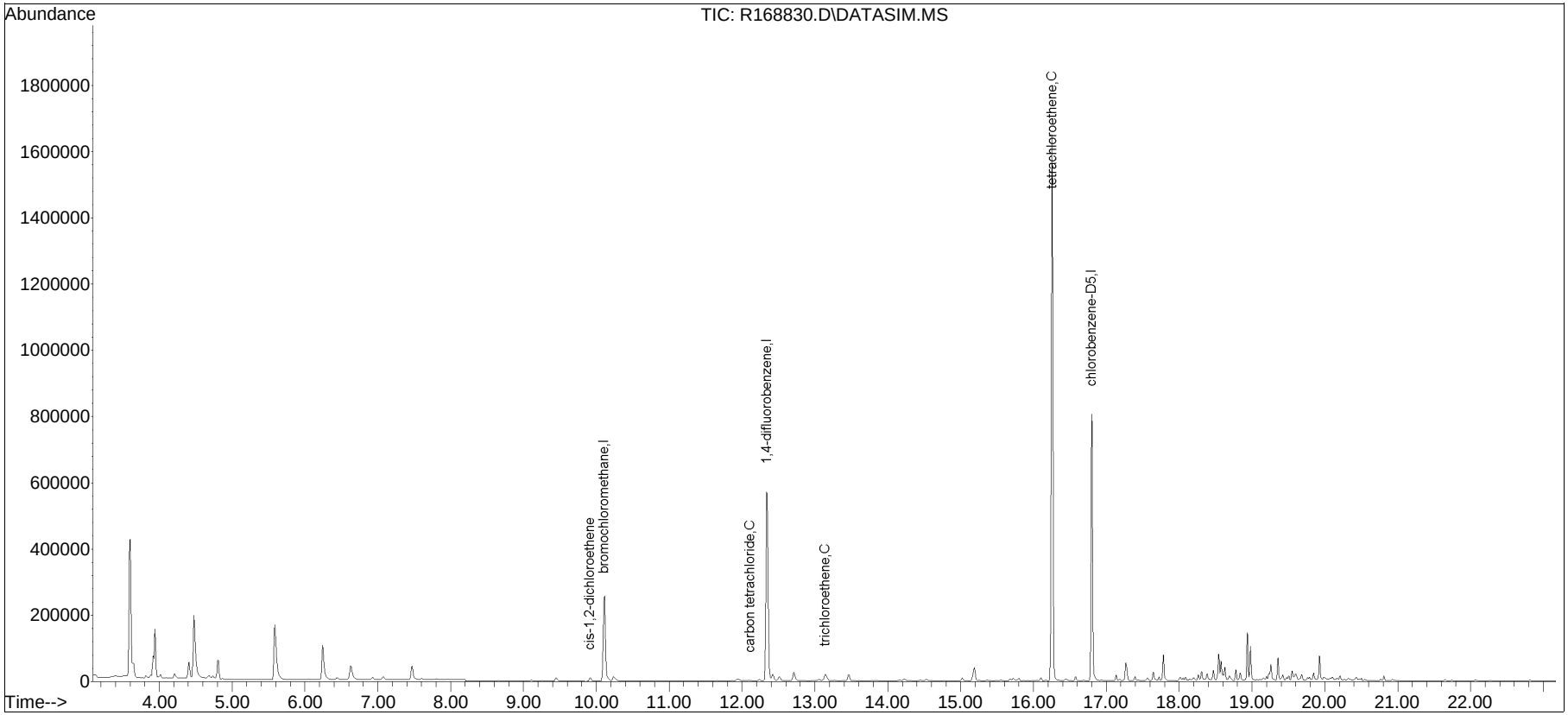
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	288608	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		89.53%	
33) 1,4-difluorobenzene	12.339	114	710027	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		85.63%	
51) chlorobenzene-D5	16.798	54	112196	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		85.08%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.287		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	8992	0.437	ppbV	96
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1622	0.058	ppbV	96
44) trichloroethene	13.142	130	8857	0.422	ppbV	98
57) tetrachloroethene	16.253	166	850202	31.883	ppbV	99

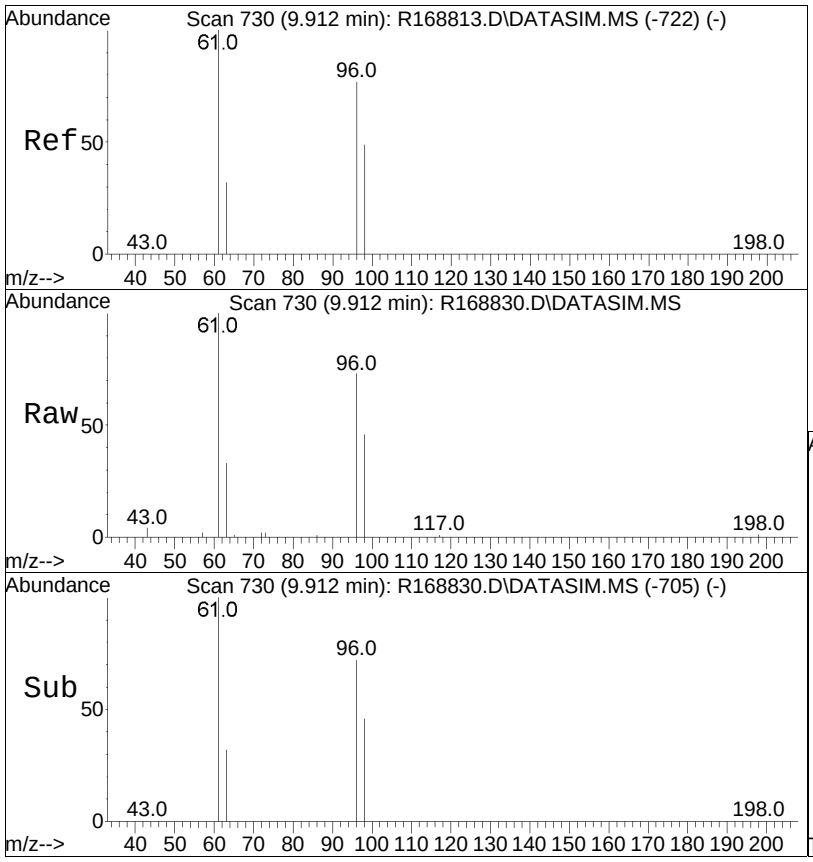
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168830.D
Acq On : 24 Oct 2019 5:53 pm
Operator : AIRPIANO1:TS
Sample : L1948939-01,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 25 07:42:53 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

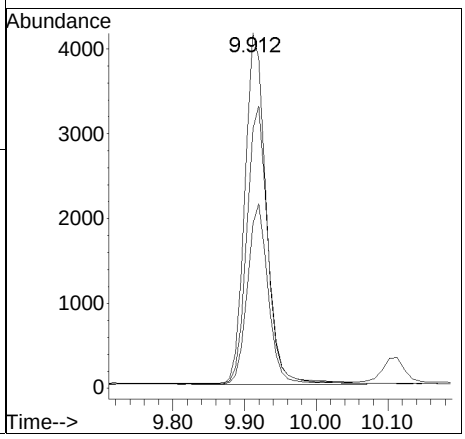


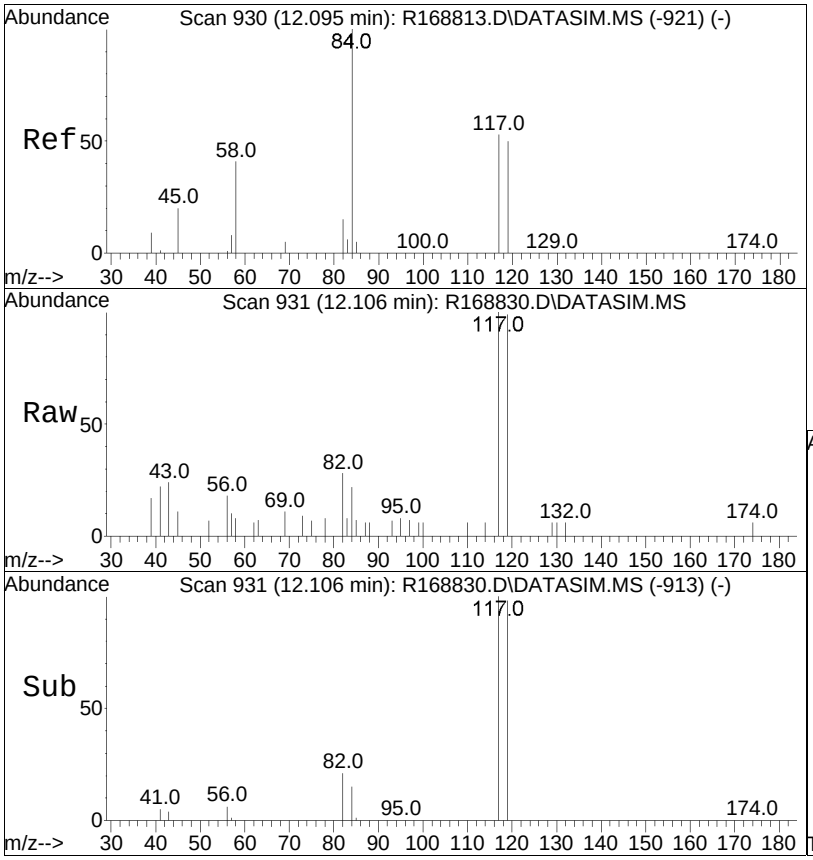


#28
cis-1,2-dichloroethene
Concen: 0.44 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion: 61 Resp: 8992

Ion	Ratio	Lower	Upper
61	100		
96	72.9	61.7	92.5
98	46.3	39.0	58.4

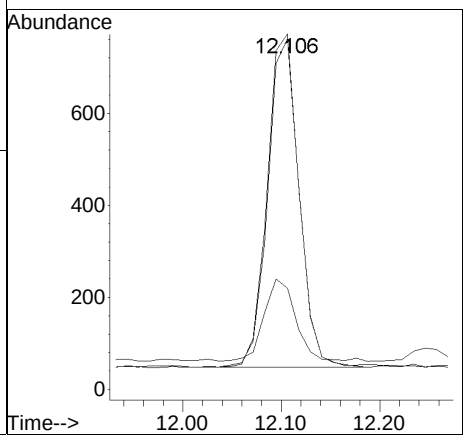


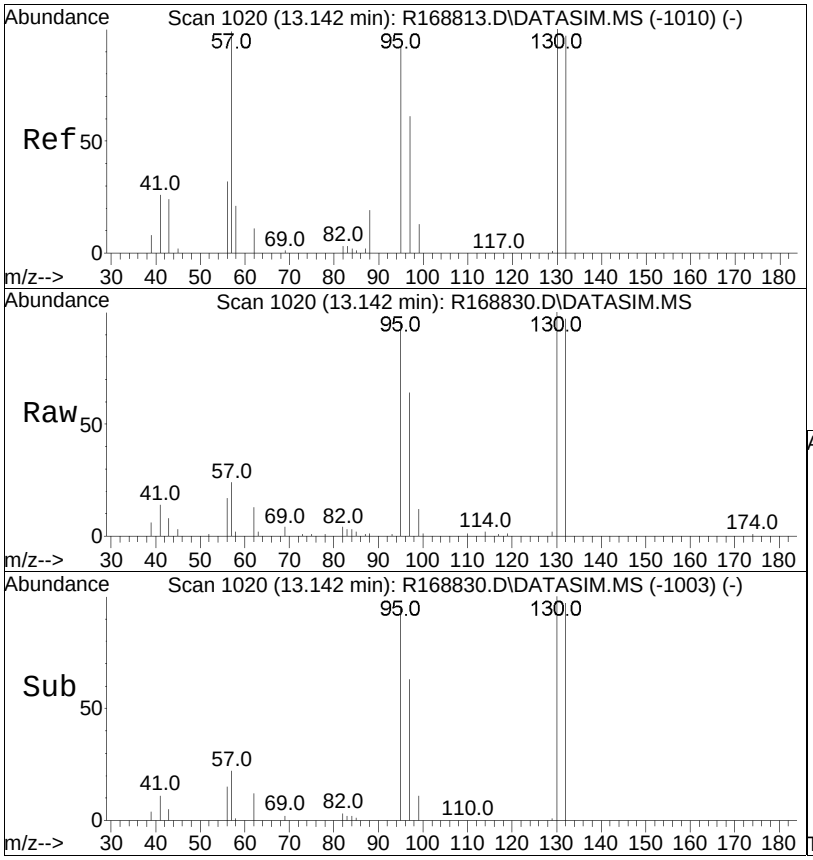


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:117 Resp: 1622

Ion	Ratio	Lower	Upper
117	100		
119	98.7	75.6	113.4
82	28.5	23.1	34.7

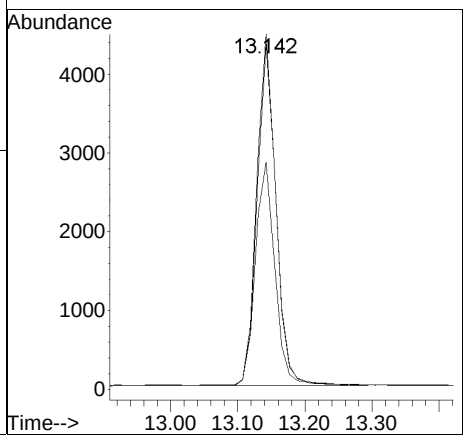


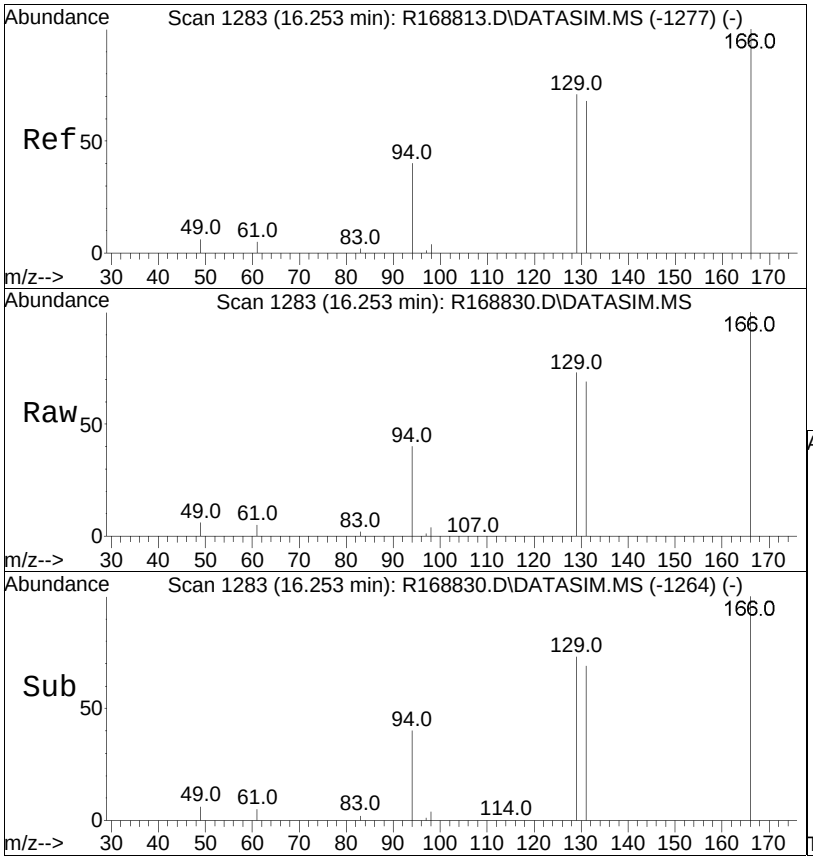


#44
trichloroethene
Concen: 0.42 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:130 Resp: 8857

Ion	Ratio	Lower	Upper
130	100		
132	97.1	78.0	117.0
97	64.0	48.9	73.3

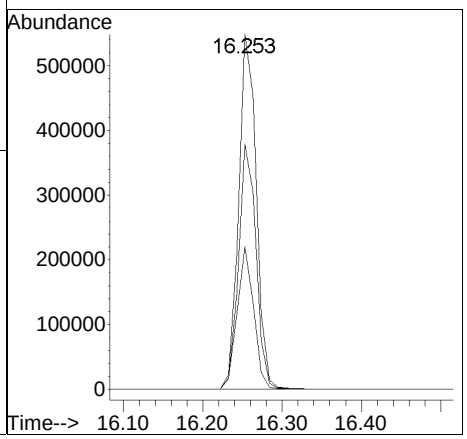




#57
tetrachloroethene
Concen: 31.88 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168830.D
Acq: 24 Oct 2019 5:53 pm

Tgt Ion:166 Resp: 850202

Ion	Ratio	Lower	Upper
166	100		
131	69.1	54.5	81.7
94	40.2	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168830.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 5:53 pm	Instrument	: Air Piano 1
Sample	: L1948939-01,3,250,250	Quant Date	: 10/25/2019 7:42 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168831.D
Acq On : 24 Oct 2019 6:25 pm
Operator : AIRPIANO1:TS
Sample : L1948939-02,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 25 07:43:03 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

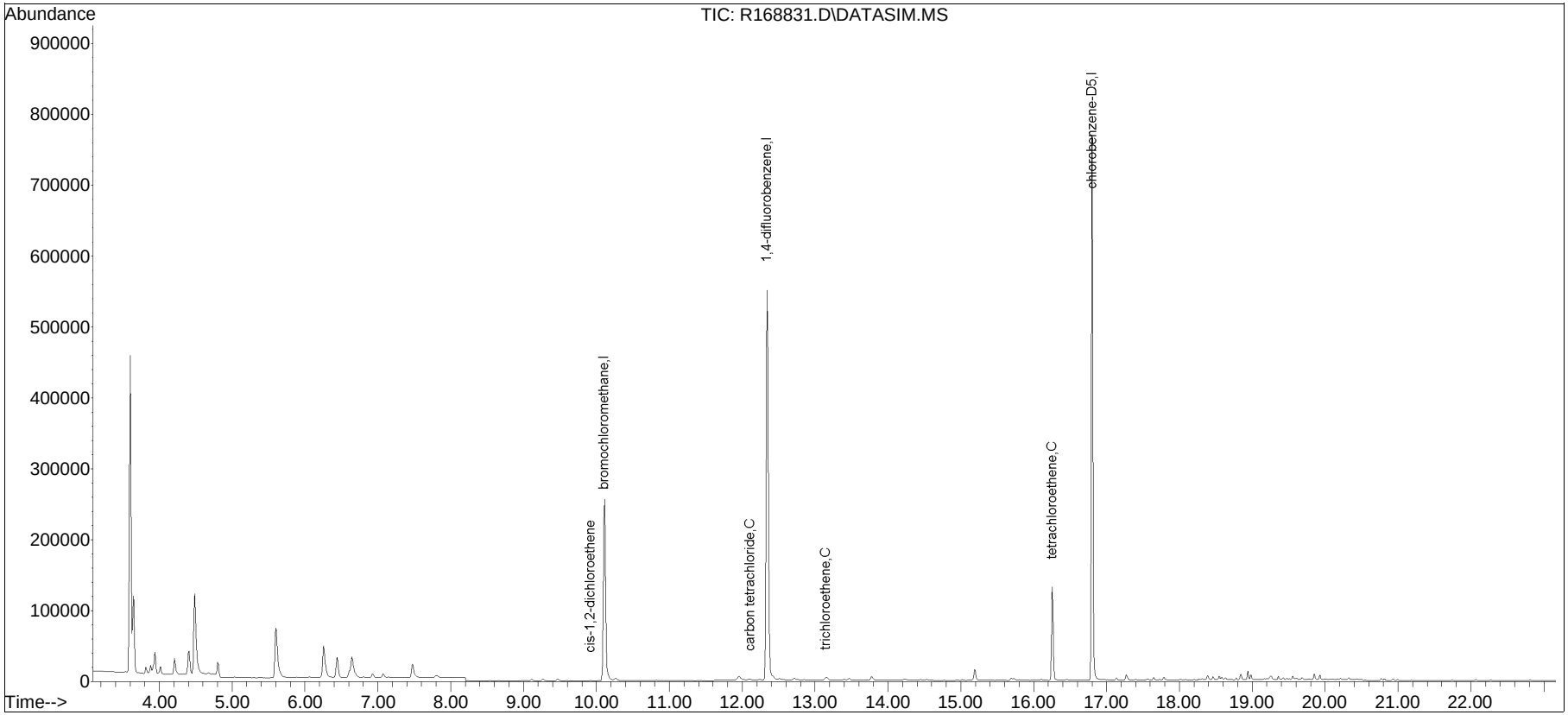
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	287830	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		89.29%	
33) 1,4-difluorobenzene	12.339	114	697013	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		84.06%	
51) chlorobenzene-D5	16.798	54	108704	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		82.43%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.352		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	599	0.029	ppbV	98
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1542	0.056	ppbV	97
44) trichloroethene	13.142	130	1485	0.072	ppbV	95
57) tetrachloroethene	16.253	166	68890	2.666	ppbV	98

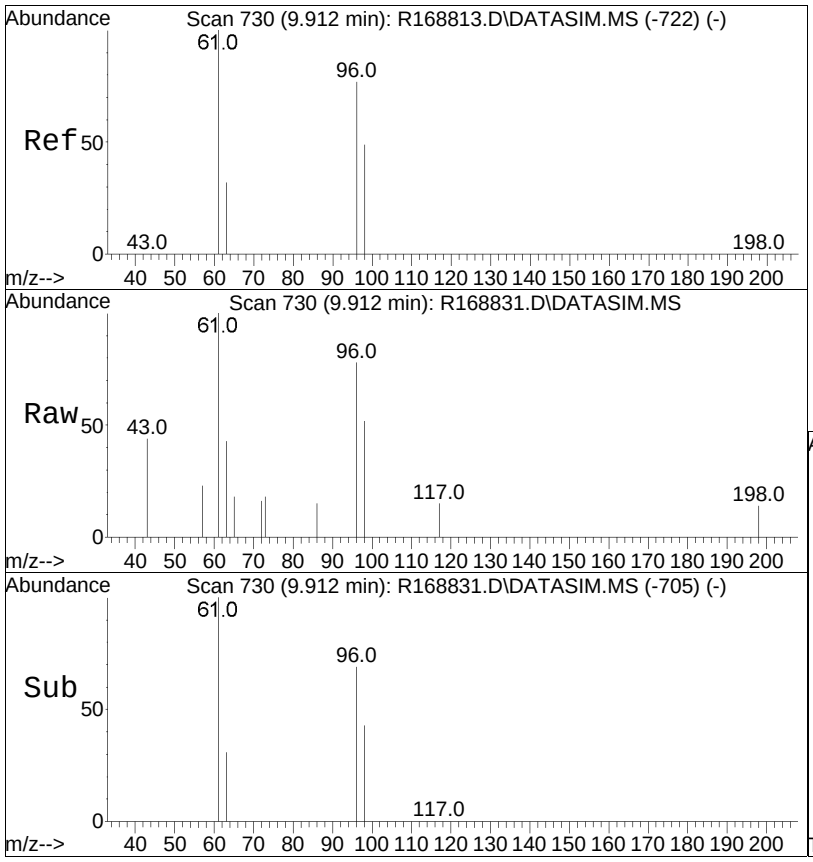
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168831.D
Acq On : 24 Oct 2019 6:25 pm
Operator : AIRPIANO1:TS
Sample : L1948939-02,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 25 07:43:03 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

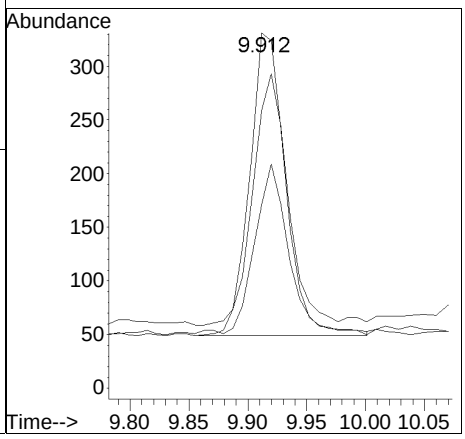


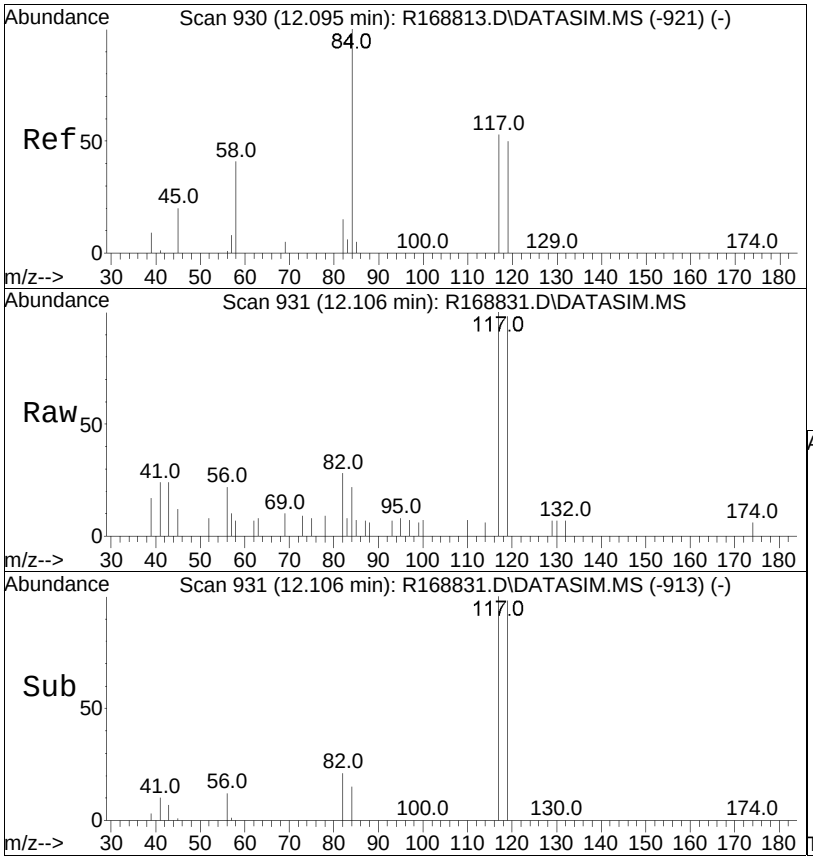


#28
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion: 61 Resp: 599

Ion	Ratio	Lower	Upper
61	100		
96	78.2	61.7	92.5
98	51.7	39.0	58.4

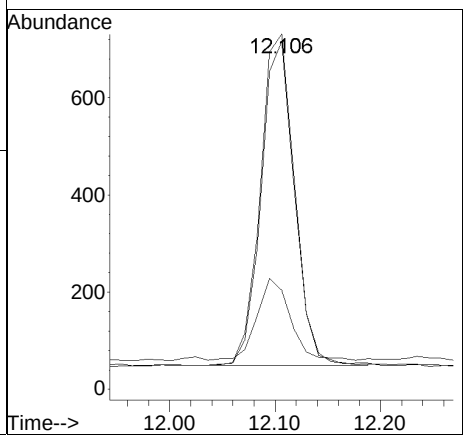


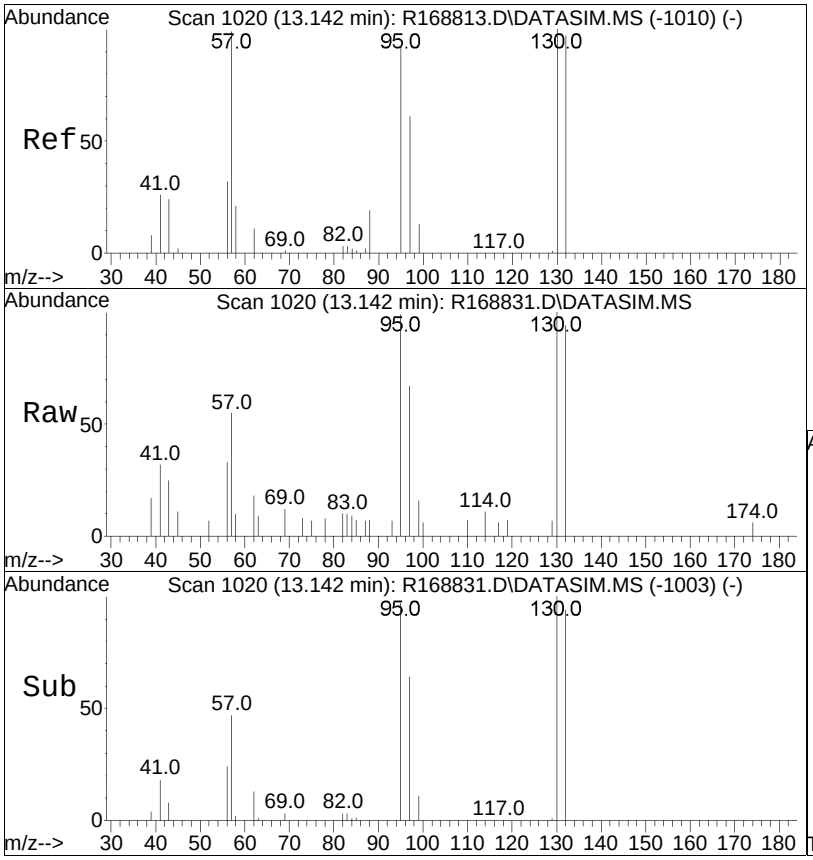


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:117 Resp: 1542

Ion	Ratio	Lower	Upper
117	100		
119	97.9	75.6	113.4
82	27.9	23.1	34.7

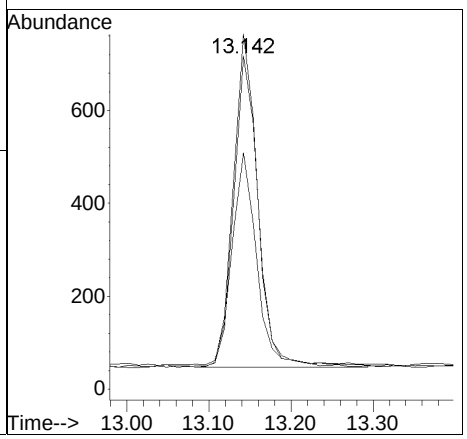


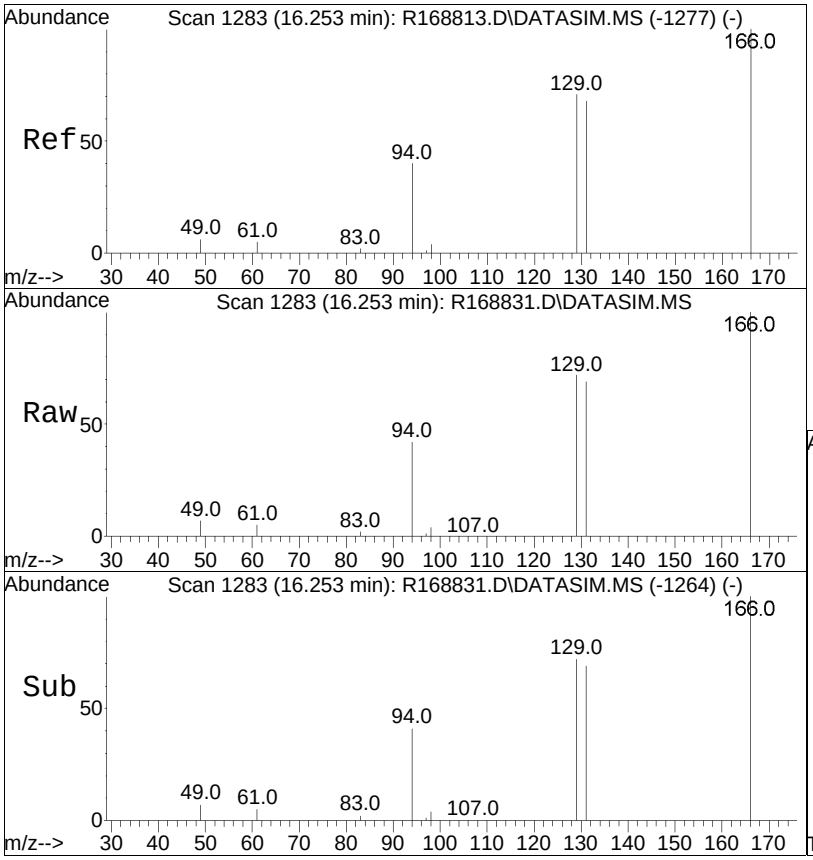


#44
trichloroethene
Concen: 0.07 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:130 Resp: 1485

Ion	Ratio	Lower	Upper
130	100		
132	93.8	78.0	117.0
97	66.6	48.9	73.3

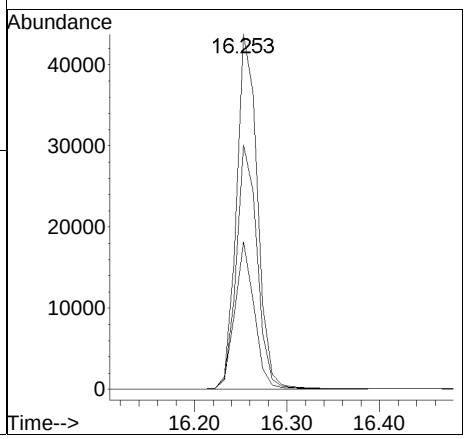




#57
tetrachloroethene
Concen: 2.67 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168831.D
Acq: 24 Oct 2019 6:25 pm

Tgt Ion:166 Resp: 68890

Ion	Ratio	Lower	Upper
166	100		
131	68.9	54.5	81.7
94	41.6	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168831.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 6:25 pm	Instrument	: Air Piano 1
Sample	: L1948939-02,3,250,250	Quant Date	: 10/25/2019 7:43 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168832.D
Acq On : 24 Oct 2019 6:58 pm
Operator : AIRPIANO1:TS
Sample : L1948939-03,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 07:43:20 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

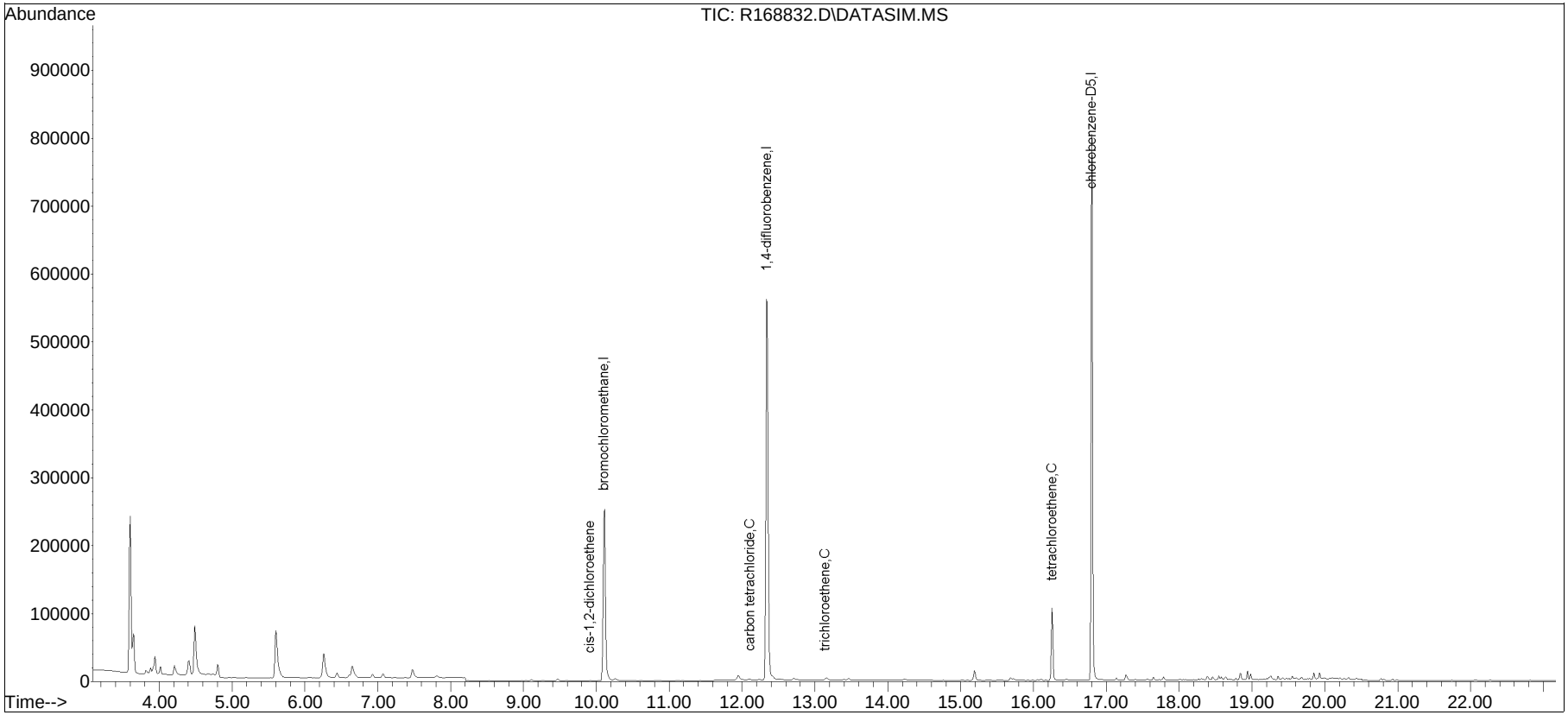
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	289119	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		89.69%	
33) 1,4-difluorobenzene	12.339	114	706030	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		85.15%	
51) chlorobenzene-D5	16.798	54	113637	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		86.17%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.287		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	527	0.026	ppbV	94
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1684	0.060	ppbV	96
44) trichloroethene	13.142	130	656	0.031	ppbV	95
57) tetrachloroethene	16.253	166	55678	2.061	ppbV	98

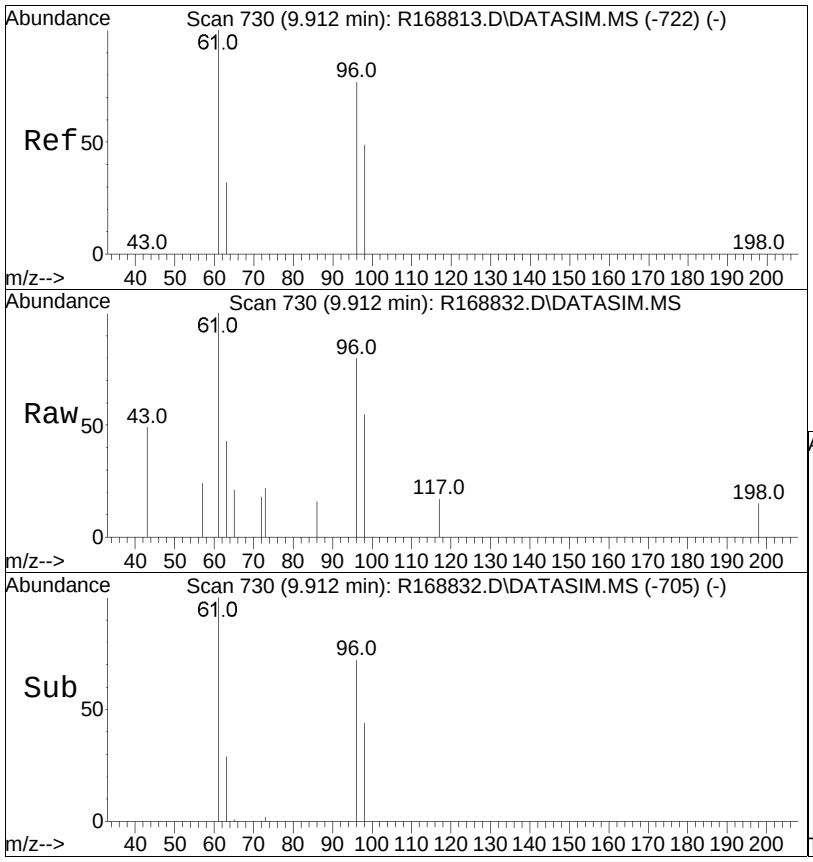
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168832.D
Acq On : 24 Oct 2019 6:58 pm
Operator : AIRPIANO1:TS
Sample : L1948939-03,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 07:43:20 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

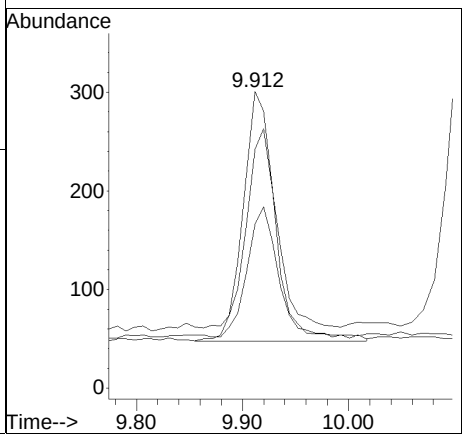


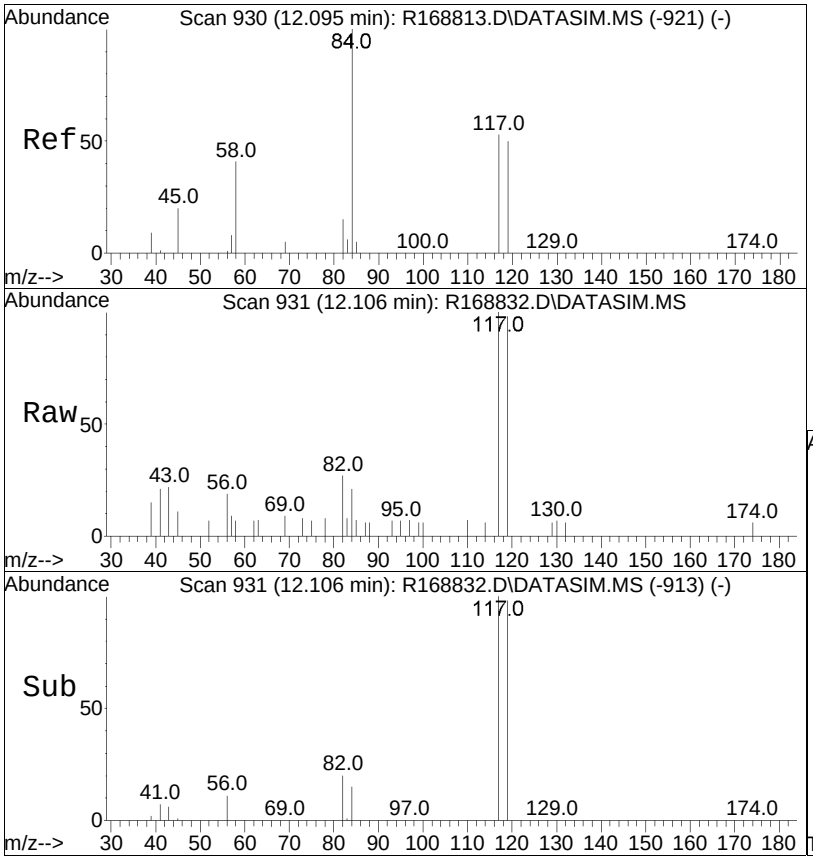


#28
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion: 61 Resp: 527

Ion	Ratio	Lower	Upper
61	100		
96	80.4	61.7	92.5
98	55.1	39.0	58.4

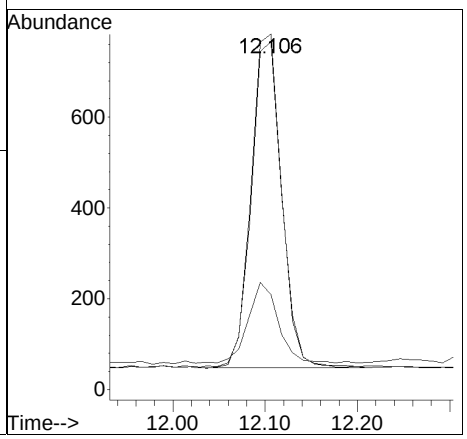


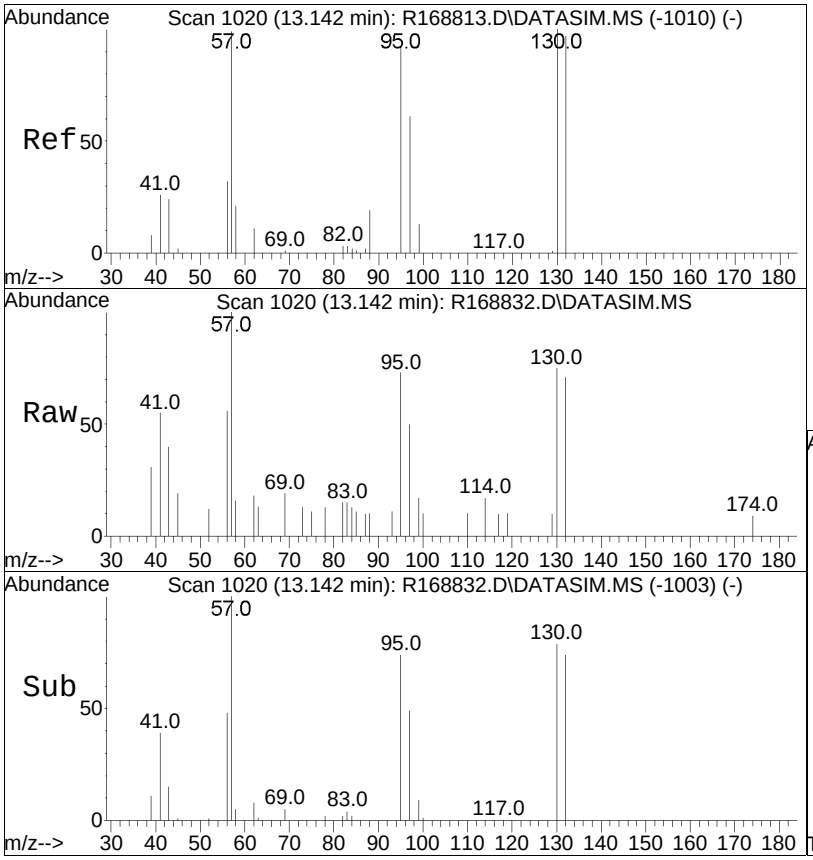


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:117 Resp: 1684

Ion	Ratio	Lower	Upper
117	100		
119	97.8	75.6	113.4
82	26.7	23.1	34.7

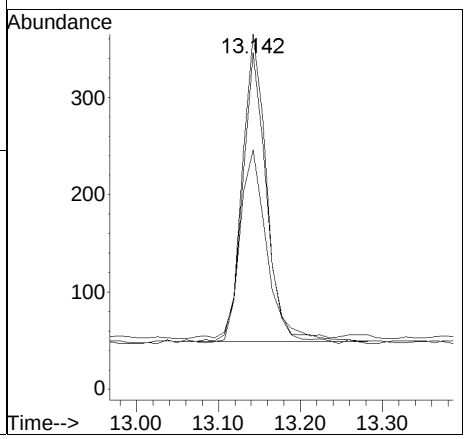


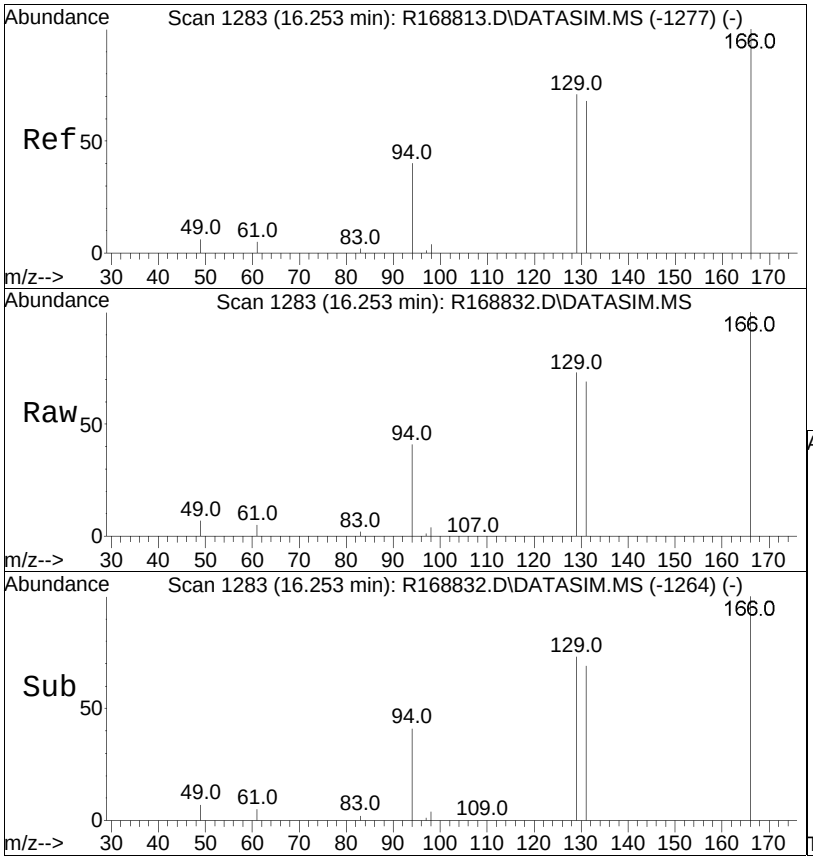


#44
trichloroethene
Concen: 0.03 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:130 Resp: 656

Ion	Ratio	Lower	Upper
130	100		
132	94.8	78.0	117.0
97	67.4	48.9	73.3

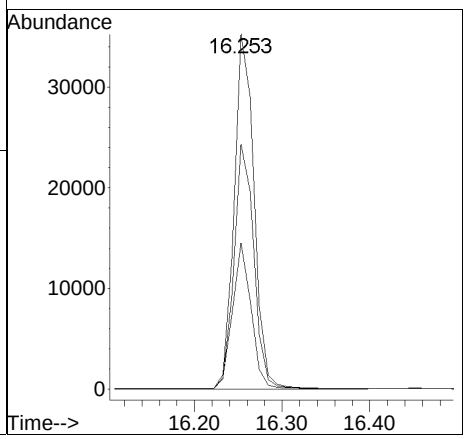




#57
tetrachloroethene
Concen: 2.06 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168832.D
Acq: 24 Oct 2019 6:58 pm

Tgt Ion:166 Resp: 55678

Ion	Ratio	Lower	Upper
166	100		
131	69.0	54.5	81.7
94	41.3	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168832.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 6:58 pm	Instrument	: Air Piano 1
Sample	: L1948939-03,3,250,250	Quant Date	: 10/25/2019 7:43 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168834.D
Acq On : 24 Oct 2019 8:02 pm
Operator : AIRPIANO1:TS
Sample : L1948939-04,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 25 07:43:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	277246	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		86.00%	
33) 1,4-difluorobenzene	12.339	114	616002	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		74.29%	
51) chlorobenzene-D5	16.798	54	111909	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		84.86%	

System Monitoring Compounds

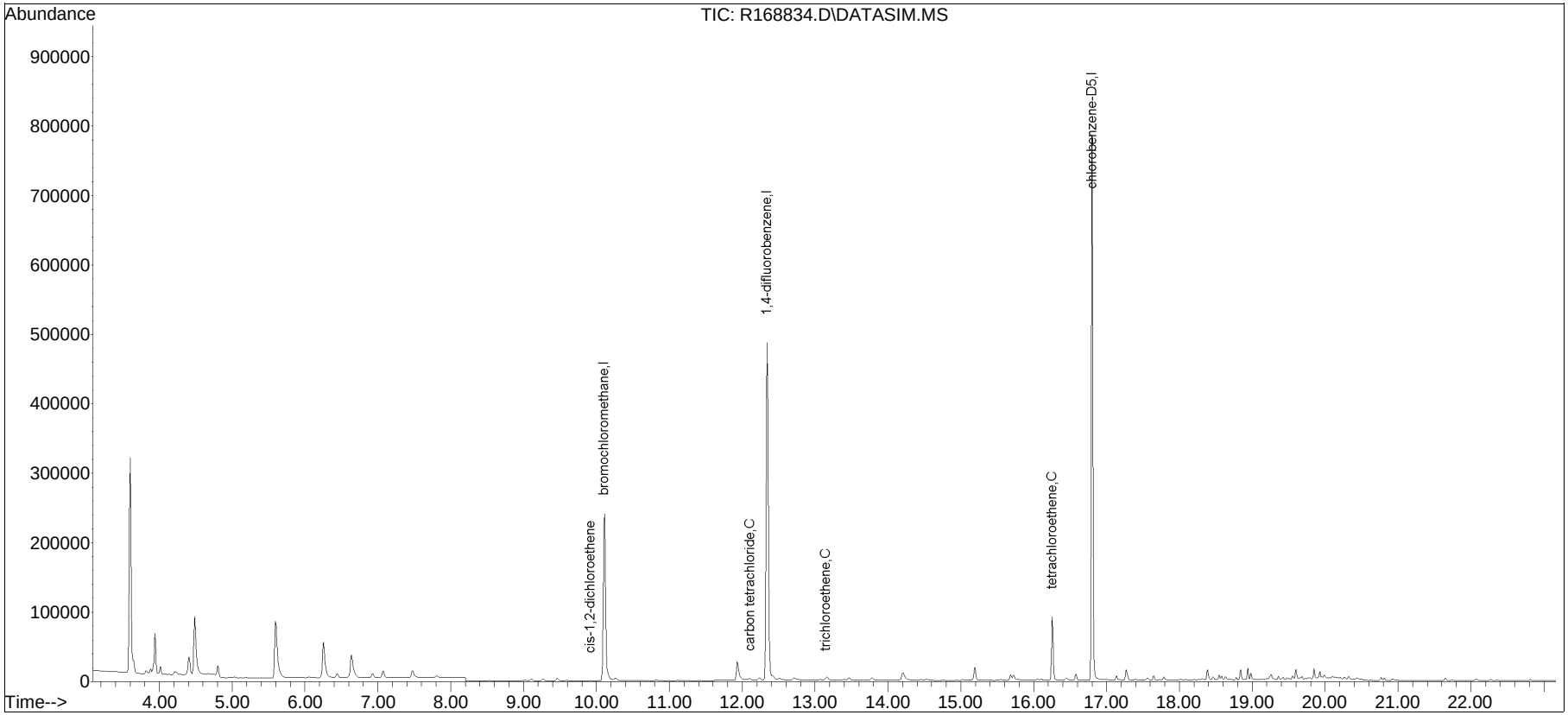
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.231		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	394	0.020	ppbV #	87
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1798	0.074	ppbV	98
44) trichloroethene	13.142	130	513	0.028	ppbV	95
57) tetrachloroethene	16.253	166	47255	1.777	ppbV	98

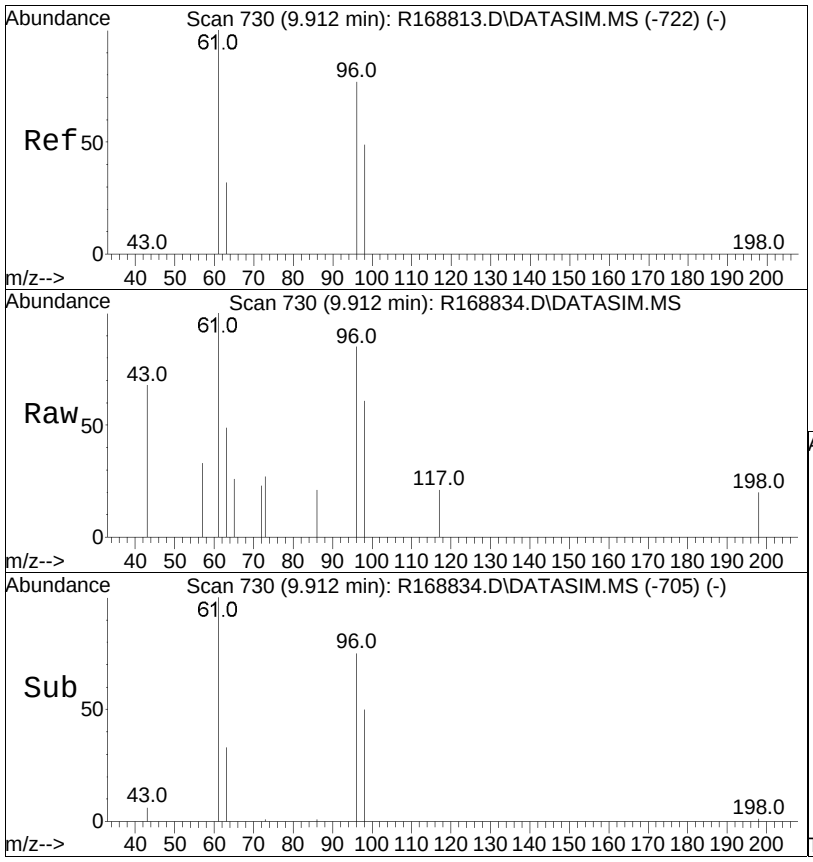
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168834.D
Acq On : 24 Oct 2019 8:02 pm
Operator : AIRPIANO1:TS
Sample : L1948939-04,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 25 07:43:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

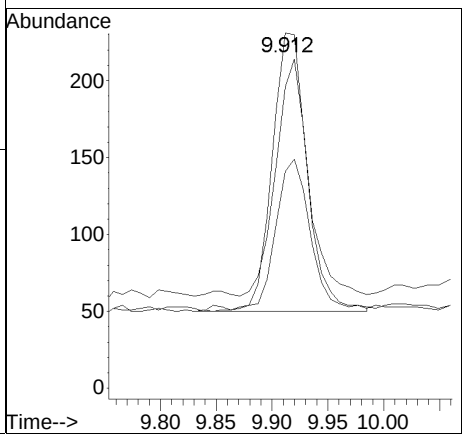


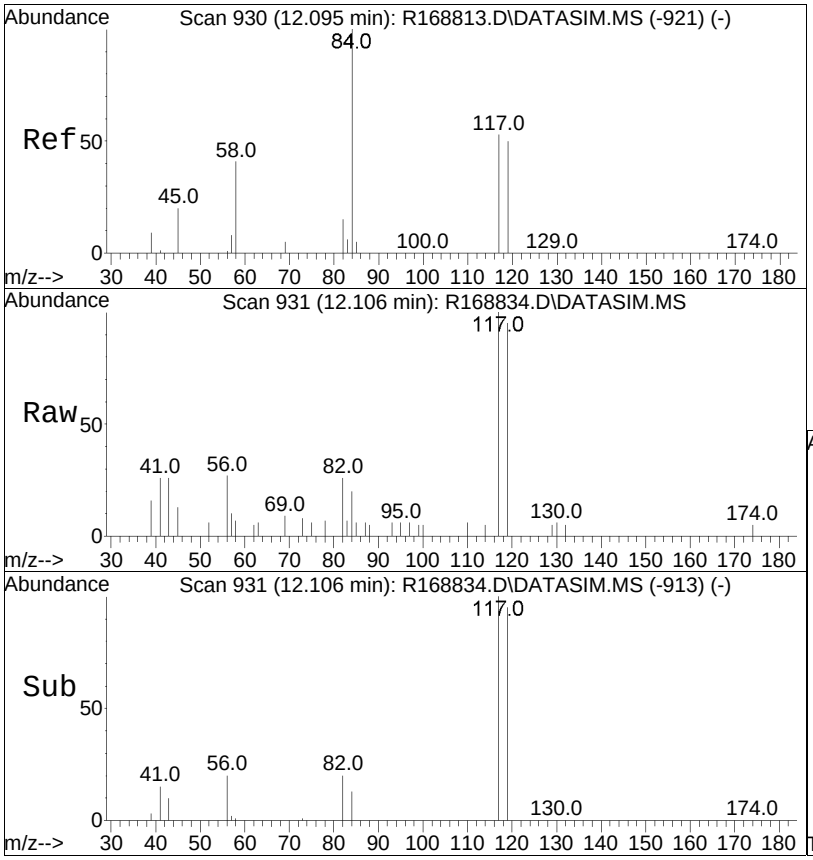


#28
cis-1,2-dichloroethene
Concen: 0.02 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion: 61 Resp: 394

Ion	Ratio	Lower	Upper
61	100		
96	84.8	61.7	92.5
98	61.0	39.0	58.4#

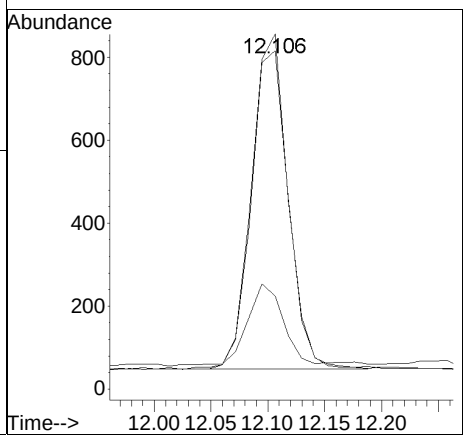


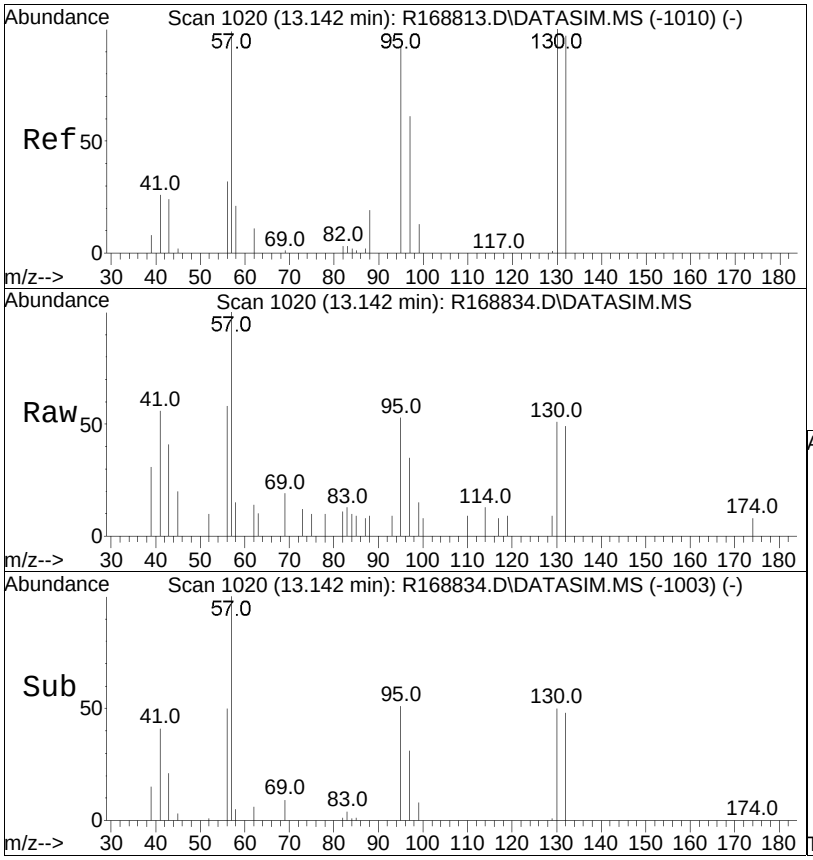


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:117 Resp: 1798

Ion	Ratio	Lower	Upper
117	100		
119	95.3	75.6	113.4
82	26.3	23.1	34.7

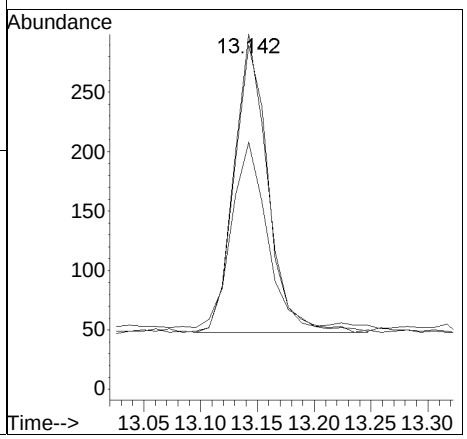


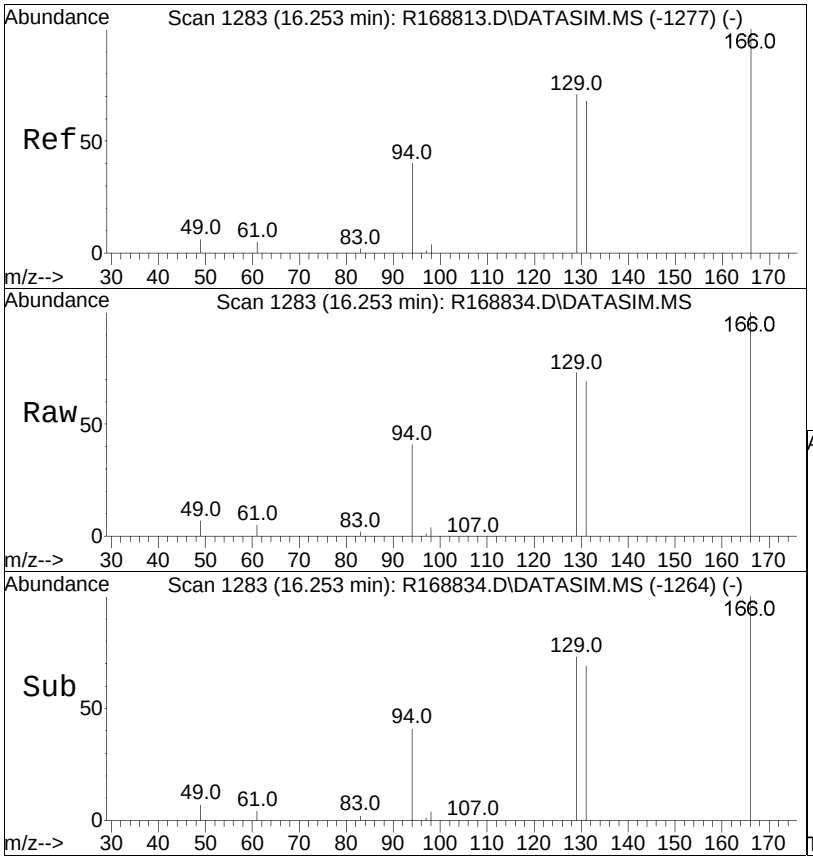


#44
trichloroethene
Concen: 0.03 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. 0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:130 Resp: 513

Ion	Ratio	Lower	Upper
130	100		
132	97.0	78.0	117.0
97	69.6	48.9	73.3

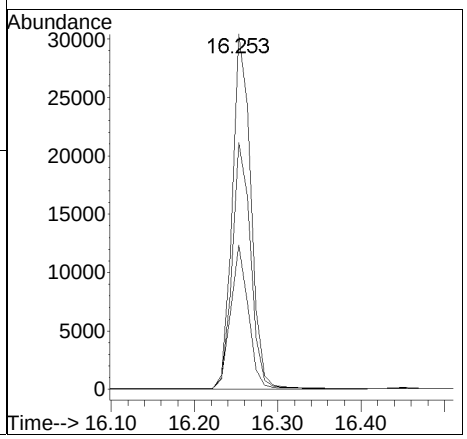




#57
tetrachloroethene
Concen: 1.78 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168834.D
Acq: 24 Oct 2019 8:02 pm

Tgt Ion:166 Resp: 47255

Ion	Ratio	Lower	Upper
166	100		
131	69.5	54.5	81.7
94	40.7	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168834.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 8:02 pm	Instrument	: Air Piano 1
Sample	: L1948939-04,3,250,250	Quant Date	: 10/25/2019 7:43 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168835.D
Acq On : 24 Oct 2019 8:35 pm
Operator : AIRPIANO1:TS
Sample : L1948939-05,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 25 07:43:55 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

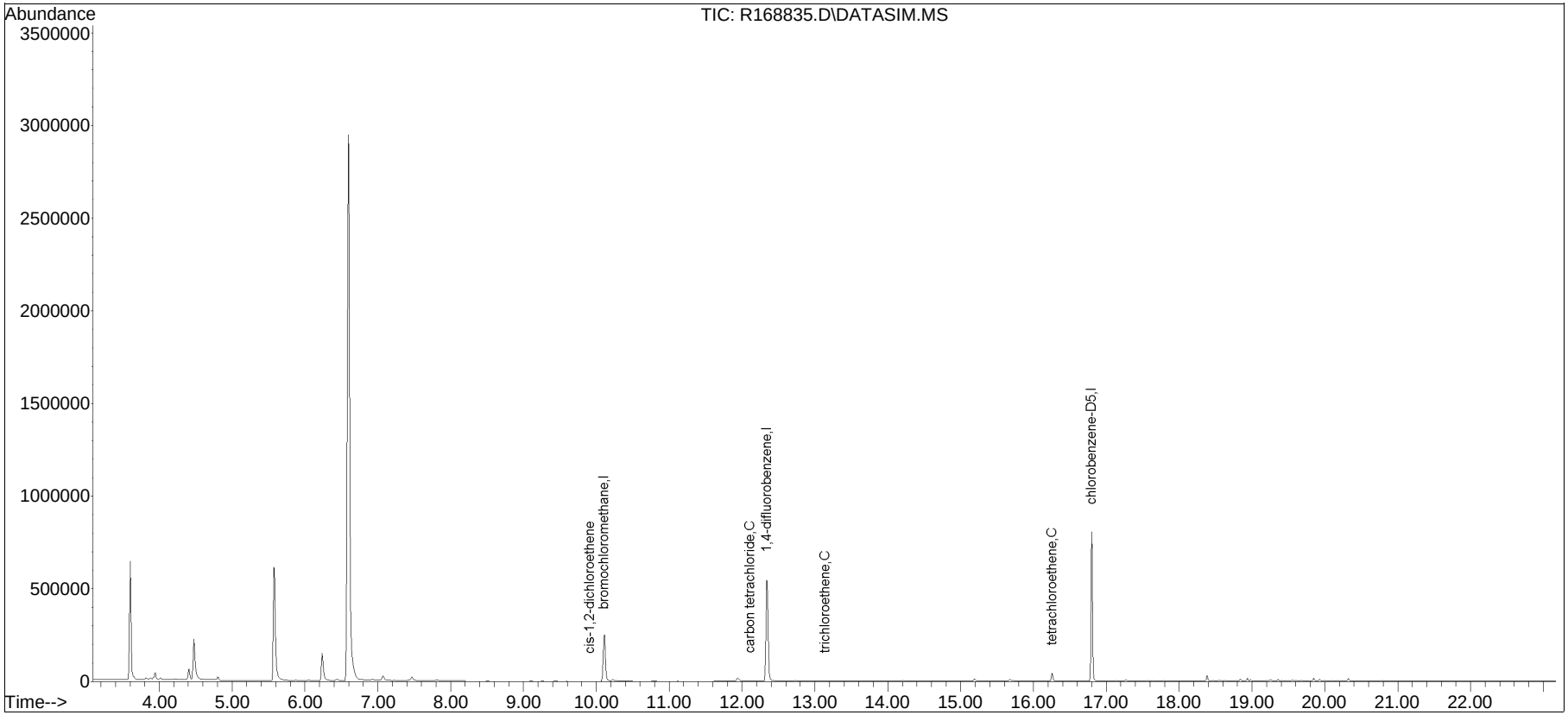
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	286605	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		88.91%	
33) 1,4-difluorobenzene	12.339	114	680205	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		82.03%	
51) chlorobenzene-D5	16.798	54	110898	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		84.10%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.231		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	205	0.010	ppbV #	84
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1409	0.052	ppbV	95
44) trichloroethene	13.142	130	260	0.013	ppbV #	92
57) tetrachloroethene	16.253	166	22926	0.870	ppbV	99

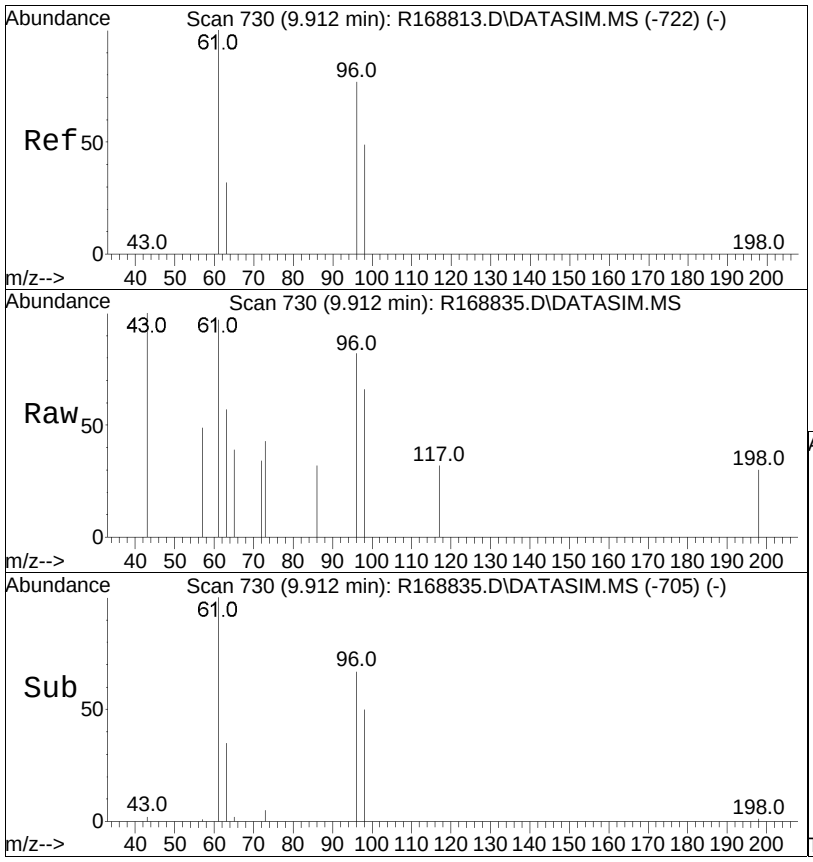
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168835.D
Acq On : 24 Oct 2019 8:35 pm
Operator : AIRPIANO1:TS
Sample : L1948939-05,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 25 07:43:55 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

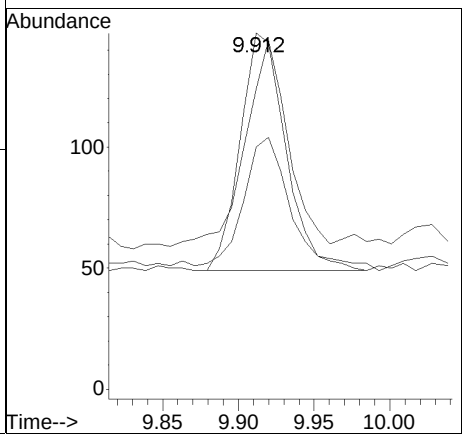


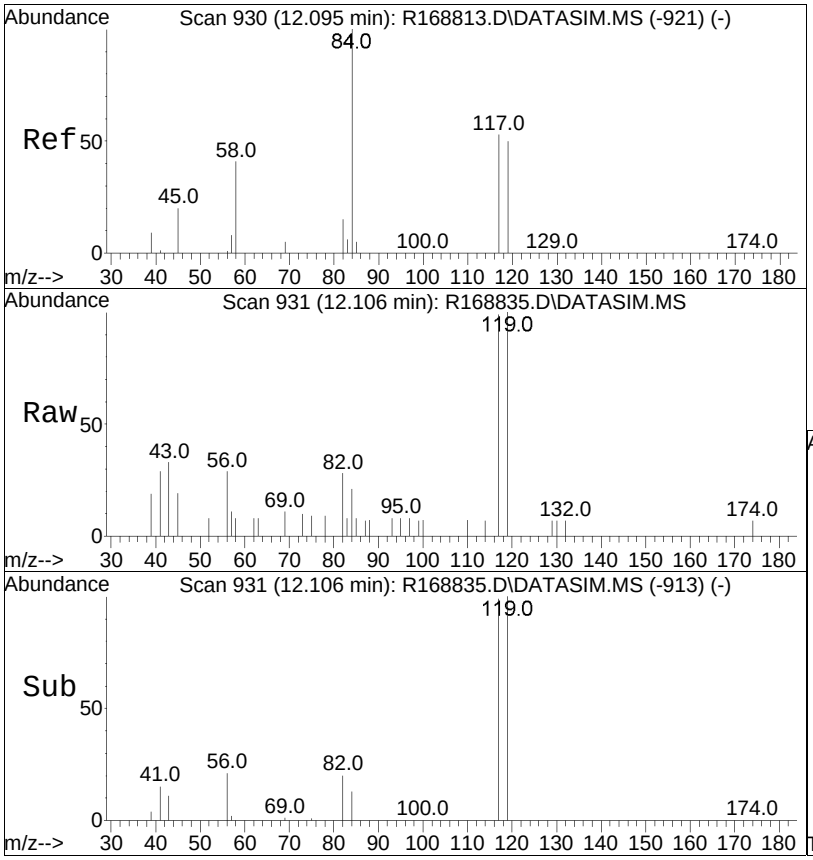


#28
cis-1,2-dichloroethene
Concen: 0.01 ppbV
RT: 9.912 min Scan# 730
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion: 61 Resp: 205

Ion	Ratio	Lower	Upper
61	100		
96	84.4	61.7	92.5
98	68.0	39.0	58.4#

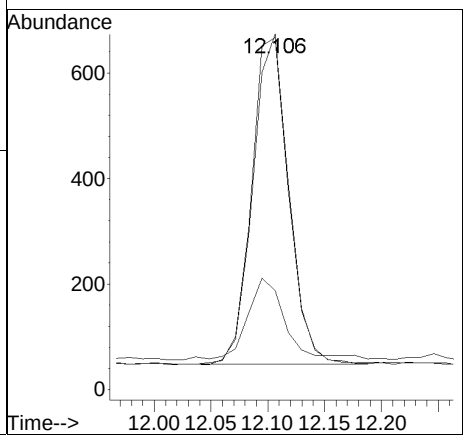


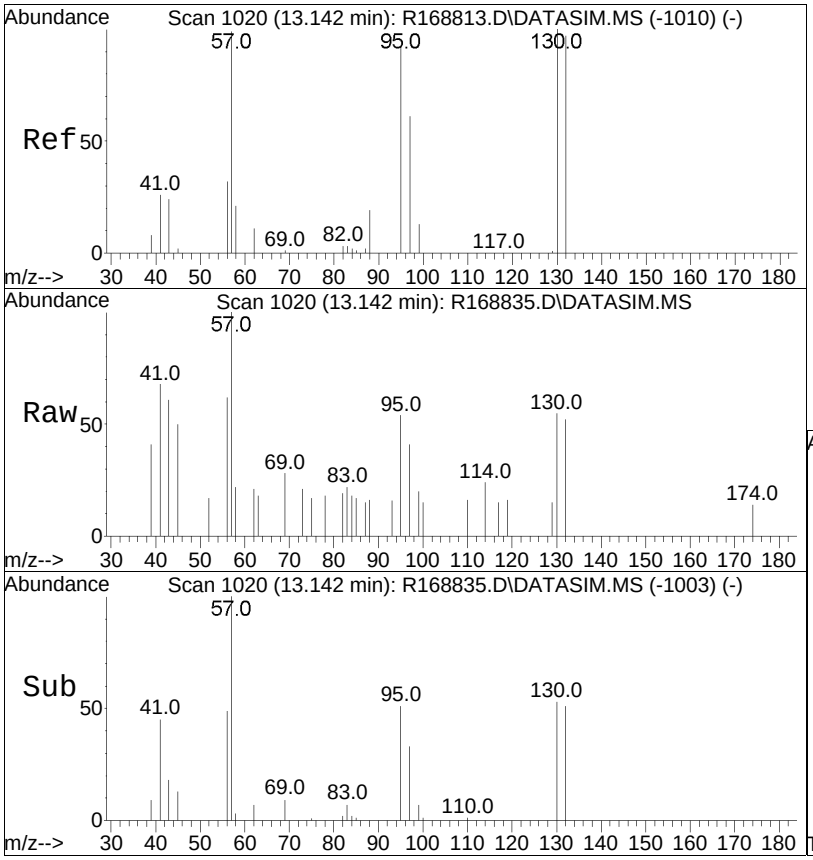


#38
carbon tetrachloride
Concen: 0.05 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:117 Resp: 1409

Ion	Ratio	Lower	Upper
117	100		
119	101.0	75.6	113.4
82	28.2	23.1	34.7

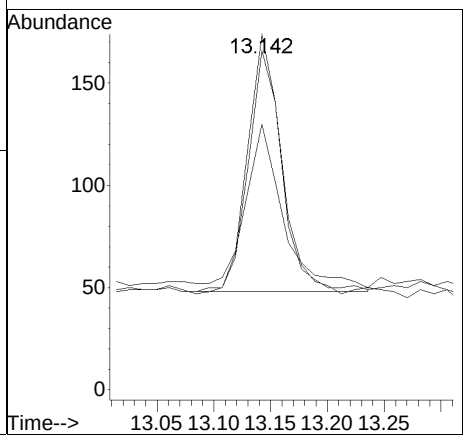


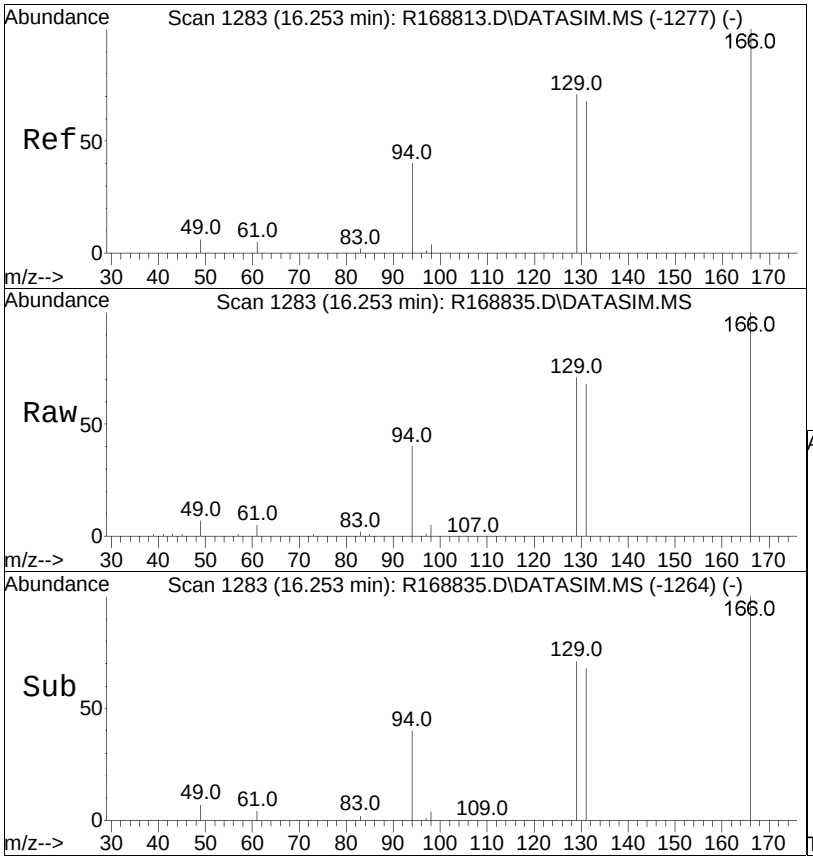


#44
trichloroethene
Concen: 0.01 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:130 Resp: 260

Ion	Ratio	Lower	Upper
130	100		
132	95.4	78.0	117.0
97	74.7	48.9	73.3#

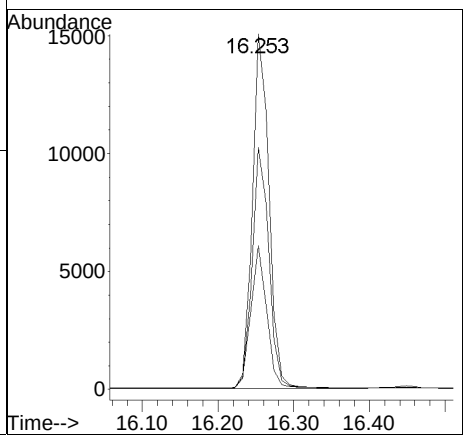




#57
tetrachloroethene
Concen: 0.87 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. 0.000 min
Lab File: R168835.D
Acq: 24 Oct 2019 8:35 pm

Tgt Ion:166 Resp: 22926

Ion	Ratio	Lower	Upper
166	100		
131	68.0	54.5	81.7
94	40.5	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168835.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 8:35 pm	Instrument	: Air Piano 1
Sample	: L1948939-05,3,250,250	Quant Date	: 10/25/2019 7:43 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168836.D
Acq On : 24 Oct 2019 9:07 pm
Operator : AIRPIANO1:TS
Sample : L1948939-06,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 25 07:44:05 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

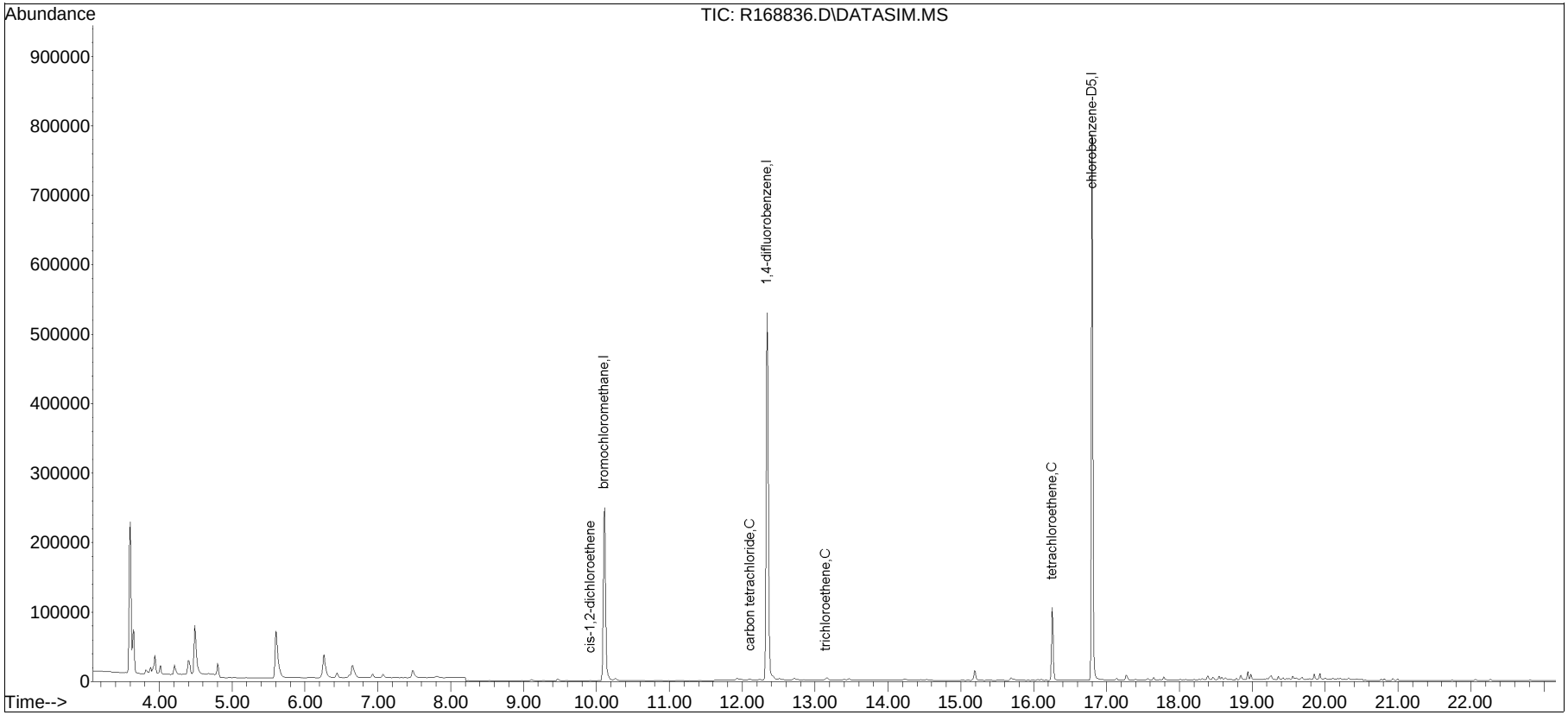
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.103	49	288088	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		89.37%	
33) 1,4-difluorobenzene	12.339	114	672674	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		81.12%	
51) chlorobenzene-D5	16.798	54	112848	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		85.58%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.278		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	506	0.025	ppbV	92
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1654	0.062	ppbV	99
44) trichloroethene	13.142	130	645	0.032	ppbV	94
57) tetrachloroethene	16.253	166	55246	2.060	ppbV	98

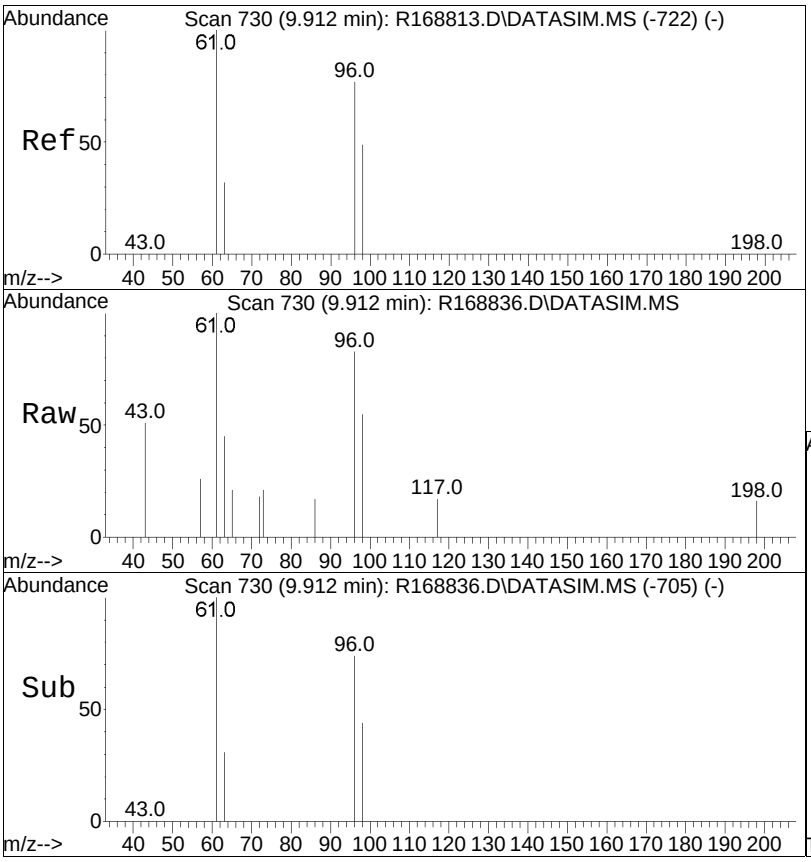
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168836.D
Acq On : 24 Oct 2019 9:07 pm
Operator : AIRPIANO1:TS
Sample : L1948939-06,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 25 07:44:05 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

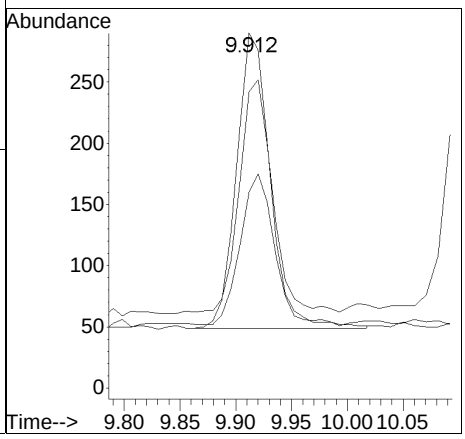


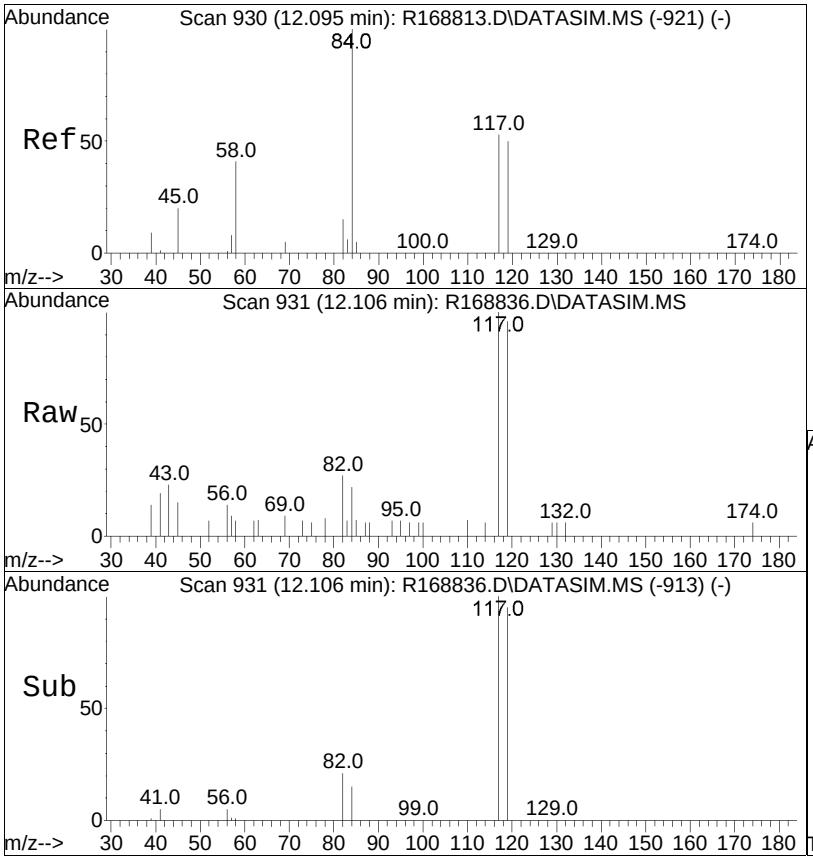


#28
cis-1,2-dichloroethene
Concen: 0.02 ppbV
RT: 9.912 min Scan# 730
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion: 61 Resp: 506

Ion	Ratio	Lower	Upper
61	100		
96	83.4	61.7	92.5
98	55.2	39.0	58.4

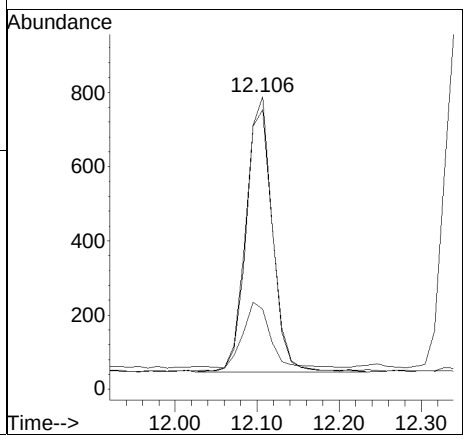


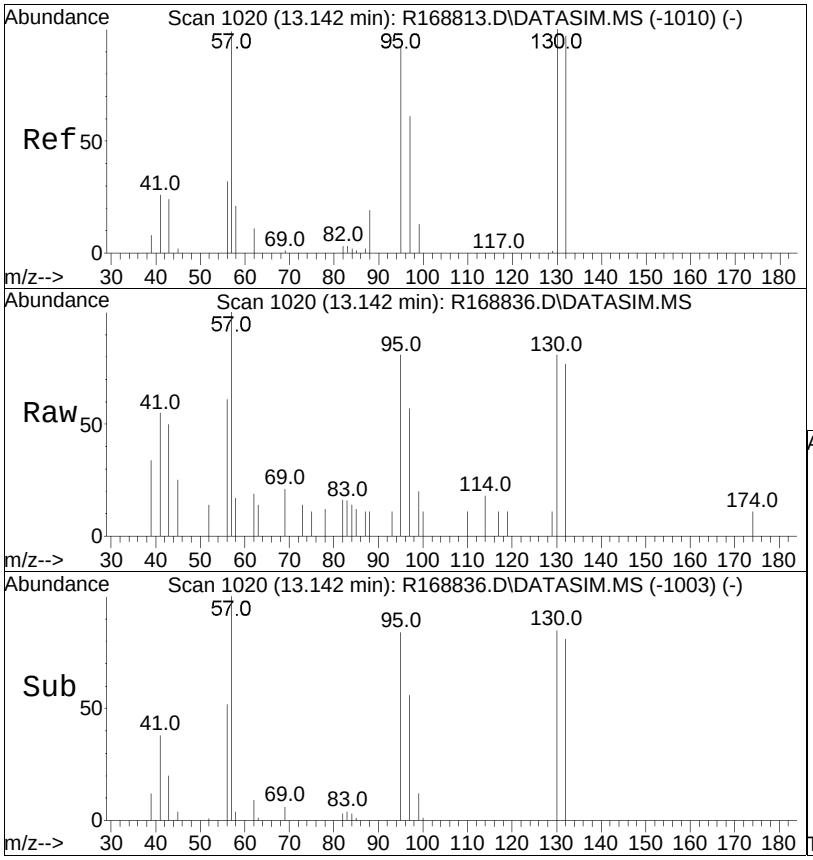


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:117 Resp: 1654

Ion	Ratio	Lower	Upper
117	100		
119	95.6	75.6	113.4
82	27.4	23.1	34.7

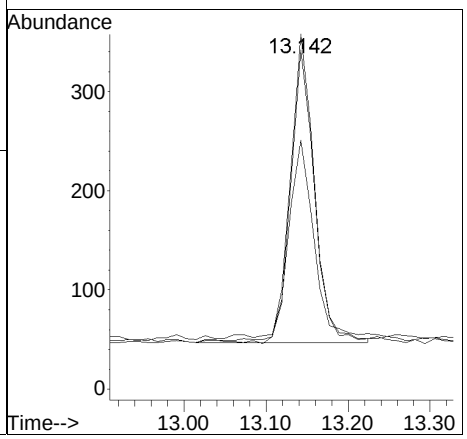


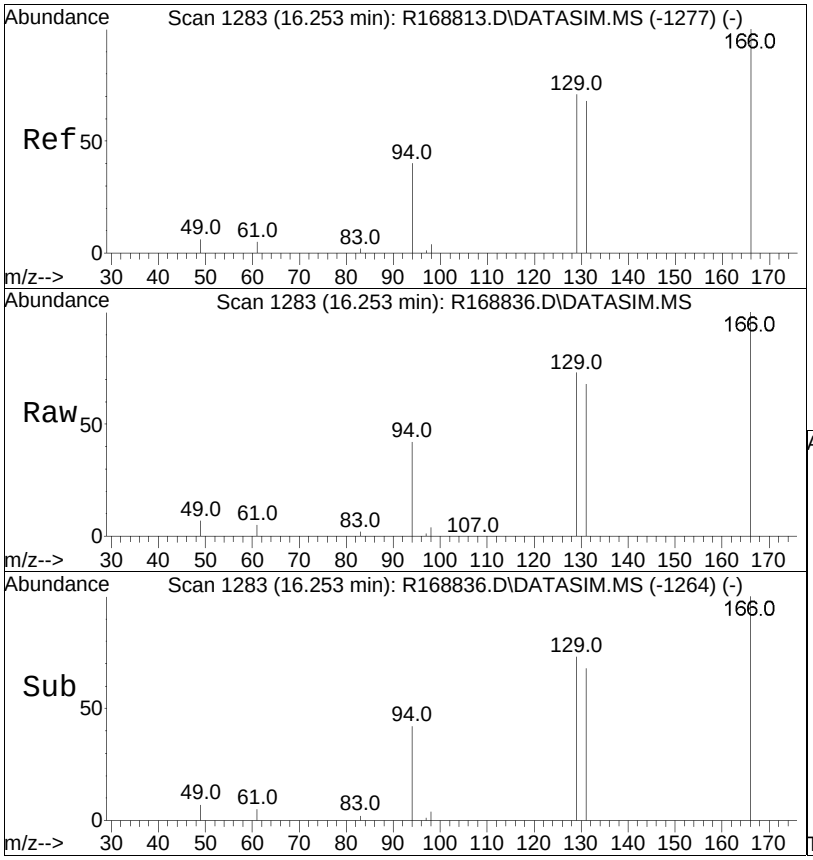


#44
trichloroethene
Concen: 0.03 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:130 Resp: 645

Ion	Ratio	Lower	Upper
130	100		
132	95.5	78.0	117.0
97	70.1	48.9	73.3

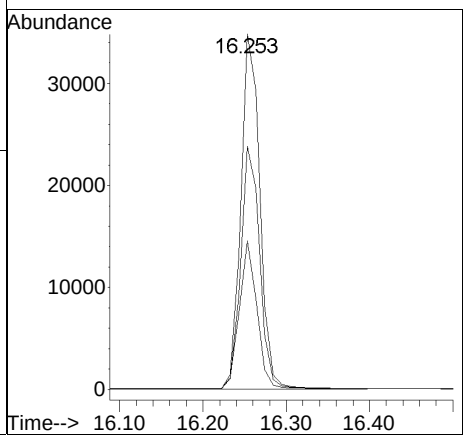




#57
tetrachloroethene
Concen: 2.06 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. 0.000 min
Lab File: R168836.D
Acq: 24 Oct 2019 9:07 pm

Tgt Ion:166 Resp: 55246

Ion	Ratio	Lower	Upper
166	100		
131	68.5	54.5	81.7
94	41.8	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168836.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 9:07 pm	Instrument	: Air Piano 1
Sample	: L1948939-06,3,250,250	Quant Date	: 10/25/2019 7:44 am

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Integral Consulting, Inc.**	**Lab Number**	**: L1948939**
Project Name	**: 135 KENT AVE**	**Project Number**	**: E051**
Instrument ID	**: AIRPIANO1**	**Ical Ref**	**: ICAL16240**
Calibration dates	**: 10/23/19 12:51 10/23/19 17:38**		

Calibration Files
0.02=R168807.D 0.05=R168808.D 0.1 =R168809.D 0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D
5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene				0.408	0.370	0.351	0.308	0.334	0.314	0.271	0.3365	13.30
3)		dichlorodifluoromethane				1.334	1.011	1.075	1.074	1.013	1.073	0.968	1.0782	11.12
4)	C	chloromethane				0.406	0.374	0.370	0.346	0.349	0.353	0.314	0.3588	7.96
5)		Freon-114		1.026	1.247	1.433	1.307	1.283	1.220	1.231	1.245	1.096	1.2320	9.54
6)	C	vinyl chloride	0.476	0.355	0.429	0.516	0.452	0.450	0.427	0.431	0.438	0.390	0.4365	10.08
7)	C	1,3-butadiene	0.323	0.255	0.277	0.331	0.297	0.292	0.278	0.275	0.288	0.254	0.2871	8.85
8)	C	bromomethane	0.576	0.411	0.485	0.532	0.495	0.483	0.454	0.456	0.468	0.416	0.4777	10.44
9)	C	chloroethane	0.263	0.191	0.229	0.239	0.233	0.220	0.203	0.204	0.208	0.188	0.2178	10.80
10)		ethanol						0.344	0.238	0.225	0.213	0.186	0.2413	25.08
11)	C	vinyl bromide				0.539	0.512	0.493	0.464	0.463	0.482	0.434	0.4839	7.20
12)	C	acrolein		0.158	0.202	0.201	0.173	0.167	0.157	0.158	0.164	0.151	0.1702	11.19
13)		acetone				0.785	0.681	0.661	0.654	0.648	0.601	0.526	0.6506	12.10
14)		trichlorofluoromethane		0.909	1.099	1.257	1.165	1.144	1.098	1.088	1.127	1.000	1.0987	8.99
15)		isopropyl alcohol				0.870	0.733	0.691	0.691	0.680	0.759	0.577	0.7144	12.48
16)	C	acrylonitrile				0.337	0.309	0.310	0.274	0.277	0.333	0.265	0.3010	9.65
17)	C	1,1-dichloroethene	0.748	0.569	0.670	0.780	0.721	0.716	0.674	0.670	0.772	0.615	0.6934	9.72
18)		tertiary butyl alcohol					0.901	0.877	0.814	0.826	0.933	0.755	0.8509	7.66
19)	C	methylene chloride					0.512	0.493	0.466	0.458	0.549	0.413	0.4818	9.74
20)	C	3-chloropropene				0.508	0.464	0.472	0.449	0.452	0.560	0.414	0.4742	9.94
21)	C	carbon disulfide				1.612	1.446	1.390	1.328	1.327	1.561	1.210	1.4105	9.99
22)		Freon 113		0.790	0.948	1.052	0.987	0.969	0.931	0.928	1.042	0.843	0.9434	9.04
23)		trans-1,2-dichloroethene	0.713	0.523	0.692	0.855	0.698	0.688	0.748	0.638	0.771	0.693	0.7020	12.28
24)	C	1,1-dichloroethane	1.002	0.642	0.903	1.056	0.846	0.963	0.921	0.788	0.930	0.836	0.8886	13.26
25)	C	MTBE	1.382	1.012	1.234	1.443	1.214	1.333	1.275	1.247	1.311	1.173	1.2622	9.47
26)	C	vinyl acetate					0.870	0.900	0.838	0.914	0.920	0.902	0.8908	3.47
27)	C	2-butanone				1.014	0.993	0.968	0.920	0.947	0.939	0.864	0.9493	5.21
28)		cis-1,2-dichloroethene	0.716	0.540	0.673	0.823	0.770	0.765	0.726	0.723	0.729	0.664	0.7128	10.72
29)		Ethyl Acetate					0.200	0.205	0.203	0.208	0.205	0.192	0.2023	2.76
30)	C	chloroform	1.384	1.029	1.245	1.422	1.335	1.319	1.262	1.247	1.262	1.119	1.2624	9.30
31)		Tetrahydrofuran					0.599	0.589	0.536	0.532	0.537	0.479	0.5454	8.02
32)	C	1,2-dichloroethane	0.757	0.538	0.634	0.720	0.683	0.680	0.645	0.643	0.649	0.582	0.6531	9.65
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane				0.414	0.385	0.379	0.363	0.359	0.365	0.338	0.3715	6.44
35)	s	1,2-dichloroethane-D4	0.223	0.226	0.225	0.225	0.225	0.225	0.224	0.227	0.225	0.224	0.2248	0.54
36)	C	1,1,1-trichloroethane	0.427	0.327	0.393	0.448	0.419	0.410	0.396	0.389	0.408	0.376	0.3993	8.18

Initial Calibration Summary
Form 6
Air Volatiles

Client	: **Integral Consulting, Inc.**	**Lab Number**	: **L1948939**
Project Name	: **135 KENT AVE**	**Project Number**	: **E051**
Instrument ID	: **AIRPIANO1**	**Ical Ref**	: **ICAL16240**
Calibration dates	: **10/23/19 12:51 10/23/19 17:38**		

Calibration Files

0.02=R168807.D 0.05=R168808.D 0.1 =R168809.D 0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D

5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
37)	C	benzene		0.523	0.625	0.708	0.664	0.652	0.629	0.619	0.632	0.584	0.6263	8.23
38)	C	carbon tetrachloride	0.436	0.319	0.379	0.441	0.411	0.399	0.396	0.397	0.409	0.380	0.3968	8.63
39)		cyclohexane				0.335	0.309	0.307	0.297	0.294	0.300	0.277	0.3028	5.86
40)		dibromomethane	0.465	0.297	0.283	0.304	0.273	0.267	0.252	0.251	0.260	0.242	0.2893	22.44
41)	C	1,2-dichloropropane	0.261	0.186	0.224	0.267	0.250	0.247	0.237	0.235	0.239	0.219	0.2365	9.79
42)		bromodichloromethane	0.497	0.371	0.445	0.521	0.488	0.480	0.470	0.466	0.490	0.455	0.4682	8.65
43)	C	1,4-dioxane			0.117	0.150	0.143	0.139	0.144	0.146	0.147	0.137	0.1404	7.31
44)	C	trichloroethene	0.321	0.236	0.282	0.326	0.314	0.305	0.299	0.294	0.305	0.277	0.2959	8.82
45)	C	2,2,4-trimethylpentane				1.080	1.013	0.979	0.942	0.944	0.959	0.865	0.9687	6.88
46)		heptane				0.374	0.353	0.346	0.339	0.330	0.339	0.303	0.3407	6.43
47)	C	cis-1,3-dichloropropene	1.340	1.008	1.223	1.475	1.389	1.370	1.385	1.406	1.435	1.347	1.3376	9.99
48)	C	4-methyl-2-pentanone					0.450	0.448	0.458	0.453	0.454	0.417	0.4466	3.32
49)		trans-1,3-dichloropropene	0.342	0.227	0.289	0.344	0.327	0.329	0.335	0.343	0.355	0.331	0.3222	11.76
50)	C	1,1,2-trichloroethane	0.288	0.213	0.250	0.307	0.287	0.282	0.270	0.273	0.277	0.257	0.2705	9.58
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene		5.381	5.335	5.700	4.848	4.941	4.753	4.606	4.727	4.364	4.9618	8.60
53)	s	toluene-D8	4.207	4.164	4.194	4.129	4.033	4.231	4.244	4.188	4.235	4.265	4.1890	1.63
54)		2-hexanone				2.612	2.448	2.589	2.681	2.629	2.441	2.023	2.4892	9.02
55)		dibromochloromethane	2.974	2.128	2.601	3.104	2.802	2.983	2.975	2.956	3.090	2.933	2.8547	10.28
56)	C	1,2-dibromoethane	2.758	2.119	2.490	3.003	2.619	2.786	2.781	2.705	2.791	2.599	2.6652	8.88
57)	C	tetrachloroethene	2.535	1.890	2.269	2.638	2.412	2.475	2.416	2.393	2.422	2.319	2.3768	8.41
58)		1,1,1,2-tetrachloroethane	2.513	1.597	1.882	2.250	2.068	2.076	2.020	2.007	2.112	1.988	2.0513	11.48
59)	C	chlorobenzene	4.077	3.105	3.789	4.447	4.169	4.091	3.999	3.925	3.971	3.689	3.9262	9.05
60)	C	ethylbenzene	7.100	5.203	5.817	6.838	6.342	6.311	6.128	5.934	6.099	5.625	6.1398	9.04
61)	C	m+p-xylene	6.543	8.440	4.522	5.289	4.902	4.898	4.692	4.603	4.668	4.257	5.2813	24.17
62)	C	bromoform	3.114	2.111	2.463	3.094	2.868	2.949	3.065	3.100	3.243	3.135	2.9142	12.20
63)	C	styrene	3.748	2.668	3.233	4.010	3.795	3.767	3.801	3.771	3.802	3.532	3.6128	10.81
64)	C	1,1,2,2-tetrachloroethane	3.960	2.936	3.524	4.436	4.007	4.035	3.974	3.912	3.701	3.421	3.7905	10.93
65)	C	o-xylene	6.480	4.289	4.621	5.473	5.092	5.034	4.895	4.744	4.681	4.262	4.9571	13.07
66)		1,2,3-trichloropropane	3.374	2.427	2.701	3.202	3.039	3.018	2.926	2.846	2.851	2.700	2.9084	9.29
67)	s	bromofluorobenzene	2.763	2.818	2.795	2.800	2.791	2.834	2.870	2.839	2.804	2.882	2.8196	1.31
68)	C	isopropylbenzene				7.188	6.853	6.851	6.550	6.418	6.504	6.006	6.6243	5.73
69)		bromobenzene	3.590	2.613	3.095	3.772	3.605	3.553	3.431	3.358	3.413	3.130	3.3559	9.97
70)		4-ethyl toluene	6.937	4.924	6.252	7.761	7.355	7.488	7.480	7.238	7.059	6.603	6.9098	11.99
71)		1,3,5-trimethylbenzene	6.616	4.236	4.749	6.234	5.831	5.842	5.899	5.729	5.462	5.219	5.5817	12.52
72)		tert-butylbenzene				6.493	6.223	6.241	6.172	5.979	5.607	5.203	5.9883	7.37

Initial Calibration Summary
Form 6
Air Volatiles

Client	: **Integral Consulting, Inc.**	**Lab Number**	: **L1948939**
Project Name	: **135 KENT AVE**	**Project Number**	: **E051**
Instrument ID	: **AIRPIANO1**	**Ical Ref**	: **ICAL16240**
Calibration dates	: **10/23/19 12:51 10/23/19 17:38**		

Calibration Files

0.02=R168807.D 0.05=R168808.D 0.1 =R168809.D 0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D

5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
73)		1,2,4-trimethylbenzene	6.023	4.018	4.825	6.080	5.800	5.797	5.911	5.785	5.259	4.958	5.4455	12.26
74)	C	Benzyl Chloride				4.596	4.381	4.549	5.047	5.243	4.910	5.062	4.8269	6.63
75)		1,3-dichlorobenzene	4.440	3.031	3.618	4.666	4.582	4.555	4.693	4.610	4.253	4.224	4.2671	12.64
76)	C	1,4-dichlorobenzene	4.527	3.048	3.773	4.871	4.666	4.653	4.778	4.707	4.256	4.261	4.3539	12.93
77)		sec-butylbenzene				9.020	8.748	8.768	8.683	8.409	7.913	7.356	8.4138	6.94
78)		p-isopropyltoluene				7.921	7.657	7.729	7.857	7.539	6.906	6.544	7.4504	7.00
79)		1,2-dichlorobenzene	4.213	2.875	3.528	4.513	4.320	4.351	4.500	4.436	3.927	4.048	4.0711	12.73
80)		n-butylbenzene				7.052	7.141	7.270	7.348	7.200	6.075	6.090	6.8821	8.05
81)	C	1,2,4-trichlorobenzene		2.179	2.462	3.169	3.466	3.667	4.270	4.550	2.828	3.158	3.3053	23.64
82)		naphthalene		6.964	6.120	9.759	8.477	8.320	9.125	9.473	5.821	6.639	7.8552	19.03
83)		1,2,3-trichlorobenzene		1.958	2.317	2.986	3.208	3.482	3.919	4.237	2.587	2.918	3.0681	24.00
84)	C	hexachlorobutadiene		1.928	2.289	2.788	2.935	3.078	3.509	3.687	2.316	2.599	2.7921	20.73

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Method File : TSIM1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Oct 23 18:03:30 2019
Response Via : Initial Calibration

Calibration Files
0.02=R168807.D 0.05=R168808.D 0.1 =R168809.D 0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D
5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene				0.408	0.370	0.351	0.308	0.334	0.314	0.271	0.3365	13.30
3)		dichlorodifluorome...				1.334	1.011	1.075	1.074	1.013	1.073	0.968	1.0782	11.12
4)	C	chloromethane				0.406	0.374	0.370	0.346	0.349	0.353	0.314	0.3588	7.96
5)		Freon-114		1.026	1.247	1.433	1.307	1.283	1.220	1.231	1.245	1.096	1.2320	9.54
6)	C	vinyl chloride	0.476	0.355	0.429	0.516	0.452	0.450	0.427	0.431	0.438	0.390	0.4365	10.08
7)	C	1,3-butadiene	0.323	0.255	0.277	0.331	0.297	0.292	0.278	0.275	0.288	0.254	0.2871	8.85
8)	C	bromomethane	0.576	0.411	0.485	0.532	0.495	0.483	0.454	0.456	0.468	0.416	0.4777	10.44
9)	C	chloroethane	0.263	0.191	0.229	0.239	0.233	0.220	0.203	0.204	0.208	0.188	0.2178	10.80
10)		ethanol						0.344	0.238	0.225	0.213	0.186	0.2413	25.08
11)	C	vinyl bromide				0.539	0.512	0.493	0.464	0.463	0.482	0.434	0.4839	7.20
12)	C	acrolein		0.158	0.202	0.201	0.173	0.167	0.157	0.158	0.164	0.151	0.1702	11.19
13)		acetone				0.785	0.681	0.661	0.654	0.648	0.601	0.526	0.6506	12.10
14)		trichlorofluoromet...		0.909	1.099	1.257	1.165	1.144	1.098	1.088	1.127	1.000	1.0987	8.99
15)		isopropyl alcohol				0.870	0.733	0.691	0.691	0.680	0.759	0.577	0.7144	12.48
16)	C	acrylonitrile				0.337	0.309	0.310	0.274	0.277	0.333	0.265	0.3010	9.65
17)	C	1,1-dichloroethene	0.748	0.569	0.670	0.780	0.721	0.716	0.674	0.670	0.772	0.615	0.6934	9.72
18)		tertiary butyl alc...					0.901	0.877	0.814	0.826	0.933	0.755	0.8509	7.66
19)	C	methylene chloride					0.512	0.493	0.466	0.458	0.549	0.413	0.4818	9.74
20)	C	3-chloropropene				0.508	0.464	0.472	0.449	0.452	0.560	0.414	0.4742	9.94
21)	C	carbon disulfide				1.612	1.446	1.390	1.328	1.327	1.561	1.210	1.4105	9.99
22)		Freon 113		0.790	0.948	1.052	0.987	0.969	0.931	0.928	1.042	0.843	0.9434	9.04
23)		trans-1,2-dichloro...	0.713	0.523	0.692	0.855	0.698	0.688	0.748	0.638	0.771	0.693	0.7020	12.28
24)	C	1,1-dichloroethane	1.002	0.642	0.903	1.056	0.846	0.963	0.921	0.788	0.930	0.836	0.8886	13.26
25)	C	MTBE	1.382	1.012	1.234	1.443	1.214	1.333	1.275	1.247	1.311	1.173	1.2622	9.47
26)	C	vinyl acetate					0.870	0.900	0.838	0.914	0.920	0.902	0.8908	3.47
27)	C	2-butanone				1.014	0.993	0.968	0.920	0.947	0.939	0.864	0.9493	5.21
28)		cis-1,2-dichloroet...	0.716	0.540	0.673	0.823	0.770	0.765	0.726	0.723	0.729	0.664	0.7128	10.72
29)		Ethyl Acetate					0.200	0.205	0.203	0.208	0.205	0.192	0.2023	2.76
30)	C	chloroform	1.384	1.029	1.245	1.422	1.335	1.319	1.262	1.247	1.262	1.119	1.2624	9.30
31)		Tetrahydrofuran					0.599	0.589	0.536	0.532	0.537	0.479	0.5454	8.02

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Method File : TSIM1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Oct 23 18:03:30 2019
Response Via : Initial Calibration

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5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32)	C	1,2-dichloroethane	0.757	0.538	0.634	0.720	0.683	0.680	0.645	0.643	0.649	0.582	0.6531	9.65
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane				0.414	0.385	0.379	0.363	0.359	0.365	0.338	0.3715	6.44
35)	s	1,2-dichloroethane-D4	0.223	0.226	0.225	0.225	0.225	0.225	0.224	0.227	0.225	0.224	0.2248	0.54
36)	C	1,1,1-trichloroethane	0.427	0.327	0.393	0.448	0.419	0.410	0.396	0.389	0.408	0.376	0.3993	8.18
37)	C	benzene		0.523	0.625	0.708	0.664	0.652	0.629	0.619	0.632	0.584	0.6263	8.23
38)	C	carbon tetrachloride	0.436	0.319	0.379	0.441	0.411	0.399	0.396	0.397	0.409	0.380	0.3968	8.63
39)		cyclohexane				0.335	0.309	0.307	0.297	0.294	0.300	0.277	0.3028	5.86
40)		dibromomethane	0.465	0.297	0.283	0.304	0.273	0.267	0.252	0.251	0.260	0.242	0.2893	22.44
41)	C	1,2-dichloropropane	0.261	0.186	0.224	0.267	0.250	0.247	0.237	0.235	0.239	0.219	0.2365	9.79
42)		bromodichloromethane	0.497	0.371	0.445	0.521	0.488	0.480	0.470	0.466	0.490	0.455	0.4682	8.65
43)	C	1,4-dioxane			0.117	0.150	0.143	0.139	0.144	0.146	0.147	0.137	0.1404	7.31
44)	C	trichloroethene	0.321	0.236	0.282	0.326	0.314	0.305	0.299	0.294	0.305	0.277	0.2959	8.82
45)	C	2,2,4-trimethylpen...				1.080	1.013	0.979	0.942	0.944	0.959	0.865	0.9687	6.88
46)		heptane				0.374	0.353	0.346	0.339	0.330	0.339	0.303	0.3407	6.43
47)	C	cis-1,3-dichloropr...	1.340	1.008	1.223	1.475	1.389	1.370	1.385	1.406	1.435	1.347	1.3376	9.99
48)	C	4-methyl-2-pentanone					0.450	0.448	0.458	0.453	0.454	0.417	0.4466	3.32
49)		trans-1,3-dichloro...	0.342	0.227	0.289	0.344	0.327	0.329	0.335	0.343	0.355	0.331	0.3222	11.76
50)	C	1,1,2-trichloroethane	0.288	0.213	0.250	0.307	0.287	0.282	0.270	0.273	0.277	0.257	0.2705	9.58
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene		5.381	5.335	5.700	4.848	4.941	4.753	4.606	4.727	4.364	4.9618	8.60
53)	s	toluene-D8	4.207	4.164	4.194	4.129	4.033	4.231	4.244	4.188	4.235	4.265	4.1890	1.63
54)		2-hexanone				2.612	2.448	2.589	2.681	2.629	2.441	2.023	2.4892	9.02
55)		dibromochloromethane	2.974	2.128	2.601	3.104	2.802	2.983	2.975	2.956	3.090	2.933	2.8547	10.28
56)	C	1,2-dibromoethane	2.758	2.119	2.490	3.003	2.619	2.786	2.781	2.705	2.791	2.599	2.6652	8.88
57)	C	tetrachloroethene	2.535	1.890	2.269	2.638	2.412	2.475	2.416	2.393	2.422	2.319	2.3768	8.41
58)		1,1,1,2-tetrachlor...	2.513	1.597	1.882	2.250	2.068	2.076	2.020	2.007	2.112	1.988	2.0513	11.48
59)	C	chlorobenzene	4.077	3.105	3.789	4.447	4.169	4.091	3.999	3.925	3.971	3.689	3.9262	9.05
60)	C	ethylbenzene	7.100	5.203	5.817	6.838	6.342	6.311	6.128	5.934	6.099	5.625	6.1398	9.04
61)	C	m+p-xylene	6.543	8.440	4.522	5.289	4.902	4.898	4.692	4.603	4.668	4.257	5.2813	24.17

Method Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Method File : TSIM1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Oct 23 18:03:30 2019
Response Via : Initial Calibration

Calibration Files
0.02=R168807.D 0.05=R168808.D 0.1 =R168809.D 0.2 =R168810.D 0.5 =R168811.D 1.0 =R168812.D
5.0 =R168813.D 10.0=R168814.D 20.0=R168815.D 50.0=R168816.D

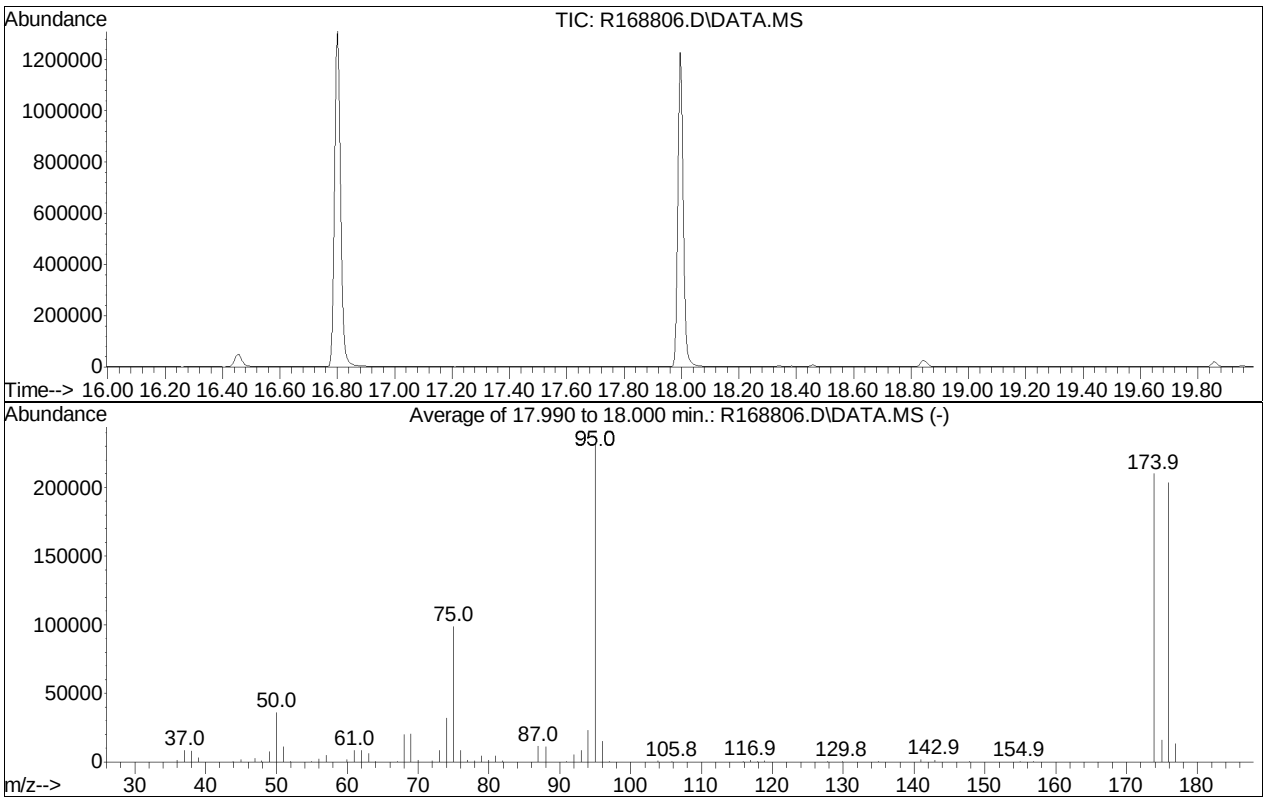
		Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C	bromoform	3.114	2.111	2.463	3.094	2.868	2.949	3.065	3.100	3.243	3.135	2.9142	12.20
63)	C	styrene	3.748	2.668	3.233	4.010	3.795	3.767	3.801	3.771	3.802	3.532	3.6128	10.81
64)	C	1,1,2,2-tetrachlor...	3.960	2.936	3.524	4.436	4.007	4.035	3.974	3.912	3.701	3.421	3.7905	10.93
65)	C	o-xylene	6.480	4.289	4.621	5.473	5.092	5.034	4.895	4.744	4.681	4.262	4.9571	13.07
66)		1,2,3-trichloropro...	3.374	2.427	2.701	3.202	3.039	3.018	2.926	2.846	2.851	2.700	2.9084	9.29
67)	s	bromofluorobenzene	2.763	2.818	2.795	2.800	2.791	2.834	2.870	2.839	2.804	2.882	2.8196	1.31
68)	C	isopropylbenzene				7.188	6.853	6.851	6.550	6.418	6.504	6.006	6.6243	5.73
69)		bromobenzene	3.590	2.613	3.095	3.772	3.605	3.553	3.431	3.358	3.413	3.130	3.3559	9.97
70)		4-ethyl toluene	6.937	4.924	6.252	7.761	7.355	7.488	7.480	7.238	7.059	6.603	6.9098	11.99
71)		1,3,5-trimethylben...	6.616	4.236	4.749	6.234	5.831	5.842	5.899	5.729	5.462	5.219	5.5817	12.52
72)		tert-butylbenzene				6.493	6.223	6.241	6.172	5.979	5.607	5.203	5.9883	7.37
73)		1,2,4-trimethylben...	6.023	4.018	4.825	6.080	5.800	5.797	5.911	5.785	5.259	4.958	5.4455	12.26
74)	C	Benzyl Chloride				4.596	4.381	4.549	5.047	5.243	4.910	5.062	4.8269	6.63
75)		1,3-dichlorobenzene	4.440	3.031	3.618	4.666	4.582	4.555	4.693	4.610	4.253	4.224	4.2671	12.64
76)	C	1,4-dichlorobenzene	4.527	3.048	3.773	4.871	4.666	4.653	4.778	4.707	4.256	4.261	4.3539	12.93
77)		sec-butylbenzene				9.020	8.748	8.768	8.683	8.409	7.913	7.356	8.4138	6.94
78)		p-isopropyltoluene				7.921	7.657	7.729	7.857	7.539	6.906	6.544	7.4504	7.00
79)		1,2-dichlorobenzene	4.213	2.875	3.528	4.513	4.320	4.351	4.500	4.436	3.927	4.048	4.0711	12.73
80)		n-butylbenzene				7.052	7.141	7.270	7.348	7.200	6.075	6.090	6.8821	8.05
81)	C	1,2,4-trichloroben...		2.179	2.462	3.169	3.466	3.667	4.270	4.550	2.828	3.158	3.3053	23.64
82)		naphthalene		6.964	6.120	9.759	8.477	8.320	9.125	9.473	5.821	6.639	7.8552	19.03
83)		1,2,3-trichloroben...		1.958	2.317	2.986	3.208	3.482	3.919	4.237	2.587	2.918	3.0681	24.00
84)	C	hexachlorobutadiene		1.928	2.289	2.788	2.935	3.078	3.509	3.687	2.316	2.599	2.7921	20.73

(#) = Out of Range

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168806.D
Acq On : 23 Oct 2019 12:21 pm
Operator : AIRPIANO1:RY
Sample : WG1300076-1,3,250,250
Misc : WG1300076
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Oct 23 18:03:30 2019



Spectrum Information: Average of 17.990 to 18.000 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.6	36341	PASS
75	95	30	66	42.5	98968	PASS
95	95	100	100	100.0	232661	PASS
96	95	5	9	6.6	15378	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.4	210261	PASS
175	174	4	9	7.7	16282	PASS
176	174	93	101	96.8	203584	PASS
177	176	5	9	6.6	13385	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168807.D
Acq On : 23 Oct 2019 12:51 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	316936	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 101.58%	
33) 1,4-difluorobenzene	12.35	114	813292	10.000 ppbV	# 0.01
Standard Area = 795323			Recovery	= 102.26%	
51) chlorobenzene-D5	16.80	54	132325	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 102.74%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	181269	9.908 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.08%	
53) toluene-D8	15.09	98	556662	10.063 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.63%	
67) bromofluorobenzene	18.00	95	365672	9.825 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.25%	
Target Compounds					Qvalue
2) propylene	3.92	41	331M6	0.030 ppbV	
3) dichlorodifluoromethane	4.02	85	806	0.023 ppbV	95
4) chloromethane	4.23	50	284M4	0.024 ppbV	
5) Freon-114	4.39	85	911	0.023 ppbV	95
6) vinyl chloride	4.54	62	302M4	0.022 ppbV	
7) 1,3-butadiene	4.73	54	205M4	0.022 ppbV	
8) bromomethane	5.12	94	365	0.024 ppbV	86
9) chloroethane	5.37	64	167M4	0.024 ppbV	
10) ethanol	5.63	31	21270	2.630 ppbV	96
11) vinyl bromide	5.86	106	325M4	0.021 ppbV	
12) acrolein	6.08	56	194M3	0.035 ppbV	
13) acetone	6.30	43	4477	0.210 ppbV #	96
14) trichlorofluoromethane	6.44	101	806	0.023 ppbV	91
15) isopropyl alcohol	6.67	45	3243	0.139 ppbV #	89
16) acrylonitrile	6.91	53	202M3	0.021 ppbV	
17) 1,1-dichloroethene	7.29	61	474M4	0.021 ppbV	
18) tertiary butyl alcohol	7.50	59	1120	0.041 ppbV #	1
19) methylene chloride	7.47	49	518	0.033 ppbV	87
20) 3-chloropropene	7.61	41	348	0.023 ppbV #	85
21) carbon disulfide	7.80	76	1768	0.039 ppbV #	1
22) Freon 113	7.82	101	673	0.022 ppbV #	84
23) trans-1,2-dichloroethene	8.65	61	452	0.020 ppbV #	82
24) 1,1-dichloroethane	8.90	63	635	0.022 ppbV #	61

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168807.D
Acq On : 23 Oct 2019 12:51 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25)	MTBE	9.07	73	876	0.022 ppbV #	20
26)	vinyl acetate	9.14	43	584	0.021 ppbV #	79
27)	2-butanone	9.48	43	681M3	0.022 ppbV	
28)	cis-1,2-dichloroethene	9.91	61	454	0.020 ppbV	90
29)	Ethyl Acetate	10.28	61	229	0.035 ppbV #	1
30)	chloroform	10.27	83	877	0.022 ppbV #	91
31)	Tetrahydrofuran	10.83	42	425M3	0.024 ppbV	
32)	1,2-dichloroethane	11.13	62	480	0.023 ppbV #	56
34)	hexane	10.17	57	620M4	0.020 ppbV	
36)	1,1,1-trichloroethane	11.41	97	694	0.021 ppbV #	80
37)	benzene	11.93	78	1198	0.023 ppbV #	78
38)	carbon tetrachloride	12.11	117	710	0.022 ppbV #	93
39)	cyclohexane	12.23	56	525	0.021 ppbV #	85
40)	dibromomethane	12.85	93	756	0.032 ppbV	89
41)	1,2-dichloropropane	12.87	63	425M4	0.022 ppbV	
42)	bromodichloromethane	13.10	83	809	0.021 ppbV #	96
43)	1,4-dioxane	13.25	88	257M4	0.022 ppbV	
44)	trichloroethene	13.14	130	522	0.022 ppbV #	92
45)	2,2,4-trimethylpentane	13.17	57	1547	0.019 ppbV #	72
46)	heptane	13.47	43	613	0.022 ppbV #	94
47)	cis-1,3-dichloropropene	14.13	75	2180	0.020 ppbV #	76
48)	4-methyl-2-pentanone	14.23	43	716	0.019 ppbV #	85
49)	trans-1,3-dichloropropene	14.74	75	557	0.021 ppbV #	46
50)	1,1,2-trichloroethane	14.92	97	468	0.021 ppbV	94
52)	toluene	15.19	91	2460	0.037 ppbV	99
54)	2-hexanone	15.52	43	613	0.018 ppbV #	78
55)	dibromochloromethane	15.62	129	787	0.021 ppbV #	94
56)	1,2-dibromoethane	15.85	107	730	0.021 ppbV	98
57)	tetrachloroethene	16.26	166	671	0.021 ppbV	97
58)	1,1,1,2-tetrachloroethane	16.82	131	665	0.024 ppbV	91
59)	chlorobenzene	16.84	112	1079	0.021 ppbV #	83
60)	ethylbenzene	17.14	91	1879	0.023 ppbV	97
61)	m+p-xylene	17.27	91	3463	0.049 ppbV	100
62)	bromoform	17.36	173	824	0.022 ppbV	93
63)	styrene	17.57	104	992	0.021 ppbV	97
64)	1,1,2,2-tetrachloroethane	17.65	83	1048	0.021 ppbV	99
65)	o-xylene	17.65	91	1715	0.026 ppbV	96
66)	1,2,3-trichloropropane	17.75	75	893	0.023 ppbV #	80
68)	isopropylbenzene	18.09	105	1914	0.022 ppbV	98
69)	bromobenzene	18.18	77	950	0.021 ppbV	89

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168807.D
Acq On : 23 Oct 2019 12:51 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
70) 4-ethyl toluene	18.58	105	1836	0.020 ppbV #	94
71) 1,3,5-trimethylbenzene	18.63	105	1751	0.024 ppbV #	96
72) tert-butylbenzene	18.94	119	1661M4	0.021 ppbV	
73) 1,2,4-trimethylbenzene	18.94	105	1594	0.022 ppbV	98
74) Benzyl Chloride	19.05	91	1111	0.018 ppbV	83
75) 1,3-dichlorobenzene	19.07	146	1175M3	0.021 ppbV	
76) 1,4-dichlorobenzene	19.12	146	1198	0.021 ppbV #	82
77) sec-butylbenzene	19.14	105	2247	0.020 ppbV #	90
78) p-isopropyltoluene	19.25	119	2211	0.022 ppbV	98
79) 1,2-dichlorobenzene	19.39	146	1115	0.021 ppbV #	93
80) n-butylbenzene	19.57	91	1733	0.019 ppbV	97
81) 1,2,4-trichlorobenzene	20.81	180	877	0.020 ppbV #	73
82) naphthalene	20.93	128	3786	0.036 ppbV #	90
83) 1,2,3-trichlorobenzene	21.18	180	768	0.019 ppbV #	73
84) hexachlorobutadiene	21.24	225	709	0.019 ppbV #	89

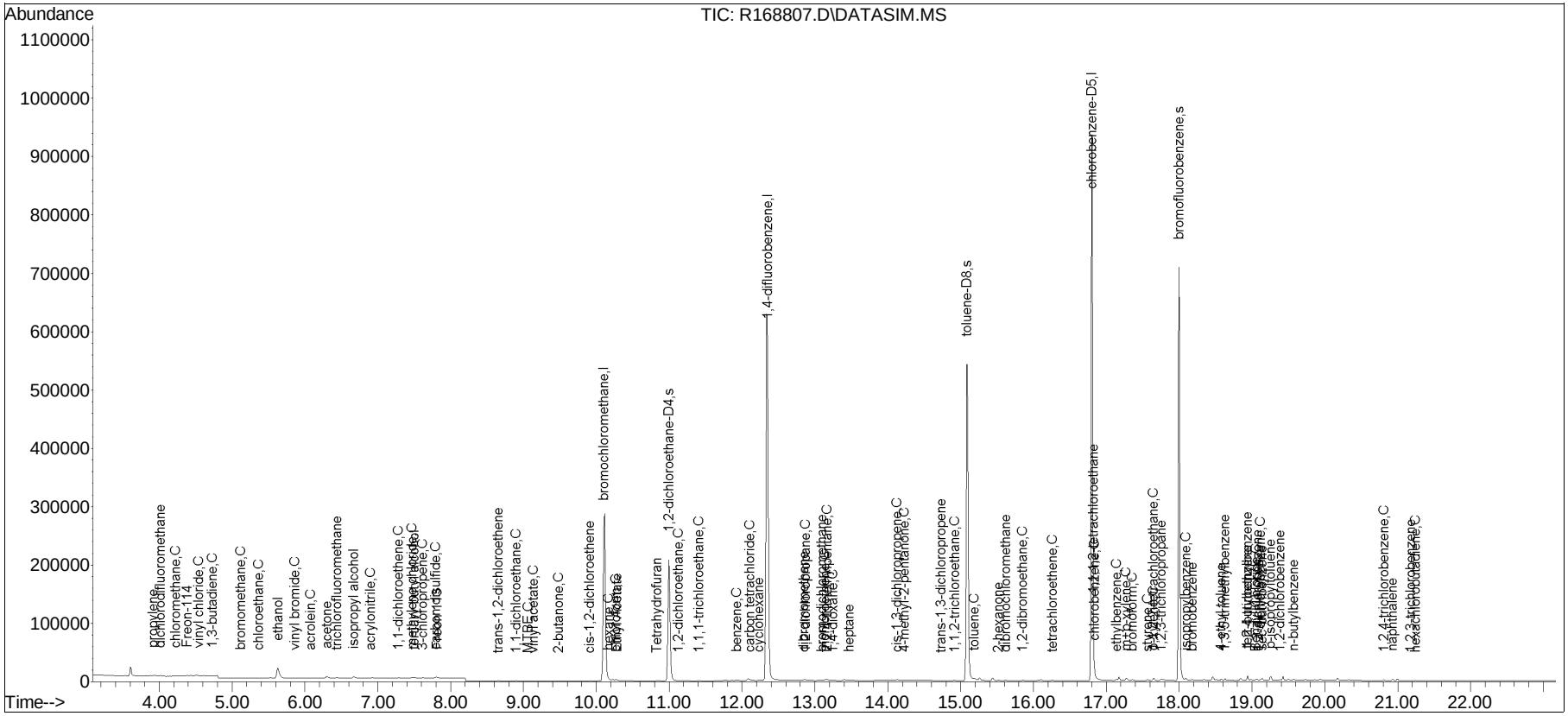
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168807.D
Acq On : 23 Oct 2019 12:51 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:15 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

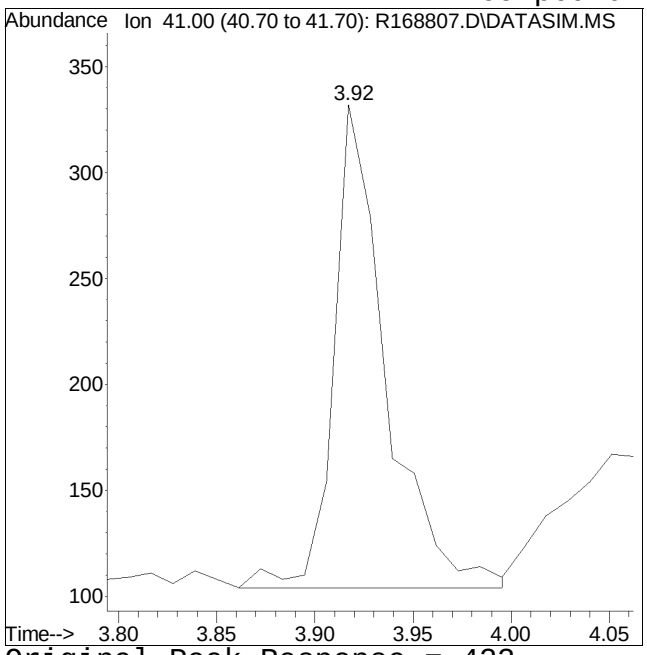


Manual Integration/Negative Proof Report

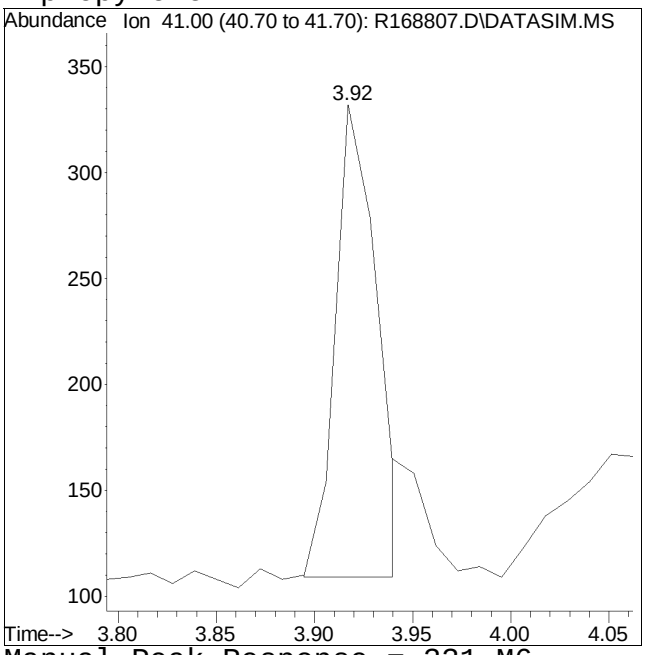
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 422



Manual Peak Response = 331 M6

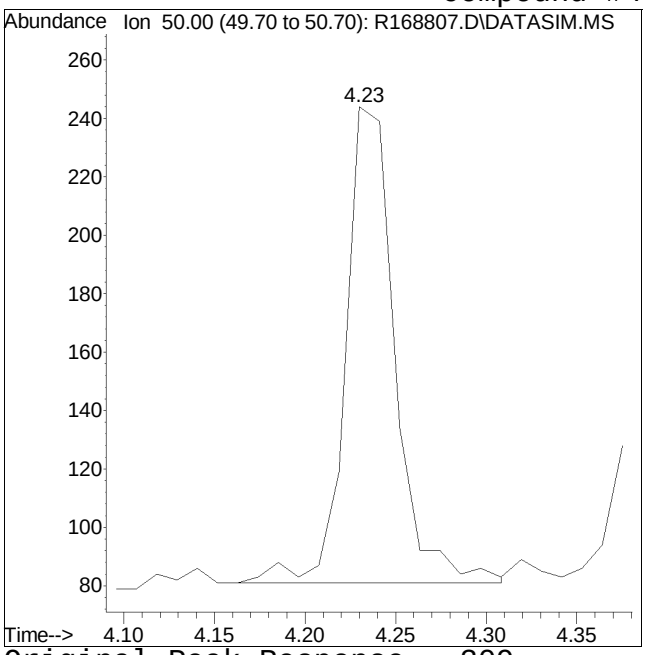
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

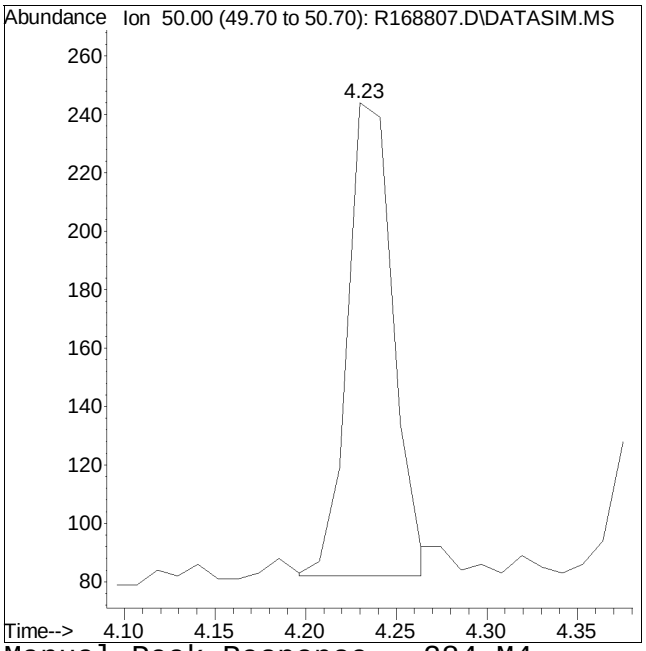
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #4: chloromethane



Original Peak Response = 309



Manual Peak Response = 284 M4

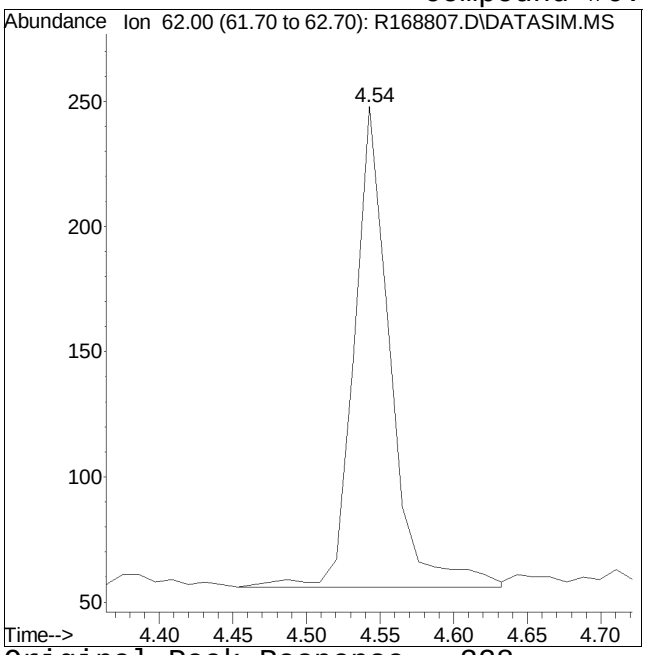
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

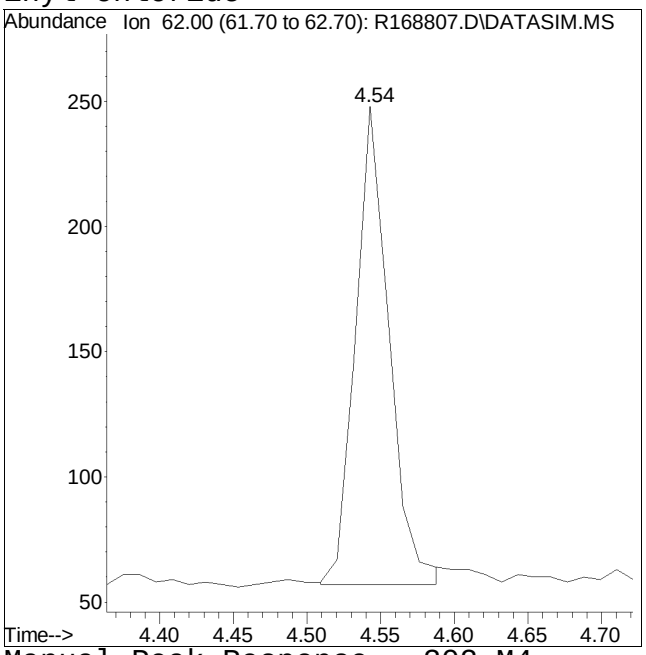
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #6: vinyl chloride



Original Peak Response = 328



Manual Peak Response = 302 M4

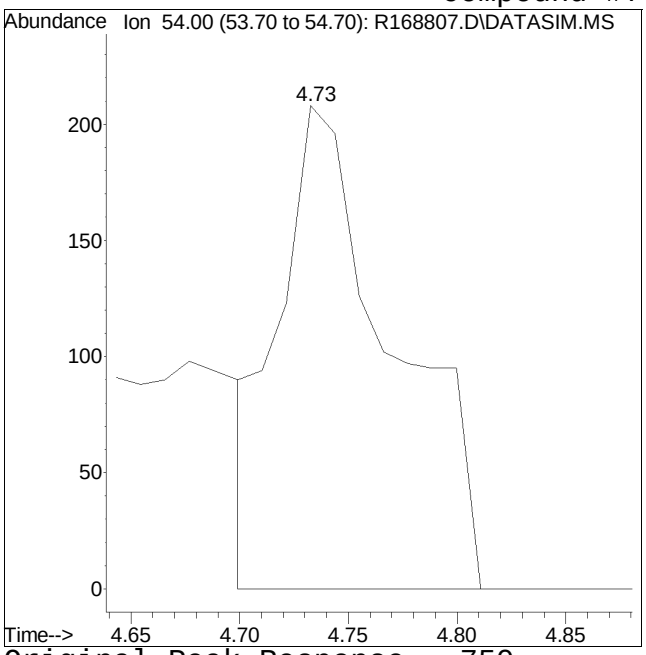
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

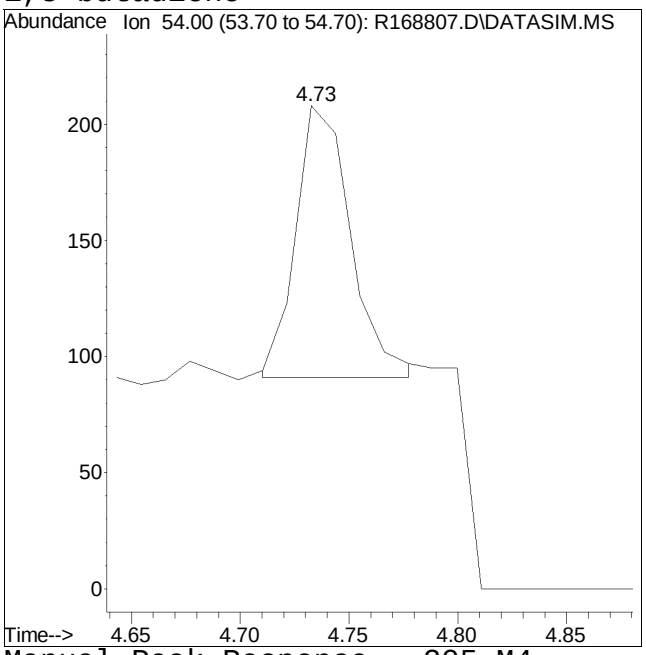
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 750



Manual Peak Response = 205 M4

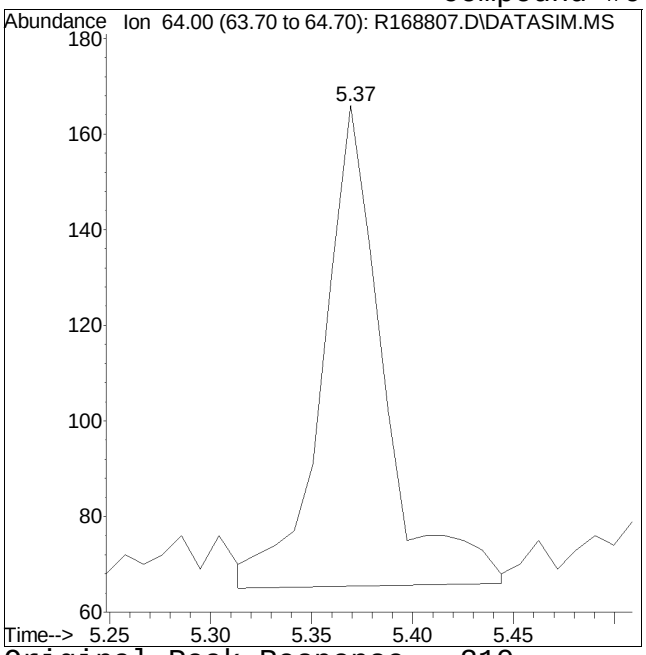
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

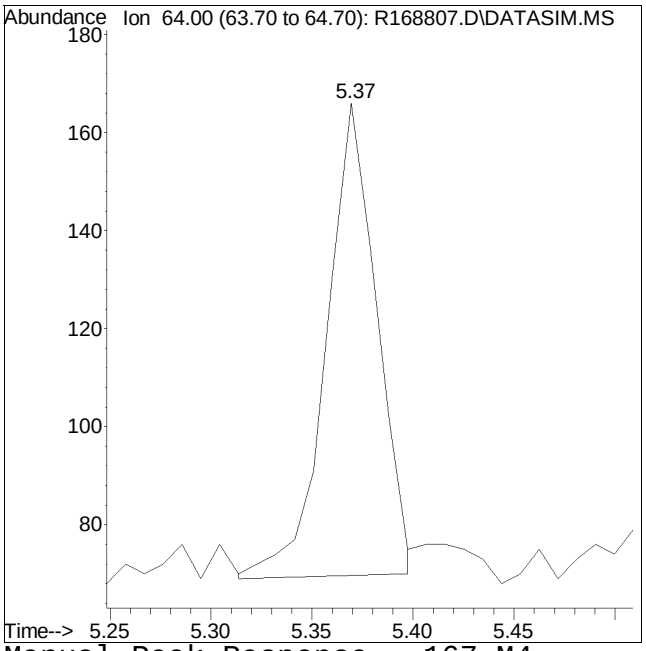
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #9: chloroethane



Original Peak Response = 210



Manual Peak Response = 167 M4

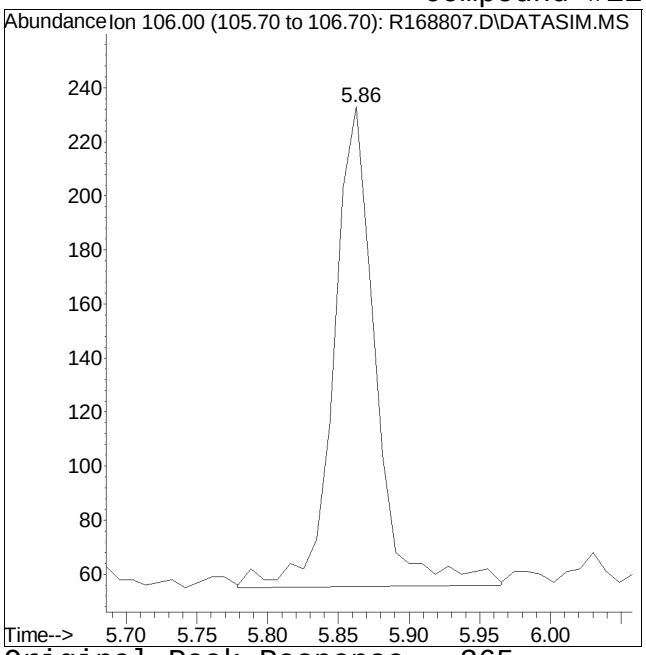
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

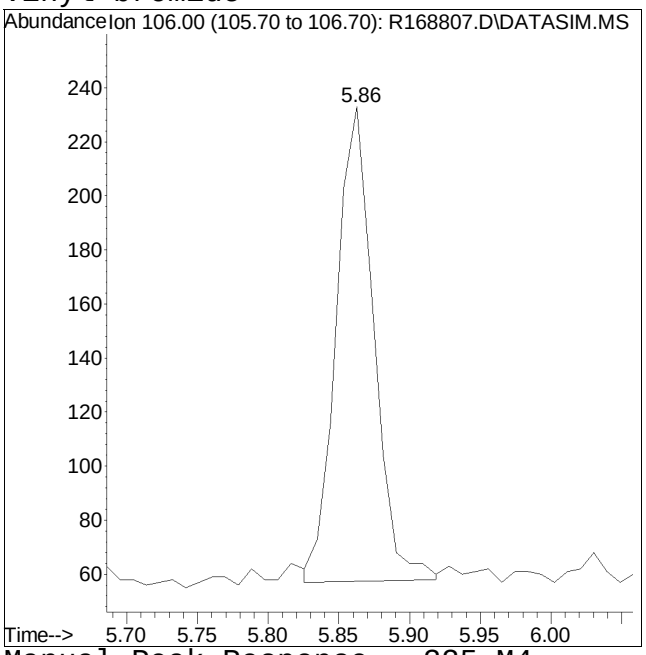
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #11: vinyl bromide



Original Peak Response = 365



Manual Peak Response = 325 M4

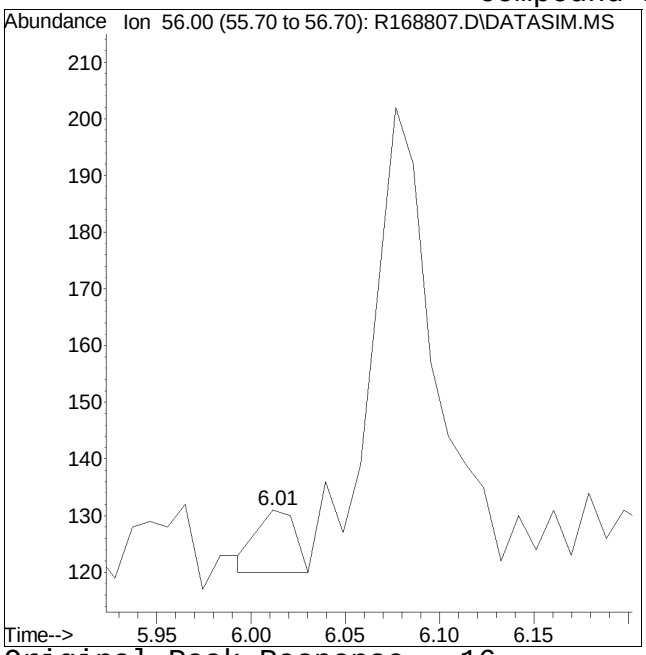
M4 = Poor automated baseline construction.

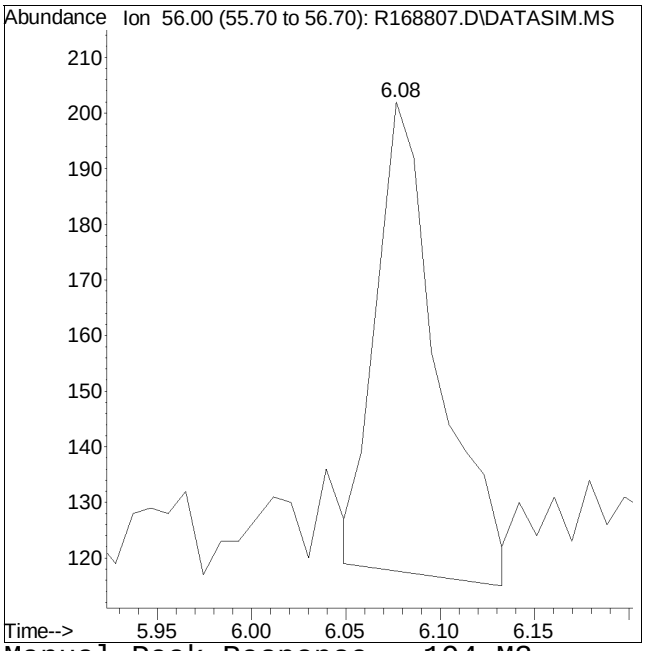
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #12: acrolein





Original Peak Response = 16 Manual Peak Response = 194 M3

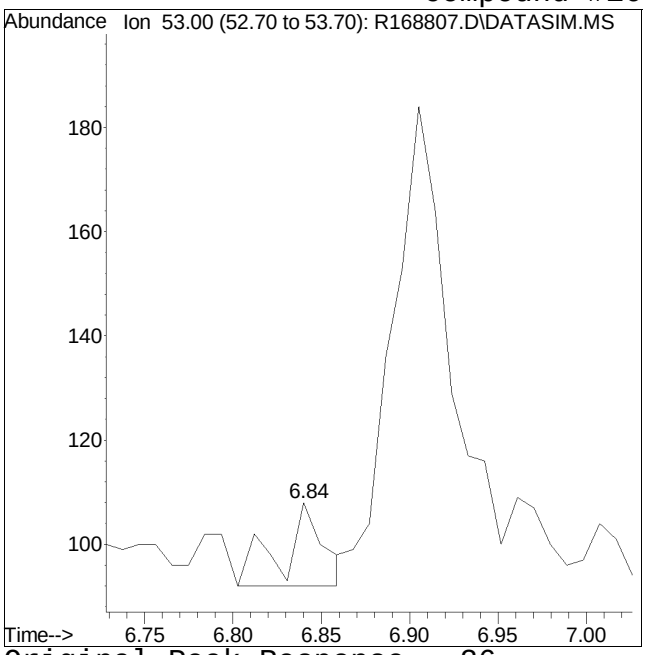
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

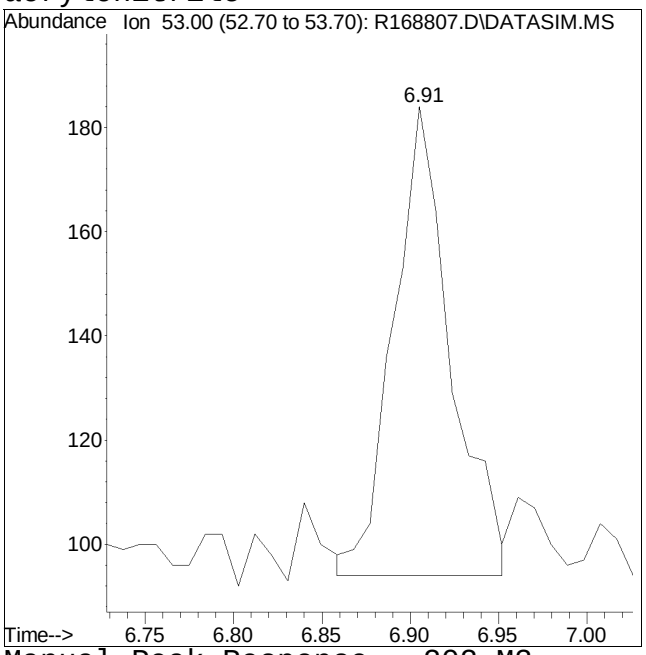
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #16: acrylonitrile





Original Peak Response = 26 Manual Peak Response = 202 M3

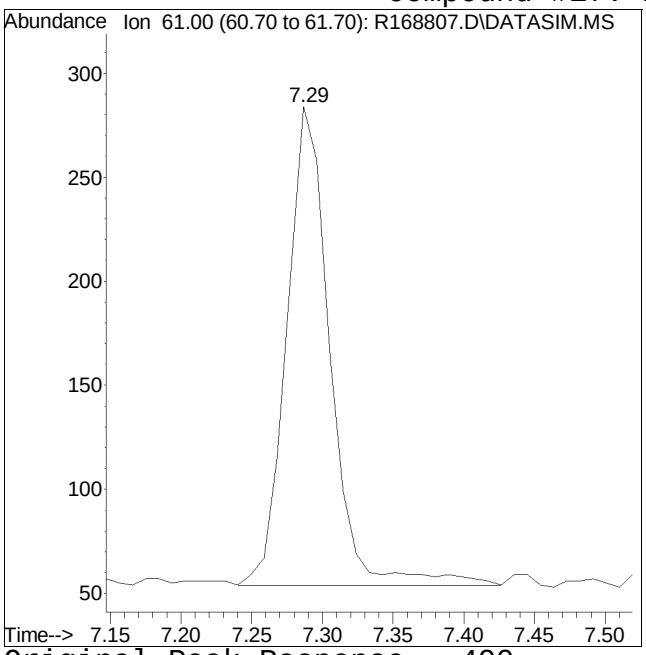
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

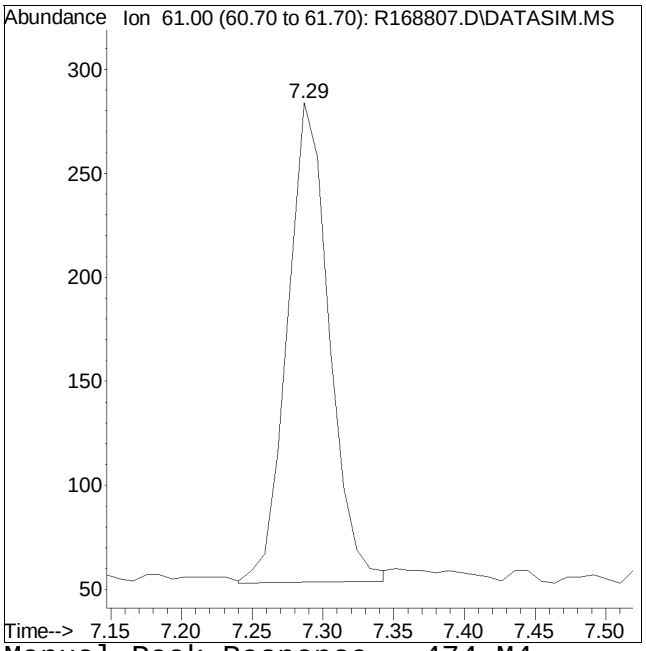
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #17: 1,1-dichloroethene



Original Peak Response = 490



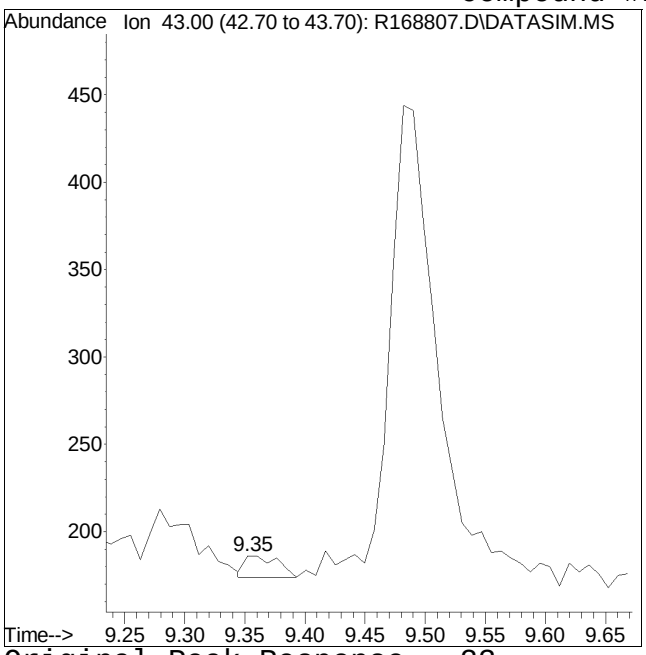
Manual Peak Response = 474 M4

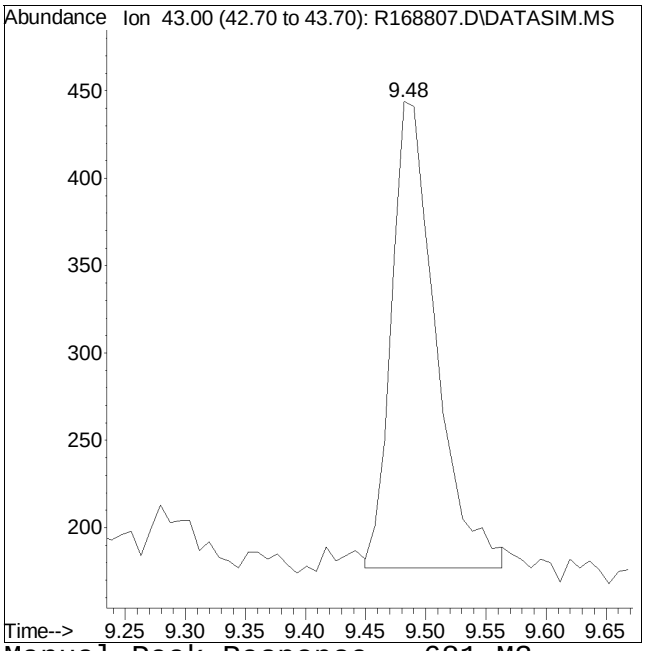
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TSIM1_191023.M
Data File : R168807.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 12:51 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 10/23/2019 5:59 pm

Compound #27: 2-butanone





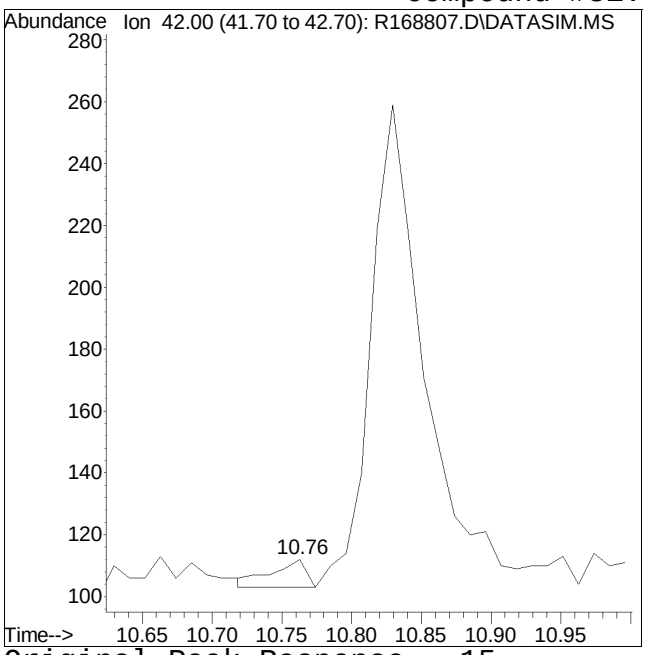
Original Peak Response = 23 Manual Peak Response = 681 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

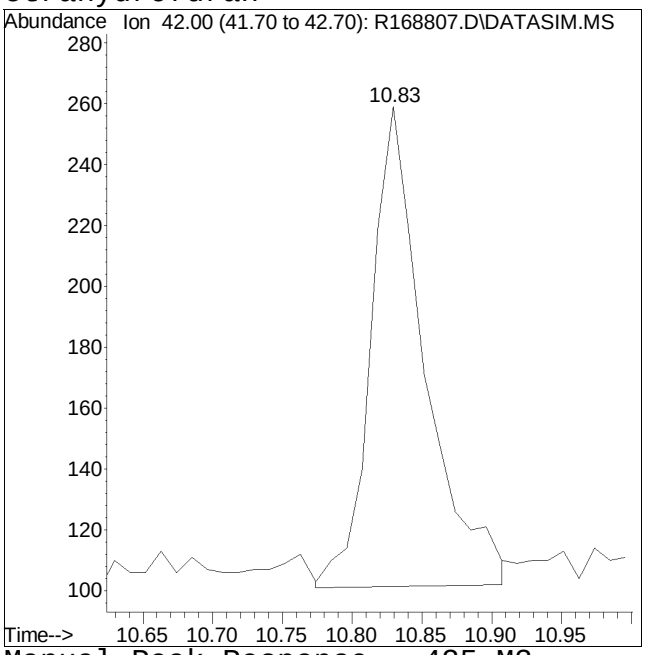
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #31: Tetrahydrofuran





Original Peak Response = 15 Manual Peak Response = 425 M3

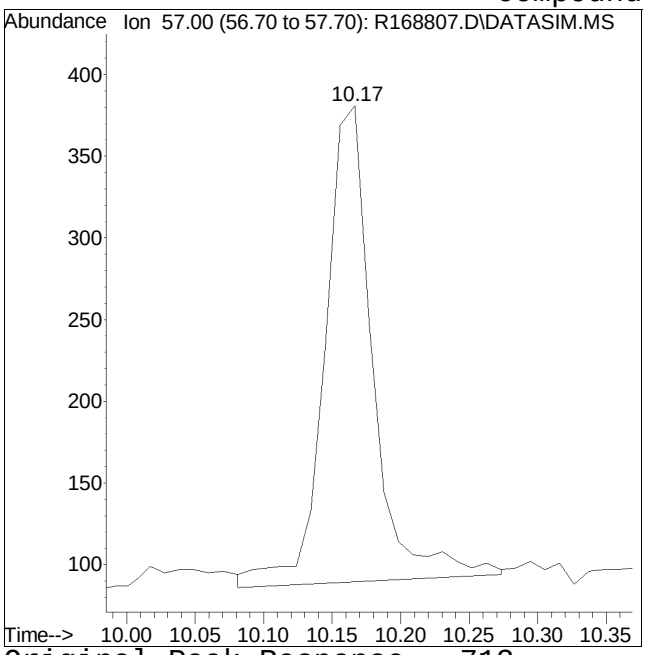
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

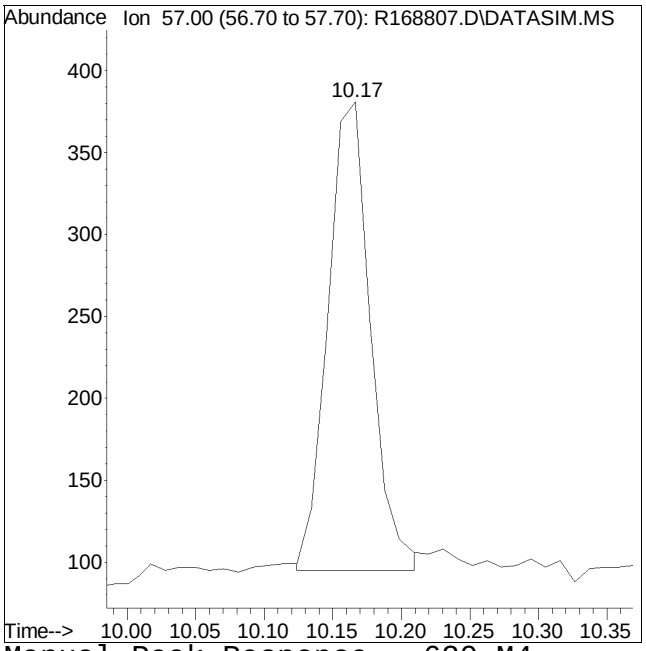
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #34: hexane



Original Peak Response = 712



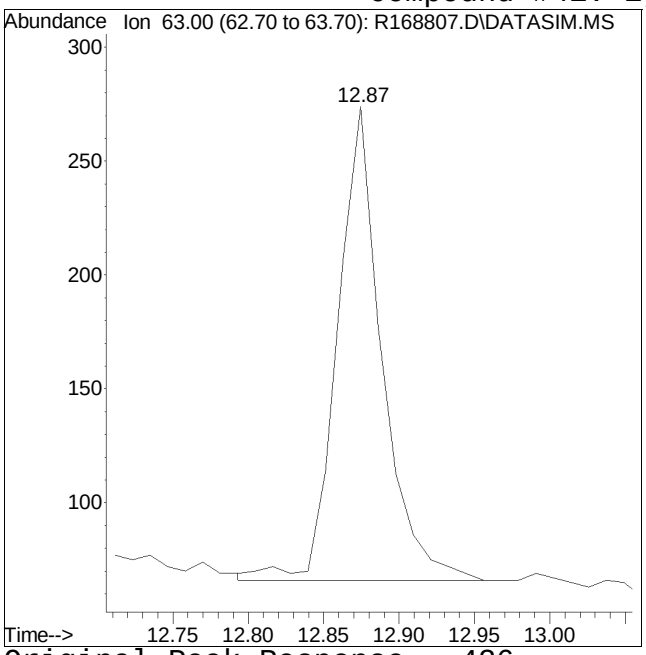
Manual Peak Response = 620 M4

M4 = Poor automated baseline construction.

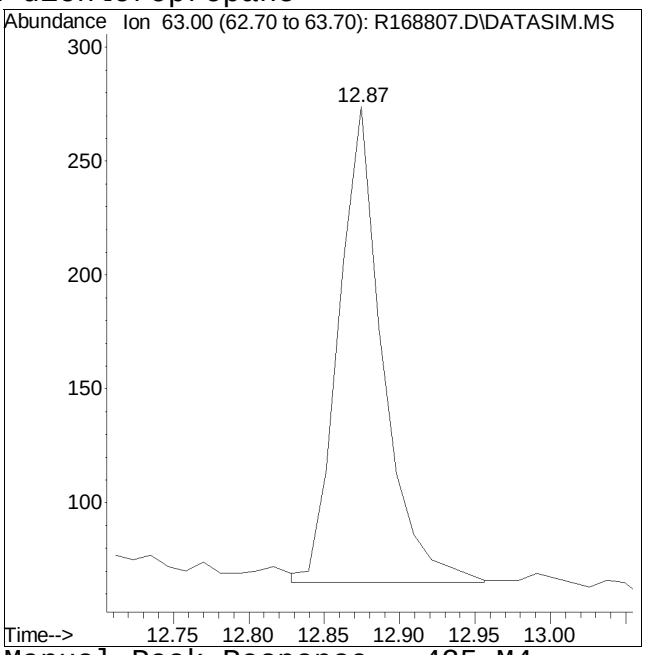
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TSIM1_191023.M
Data File : R168807.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 12:51 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 10/23/2019 5:59 pm

Compound #41: 1,2-dichloropropane



Original Peak Response = 426



Manual Peak Response = 425 M4

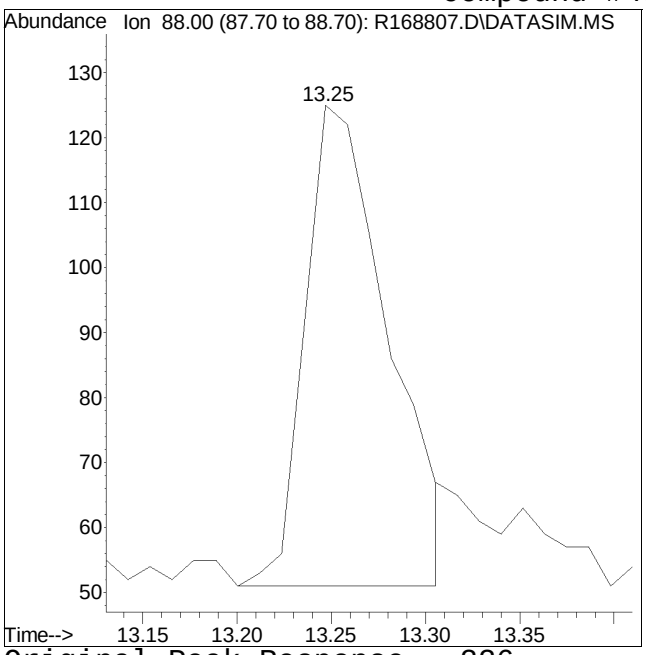
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

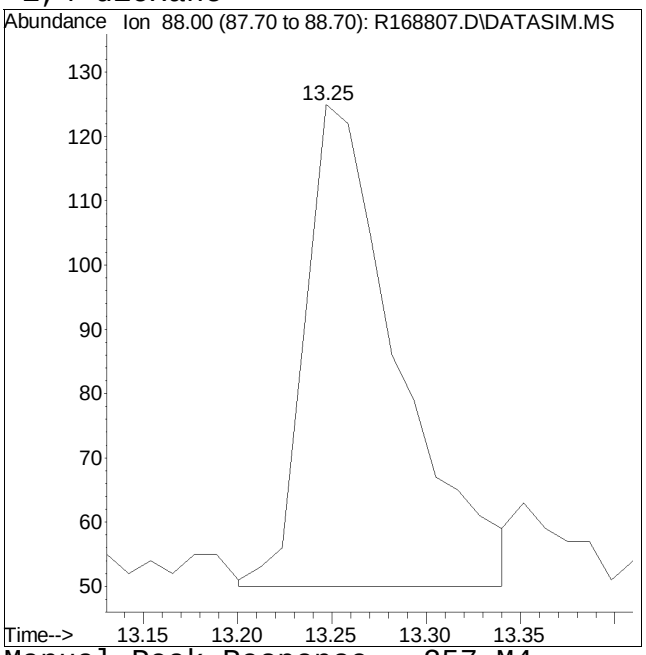
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #43: 1,4-dioxane



Original Peak Response = 226



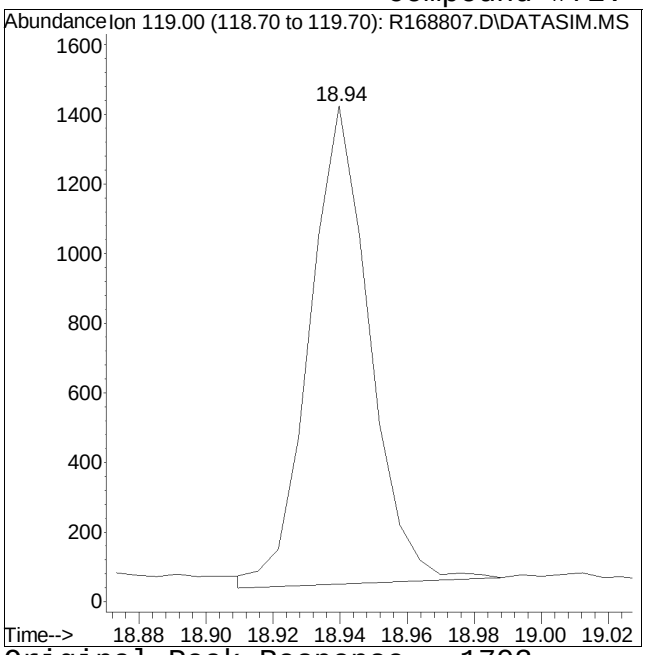
Manual Peak Response = 257 M4

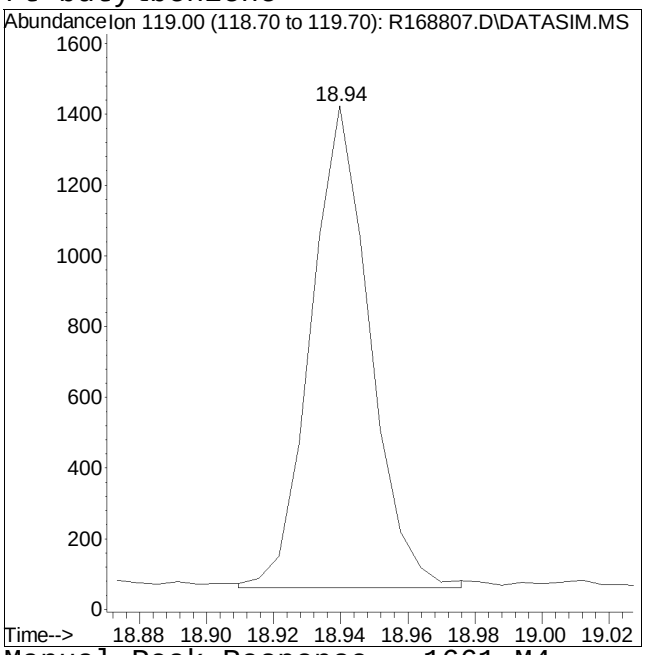
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019QMethod : TSIM1_191023.M
Data File : R168807.D Operator : AIRPIANO1:RY
Date Inj'd : 10/23/2019 12:51 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 10/23/2019 5:59 pm

Compound #72: tert-butylbenzene





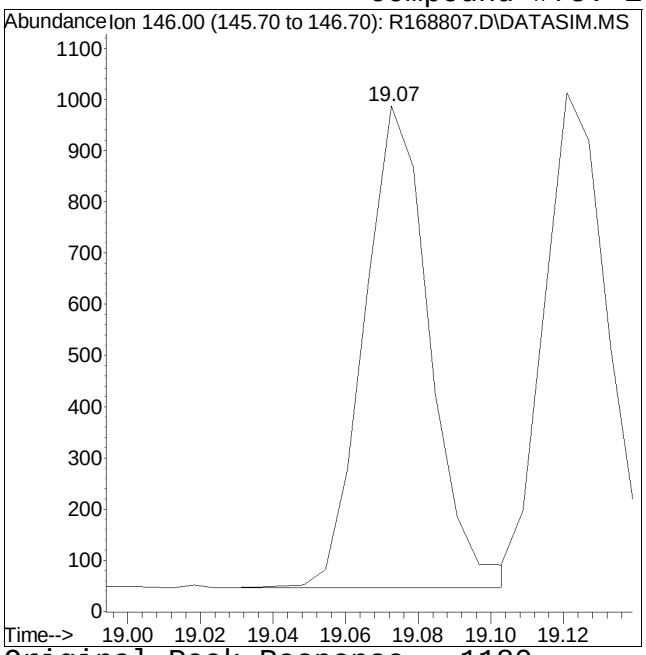
Original Peak Response = 1703 Manual Peak Response = 1661 M4
M4 = Poor automated baseline construction.

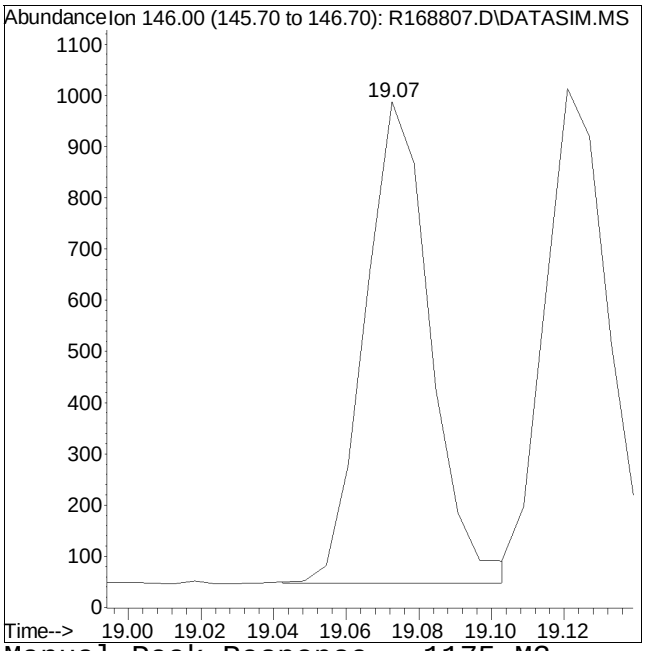
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168807.D
Date Inj'd : 10/23/2019 12:51 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 1180 Manual Peak Response = 1175 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168808.D
Acq On : 23 Oct 2019 1:22 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:21 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	315720	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 101.19%	
33) 1,4-difluorobenzene	12.35	114	797053	10.000 ppbV	# 0.01
Standard Area = 795323			Recovery	= 100.22%	
51) chlorobenzene-D5	16.80	54	132163	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 102.62%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	180144	10.047 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.47%	
53) toluene-D8	15.09	98	550355	9.961 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.61%	
67) bromofluorobenzene	18.00	95	372399	10.018 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.18%	
Target Compounds					Qvalue
2) propylene	3.92	41	542M6	0.049 ppbV	
3) dichlorodifluoromethane	4.02	85	1269	0.037 ppbV	100
4) chloromethane	4.24	50	499	0.043 ppbV #	79
5) Freon-114	4.39	85	1619	0.041 ppbV	91
6) vinyl chloride	4.54	62	560	0.040 ppbV #	77
7) 1,3-butadiene	4.74	54	402M4	0.044 ppbV	
8) bromomethane	5.12	94	649	0.042 ppbV	89
9) chloroethane	5.37	64	301	0.043 ppbV #	75
10) ethanol	5.63	31	21065	2.615 ppbV	96
11) vinyl bromide	5.86	106	621	0.040 ppbV	94
12) acrolein	6.08	56	249M3	0.046 ppbV	
13) acetone	6.30	43	6223	0.294 ppbV #	96
14) trichlorofluoromethane	6.44	101	1435	0.041 ppbV	96
15) isopropyl alcohol	6.67	45	4061	0.174 ppbV #	90
16) acrylonitrile	6.91	53	390M4	0.040 ppbV	
17) 1,1-dichloroethene	7.29	61	899	0.041 ppbV #	89
18) tertiary butyl alcohol	7.50	59	1618	0.059 ppbV #	18
19) methylene chloride	7.46	49	842	0.054 ppbV	99
20) 3-chloropropene	7.62	41	744	0.049 ppbV	88
21) carbon disulfide	7.80	76	2451	0.054 ppbV #	1
22) Freon 113	7.82	101	1247	0.041 ppbV	98
23) trans-1,2-dichloroethene	8.65	61	826	0.037 ppbV	93
24) 1,1-dichloroethane	8.91	63	1013M4	0.036 ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168808.D
Acq On : 23 Oct 2019 1:22 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:21 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.07	73	1597	0.040 ppbV #	50
26) vinyl acetate	9.14	43	1249	0.045 ppbV #	87
27) 2-butanone	9.48	43	1262	0.041 ppbV #	90
28) cis-1,2-dichloroethene	9.92	61	852	0.038 ppbV #	81
29) Ethyl Acetate	10.28	61	440	0.068 ppbV #	1
30) chloroform	10.27	83	1625	0.040 ppbV #	94
31) Tetrahydrofuran	10.83	42	690	0.039 ppbV #	82
32) 1,2-dichloroethane	11.13	62	850	0.041 ppbV #	77
34) hexane	10.17	57	1224	0.041 ppbV #	87
36) 1,1,1-trichloroethane	11.41	97	1302	0.041 ppbV #	88
37) benzene	11.93	78	2086	0.041 ppbV #	86
38) carbon tetrachloride	12.11	117	1272	0.040 ppbV	95
39) cyclohexane	12.23	56	943	0.039 ppbV #	88
40) dibromomethane	12.85	93	1185	0.050 ppbV	98
41) 1,2-dichloropropane	12.87	63	742	0.039 ppbV #	86
42) bromodichloromethane	13.10	83	1479	0.040 ppbV #	96
43) 1,4-dioxane	13.25	88	390	0.035 ppbV	83
44) trichloroethene	13.14	130	941	0.040 ppbV	92
45) 2,2,4-trimethylpentane	13.17	57	2914	0.037 ppbV #	83
46) heptane	13.47	43	1091	0.039 ppbV #	95
47) cis-1,3-dichloropropene	14.13	75	4017	0.038 ppbV #	85
48) 4-methyl-2-pentanone	14.23	43	1310	0.036 ppbV #	90
49) trans-1,3-dichloropropene	14.74	75	904	0.035 ppbV #	69
50) 1,1,2-trichloroethane	14.91	97	847	0.039 ppbV	99
52) toluene	15.19	91	3556	0.053 ppbV	100
54) 2-hexanone	15.51	43	1189M3	0.035 ppbV	
55) dibromochloromethane	15.61	129	1406	0.037 ppbV #	94
56) 1,2-dibromoethane	15.85	107	1400	0.040 ppbV	93
57) tetrachloroethene	16.26	166	1249	0.040 ppbV	98
58) 1,1,1,2-tetrachloroethane	16.82	131	1055	0.039 ppbV #	94
59) chlorobenzene	16.84	112	2052	0.039 ppbV	91
60) ethylbenzene	17.14	91	3438	0.042 ppbV	98
61) m+p-xylene	17.27	91	5577	0.078 ppbV	100
62) bromoform	17.36	173	1395	0.037 ppbV	98
63) styrene	17.56	104	1763	0.037 ppbV	95
64) 1,1,2,2-tetrachloroethane	17.65	83	1940	0.038 ppbV	98
65) o-xylene	17.65	91	2834	0.043 ppbV	97
66) 1,2,3-trichloropropane	17.75	75	1604	0.041 ppbV #	90
68) isopropylbenzene	18.09	105	3366	0.038 ppbV	100
69) bromobenzene	18.18	77	1727	0.039 ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168808.D
Acq On : 23 Oct 2019 1:22 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:21 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.58	105	3254	0.035	ppbV		96
71) 1,3,5-trimethylbenzene	18.63	105	2799	0.038	ppbV		94
72) tert-butylbenzene	18.94	119	2953	0.037	ppbV		99
73) 1,2,4-trimethylbenzene	18.94	105	2655	0.037	ppbV		96
74) Benzyl Chloride	19.05	91	1842	0.029	ppbV		86
75) 1,3-dichlorobenzene	19.07	146	2003M3	0.035	ppbV		
76) 1,4-dichlorobenzene	19.12	146	2014	0.035	ppbV	#	85
77) sec-butylbenzene	19.14	105	3899	0.034	ppbV		95
78) p-isopropyltoluene	19.25	119	3588	0.036	ppbV		99
79) 1,2-dichlorobenzene	19.39	146	1900	0.035	ppbV		96
80) n-butylbenzene	19.57	91	2980	0.032	ppbV		99
81) 1,2,4-trichlorobenzene	20.81	180	1440	0.033	ppbV	#	81
82) naphthalene	20.93	128	4602	0.043	ppbV	#	93
83) 1,2,3-trichlorobenzene	21.18	180	1294	0.032	ppbV	#	80
84) hexachlorobutadiene	21.24	225	1274	0.034	ppbV	#	89

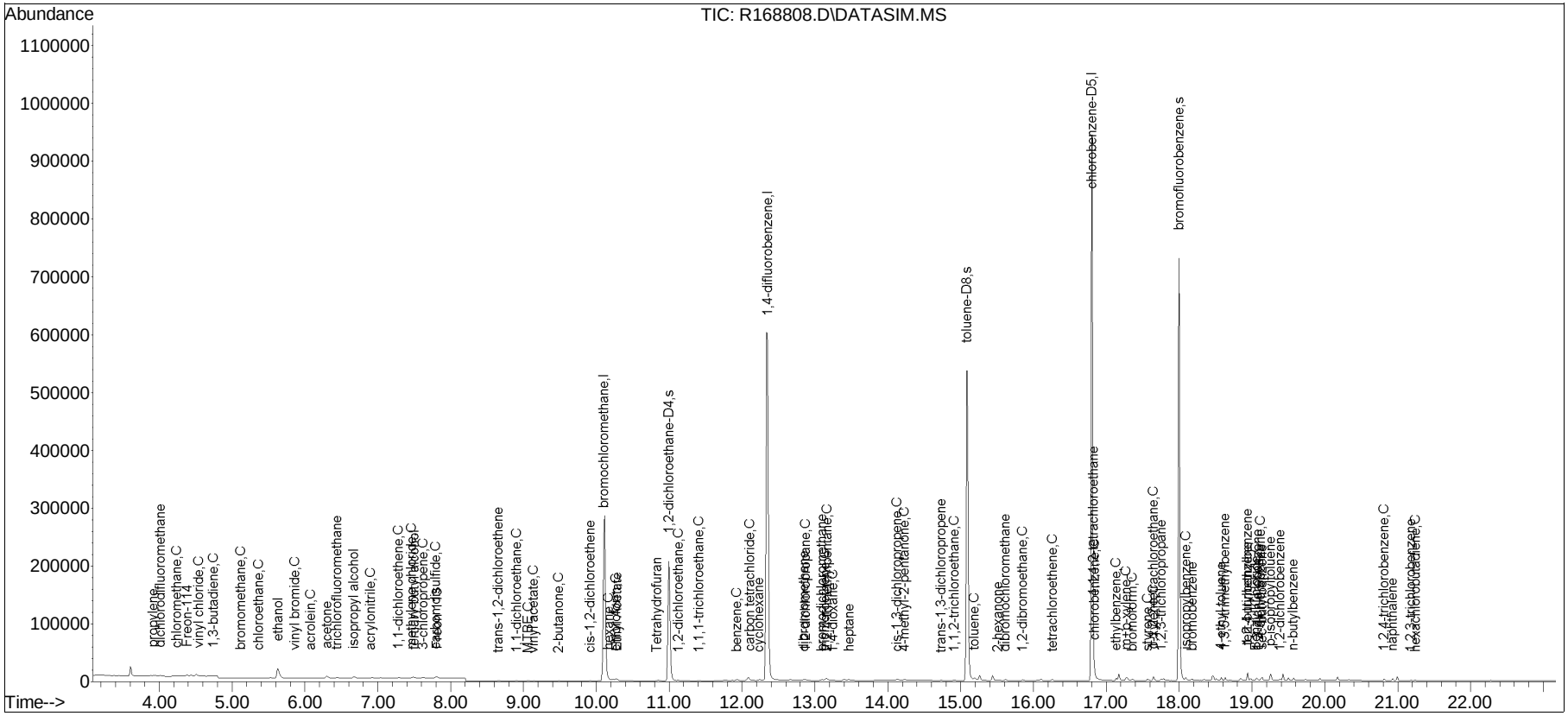
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168808.D
Acq On : 23 Oct 2019 1:22 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.05
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:21 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

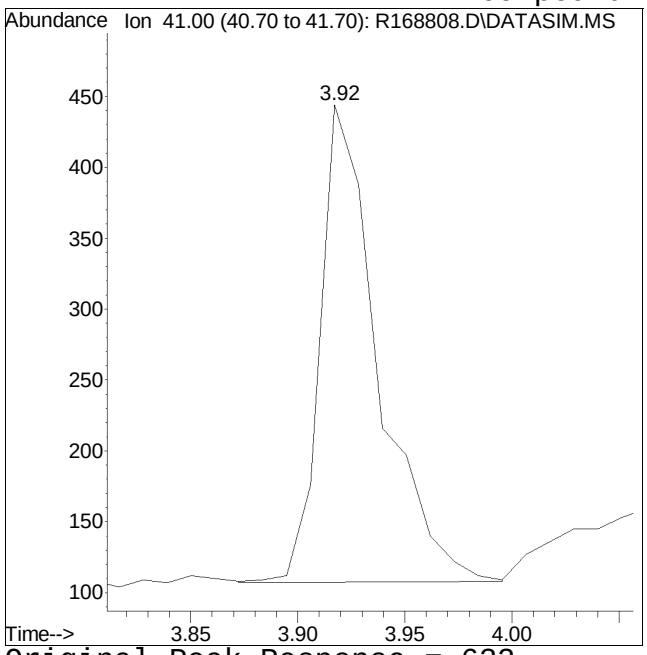


Manual Integration/Negative Proof Report

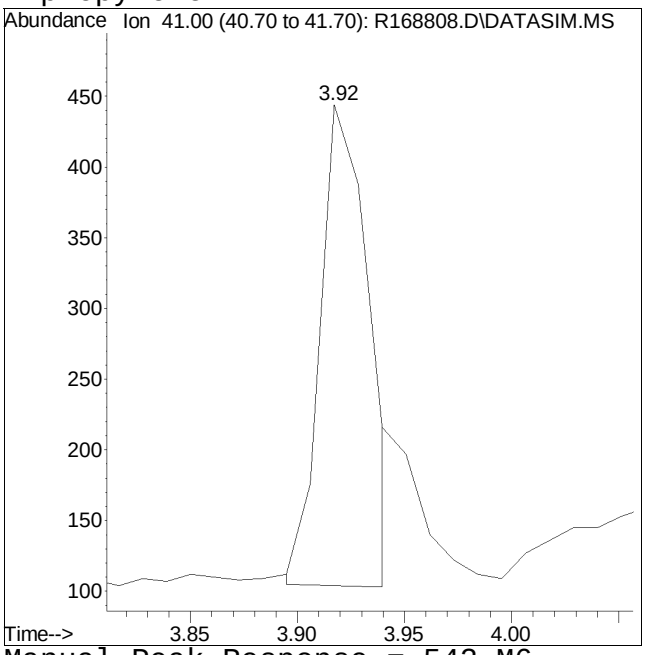
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 632



Manual Peak Response = 542 M6

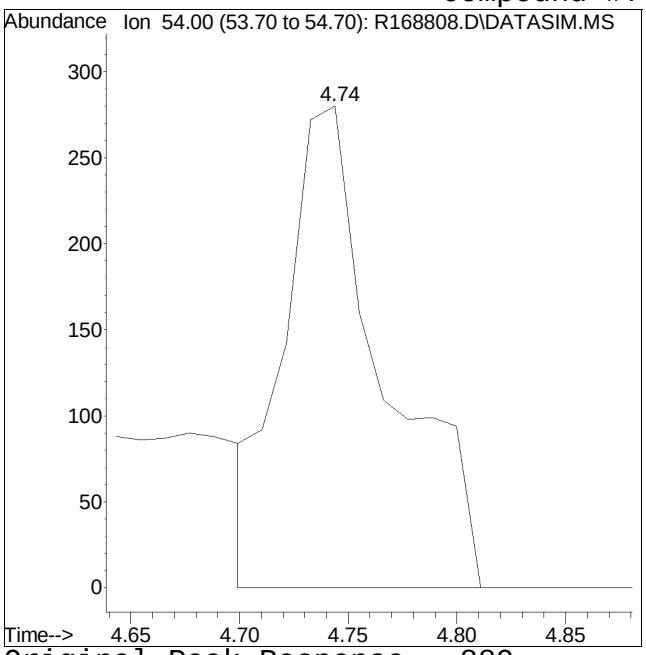
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

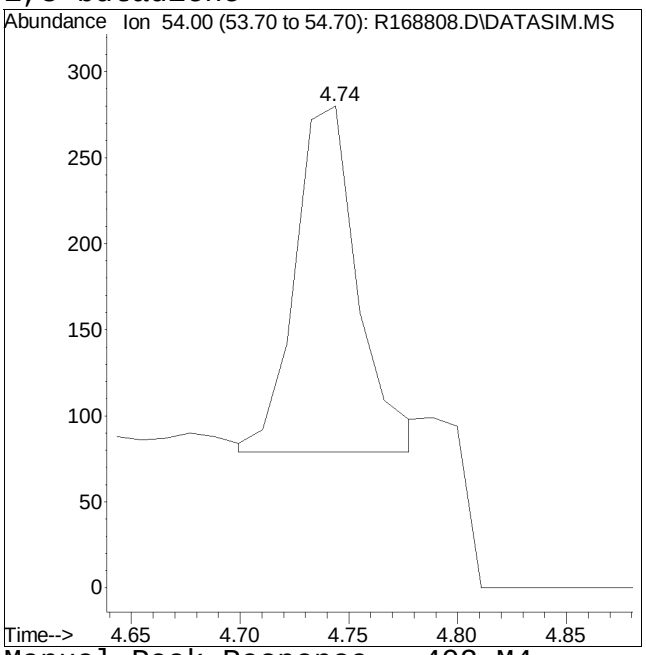
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 889



Manual Peak Response = 402 M4

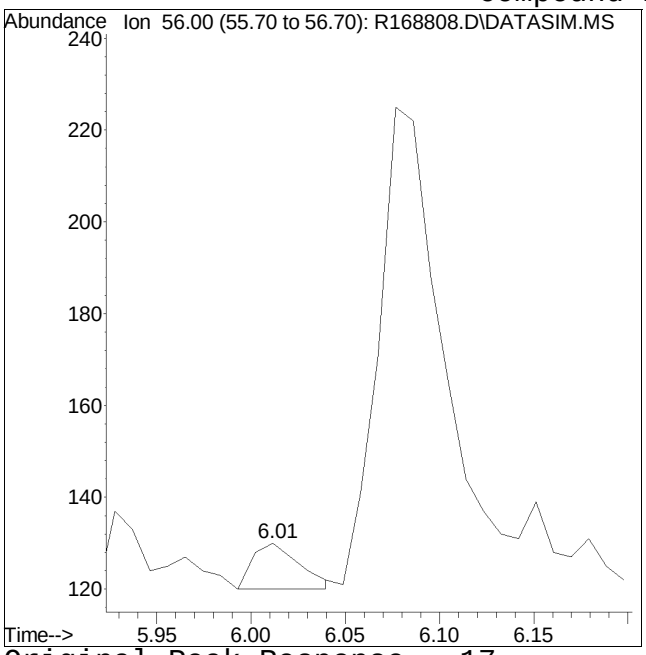
M4 = Poor automated baseline construction.

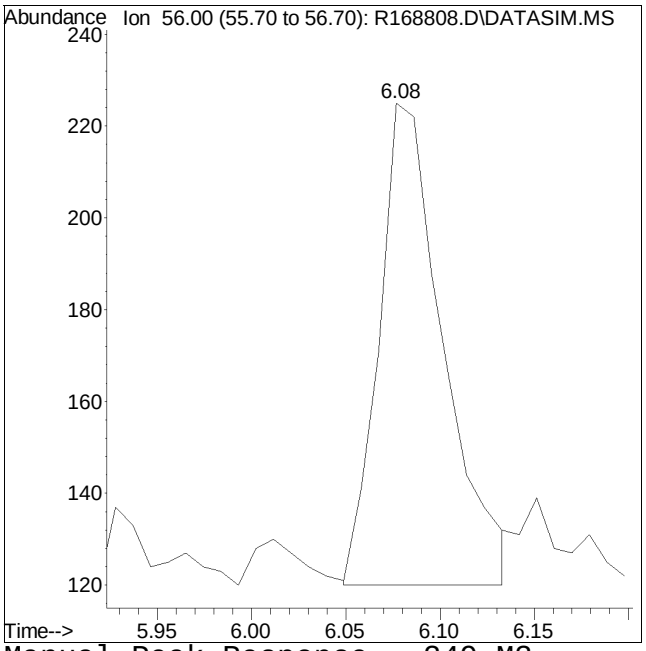
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #12: acrolein





Original Peak Response = 17 Manual Peak Response = 249 M3

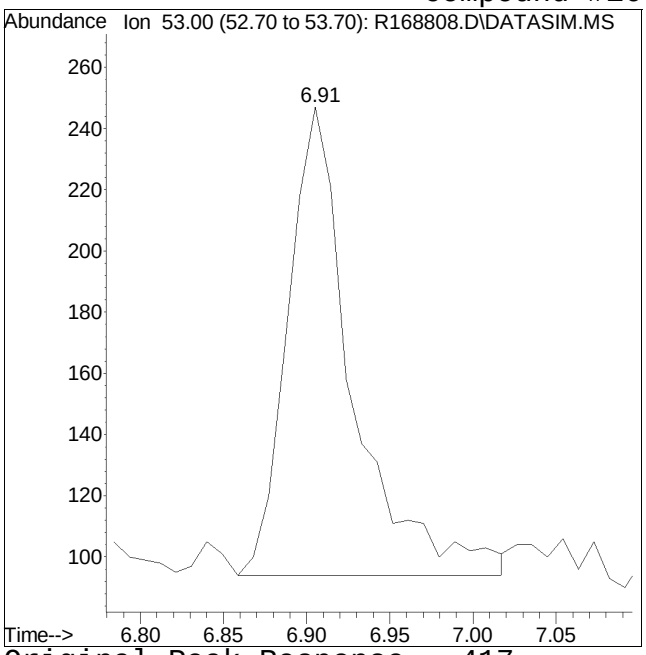
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

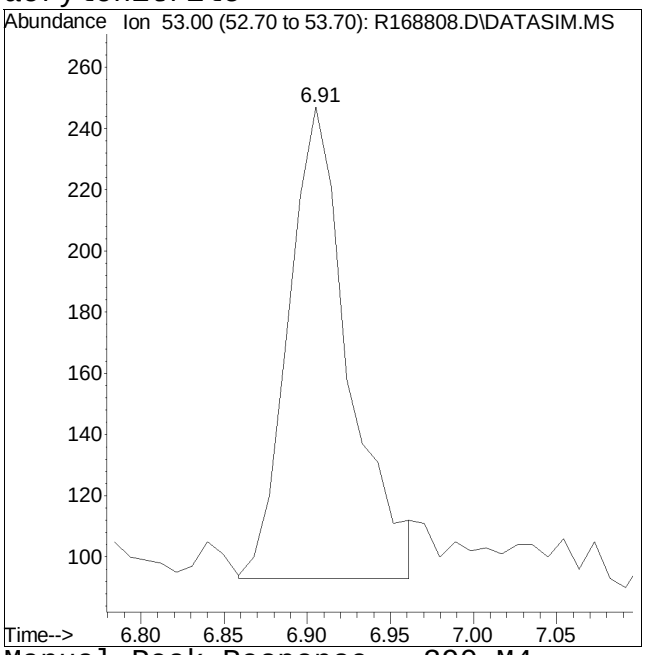
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #16: acrylonitrile



Original Peak Response = 417



Manual Peak Response = 390 M4

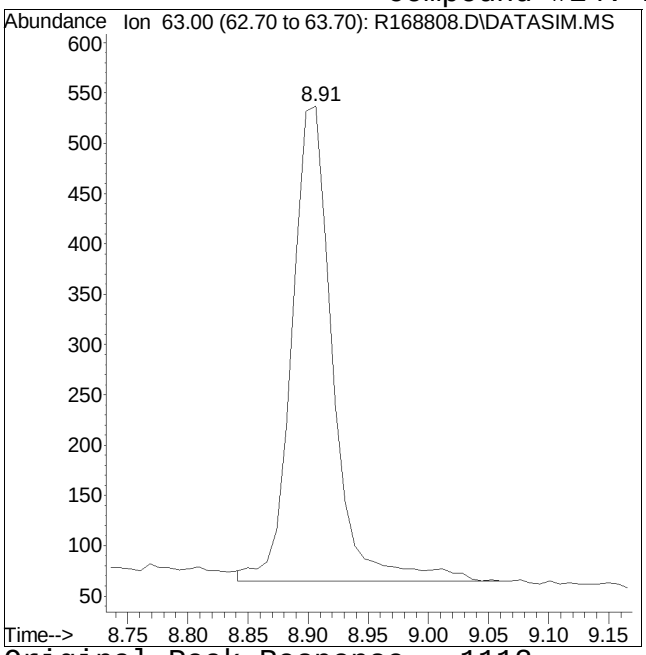
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

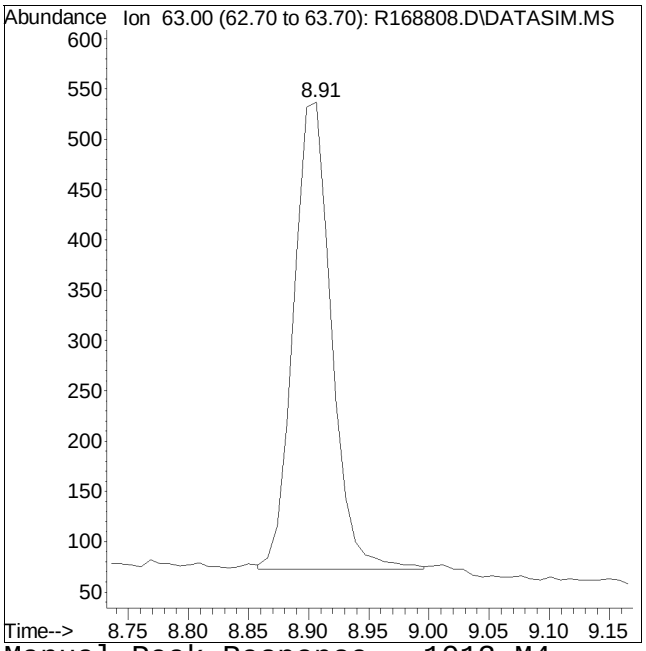
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #24: 1,1-dichloroethane



Original Peak Response = 1112



Manual Peak Response = 1013 M4

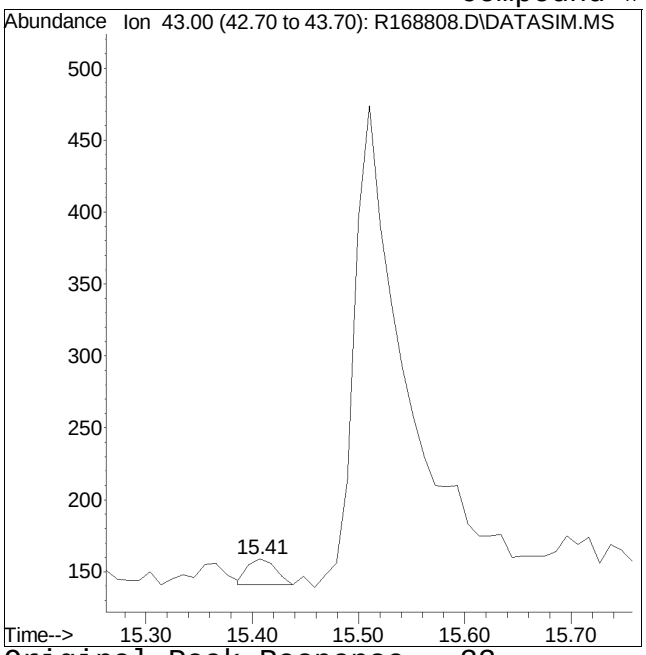
M4 = Poor automated baseline construction.

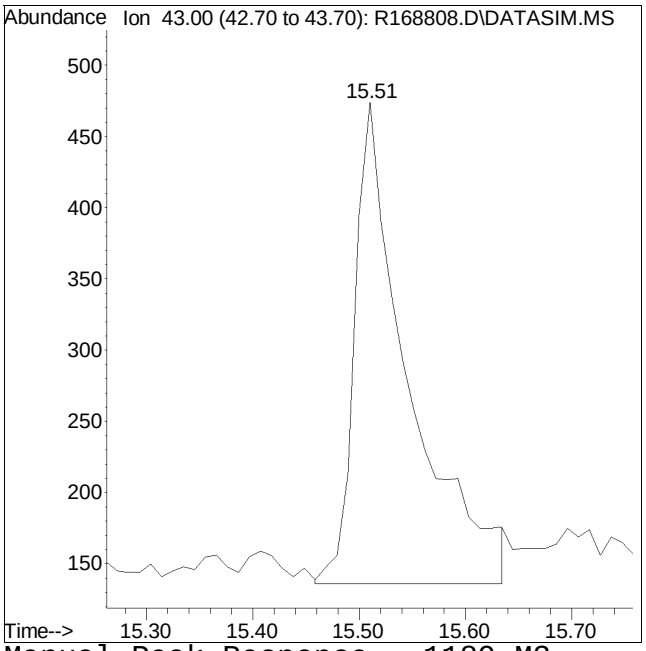
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #54: 2-hexanone





Original Peak Response = 33 Manual Peak Response = 1189 M3

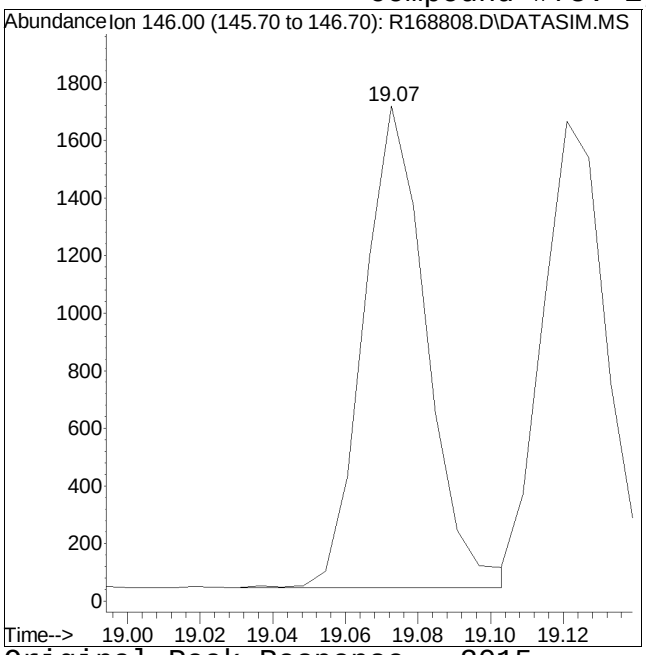
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

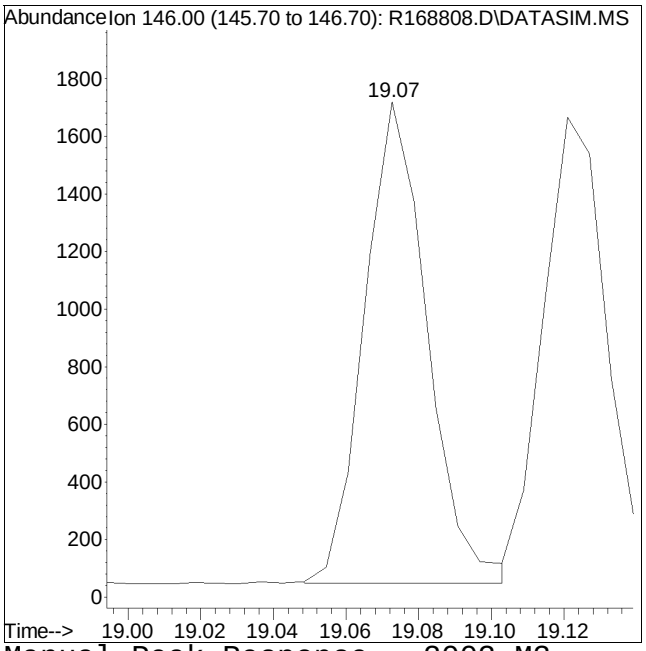
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168808.D
Date Inj'd : 10/23/2019 1:22 pm
Sample : ITO15-SIMSTD0.05

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 2015 Manual Peak Response = 2003 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168809.D
Acq On : 23 Oct 2019 1:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	312086	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 100.03%	
33) 1,4-difluorobenzene	12.34	114	797388	10.000 ppbV	0.00
Standard Area = 795323			Recovery	= 100.26%	
51) chlorobenzene-D5	16.80	54	131134	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 101.82%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	179301	9.995 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.95%	
53) toluene-D8	15.09	98	549983	10.032 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.32%	
67) bromofluorobenzene	18.00	95	366459	9.935 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.35%	

Target Compounds					Qvalue
2) propylene	3.92	41	1239M6	0.114 ppbV	
3) dichlorodifluoromethane	4.02	85	3378	0.099 ppbV	99
4) chloromethane	4.23	50	1187	0.104 ppbV	93
5) Freon-114	4.38	85	3892	0.100 ppbV	98
6) vinyl chloride	4.54	62	1339	0.097 ppbV #	84
7) 1,3-butadiene	4.73	54	863M4	0.095 ppbV	
8) bromomethane	5.12	94	1513	0.100 ppbV	92
9) chloroethane	5.37	64	714	0.103 ppbV	90
10) ethanol	5.62	31	22584	2.836 ppbV	97
11) vinyl bromide	5.86	106	1494	0.097 ppbV	96
12) acrolein	6.08	56	631	0.117 ppbV #	95
13) acetone	6.29	43	12068	0.576 ppbV #	99
14) trichlorofluoromethane	6.44	101	3430	0.099 ppbV	94
15) isopropyl alcohol	6.66	45	6748	0.293 ppbV #	95
16) acrylonitrile	6.90	53	945	0.099 ppbV #	90
17) 1,1-dichloroethene	7.29	61	2090	0.095 ppbV	97
18) tertiary butyl alcohol	7.48	59	3166	0.117 ppbV #	49
19) methylene chloride	7.46	49	1697	0.110 ppbV	98
20) 3-chloropropene	7.61	41	1432	0.095 ppbV	91
21) carbon disulfide	7.79	76	4871	0.108 ppbV #	1
22) Freon 113	7.81	101	2959	0.099 ppbV	98
23) trans-1,2-dichloroethene	8.65	61	2161	0.098 ppbV	99
24) 1,1-dichloroethane	8.90	63	2819	0.101 ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168809.D
Acq On : 23 Oct 2019 1:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.05	73	3851	0.097 ppbV #	82
26) vinyl acetate	9.14	43	2902	0.105 ppbV #	93
27) 2-butanone	9.47	43	2783	0.093 ppbV #	92
28) cis-1,2-dichloroethene	9.91	61	2099	0.094 ppbV	100
29) Ethyl Acetate	10.28	61	657M6	0.103 ppbV	
30) chloroform	10.27	83	3886	0.097 ppbV	96
31) Tetrahydrofuran	10.82	42	1676	0.096 ppbV #	88
32) 1,2-dichloroethane	11.12	62	1980	0.096 ppbV #	87
34) hexane	10.16	57	2970	0.099 ppbV #	79
36) 1,1,1-trichloroethane	11.41	97	3134	0.098 ppbV #	92
37) benzene	11.93	78	4987	0.099 ppbV	95
38) carbon tetrachloride	12.11	117	3022	0.095 ppbV	97
39) cyclohexane	12.23	56	2249	0.092 ppbV	95
40) dibromomethane	12.85	93	2260	0.096 ppbV	88
41) 1,2-dichloropropane	12.87	63	1790	0.094 ppbV #	95
42) bromodichloromethane	13.10	83	3546	0.095 ppbV	99
43) 1,4-dioxane	13.24	88	934	0.083 ppbV #	73
44) trichloroethene	13.14	130	2252	0.095 ppbV	97
45) 2,2,4-trimethylpentane	13.17	57	7278	0.093 ppbV #	94
46) heptane	13.47	43	2540	0.092 ppbV	97
47) cis-1,3-dichloropropene	14.13	75	9749	0.091 ppbV #	94
48) 4-methyl-2-pentanone	14.21	43	3094	0.086 ppbV	95
49) trans-1,3-dichloropropene	14.73	75	2304	0.090 ppbV #	84
50) 1,1,2-trichloroethane	14.91	97	1997	0.092 ppbV	99
52) toluene	15.19	91	6996	0.106 ppbV	99
54) 2-hexanone	15.49	43	2690	0.080 ppbV	85
55) dibromochloromethane	15.61	129	3411	0.091 ppbV	99
56) 1,2-dibromoethane	15.85	107	3265	0.093 ppbV	100
57) tetrachloroethene	16.25	166	2975	0.095 ppbV	95
58) 1,1,1,2-tetrachloroethane	16.82	131	2468	0.091 ppbV	98
59) chlorobenzene	16.84	112	4969	0.096 ppbV	96
60) ethylbenzene	17.14	91	7628	0.094 ppbV	99
61) m+p-xylene	17.27	91	11860	0.168 ppbV	97
62) bromoform	17.36	173	3230	0.085 ppbV	98
63) styrene	17.56	104	4240	0.089 ppbV	98
64) 1,1,2,2-tetrachloroethane	17.65	83	4621	0.092 ppbV	99
65) o-xylene	17.65	91	6060	0.092 ppbV	98
66) 1,2,3-trichloropropane	17.75	75	3542	0.092 ppbV #	94
68) isopropylbenzene	18.09	105	7837	0.089 ppbV	99
69) bromobenzene	18.18	77	4058	0.092 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168809.D
Acq On : 23 Oct 2019 1:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.58	105	8199	0.090	ppbV	97
71) 1,3,5-trimethylbenzene	18.63	105	6228	0.084	ppbV	99
72) tert-butylbenzene	18.94	119	6876	0.086	ppbV	98
73) 1,2,4-trimethylbenzene	18.94	105	6327	0.088	ppbV	96
74) Benzyl Chloride	19.05	91	4557	0.073	ppbV	96
75) 1,3-dichlorobenzene	19.07	146	4745M3	0.085	ppbV	
76) 1,4-dichlorobenzene	19.12	146	4948M3	0.086	ppbV	
77) sec-butylbenzene	19.14	105	9453	0.084	ppbV	99
78) p-isopropyltoluene	19.25	119	8275	0.083	ppbV	97
79) 1,2-dichlorobenzene	19.38	146	4626	0.087	ppbV	91
80) n-butylbenzene	19.57	91	7184	0.078	ppbV	95
81) 1,2,4-trichlorobenzene	20.81	180	3229	0.074	ppbV #	85
82) naphthalene	20.93	128	8025	0.076	ppbV #	95
83) 1,2,3-trichlorobenzene	21.18	180	3039	0.075	ppbV #	86
84) hexachlorobutadiene	21.24	225	3002	0.081	ppbV #	87

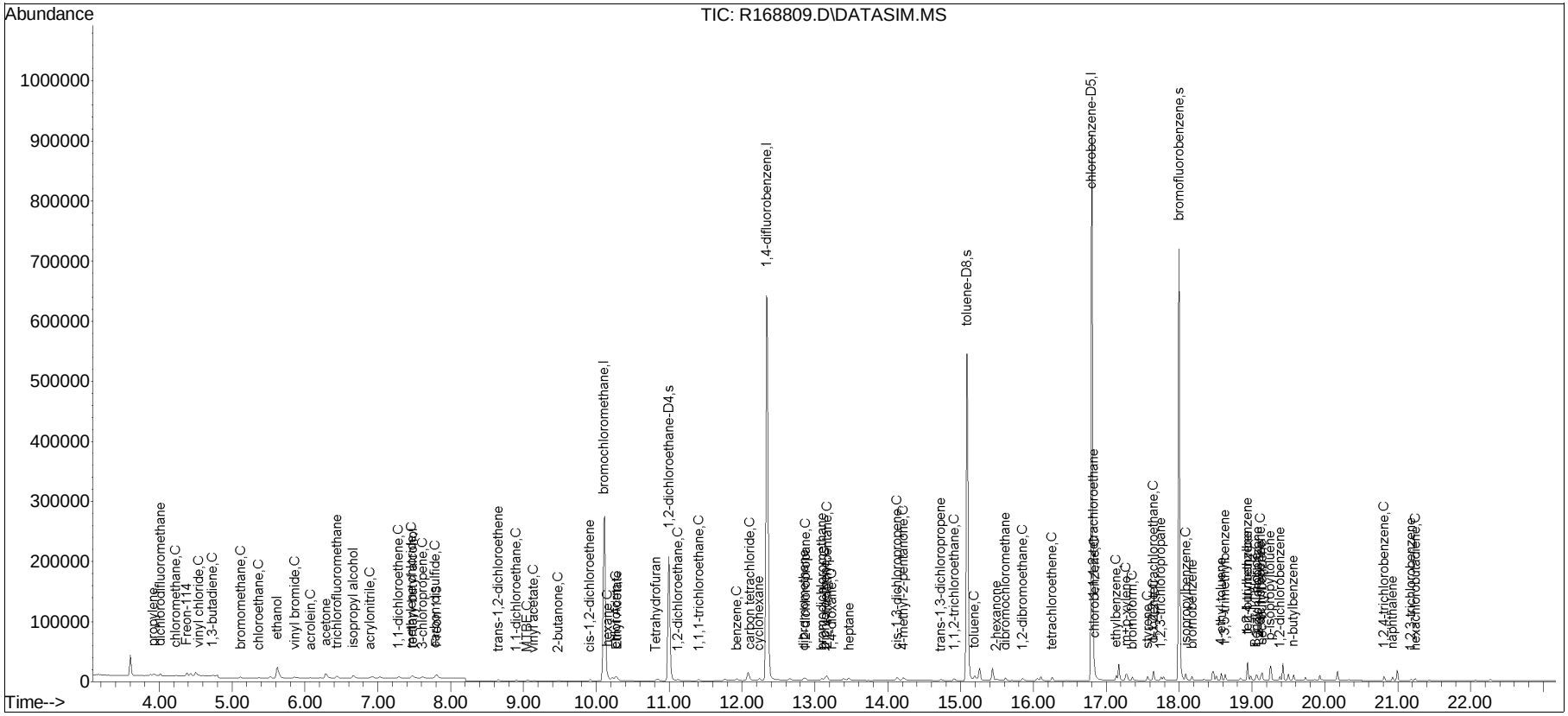
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168809.D
Acq On : 23 Oct 2019 1:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG1300076
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 23 17:59:27 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

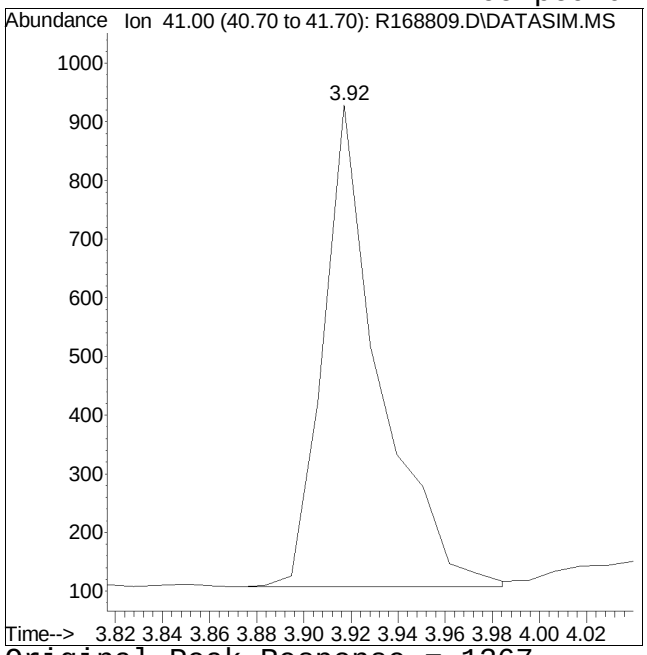


Manual Integration/Negative Proof Report

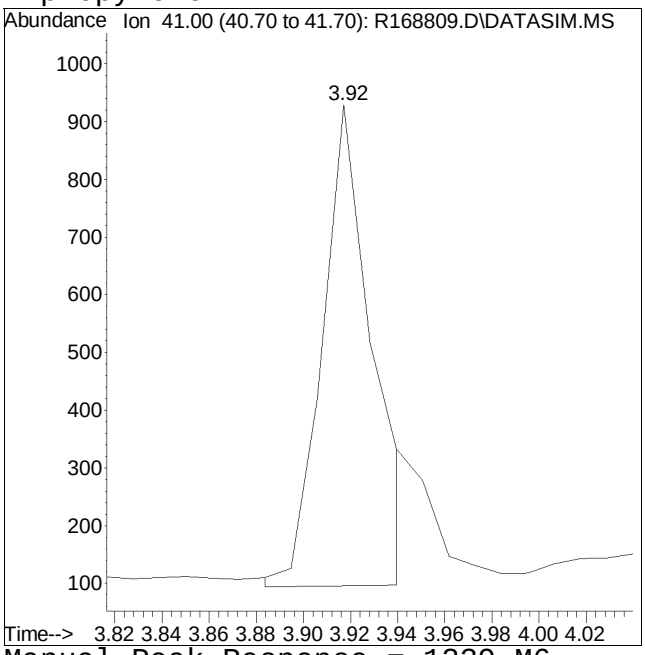
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168809.D
Date Inj'd : 10/23/2019 1:56 pm
Sample : ITO15-SIMSTD0.1

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 1367



Manual Peak Response = 1239 M6

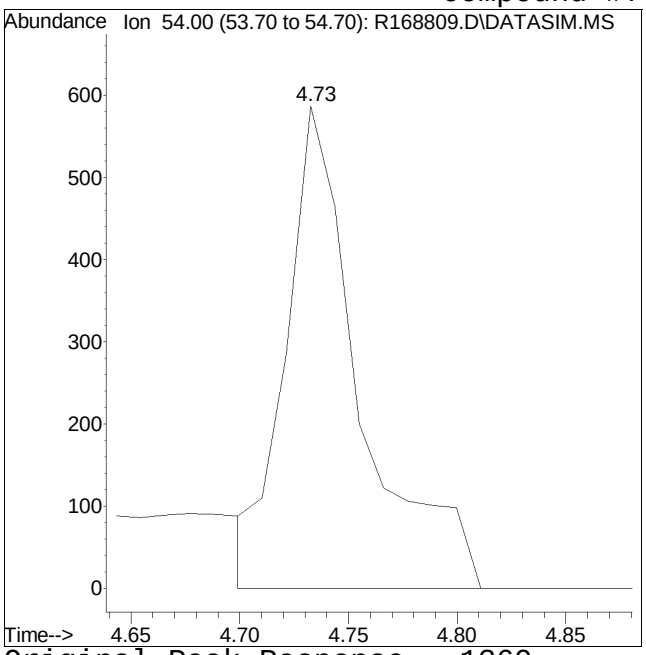
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

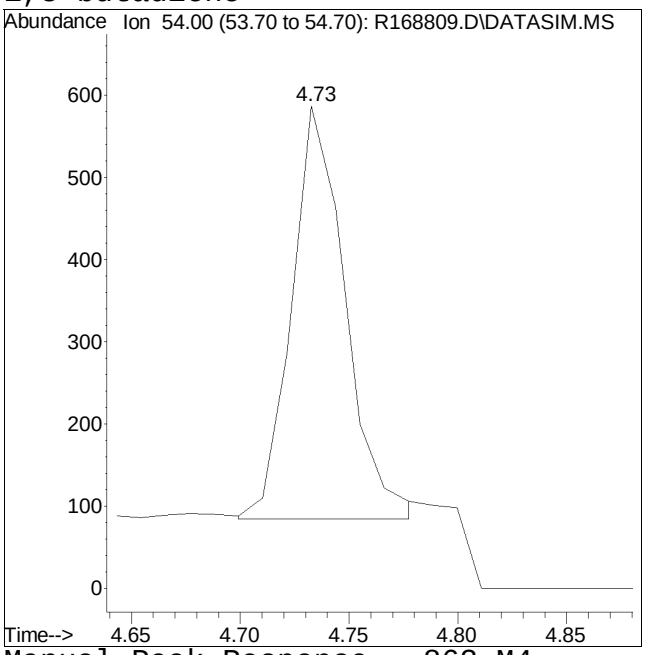
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168809.D
Date Inj'd : 10/23/2019 1:56 pm
Sample : ITO15-SIMSTD0.1

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 1369



Manual Peak Response = 863 M4

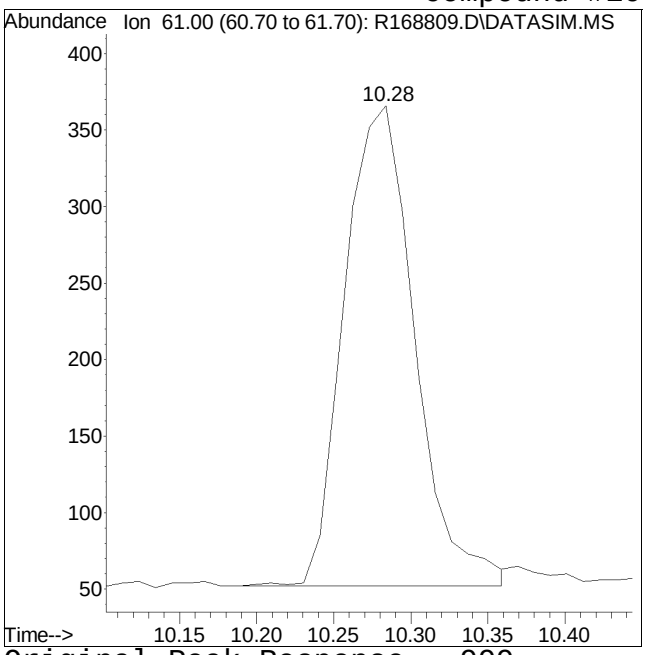
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

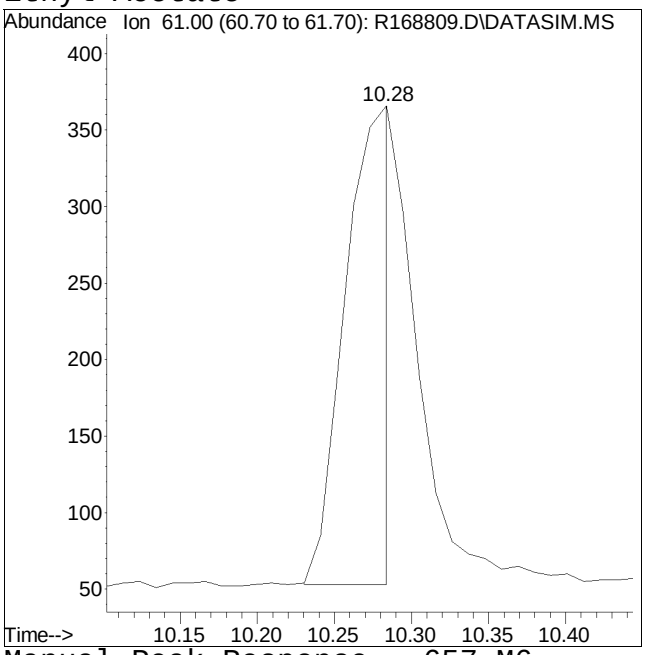
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168809.D
Date Inj'd : 10/23/2019 1:56 pm
Sample : ITO15-SIMSTD0.1

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #29: Ethyl Acetate



Original Peak Response = 999



Manual Peak Response = 657 M6

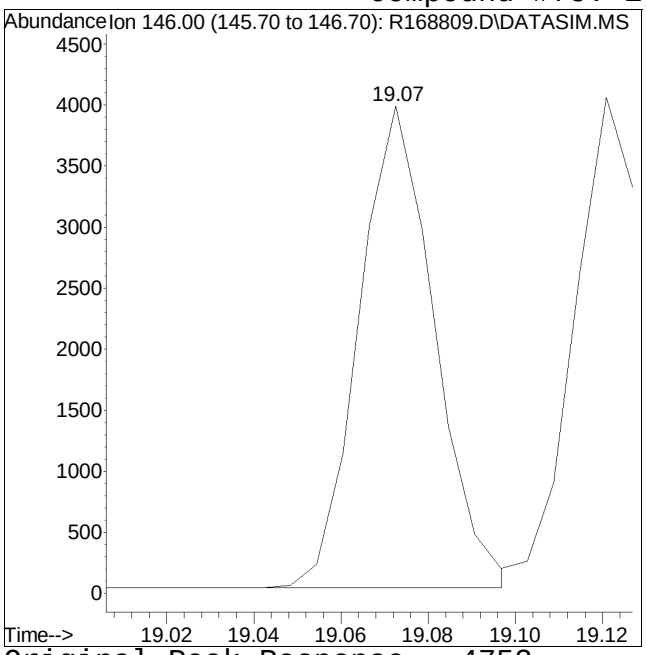
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

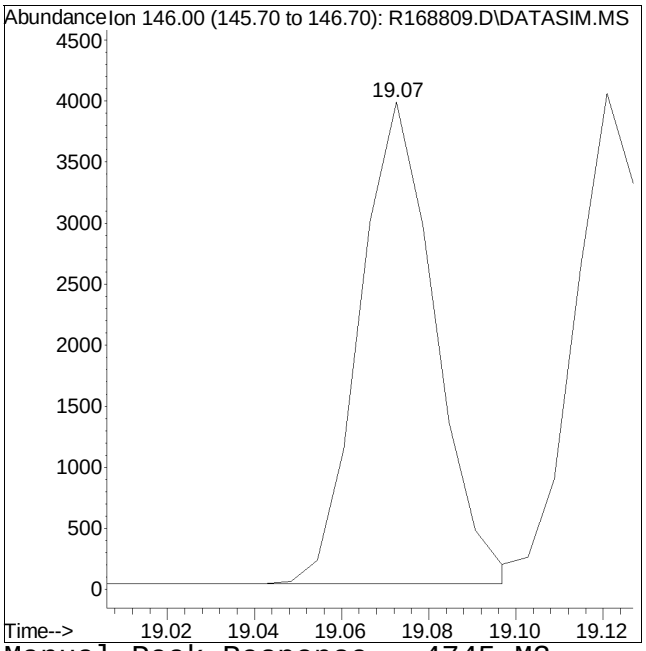
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168809.D
Date Inj'd : 10/23/2019 1:56 pm
Sample : ITO15-SIMSTD0.1

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 4752 Manual Peak Response = 4745 M3

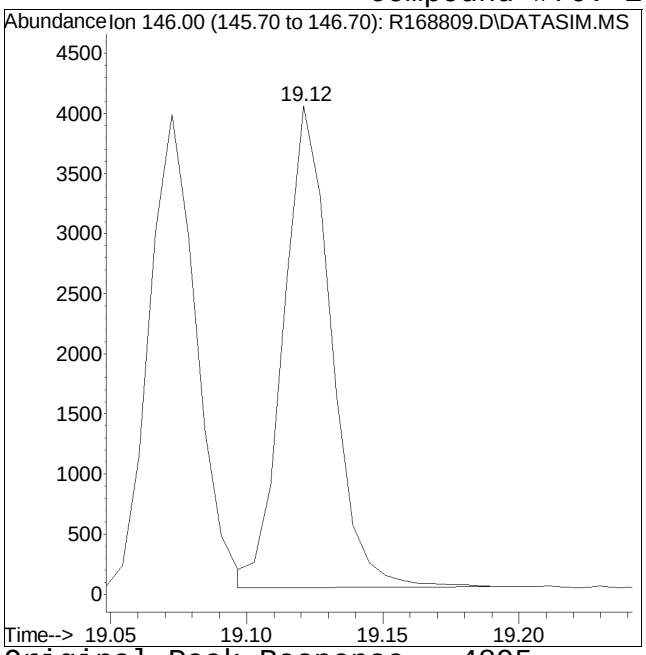
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

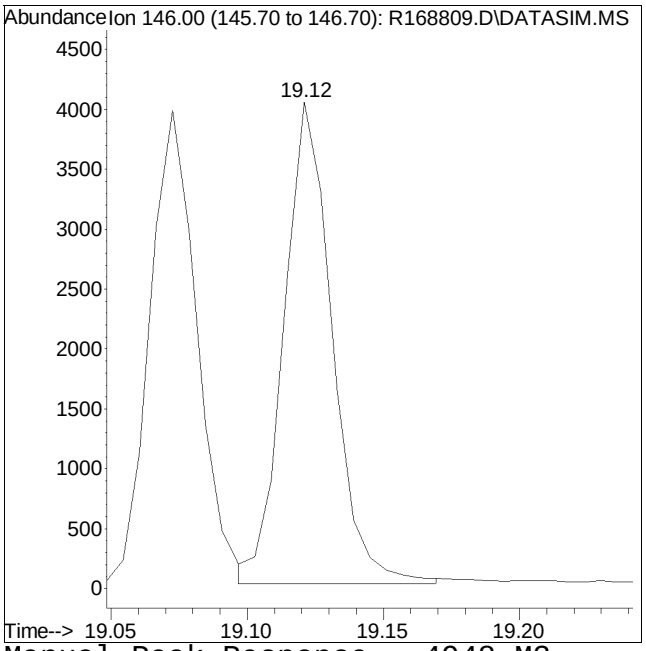
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168809.D
Date Inj'd : 10/23/2019 1:56 pm
Sample : ITO15-SIMSTD0.1

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #76: 1,4-dichlorobenzene





Original Peak Response = 4895 Manual Peak Response = 4948 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:33 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	311190	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 99.74%	
33) 1,4-difluorobenzene	12.34	114	798651	10.000 ppbV	0.00
Standard Area = 795323			Recovery	= 100.42%	
51) chlorobenzene-D5	16.80	54	130885	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 101.63%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	179770	10.006 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.06%	
53) toluene-D8	15.09	98	540398	9.876 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.76%	
67) bromofluorobenzene	18.00	95	366486	9.955 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.55%	
Target Compounds					Qvalue
2) propylene	3.92	41	2538M6	0.235 ppbV	
3) dichlorodifluoromethane	4.02	85	8301	0.243 ppbV	100
4) chloromethane	4.23	50	2529	0.222 ppbV	99
5) Freon-114	4.38	85	8920	0.229 ppbV	99
6) vinyl chloride	4.54	62	3212	0.234 ppbV	94
7) 1,3-butadiene	4.73	54	2060M4	0.228 ppbV	
8) bromomethane	5.12	94	3314	0.220 ppbV	100
9) chloroethane	5.37	64	1486	0.216 ppbV	97
10) ethanol	5.62	31	27376	3.448 ppbV	97
11) vinyl bromide	5.86	106	3357	0.219 ppbV	99
12) acrolein	6.07	56	1253	0.233 ppbV	95
13) acetone	6.28	43	24423	1.169 ppbV #	98
14) trichlorofluoromethane	6.44	101	7822	0.226 ppbV	98
15) isopropyl alcohol	6.65	45	13529	0.590 ppbV	98
16) acrylonitrile	6.90	53	2100	0.220 ppbV	93
17) 1,1-dichloroethene	7.29	61	4853	0.222 ppbV	98
18) tertiary butyl alcohol	7.48	59	6335	0.234 ppbV #	75
19) methylene chloride	7.46	49	3467	0.225 ppbV	97
20) 3-chloropropene	7.61	41	3163	0.210 ppbV	95
21) carbon disulfide	7.79	76	10033	0.223 ppbV #	1
22) Freon 113	7.81	101	6547	0.220 ppbV	99
23) trans-1,2-dichloroethene	8.65	61	5324	0.243 ppbV	97
24) 1,1-dichloroethane	8.90	63	6573	0.236 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:33 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25)	MTBE	9.04	73	8978	0.227 ppbV #	93
26)	vinyl acetate	9.13	43	6882	0.249 ppbV	98
27)	2-butanone	9.47	43	6311	0.210 ppbV #	96
28)	cis-1,2-dichloroethene	9.91	61	5123	0.229 ppbV	99
29)	Ethyl Acetate	10.27	61	1359M6	0.214 ppbV	
30)	chloroform	10.26	83	8848	0.222 ppbV	98
31)	Tetrahydrofuran	10.81	42	3890	0.224 ppbV	91
32)	1,2-dichloroethane	11.12	62	4479	0.218 ppbV	95
34)	hexane	10.16	57	6608	0.219 ppbV #	75
36)	1,1,1-trichloroethane	11.41	97	7150	0.223 ppbV	96
37)	benzene	11.93	78	11308	0.224 ppbV	97
38)	carbon tetrachloride	12.11	117	7050	0.221 ppbV	97
39)	cyclohexane	12.23	56	5358	0.219 ppbV	97
40)	dibromomethane	12.85	93	4851	0.206 ppbV	87
41)	1,2-dichloropropane	12.87	63	4260	0.224 ppbV	99
42)	bromodichloromethane	13.10	83	8314	0.222 ppbV	99
43)	1,4-dioxane	13.21	88	2390	0.212 ppbV #	78
44)	trichloroethene	13.14	130	5209	0.219 ppbV	98
45)	2,2,4-trimethylpentane	13.17	57	17248	0.219 ppbV	97
46)	heptane	13.47	43	5981	0.216 ppbV	99
47)	cis-1,3-dichloropropene	14.13	75	23563	0.221 ppbV #	97
48)	4-methyl-2-pentanone	14.19	43	7482	0.207 ppbV #	92
49)	trans-1,3-dichloropropene	14.73	75	5500	0.214 ppbV	92
50)	1,1,2-trichloroethane	14.91	97	4908	0.226 ppbV	95
52)	toluene	15.19	91	14921	0.226 ppbV	99
54)	2-hexanone	15.48	43	6837	0.204 ppbV #	87
55)	dibromochloromethane	15.61	129	8126	0.218 ppbV	98
56)	1,2-dibromoethane	15.85	107	7862	0.225 ppbV	99
57)	tetrachloroethene	16.25	166	6905	0.221 ppbV	96
58)	1,1,1,2-tetrachloroethane	16.82	131	5889	0.219 ppbV	99
59)	chlorobenzene	16.84	112	11641	0.225 ppbV	98
60)	ethylbenzene	17.14	91	17901	0.221 ppbV	100
61)	m+p-xylene	17.28	91	27690	0.392 ppbV	98
62)	bromoform	17.36	173	8100	0.214 ppbV	99
63)	styrene	17.56	104	10496	0.221 ppbV	99
64)	1,1,2,2-tetrachloroethane	17.65	83	11611	0.232 ppbV	99
65)	o-xylene	17.64	91	14327	0.217 ppbV	97
66)	1,2,3-trichloropropane	17.75	75	8381	0.218 ppbV	97
68)	isopropylbenzene	18.09	105	18815	0.214 ppbV	96
69)	bromobenzene	18.17	77	9875	0.223 ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:33 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.58	105	20315	0.224	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	16318	0.222	ppbV	97
72) tert-butylbenzene	18.94	119	16997	0.212	ppbV	97
73) 1,2,4-trimethylbenzene	18.94	105	15915	0.221	ppbV	97
74) Benzyl Chloride	19.05	91	12031	0.192	ppbV	93
75) 1,3-dichlorobenzene	19.07	146	12213M3	0.218	ppbV	
76) 1,4-dichlorobenzene	19.12	146	12752	0.223	ppbV	92
77) sec-butylbenzene	19.14	105	23611	0.210	ppbV	97
78) p-isopropyltoluene	19.25	119	20734	0.208	ppbV	99
79) 1,2-dichlorobenzene	19.38	146	11814	0.222	ppbV	94
80) n-butylbenzene	19.57	91	18459	0.201	ppbV	95
81) 1,2,4-trichlorobenzene	20.81	180	8295	0.191	ppbV #	90
82) naphthalene	20.93	128	25546	0.244	ppbV	98
83) 1,2,3-trichlorobenzene	21.18	180	7817	0.193	ppbV #	93
84) hexachlorobutadiene	21.24	225	7297	0.198	ppbV #	84

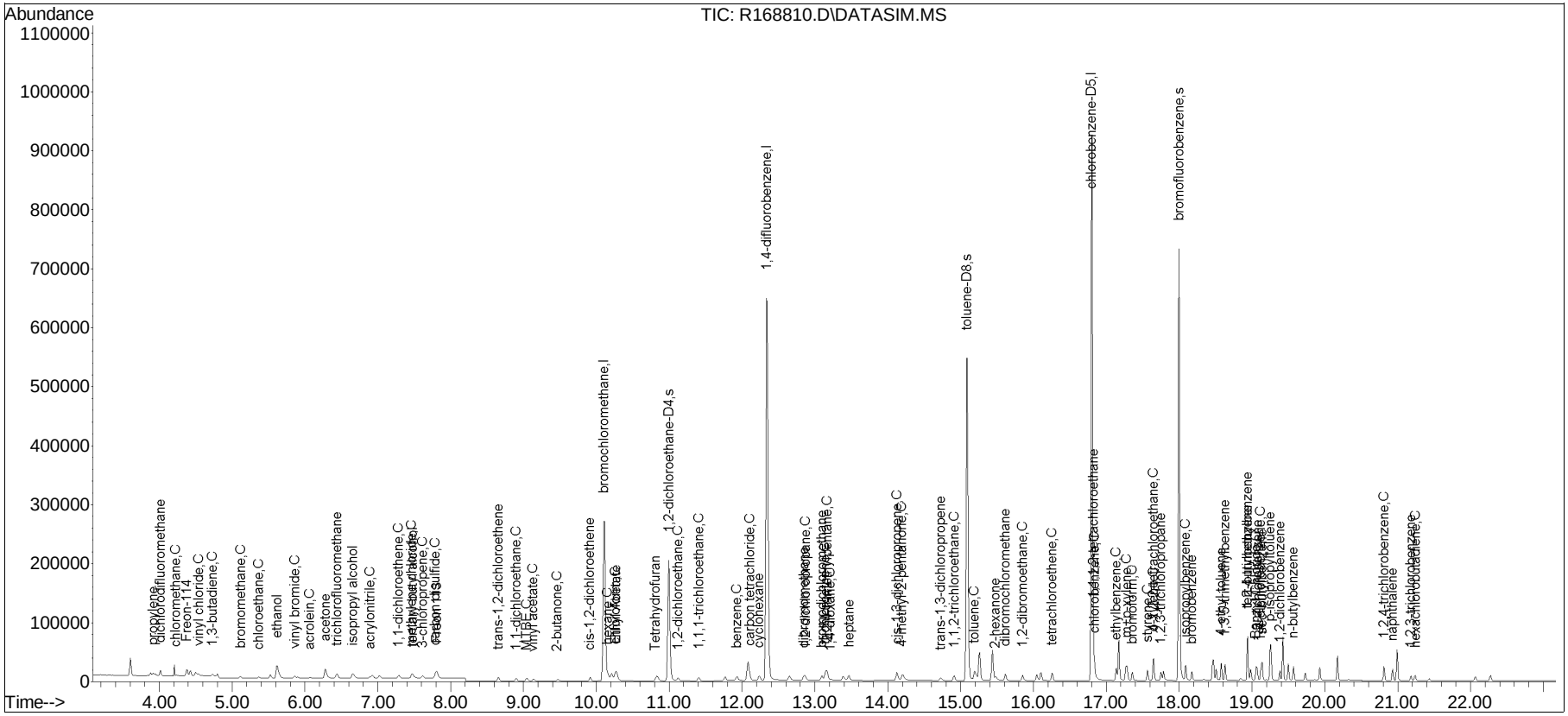
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168810.D
Acq On : 23 Oct 2019 2:26 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:33 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

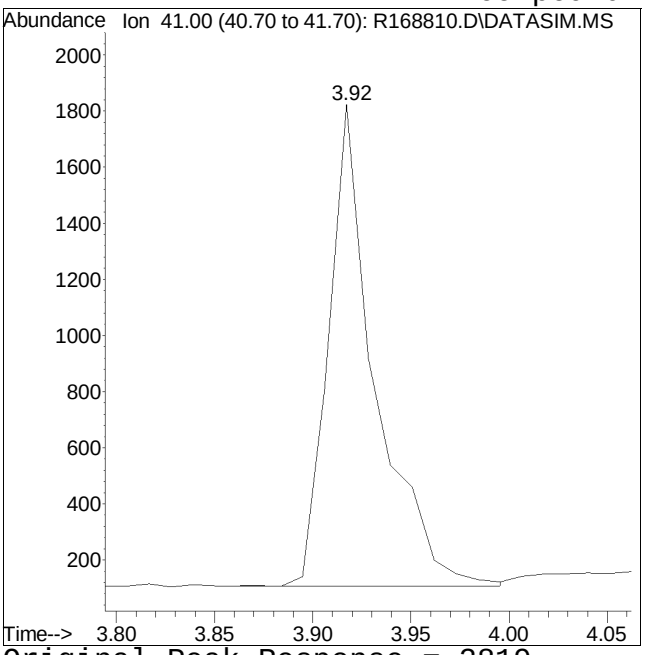


Manual Integration/Negative Proof Report

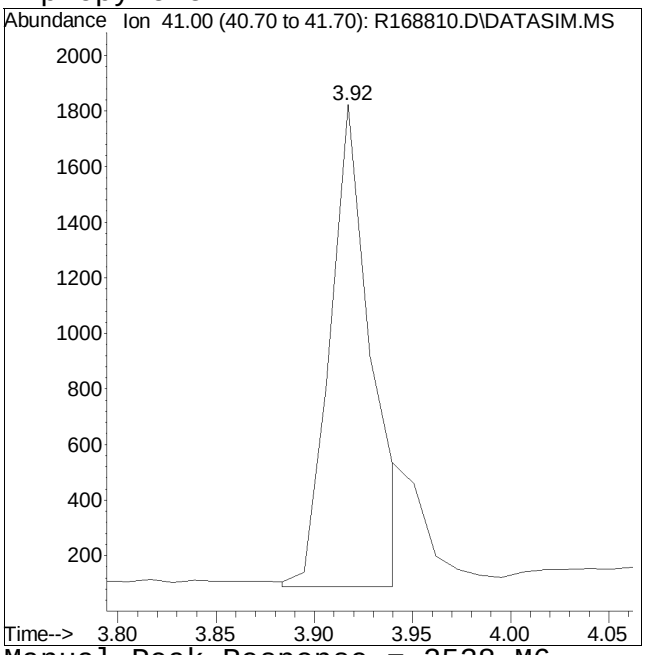
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 2819



Manual Peak Response = 2538 M6

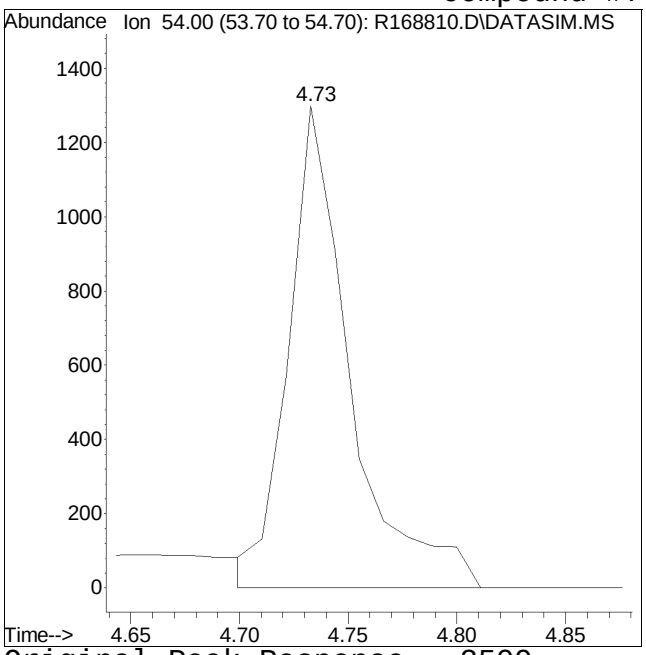
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

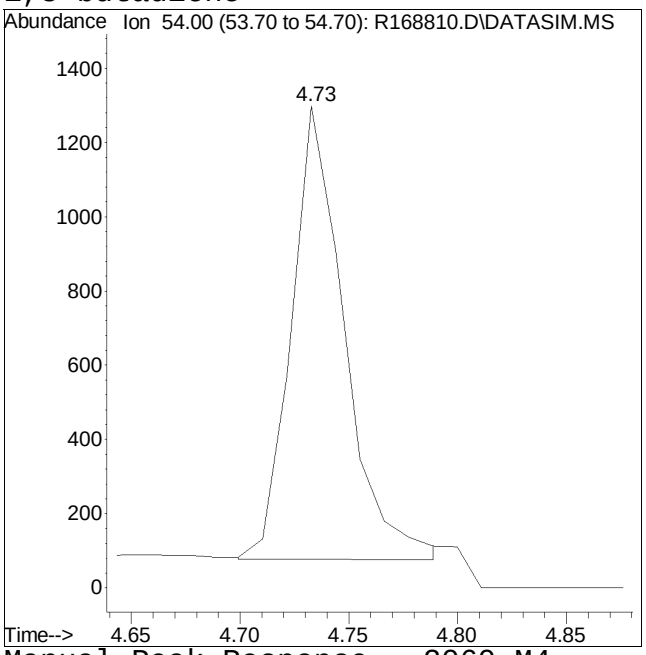
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 2509



Manual Peak Response = 2060 M4

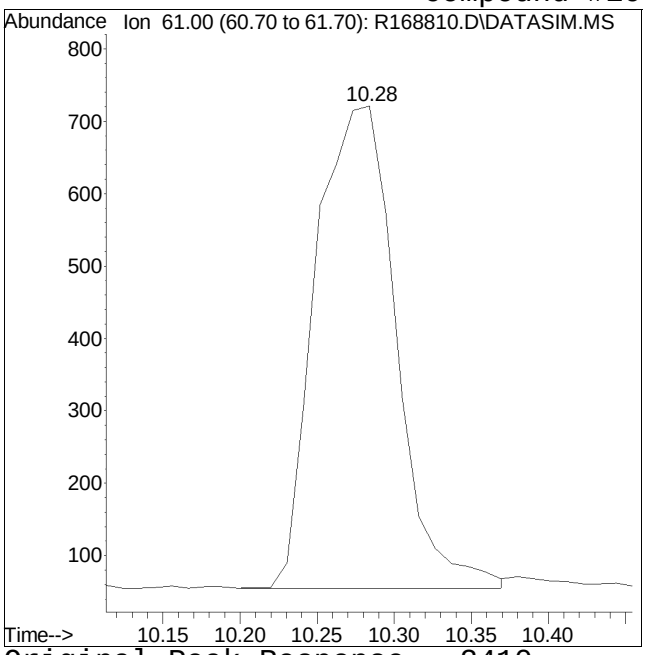
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

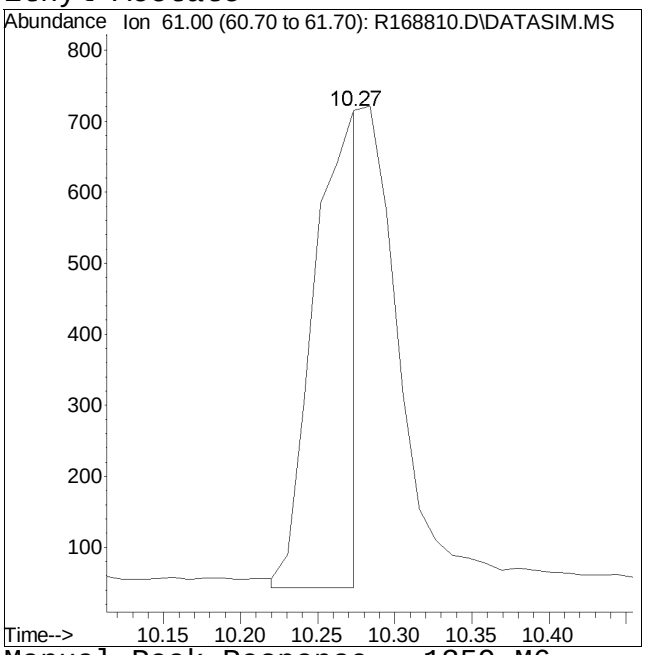
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #29: Ethyl Acetate



Original Peak Response = 2410



Manual Peak Response = 1359 M6

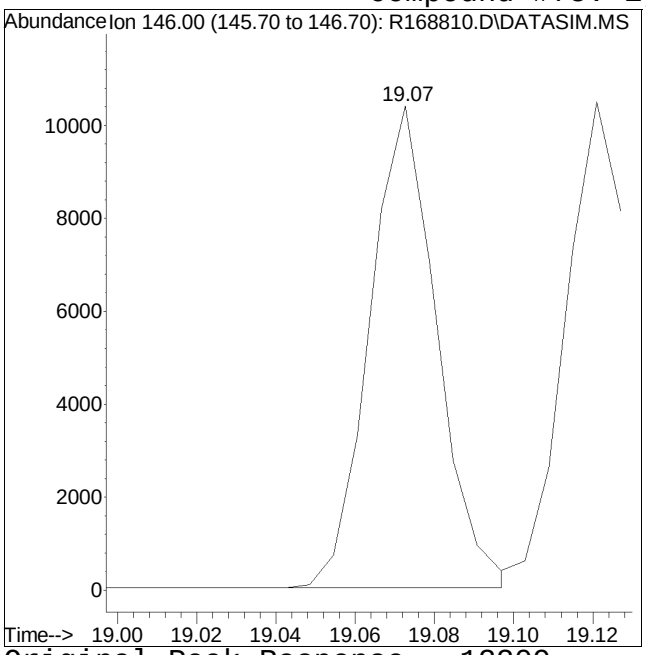
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

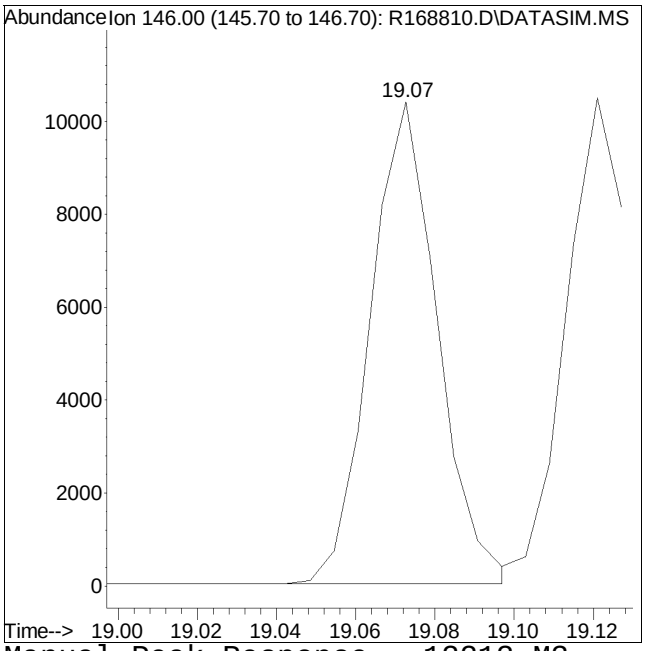
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168810.D
Date Inj'd : 10/23/2019 2:26 pm
Sample : ITO15-SIMSTD0.2

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 12209 Manual Peak Response = 12213 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:39 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.10	49	311818	10.000	ppbV	0.00
Standard Area = 311997			Recovery = 99.94%			
33) 1,4-difluorobenzene	12.34	114	796080	10.000	ppbV	0.00
Standard Area = 795323			Recovery = 100.10%			
51) chlorobenzene-D5	16.80	54	136409	10.000	ppbV	0.00
Standard Area = 128792			Recovery = 105.91%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.00	65	179015	9.996	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.96%			
53) toluene-D8	15.09	98	550090	9.646	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.46%			
67) bromofluorobenzene	18.00	95	380725	9.923	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.23%			
Target Compounds						Qvalue
2) propylene	3.92	41	5765M6	0.532	ppbV	
3) dichlorodifluoromethane	4.02	85	15765	0.461	ppbV	99
4) chloromethane	4.23	50	5829	0.510	ppbV	100
5) Freon-114	4.38	85	20370	0.523	ppbV	100
6) vinyl chloride	4.54	62	7048	0.512	ppbV	96
7) 1,3-butadiene	4.73	54	4630M4	0.511	ppbV	
8) bromomethane	5.11	94	7723	0.511	ppbV	100
9) chloroethane	5.37	64	3628	0.526	ppbV	95
10) ethanol	5.61	31	38908	4.890	ppbV	97
11) vinyl bromide	5.85	106	7983	0.520	ppbV	100
12) acrolein	6.06	56	2701	0.502	ppbV	97
13) acetone	6.26	43	53063	2.534	ppbV #	97
14) trichlorofluoromethane	6.44	101	18171	0.525	ppbV	99
15) isopropyl alcohol	6.64	45	28570	1.243	ppbV	99
16) acrylonitrile	6.89	53	4822	0.504	ppbV	95
17) 1,1-dichloroethene	7.29	61	11235	0.513	ppbV	99
18) tertiary butyl alcohol	7.46	59	14052	0.518	ppbV #	86
19) methylene chloride	7.46	49	7977	0.516	ppbV	94
20) 3-chloropropene	7.61	41	7231	0.479	ppbV	97
21) carbon disulfide	7.79	76	22542	0.501	ppbV #	48
22) Freon 113	7.81	101	15381	0.516	ppbV	97
23) trans-1,2-dichloroethene	8.66	61	10879	0.496	ppbV	99
24) 1,1-dichloroethane	8.90	63	13191	0.473	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:39 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25)	MTBE	9.03	73	18927	0.477 ppbV #	94
26)	vinyl acetate	9.13	43	13570	0.490 ppbV	98
27)	2-butanone	9.45	43	15474	0.515 ppbV	98
28)	cis-1,2-dichloroethene	9.91	61	12006	0.536 ppbV	98
29)	Ethyl Acetate	10.24	61	3121	0.490 ppbV	89
30)	chloroform	10.26	83	20807	0.522 ppbV	99
31)	Tetrahydrofuran	10.80	42	9340	0.536 ppbV #	83
32)	1,2-dichloroethane	11.12	62	10645	0.516 ppbV	97
34)	hexane	10.16	57	15313	0.510 ppbV #	74
36)	1,1,1-trichloroethane	11.41	97	16673	0.521 ppbV	98
37)	benzene	11.93	78	26432	0.526 ppbV	98
38)	carbon tetrachloride	12.09	117	16364	0.516 ppbV	99
39)	cyclohexane	12.23	56	12286	0.503 ppbV	98
40)	dibromomethane	12.84	93	10858	0.463 ppbV	93
41)	1,2-dichloropropane	12.87	63	9954	0.524 ppbV	99
42)	bromodichloromethane	13.10	83	19423	0.519 ppbV	100
43)	1,4-dioxane	13.20	88	5691	0.507 ppbV #	72
44)	trichloroethene	13.14	130	12490	0.527 ppbV	98
45)	2,2,4-trimethylpentane	13.17	57	40309	0.513 ppbV	98
46)	heptane	13.47	43	14058	0.509 ppbV	100
47)	cis-1,3-dichloropropene	14.13	75	55269	0.519 ppbV	98
48)	4-methyl-2-pentanone	14.19	43	17900	0.497 ppbV #	94
49)	trans-1,3-dichloropropene	14.73	75	12999	0.508 ppbV	98
50)	1,1,2-trichloroethane	14.91	97	11430	0.528 ppbV	93
52)	toluene	15.19	91	33066	0.481 ppbV	100
54)	2-hexanone	15.47	43	16698	0.477 ppbV #	87
55)	dibromochloromethane	15.61	129	19114	0.492 ppbV	99
56)	1,2-dibromoethane	15.85	107	17865	0.490 ppbV	98
57)	tetrachloroethene	16.25	166	16448	0.506 ppbV	98
58)	1,1,1,2-tetrachloroethane	16.82	131	14108	0.502 ppbV	99
59)	chlorobenzene	16.84	112	28434	0.527 ppbV	99
60)	ethylbenzene	17.14	91	43257	0.512 ppbV	98
61)	m+p-xylene	17.28	91	66865	0.909 ppbV	99
62)	bromoform	17.36	173	19563	0.496 ppbV	99
63)	styrene	17.56	104	25887	0.524 ppbV	98
64)	1,1,2,2-tetrachloroethane	17.64	83	27328	0.523 ppbV	99
65)	o-xylene	17.64	91	34731	0.506 ppbV	98
66)	1,2,3-trichloropropane	17.75	75	20730	0.518 ppbV	100
68)	isopropylbenzene	18.09	105	46739	0.509 ppbV	99
69)	bromobenzene	18.17	77	24587	0.533 ppbV	95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:39 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	50167	0.530	ppbV	100
71) 1,3,5-trimethylbenzene	18.63	105	39769	0.519	ppbV	99
72) tert-butylbenzene	18.94	119	42442	0.508	ppbV	98
73) 1,2,4-trimethylbenzene	18.94	105	39556	0.527	ppbV	94
74) Benzyl Chloride	19.05	91	29880	0.458	ppbV	93
75) 1,3-dichlorobenzene	19.07	146	31248M3	0.536	ppbV	
76) 1,4-dichlorobenzene	19.12	146	31823	0.535	ppbV	96
77) sec-butylbenzene	19.14	105	59666	0.509	ppbV	96
78) p-isopropyltoluene	19.25	119	52221	0.504	ppbV	99
79) 1,2-dichlorobenzene	19.38	146	29462	0.530	ppbV	97
80) n-butylbenzene	19.57	91	48707	0.509	ppbV	96
81) 1,2,4-trichlorobenzene	20.81	180	23640	0.521	ppbV #	96
82) naphthalene	20.93	128	57817	0.529	ppbV	99
83) 1,2,3-trichlorobenzene	21.18	180	21882	0.520	ppbV #	94
84) hexachlorobutadiene	21.24	225	20019	0.521	ppbV #	83

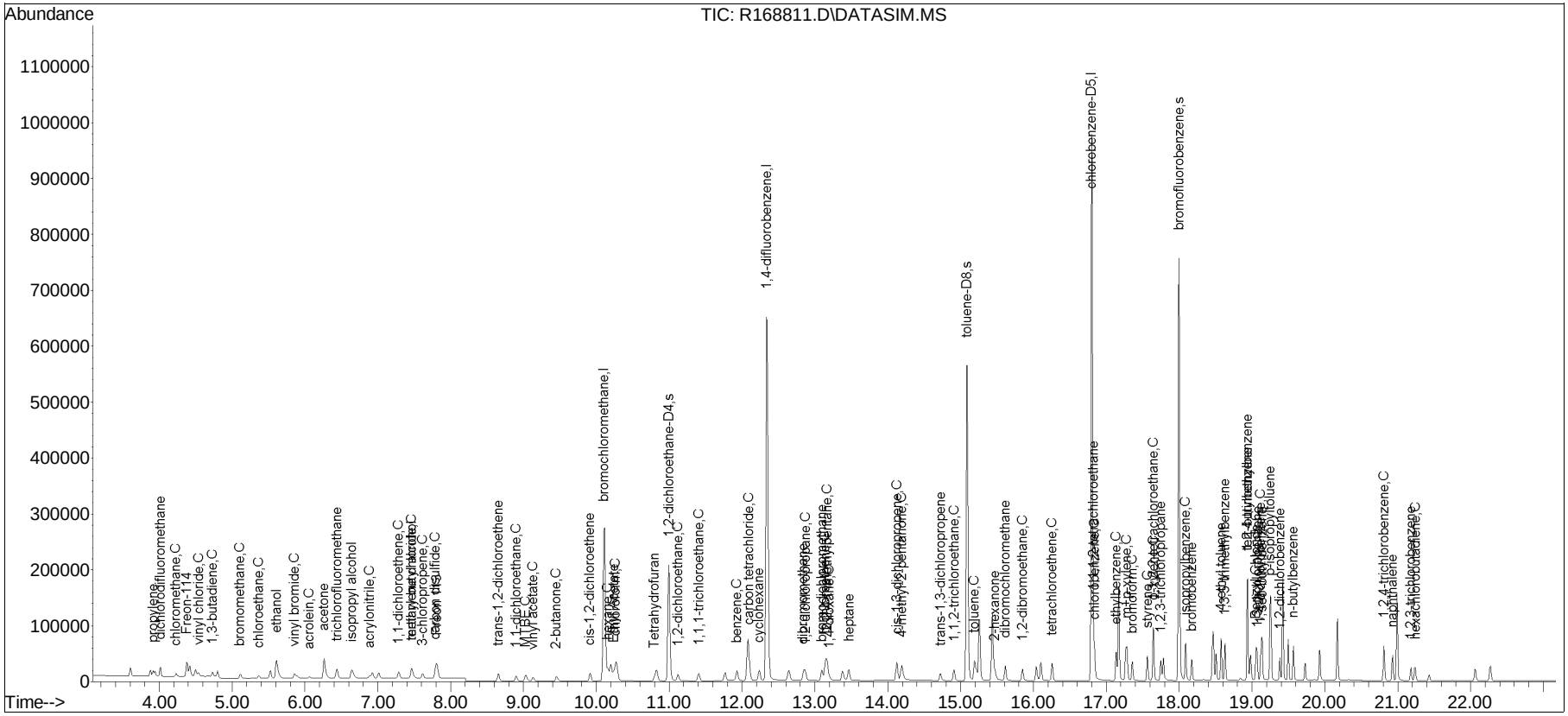
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168811.D
Acq On : 23 Oct 2019 2:57 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:39 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

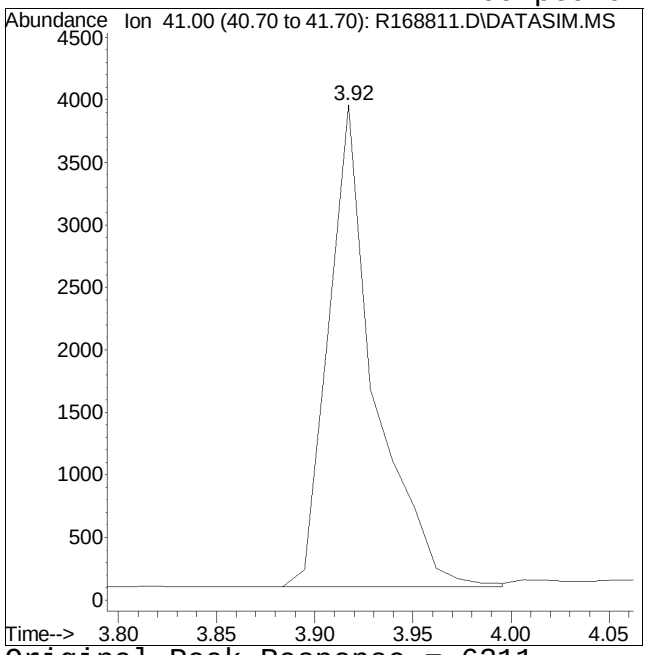


Manual Integration/Negative Proof Report

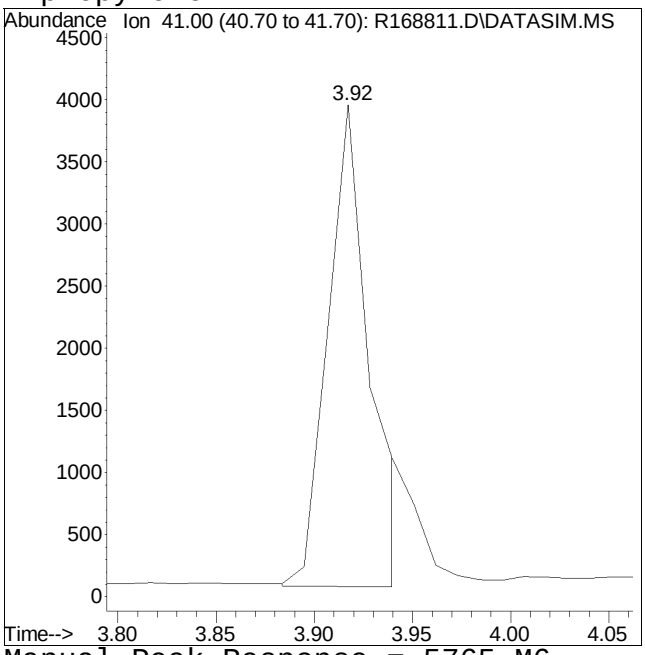
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 6311



Manual Peak Response = 5765 M6

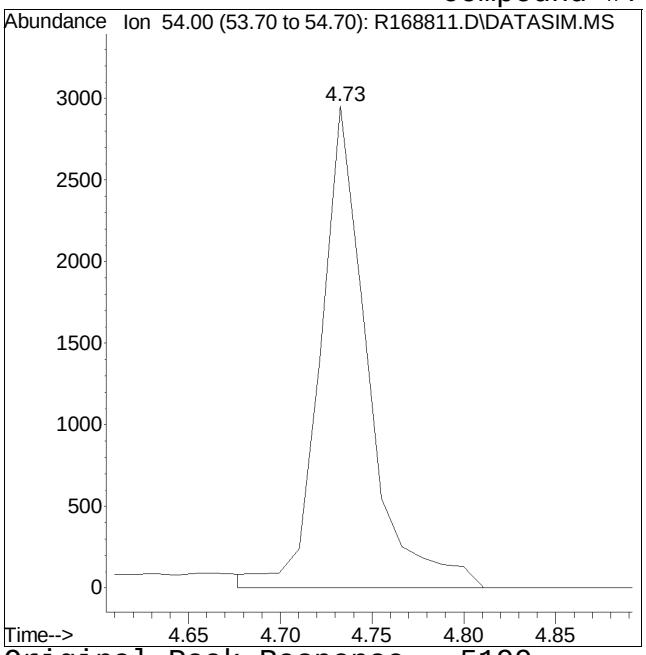
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

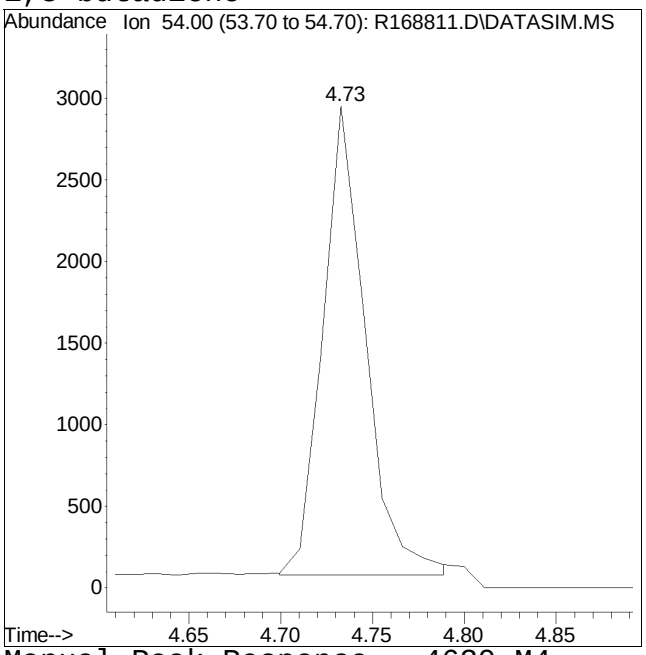
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 5199



Manual Peak Response = 4630 M4

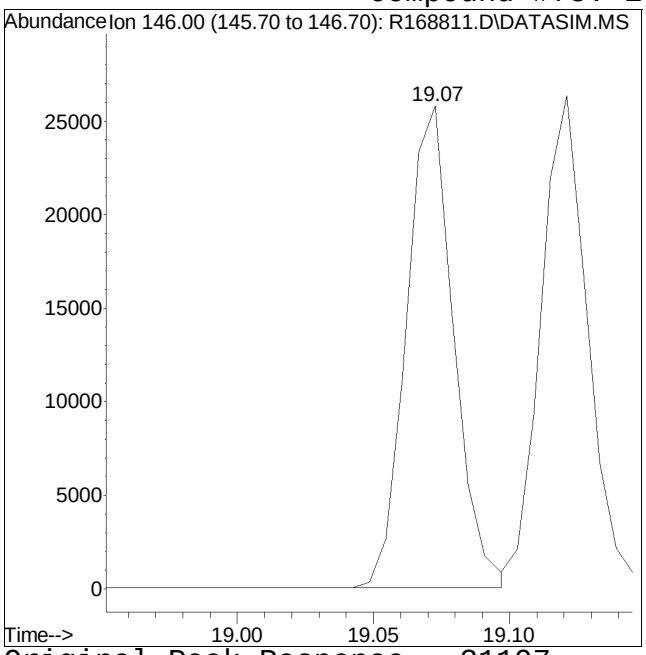
M4 = Poor automated baseline construction.

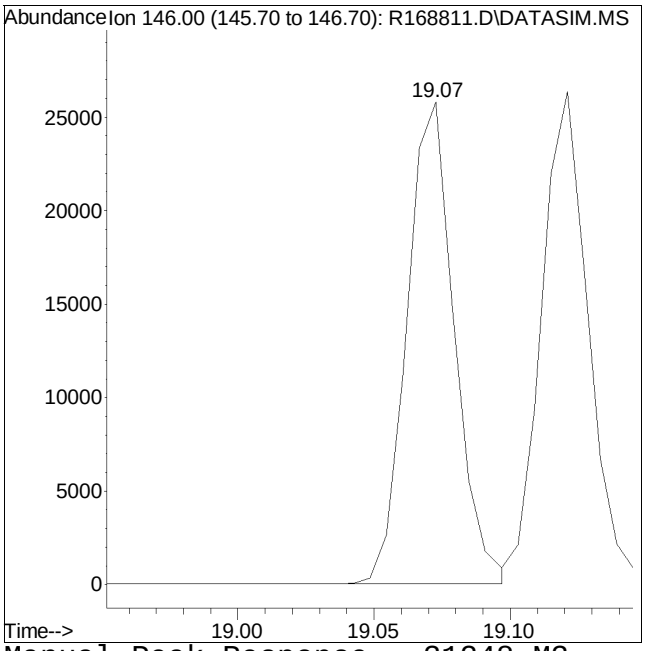
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168811.D
Date Inj'd : 10/23/2019 2:57 pm
Sample : ITO15-SIMSTD0.5

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 31197 Manual Peak Response = 31248 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.10	49	307897	10.000	ppbV	0.00
Standard Area = 311997			Recovery = 98.69%			
33) 1,4-difluorobenzene	12.34	114	790018	10.000	ppbV	0.00
Standard Area = 795323			Recovery = 99.33%			
51) chlorobenzene-D5	16.80	54	129167	10.000	ppbV	0.00
Standard Area = 128792			Recovery = 100.29%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.00	65	177877	10.009	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.09%			
53) toluene-D8	15.09	98	546523	10.121	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.21%			
67) bromofluorobenzene	18.00	95	366086	10.076	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.76%			
Target Compounds						Qvalue
2) propylene	3.92	41	10812M6	1.011	ppbV	
3) dichlorodifluoromethane	4.02	85	33110	0.981	ppbV	99
4) chloromethane	4.23	50	11385	1.009	ppbV	97
5) Freon-114	4.39	85	39504	1.027	ppbV	94
6) vinyl chloride	4.54	62	13869	1.020	ppbV	98
7) 1,3-butadiene	4.73	54	9000M4	1.005	ppbV	
8) bromomethane	5.12	94	14883	0.998	ppbV	99
9) chloroethane	5.37	64	6765	0.994	ppbV	97
10) ethanol	5.60	31	52958	6.741	ppbV	100
11) vinyl bromide	5.86	106	15165	1.000	ppbV	99
12) acrolein	6.06	56	5136	0.967	ppbV	97
13) acetone	6.25	43	101688	4.919	ppbV	98
14) trichlorofluoromethane	6.44	101	35224	1.030	ppbV	99
15) isopropyl alcohol	6.64	45	53181	2.342	ppbV	99
16) acrylonitrile	6.88	53	9552	1.011	ppbV	97
17) 1,1-dichloroethene	7.29	61	22034	1.019	ppbV	97
18) tertiary butyl alcohol	7.45	59	27009	1.008	ppbV	93
19) methylene chloride	7.46	49	15193	0.996	ppbV	92
20) 3-chloropropene	7.61	41	14544	0.976	ppbV	96
21) carbon disulfide	7.79	76	42786	0.962	ppbV #	75
22) Freon 113	7.82	101	29849	1.014	ppbV	100
23) trans-1,2-dichloroethene	8.65	61	21195	0.979	ppbV	98
24) 1,1-dichloroethane	8.90	63	29641	1.076	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.02	73	41032	1.048	ppbV	98
26) vinyl acetate	9.13	43	27717	1.013	ppbV	99
27) 2-butanone	9.44	43	29802	1.005	ppbV	98
28) cis-1,2-dichloroethene	9.91	61	23539	1.065	ppbV	97
29) Ethyl Acetate	10.23	61	6297	1.001	ppbV	99
30) chloroform	10.27	83	40618	1.032	ppbV	96
31) Tetrahydrofuran	10.78	42	18143	1.055	ppbV #	87
32) 1,2-dichloroethane	11.12	62	20950	1.029	ppbV	98
34) hexane	10.17	57	29919	1.004	ppbV #	80
36) 1,1,1-trichloroethane	11.41	97	32420	1.021	ppbV	97
37) benzene	11.93	78	51504	1.032	ppbV	99
38) carbon tetrachloride	12.11	117	31505	1.000	ppbV #	95
39) cyclohexane	12.23	56	24266	1.000	ppbV	98
40) dibromomethane	12.84	93	21078	0.906	ppbV	95
41) 1,2-dichloropropane	12.86	63	19514	1.036	ppbV	98
42) bromodichloromethane	13.10	83	37940	1.022	ppbV	99
43) 1,4-dioxane	13.19	88	10997	0.988	ppbV	82
44) trichloroethene	13.14	130	24100	1.024	ppbV	99
45) 2,2,4-trimethylpentane	13.17	57	77329	0.993	ppbV	99
46) heptane	13.47	43	27350	0.998	ppbV	100
47) cis-1,3-dichloropropene	14.13	75	108211	1.025	ppbV	99
48) 4-methyl-2-pentanone	14.18	43	35384	0.990	ppbV #	91
49) trans-1,3-dichloropropene	14.72	75	25985	1.024	ppbV	94
50) 1,1,2-trichloroethane	14.91	97	22285	1.037	ppbV	92
52) toluene	15.19	91	63827	0.981	ppbV	100
54) 2-hexanone	15.46	43	33444	1.009	ppbV #	85
55) dibromochloromethane	15.61	129	38526	1.048	ppbV	99
56) 1,2-dibromoethane	15.85	107	35985	1.042	ppbV	98
57) tetrachloroethene	16.25	166	31966	1.038	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.82	131	26819	1.009	ppbV	97
59) chlorobenzene	16.84	112	52838	1.035	ppbV	99
60) ethylbenzene	17.14	91	81520	1.018	ppbV	99
61) m+p-xylene	17.28	91	126531	1.816	ppbV	100
62) bromoform	17.36	173	38087	1.020	ppbV	99
63) styrene	17.56	104	48659	1.040	ppbV	98
64) 1,1,2,2-tetrachloroethane	17.64	83	52119	1.053	ppbV	100
65) o-xylene	17.64	91	65020	1.000	ppbV	99
66) 1,2,3-trichloropropane	17.74	75	38977	1.029	ppbV	98
68) isopropylbenzene	18.09	105	88496	1.018	ppbV	99
69) bromobenzene	18.17	77	45893	1.051	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	96717	1.078	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	75459	1.039	ppbV	98
72) tert-butylbenzene	18.93	119	80618	1.020	ppbV	100
73) 1,2,4-trimethylbenzene	18.93	105	74881	1.054	ppbV	98
74) Benzyl Chloride	19.05	91	58755	0.950	ppbV	92
75) 1,3-dichlorobenzene	19.07	146	58830M3	1.066	ppbV	
76) 1,4-dichlorobenzene	19.12	146	60098M3	1.066	ppbV	
77) sec-butylbenzene	19.13	105	113250	1.021	ppbV	99
78) p-isopropyltoluene	19.25	119	99838	1.017	ppbV	98
79) 1,2-dichlorobenzene	19.38	146	56196	1.068	ppbV	97
80) n-butylbenzene	19.57	91	93898	1.036	ppbV	97
81) 1,2,4-trichlorobenzene	20.81	180	47363	1.103	ppbV	97
82) naphthalene	20.93	128	107464	1.039	ppbV	99
83) 1,2,3-trichlorobenzene	21.18	180	44971	1.128	ppbV #	96
84) hexachlorobutadiene	21.24	225	39754	1.093	ppbV #	83

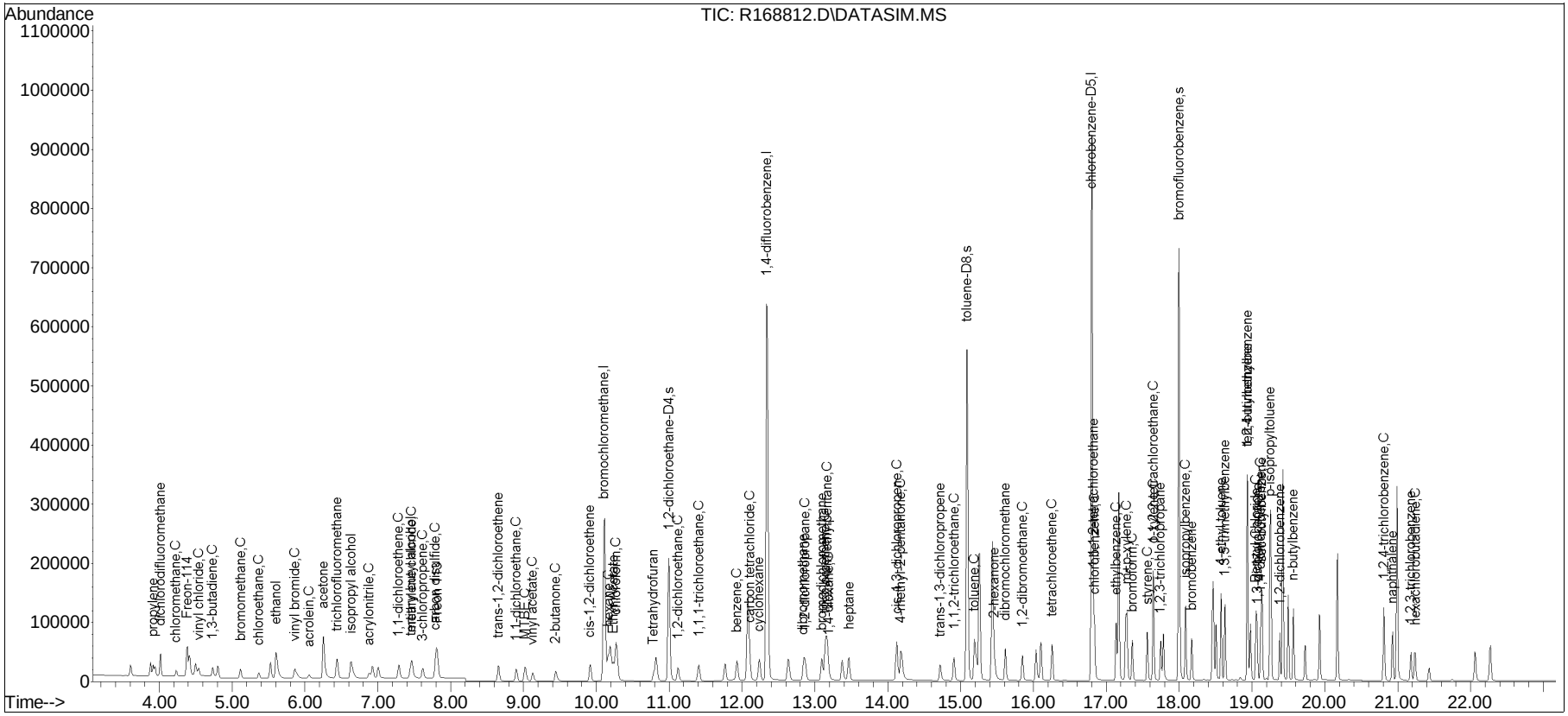
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168812.D
Acq On : 23 Oct 2019 3:31 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG1300076
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 23 17:59:45 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

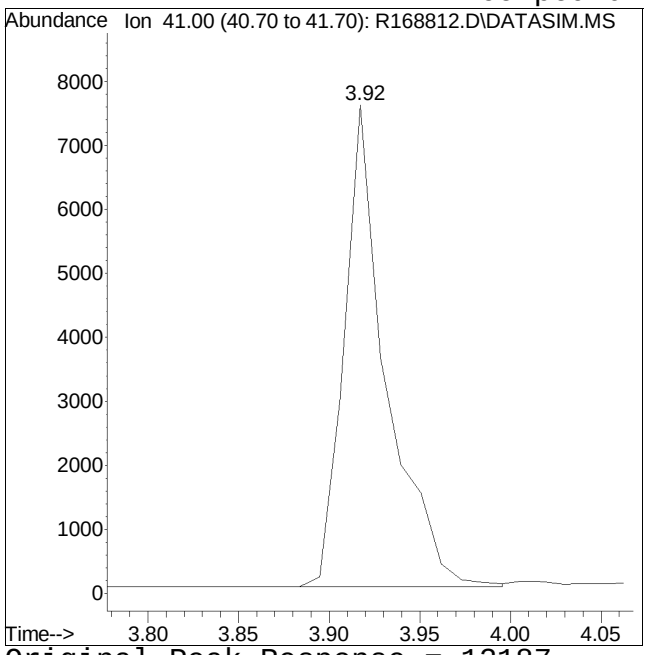


Manual Integration/Negative Proof Report

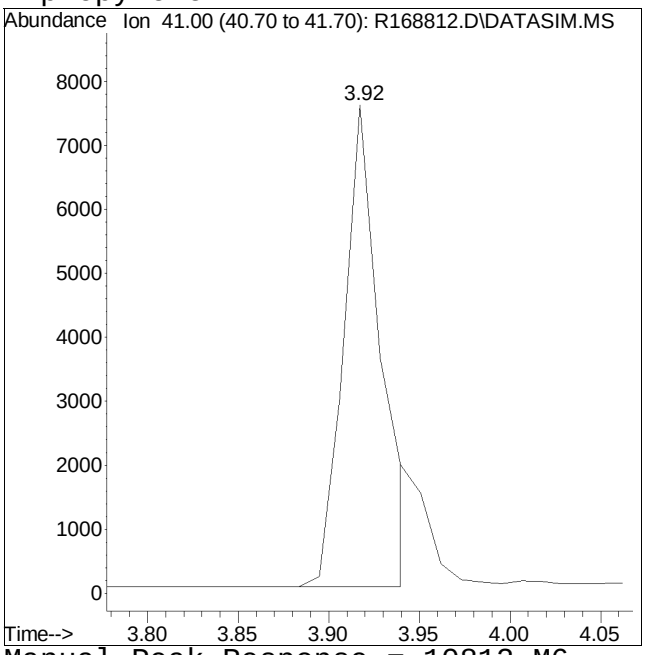
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 12187



Manual Peak Response = 10812 M6

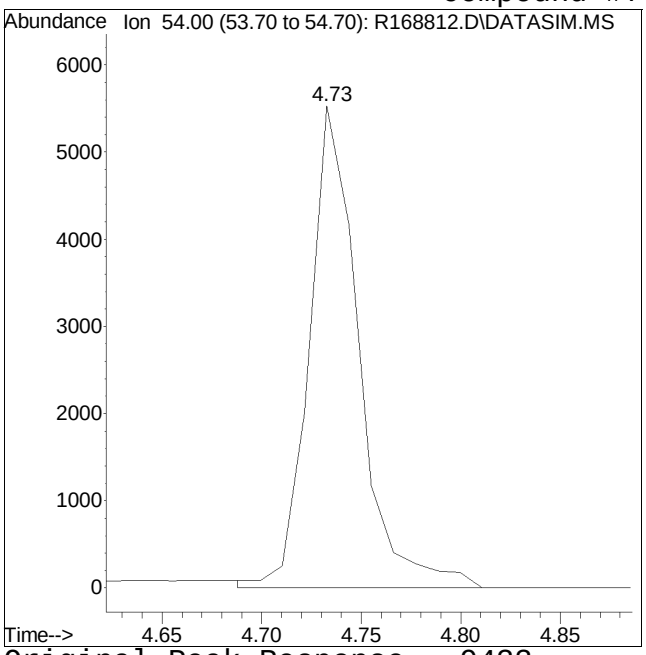
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

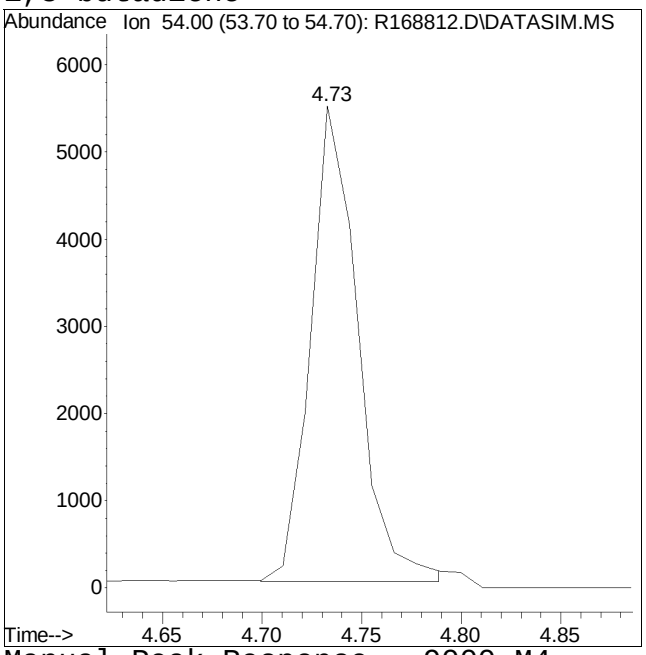
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #7: 1,3-butadiene



Original Peak Response = 9433



Manual Peak Response = 9000 M4

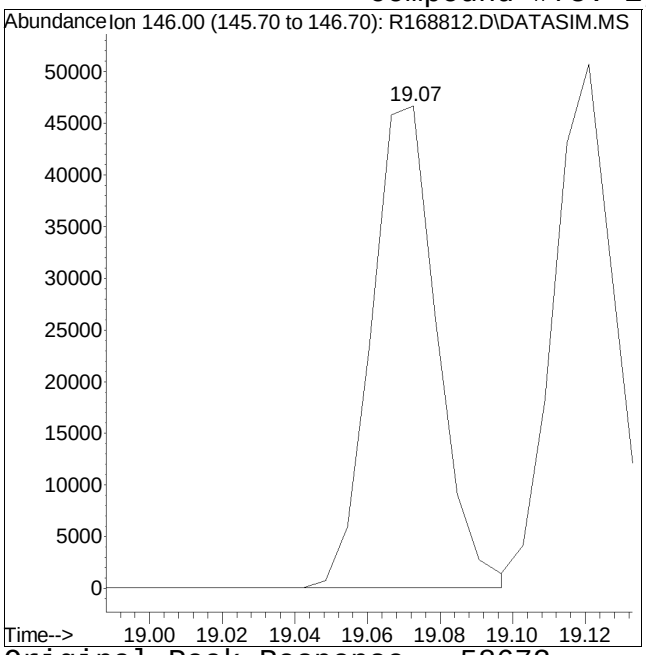
M4 = Poor automated baseline construction.

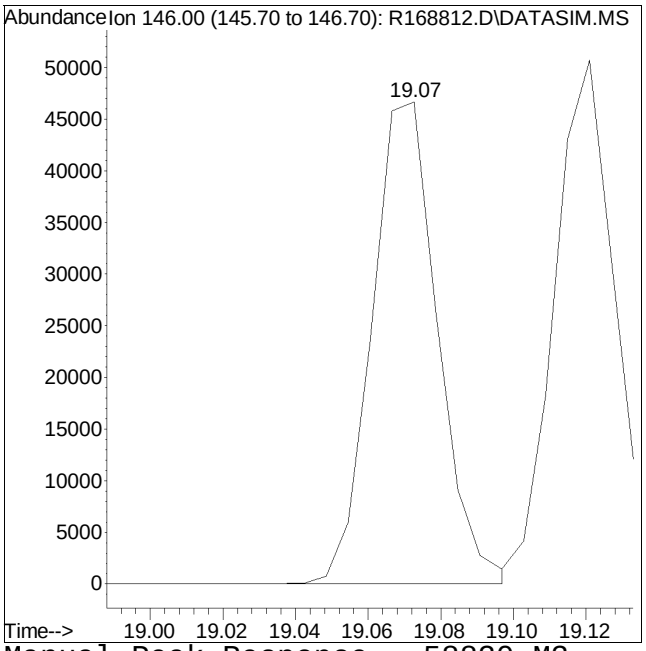
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 58672 Manual Peak Response = 58830 M3

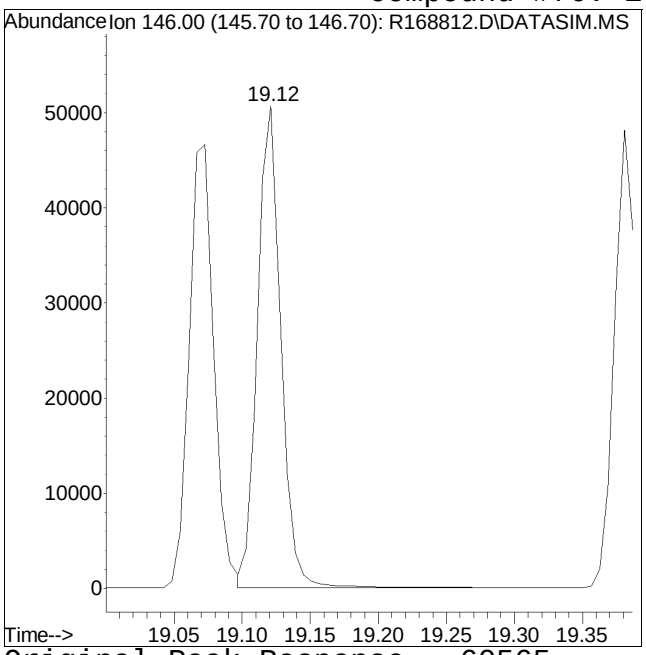
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

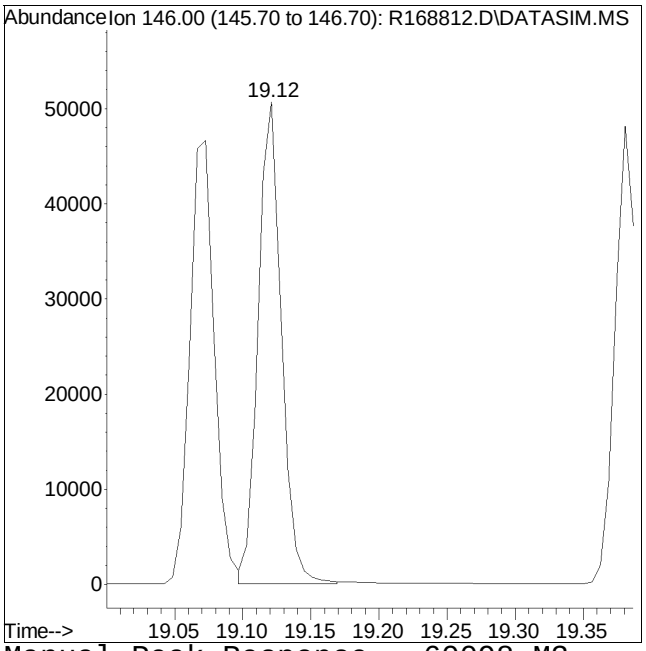
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168812.D
Date Inj'd : 10/23/2019 3:31 pm
Sample : ITO15-SIMSTD1.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #76: 1,4-dichlorobenzene





Original Peak Response = 60565 Manual Peak Response = 60098 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:51 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	311997	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 100.00%	
33) 1,4-difluorobenzene	12.34	114	795323	10.000 ppbV	0.00
Standard Area = 795323			Recovery	= 100.00%	
51) chlorobenzene-D5	16.80	54	128792	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 100.00%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	178082	9.953 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.53%	
53) toluene-D8	15.09	98	546563	10.151 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.51%	
67) bromofluorobenzene	17.99	95	369663	10.204 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.04%	
Target Compounds					Qvalue
2) propylene	3.91	41	48092M6	4.436 ppbV	
3) dichlorodifluoromethane	4.02	85	167481	4.895 ppbV	100
4) chloromethane	4.23	50	53985	4.724 ppbV	100
5) Freon-114	4.38	85	190301	4.883 ppbV	100
6) vinyl chloride	4.53	62	66574	4.831 ppbV	100
7) 1,3-butadiene	4.73	54	43413	4.786 ppbV	100
8) bromomethane	5.11	94	70810	4.684 ppbV	100
9) chloroethane	5.36	64	31721	4.599 ppbV	100
10) ethanol	5.57	31	185813	23.342 ppbV	100
11) vinyl bromide	5.85	106	72454	4.717 ppbV	100
12) acrolein	6.04	56	24503	4.551 ppbV	100
13) acetone	6.23	43	510398	24.364 ppbV	100
14) trichlorofluoromethane	6.44	101	171340	4.943 ppbV	100
15) isopropyl alcohol	6.60	45	269573	11.718 ppbV	100
16) acrylonitrile	6.87	53	42757M4	4.465 ppbV	
17) 1,1-dichloroethene	7.29	61	105098	4.798 ppbV	100
18) tertiary butyl alcohol	7.41	59	126979	4.677 ppbV	100
19) methylene chloride	7.46	49	72628	4.698 ppbV	100
20) 3-chloropropene	7.61	41	70092	4.640 ppbV	100
21) carbon disulfide	7.79	76	207189	4.599 ppbV	100
22) Freon 113	7.81	101	145201	4.868 ppbV	100
23) trans-1,2-dichloroethene	8.65	61	116666	5.319 ppbV	100
24) 1,1-dichloroethane	8.90	63	143753	5.151 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:51 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.00	73	198901	5.011	ppbV	100
26) vinyl acetate	9.12	43	131043	4.727	ppbV	100
27) 2-butanone	9.41	43	143692	4.780	ppbV	100
28) cis-1,2-dichloroethene	9.91	61	113250	5.054	ppbV	100
29) Ethyl Acetate	10.21	61	31692	4.973	ppbV	100
30) chloroform	10.26	83	196850	4.936	ppbV	100
31) Tetrahydrofuran	10.74	42	83556M6	4.794	ppbV	
32) 1,2-dichloroethane	11.12	62	100618	4.879	ppbV	100
34) hexane	10.16	57	144114	4.804	ppbV	100
36) 1,1,1-trichloroethane	11.41	97	157492	4.928	ppbV	100
37) benzene	11.93	78	250318	4.983	ppbV	100
38) carbon tetrachloride	12.09	117	157285	4.961	ppbV	100
39) cyclohexane	12.23	56	118062	4.835	ppbV	100
40) dibromomethane	12.84	93	100073	4.271	ppbV	100
41) 1,2-dichloropropane	12.86	63	94182	4.965	ppbV	100
42) bromodichloromethane	13.10	83	186783	4.999	ppbV	100
43) 1,4-dioxane	13.15	88	57125	5.099	ppbV	100
44) trichloroethene	13.14	130	118892	5.017	ppbV	100
45) 2,2,4-trimethylpentane	13.17	57	374549	4.776	ppbV	100
46) heptane	13.47	43	134705	4.881	ppbV	100
47) cis-1,3-dichloropropene	14.13	75	550585	5.179	ppbV	100
48) 4-methyl-2-pentanone	14.16	43	182177	5.062	ppbV	100
49) trans-1,3-dichloropropene	14.72	75	133277	5.216	ppbV	100
50) 1,1,2-trichloroethane	14.90	97	107541	4.971	ppbV	100
52) toluene	15.19	91	306065	4.718	ppbV	100
54) 2-hexanone	15.45	43	172630	5.222	ppbV	100
55) dibromochloromethane	15.61	129	191531	5.226	ppbV	100
56) 1,2-dibromoethane	15.84	107	179046	5.202	ppbV	100
57) tetrachloroethene	16.25	166	155509	5.067	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.82	131	130080	4.907	ppbV	100
59) chlorobenzene	16.84	112	257529	5.059	ppbV	100
60) ethylbenzene	17.13	91	394648	4.945	ppbV	100
61) m+p-xylene	17.28	91	604308	8.697	ppbV	100
62) bromoform	17.36	173	197381	5.304	ppbV	100
63) styrene	17.56	104	244743	5.247	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.64	83	255908	5.186	ppbV	100
65) o-xylene	17.64	91	315237	4.862	ppbV	100
66) 1,2,3-trichloropropane	17.74	75	188400	4.990	ppbV	100
68) isopropylbenzene	18.09	105	421793	4.868	ppbV	100
69) bromobenzene	18.17	77	220917	5.073	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:51 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	481670	5.386	ppbV	100
71) 1,3,5-trimethylbenzene	18.62	105	379833	5.246	ppbV	100
72) tert-butylbenzene	18.93	119	397432	5.043	ppbV	100
73) 1,2,4-trimethylbenzene	18.93	105	380619	5.374	ppbV	100
74) Benzyl Chloride	19.05	91	325019	5.271	ppbV	100
75) 1,3-dichlorobenzene	19.07	146	302239M3	5.493	ppbV	
76) 1,4-dichlorobenzene	19.12	146	307705M3	5.474	ppbV	
77) sec-butylbenzene	19.13	105	559142	5.054	ppbV	100
78) p-isopropyltoluene	19.25	119	505988	5.168	ppbV	100
79) 1,2-dichlorobenzene	19.38	146	289753	5.523	ppbV	100
80) n-butylbenzene	19.57	91	473160	5.238	ppbV	100
81) 1,2,4-trichlorobenzene	20.81	180	274539	6.413	ppbV	100
82) naphthalene	20.93	128	586694	5.689	ppbV	100
83) 1,2,3-trichlorobenzene	21.18	180	252010	6.339	ppbV	100
84) hexachlorobutadiene	21.23	225	225827	6.226	ppbV	100

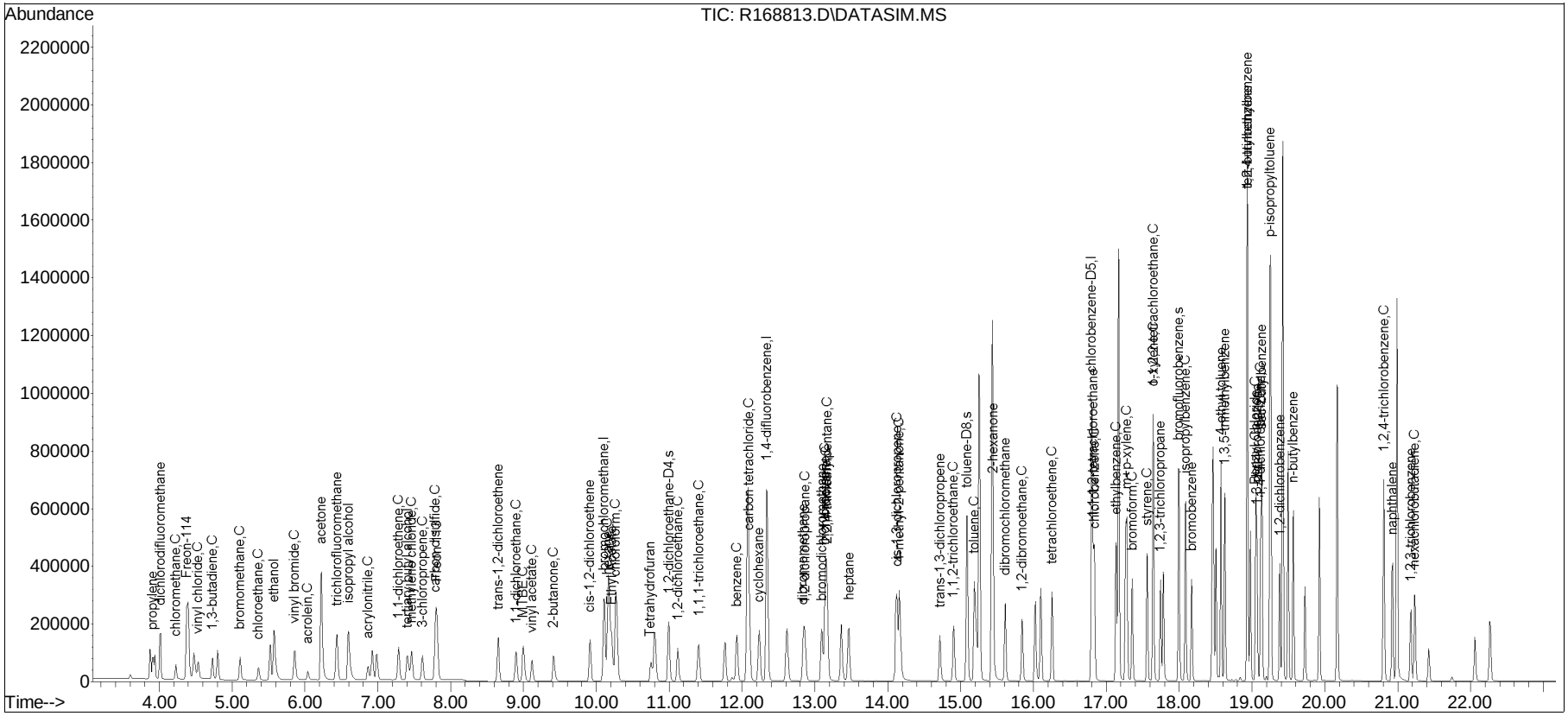
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168813.D
Acq On : 23 Oct 2019 4:02 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:51 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

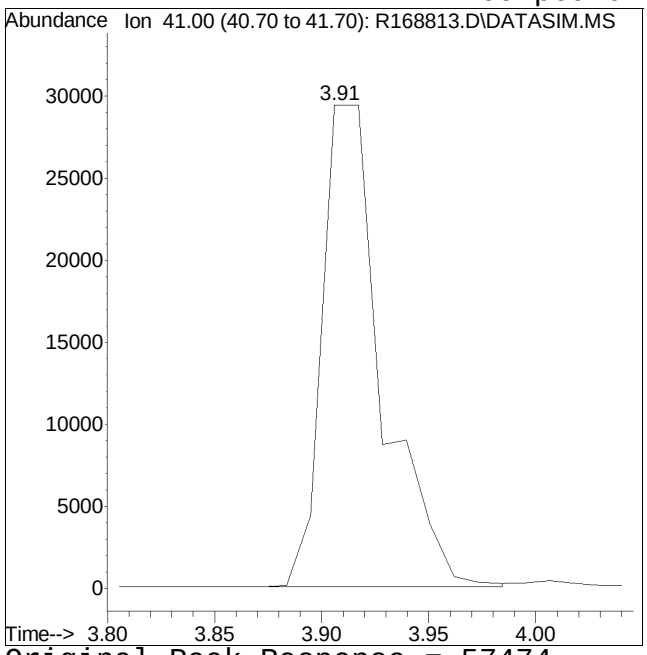


Manual Integration/Negative Proof Report

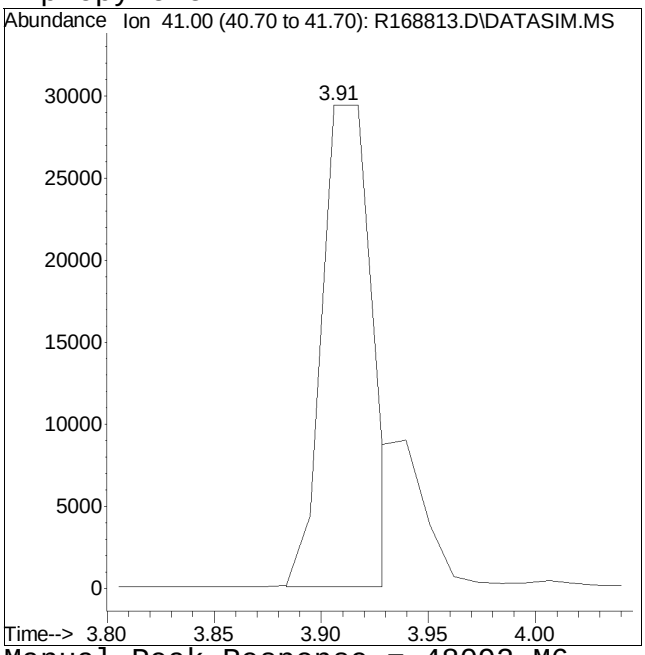
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 57474



Manual Peak Response = 48092 M6

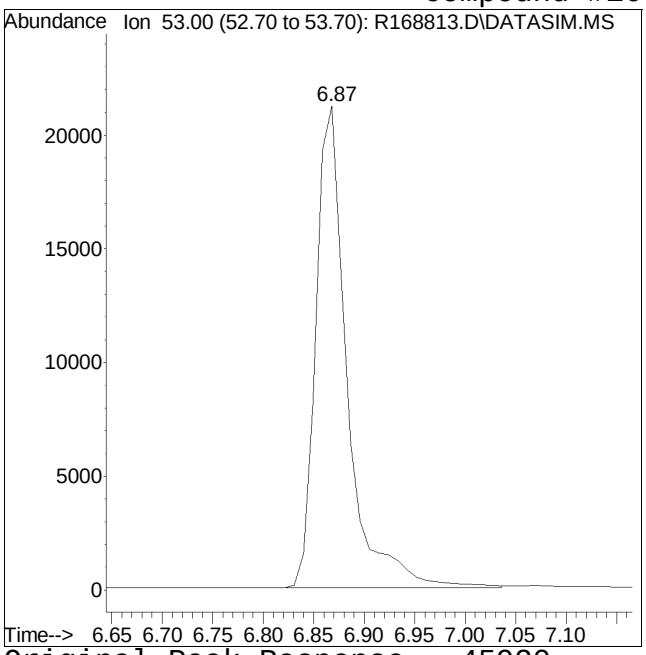
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

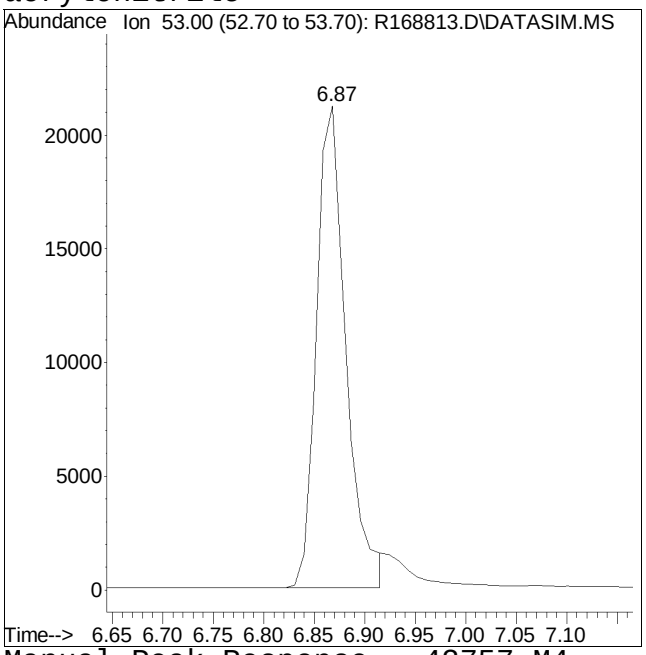
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #16: acrylonitrile



Original Peak Response = 45920



Manual Peak Response = 42757 M4

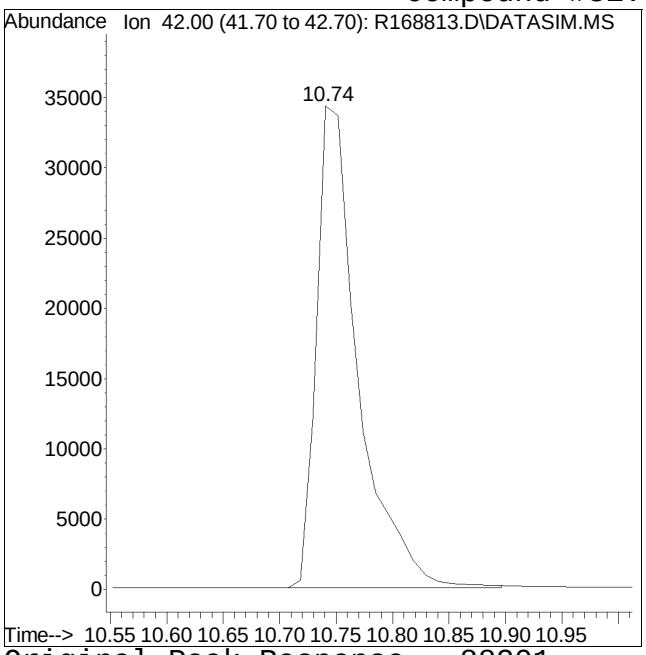
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

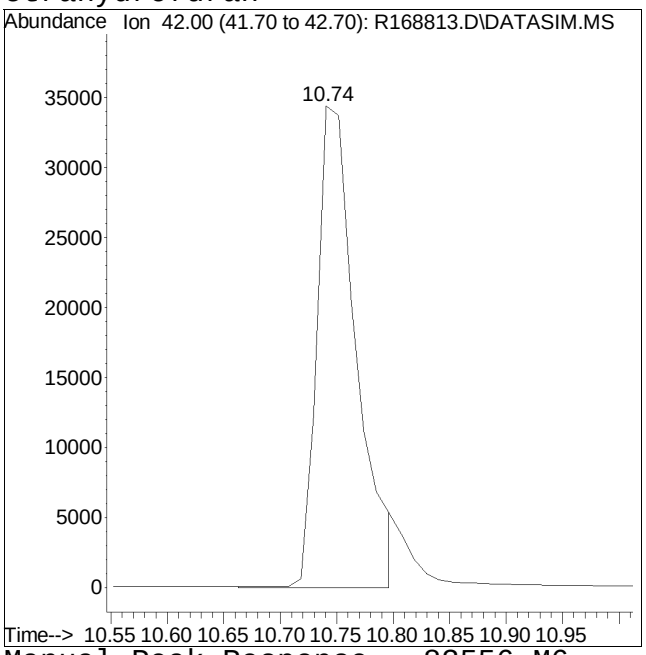
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 88201



Manual Peak Response = 83556 M6

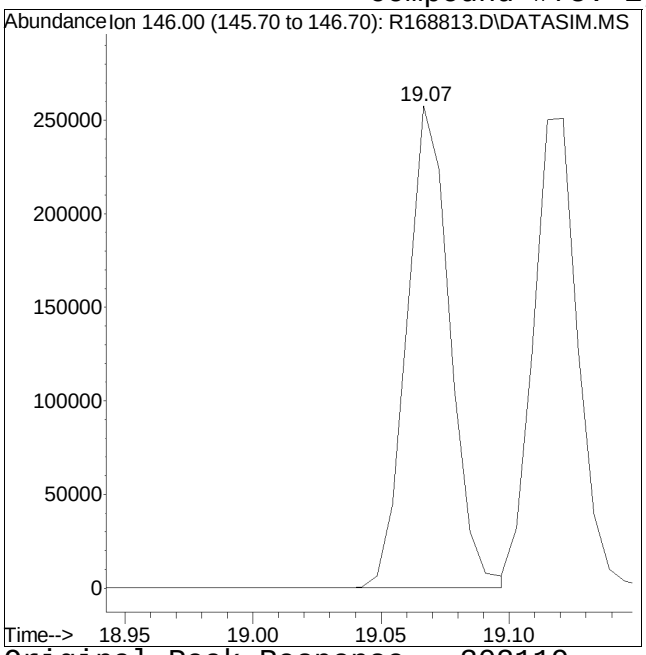
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

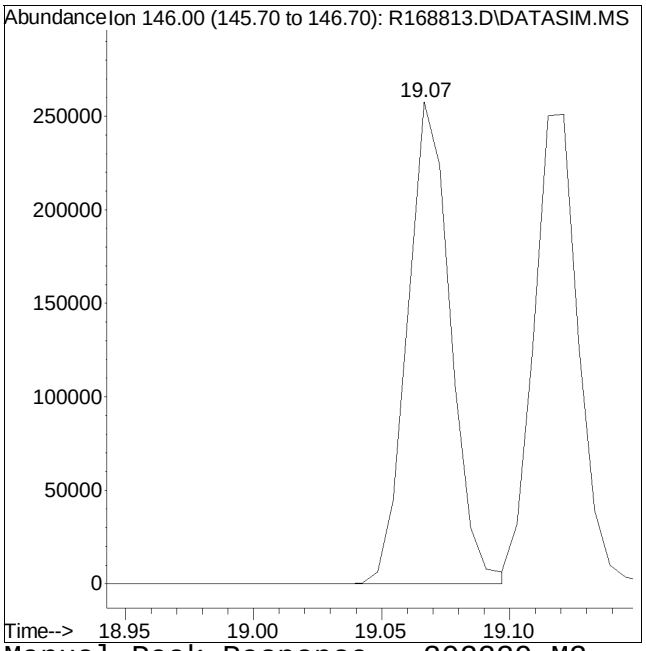
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 302119 Manual Peak Response = 302239 M3

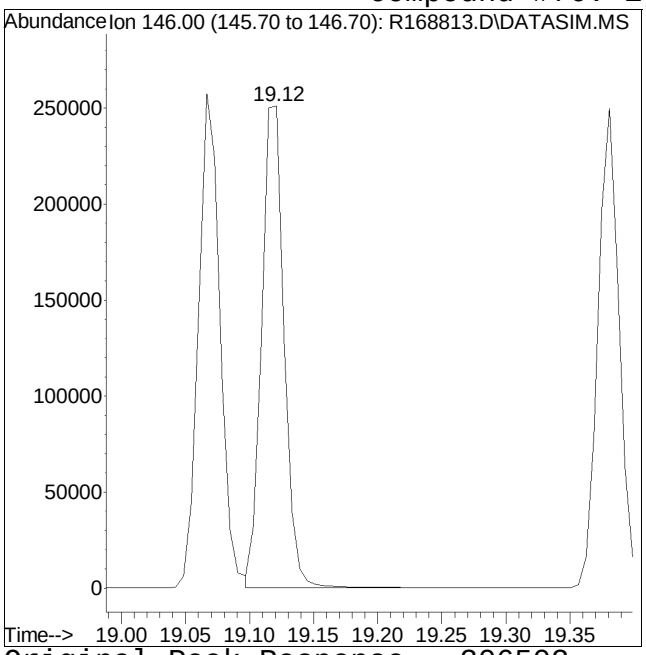
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

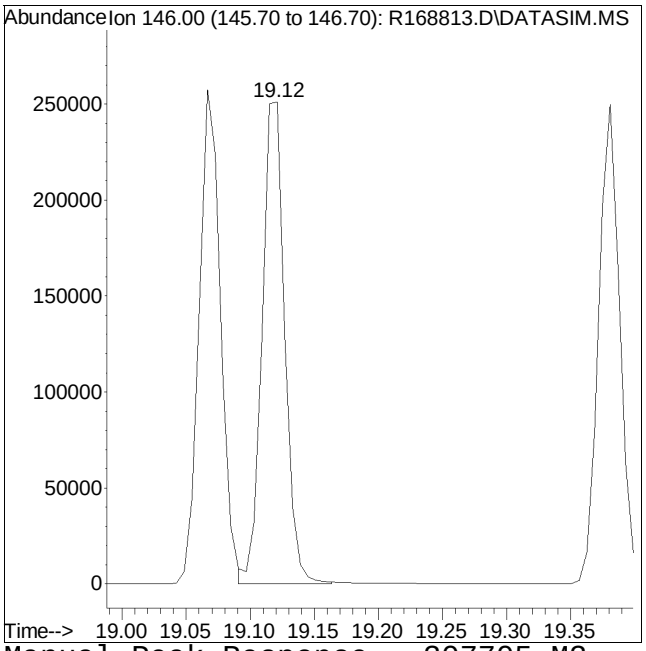
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168813.D
Date Inj'd : 10/23/2019 4:02 pm
Sample : ITO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #76: 1,4-dichlorobenzene





Original Peak Response = 306502 Manual Peak Response = 307705 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.10	49	309414	10.000	ppbV	0.00
Standard Area = 311997			Recovery = 99.17%			
33) 1,4-difluorobenzene	12.34	114	784714	10.000	ppbV	0.00
Standard Area = 795323			Recovery = 98.67%			
51) chlorobenzene-D5	16.80	54	129738	10.000	ppbV	0.00
Standard Area = 128792			Recovery = 100.73%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.00	65	178281	10.099	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.99%			
53) toluene-D8	15.09	98	543350	10.018	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.18%			
67) bromofluorobenzene	17.99	95	368347	10.094	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.94%			
Target Compounds						Qvalue
2) propylene	3.92	41	103335M6	9.612	ppbV	
3) dichlorodifluoromethane	4.02	85	313463	9.238	ppbV	98
4) chloromethane	4.23	50	107933	9.523	ppbV	98
5) Freon-114	4.39	85	381013	9.859	ppbV	93
6) vinyl chloride	4.54	62	133392	9.761	ppbV	97
7) 1,3-butadiene	4.73	54	85208	9.472	ppbV	92
8) bromomethane	5.11	94	141149	9.415	ppbV	100
9) chloroethane	5.37	64	63190	9.237	ppbV	94
10) ethanol	5.57	31	348176	44.104	ppbV	100
11) vinyl bromide	5.85	106	143373	9.412	ppbV	99
12) acrolein	6.04	56	48795	9.139	ppbV	99
13) acetone	6.22	43	1002864	48.271	ppbV	95
14) trichlorofluoromethane	6.44	101	336673	9.794	ppbV	100
15) isopropyl alcohol	6.59	45	526074	23.058	ppbV	99
16) acrylonitrile	6.87	53	85841M6	9.039	ppbV	
17) 1,1-dichloroethene	7.29	61	207376	9.545	ppbV	98
18) tertiary butyl alcohol	7.40	59	255446	9.487	ppbV	99
19) methylene chloride	7.46	49	141683	9.242	ppbV	95
20) 3-chloropropene	7.61	41	139752	9.328	ppbV	99
21) carbon disulfide	7.79	76	410527	9.189	ppbV	98
22) Freon 113	7.81	101	287182	9.709	ppbV	99
23) trans-1,2-dichloroethene	8.65	61	197525	9.081	ppbV	100
24) 1,1-dichloroethane	8.90	63	243857	8.811	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.00	73	385692	9.799	ppbV		99
26) vinyl acetate	9.12	43	282747	10.284	ppbV		100
27) 2-butanone	9.41	43	293165	9.834	ppbV		98
28) cis-1,2-dichloroethene	9.91	61	223566	10.061	ppbV		98
29) Ethyl Acetate	10.21	61	64441	10.196	ppbV		95
30) chloroform	10.27	83	385903	9.756	ppbV		96
31) Tetrahydrofuran	10.74	42	164691M4	9.527	ppbV		
32) 1,2-dichloroethane	11.12	62	198870	9.723	ppbV		99
34) hexane	10.16	57	281462	9.510	ppbV		98
36) 1,1,1-trichloroethane	11.41	97	305563	9.691	ppbV		99
37) benzene	11.93	78	485558	9.797	ppbV		99
38) carbon tetrachloride	12.11	117	311635	9.962	ppbV	#	94
39) cyclohexane	12.23	56	230744	9.577	ppbV		99
40) dibromomethane	12.84	93	196925	8.519	ppbV		100
41) 1,2-dichloropropane	12.86	63	184307	9.847	ppbV		100
42) bromodichloromethane	13.10	83	365668	9.920	ppbV		100
43) 1,4-dioxane	13.15	88	114805	10.385	ppbV		91
44) trichloroethene	13.14	130	230379	9.854	ppbV		99
45) 2,2,4-trimethylpentane	13.17	57	740840	9.574	ppbV		100
46) heptane	13.47	43	259195	9.519	ppbV		100
47) cis-1,3-dichloropropene	14.13	75	1103397	10.520	ppbV		100
48) 4-methyl-2-pentanone	14.16	43	355682	10.017	ppbV	#	94
49) trans-1,3-dichloropropene	14.72	75	268832	10.664	ppbV		99
50) 1,1,2-trichloroethane	14.90	97	214350	10.043	ppbV		99
52) toluene	15.19	91	597619	9.146	ppbV		100
54) 2-hexanone	15.44	43	341146	10.244	ppbV	#	89
55) dibromochloromethane	15.61	129	383539	10.388	ppbV		100
56) 1,2-dibromoethane	15.84	107	350976	10.122	ppbV		100
57) tetrachloroethene	16.25	166	310410	10.040	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.82	131	260378	9.751	ppbV		100
59) chlorobenzene	16.84	112	509168	9.929	ppbV		100
60) ethylbenzene	17.13	91	769802	9.575	ppbV		100
61) m+p-xylene	17.28	91	1194414	17.064	ppbV		99
62) bromoform	17.36	173	402210	10.729	ppbV		100
63) styrene	17.56	104	489277	10.413	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.64	83	507500	10.209	ppbV		100
65) o-xylene	17.64	91	615494	9.423	ppbV		99
66) 1,2,3-trichloropropane	17.74	75	369291	9.710	ppbV		100
68) isopropylbenzene	18.09	105	832694	9.541	ppbV		100
69) bromobenzene	18.17	77	435630	9.931	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	939080	10.424	ppbV	99
71) 1,3,5-trimethylbenzene	18.62	105	743261	10.190	ppbV	100
72) tert-butylbenzene	18.93	119	775711	9.771	ppbV	100
73) 1,2,4-trimethylbenzene	18.93	105	750524	10.519	ppbV	98
74) Benzyl Chloride	19.05	91	680280	10.952	ppbV	87
75) 1,3-dichlorobenzene	19.07	146	598057M3	10.791	ppbV	
76) 1,4-dichlorobenzene	19.12	146	610624	10.784	ppbV	99
77) sec-butylbenzene	19.13	105	1090929	9.789	ppbV	99
78) p-isopropyltoluene	19.25	119	978089	9.918	ppbV	100
79) 1,2-dichlorobenzene	19.38	146	575506	10.889	ppbV	99
80) n-butylbenzene	19.57	91	934123	10.265	ppbV	99
81) 1,2,4-trichlorobenzene	20.81	180	590274	13.689	ppbV	100
82) naphthalene	20.93	128	1229014	11.830	ppbV	99
83) 1,2,3-trichlorobenzene	21.18	180	549639	13.724	ppbV	100
84) hexachlorobutadiene	21.23	225	478351	13.092	ppbV	100

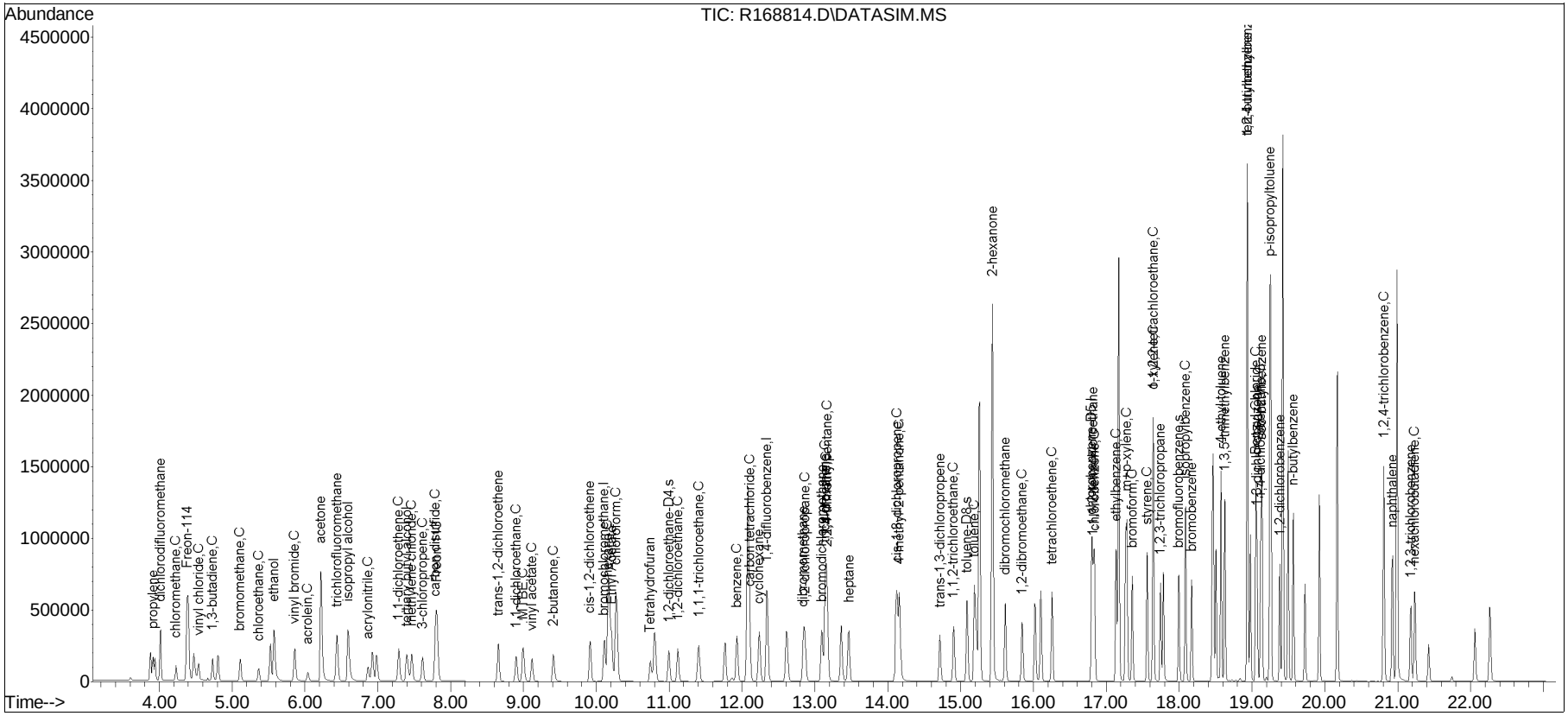
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168814.D
Acq On : 23 Oct 2019 4:36 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG1300076
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 23 17:59:57 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

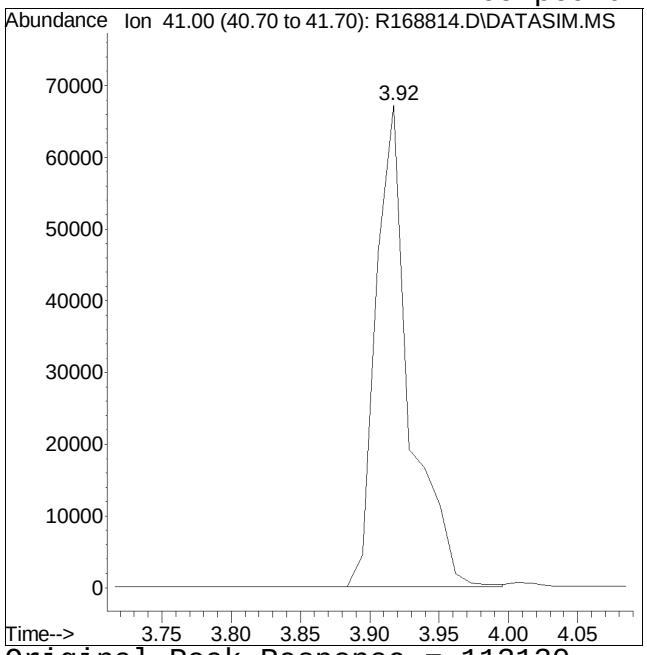


Manual Integration/Negative Proof Report

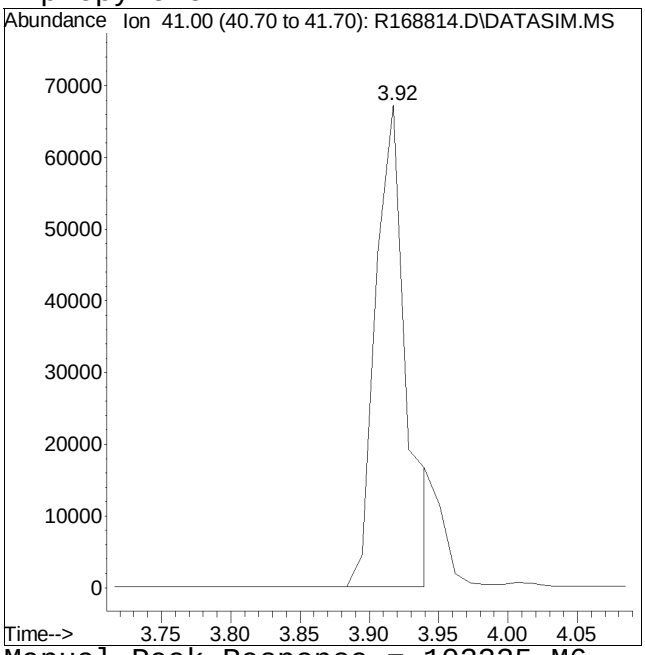
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #2: propylene



Original Peak Response = 113130



Manual Peak Response = 103335 M6

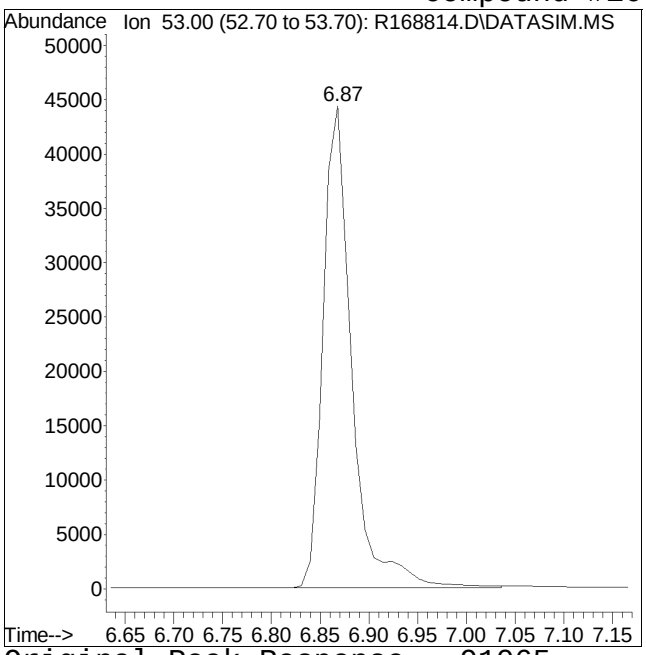
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

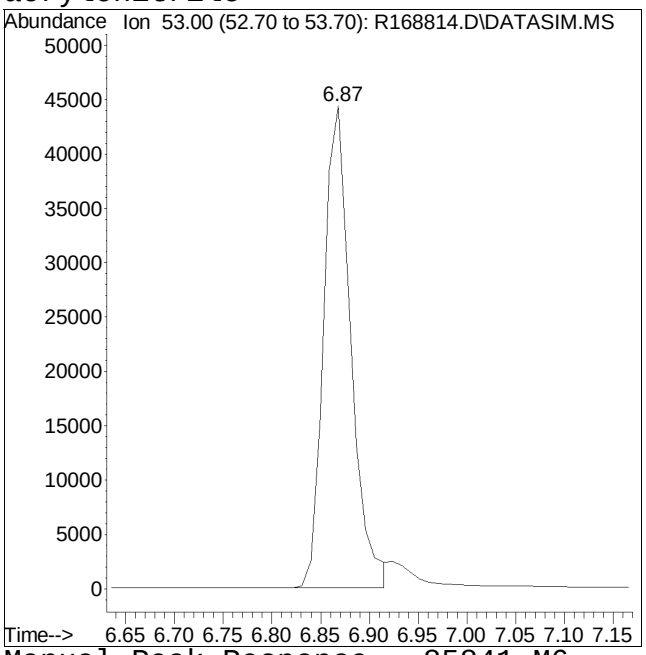
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #16: acrylonitrile



Original Peak Response = 91065



Manual Peak Response = 85841 M6

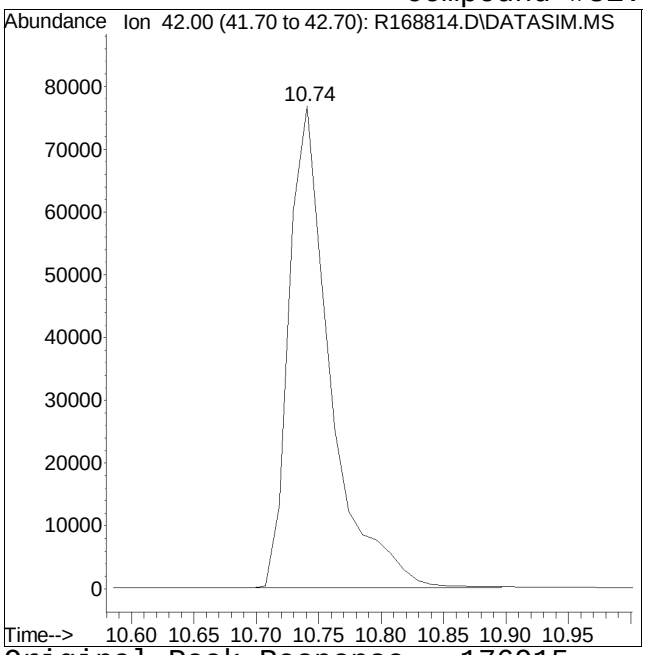
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

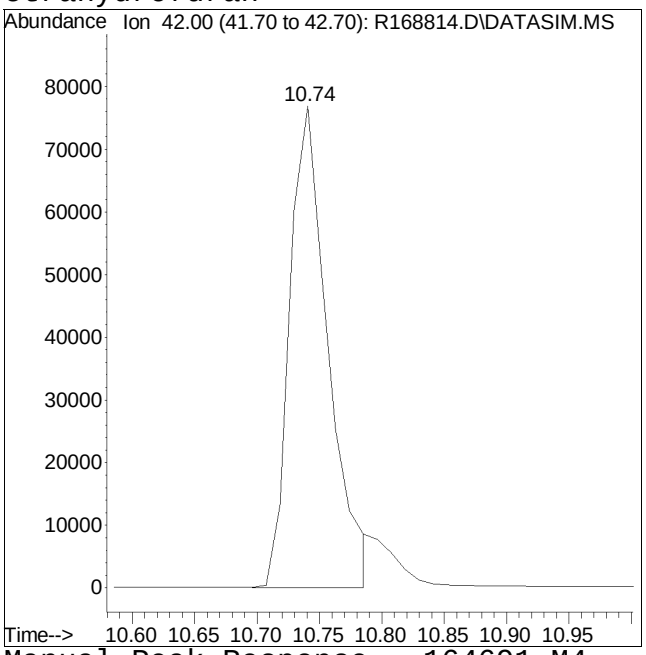
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 176915



Manual Peak Response = 164691 M4

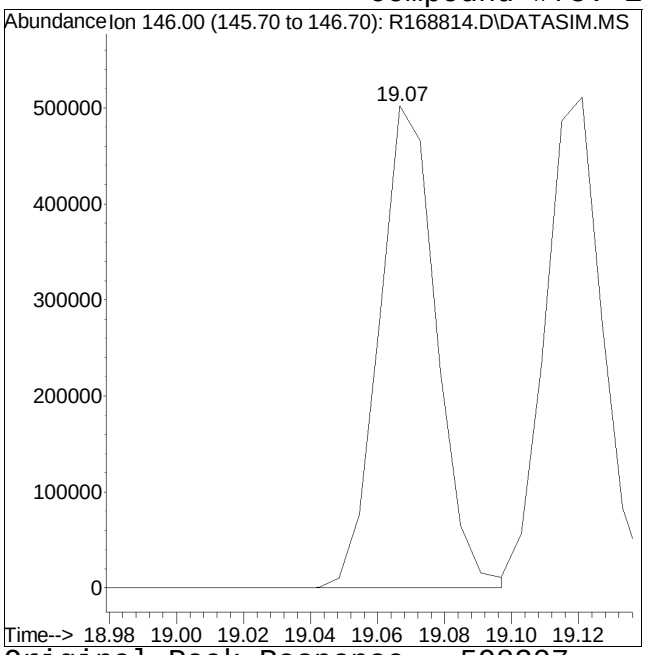
M4 = Poor automated baseline construction.

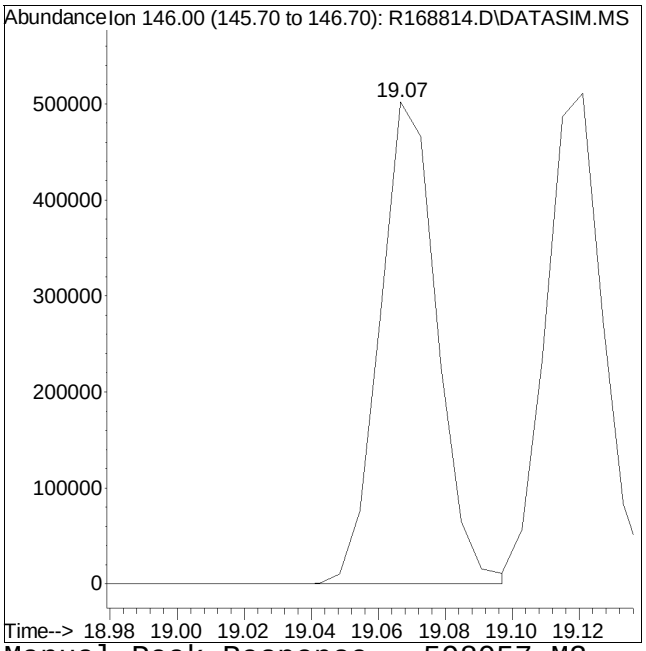
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168814.D
Date Inj'd : 10/23/2019 4:36 pm
Sample : ITO15-SIMSTD10.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 5:59 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 598307 Manual Peak Response = 598057 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:00:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	319053	10.000 ppbV	0.00
Standard Area = 311997			Recovery = 102.26%		
33) 1,4-difluorobenzene	12.34	114	806337	10.000 ppbV	0.00
Standard Area = 795323			Recovery = 101.38%		
51) chlorobenzene-D5	16.80	54	131756	10.000 ppbV	0.00
Standard Area = 128792			Recovery = 102.30%		
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	181176	9.988 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.88%		
53) toluene-D8	15.09	98	558051	10.131 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.31%		
67) bromofluorobenzene	17.99	95	369446	9.969 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.69%		
Target Compounds					Qvalue
2) propylene	3.91	41	200219M6	18.061 ppbV	
3) dichlorodifluoromethane	4.02	85	684449	19.563 ppbV	100
4) chloromethane	4.23	50	225172	19.267 ppbV	99
5) Freon-114	4.38	85	794590	19.940 ppbV	100
6) vinyl chloride	4.53	62	279716	19.850 ppbV	100
7) 1,3-butadiene	4.73	54	183860	19.821 ppbV	97
8) bromomethane	5.11	94	298332	19.299 ppbV	99
9) chloroethane	5.36	64	132814	18.828 ppbV	98
10) ethanol	5.57	31	680531	83.599 ppbV	97
11) vinyl bromide	5.85	106	307691	19.588 ppbV	100
12) acrolein	6.03	56	104872	19.049 ppbV	99
13) acetone	6.22	43	1916017	89.438 ppbV	100
14) trichlorofluoromethane	6.44	101	719126	20.288 ppbV	99
15) isopropyl alcohol	6.59	45	1211602	51.501 ppbV	100
16) acrylonitrile	6.86	53	212612M4	21.711 ppbV	
17) 1,1-dichloroethene	7.29	61	492837	22.000 ppbV	99
18) tertiary butyl alcohol	7.38	59	595269	21.441 ppbV	99
19) methylene chloride	7.46	49	350188	22.152 ppbV	98
20) 3-chloropropene	7.61	41	357310	23.128 ppbV	96
21) carbon disulfide	7.79	76	996200	21.624 ppbV	95
22) Freon 113	7.81	101	665216	21.811 ppbV	98
23) trans-1,2-dichloroethene	8.65	61	491888	21.930 ppbV	90
24) 1,1-dichloroethane	8.90	63	593158	20.783 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:00:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25)	MTBE	8.98	73	836386	20.607	ppbV		100
26)	vinyl acetate	9.11	43	587172	20.711	ppbV		99
27)	2-butanone	9.39	43	599088	19.488	ppbV		98
28)	cis-1,2-dichloroethene	9.91	61	465010	20.294	ppbV		98
29)	Ethyl Acetate	10.20	61	130944	20.092	ppbV		88
30)	chloroform	10.26	83	805583	19.752	ppbV		99
31)	Tetrahydrofuran	10.72	42	342818M4	19.232	ppbV		
32)	1,2-dichloroethane	11.12	62	413922	19.627	ppbV		99
34)	hexane	10.16	57	587946	19.333	ppbV	#	66
36)	1,1,1-trichloroethane	11.41	97	657381	20.290	ppbV		98
37)	benzene	11.93	78	1018744	20.004	ppbV		100
38)	carbon tetrachloride	12.11	117	660037	20.533	ppbV	#	94
39)	cyclohexane	12.23	56	483708	19.539	ppbV		99
40)	dibromomethane	12.84	93	418646	17.625	ppbV		97
41)	1,2-dichloropropane	12.86	63	385799	20.059	ppbV		99
42)	bromodichloromethane	13.10	83	790681	20.874	ppbV		99
43)	1,4-dioxane	13.13	88	237047	20.869	ppbV	#	77
44)	trichloroethene	13.14	130	491071	20.441	ppbV		100
45)	2,2,4-trimethylpentane	13.17	57	1547033	19.456	ppbV		100
46)	heptane	13.47	43	546730	19.541	ppbV		100
47)	cis-1,3-dichloropropene	14.11	75	2313651	21.467	ppbV	#	94
48)	4-methyl-2-pentanone	14.14	43	731410	20.046	ppbV	#	93
49)	trans-1,3-dichloropropene	14.72	75	572768	22.112	ppbV		98
50)	1,1,2-trichloroethane	14.90	97	446836	20.374	ppbV		99
52)	toluene	15.19	91	1245705	18.772	ppbV		100
54)	2-hexanone	15.44	43	643358	19.023	ppbV	#	78
55)	dibromochloromethane	15.61	129	814323	21.717	ppbV		99
56)	1,2-dibromoethane	15.84	107	735453	20.886	ppbV		100
57)	tetrachloroethene	16.25	166	638151	20.324	ppbV		99
58)	1,1,1,2-tetrachloroethane	16.82	131	556519	20.521	ppbV		99
59)	chlorobenzene	16.84	112	1046418	20.094	ppbV		100
60)	ethylbenzene	17.14	91	1607230	19.685	ppbV		98
61)	m+p-xylene	17.28	91	2459903	34.606	ppbV		100
62)	bromoform	17.36	173	854449	22.443	ppbV		99
63)	styrene	17.56	104	1001913	20.996	ppbV		100
64)	1,1,2,2-tetrachloroethane	17.64	83	975322	19.320	ppbV		100
65)	o-xylene	17.64	91	1233539	18.597	ppbV		100
66)	1,2,3-trichloropropane	17.74	75	751167	19.448	ppbV		99
68)	isopropylbenzene	18.09	105	1713972	19.337	ppbV		99
69)	bromobenzene	18.17	77	899267	20.187	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:00:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	1860154	20.332	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	1439381	19.432	ppbV	98
72) tert-butylbenzene	18.93	119	1477406	18.325	ppbV	99
73) 1,2,4-trimethylbenzene	18.93	105	1385817	19.125	ppbV	96
74) Benzyl Chloride	19.05	91	1293913	20.512	ppbV	86
75) 1,3-dichlorobenzene	19.07	146	1120737M3	19.912	ppbV	
76) 1,4-dichlorobenzene	19.12	146	1121384	19.502	ppbV	97
77) sec-butylbenzene	19.13	105	2085162	18.424	ppbV	99
78) p-isopropyltoluene	19.25	119	1819754	18.170	ppbV	100
79) 1,2-dichlorobenzene	19.38	146	1034929	19.282	ppbV	98
80) n-butylbenzene	19.57	91	1600730	17.321	ppbV	99
81) 1,2,4-trichlorobenzene	20.81	180	745099	17.014	ppbV	100
82) naphthalene	20.93	128	1533909	14.539	ppbV	99
83) 1,2,3-trichlorobenzene	21.18	180	681821	16.764	ppbV	99
84) hexachlorobutadiene	21.23	225	610281	16.447	ppbV	99

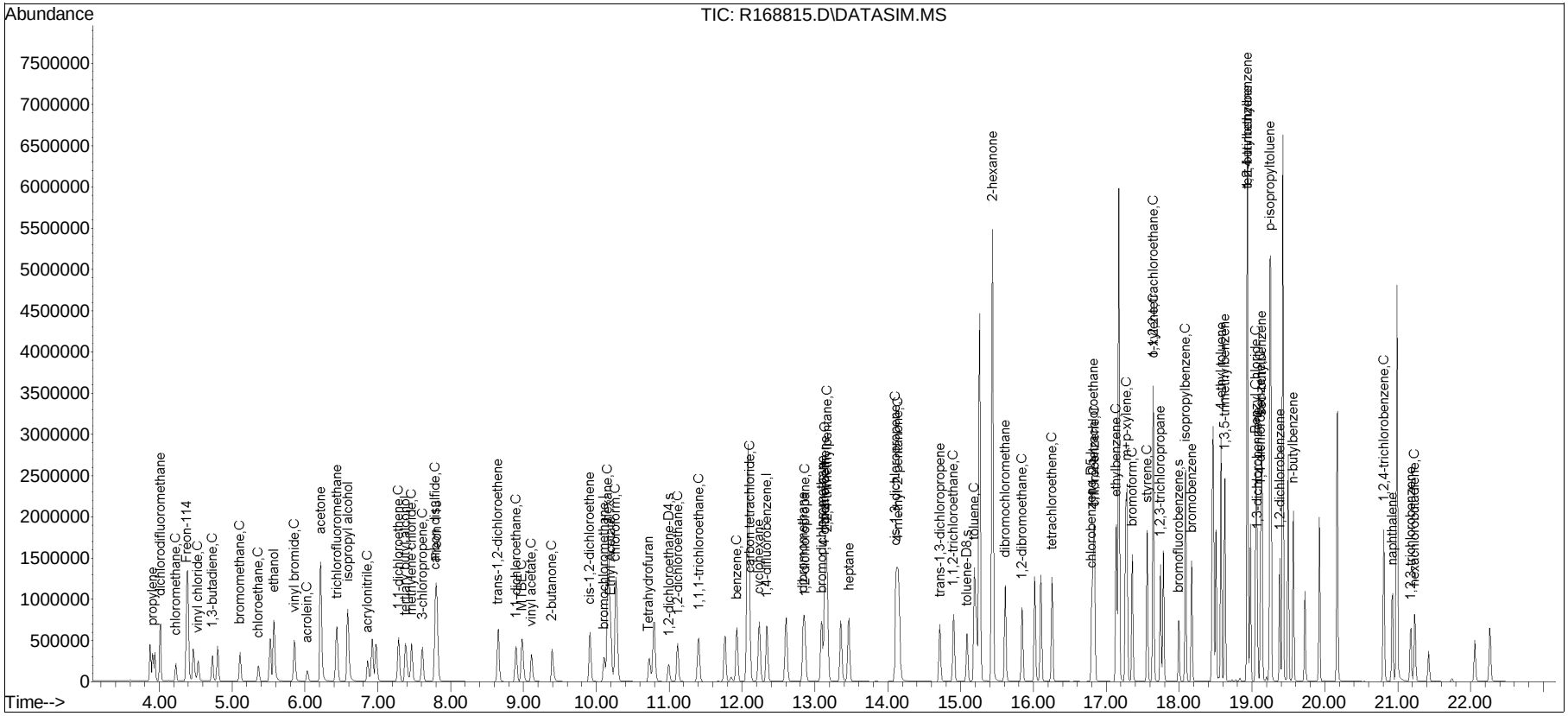
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168815.D
Acq On : 23 Oct 2019 5:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:00:04 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

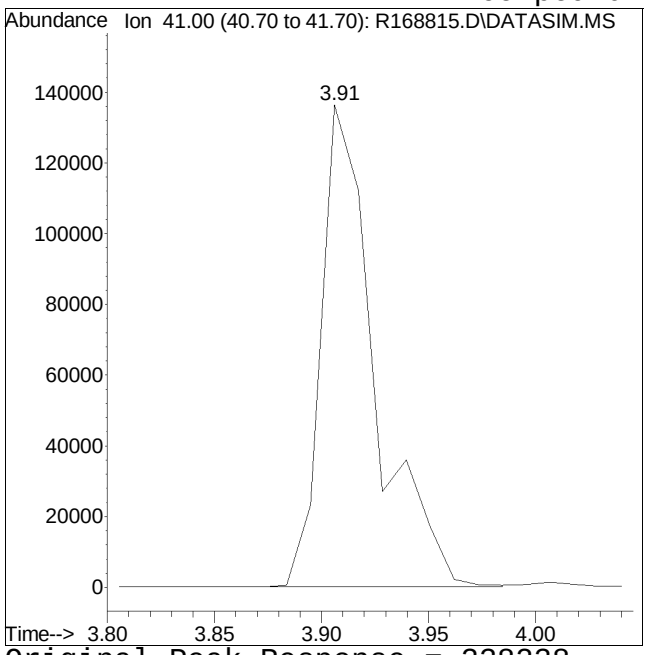


Manual Integration/Negative Proof Report

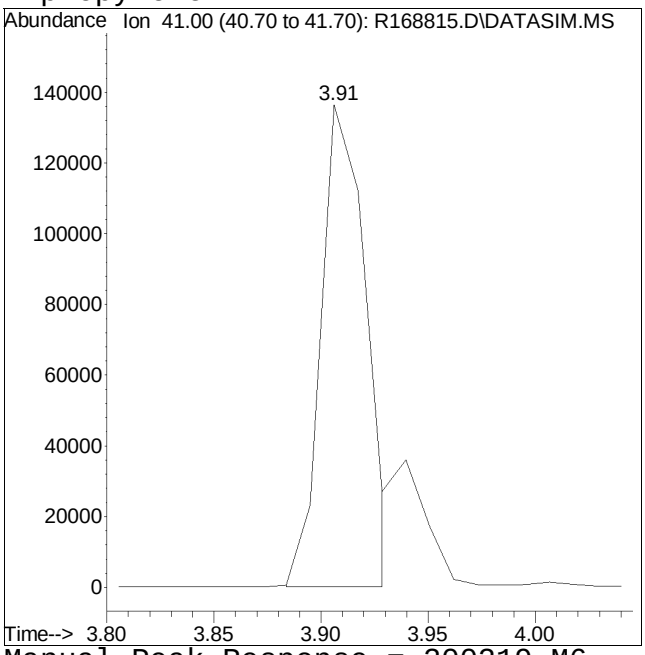
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:00 pm

Compound #2: propylene



Original Peak Response = 238238



Manual Peak Response = 200219 M6

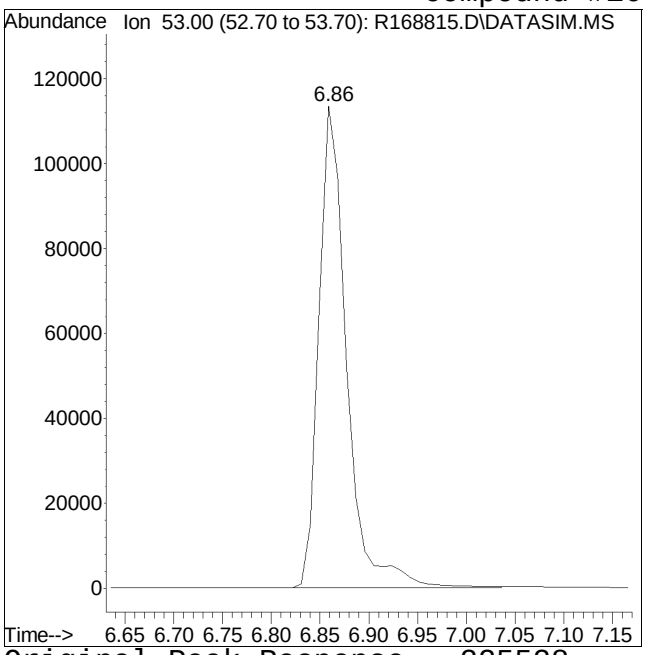
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

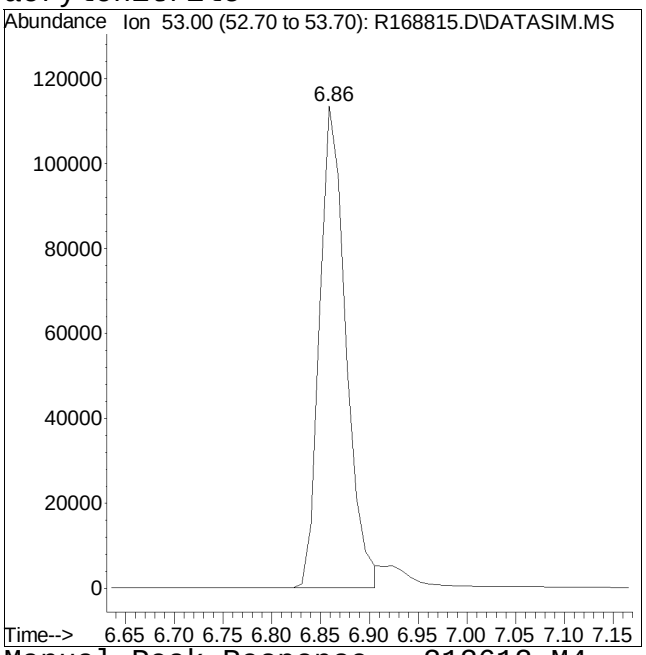
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:00 pm

Compound #16: acrylonitrile



Original Peak Response = 225528



Manual Peak Response = 212612 M4

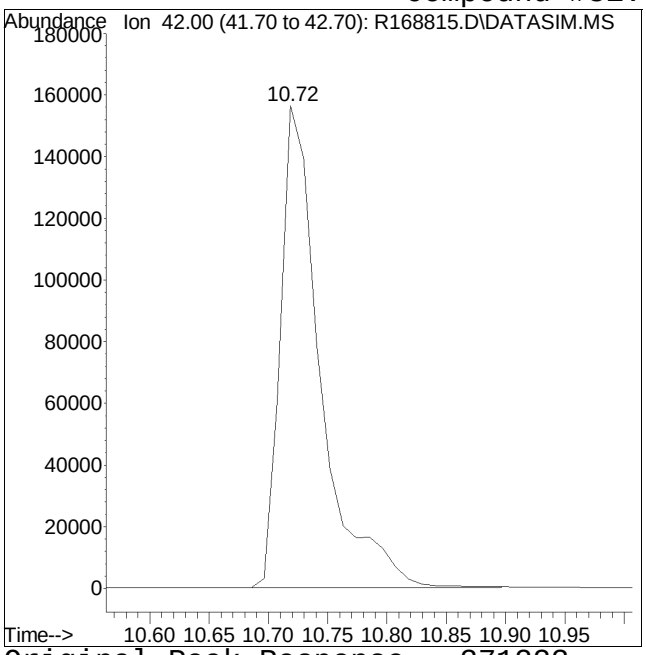
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

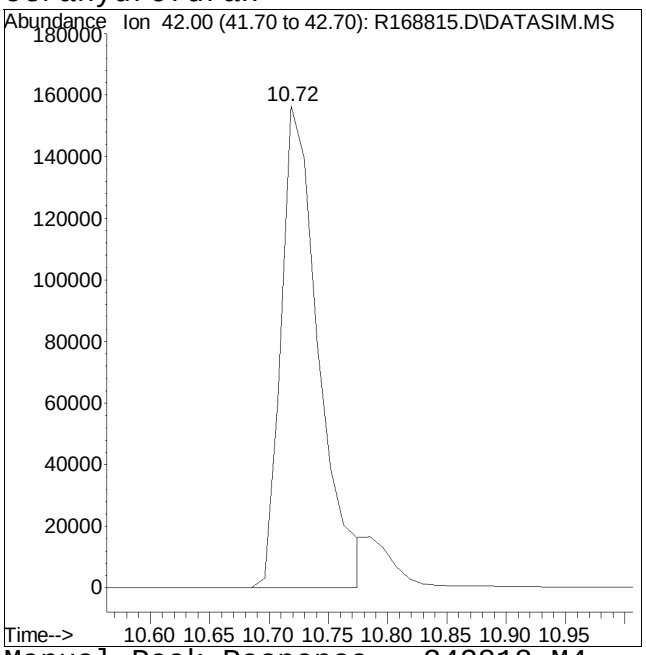
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:00 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 371223



Manual Peak Response = 342818 M4

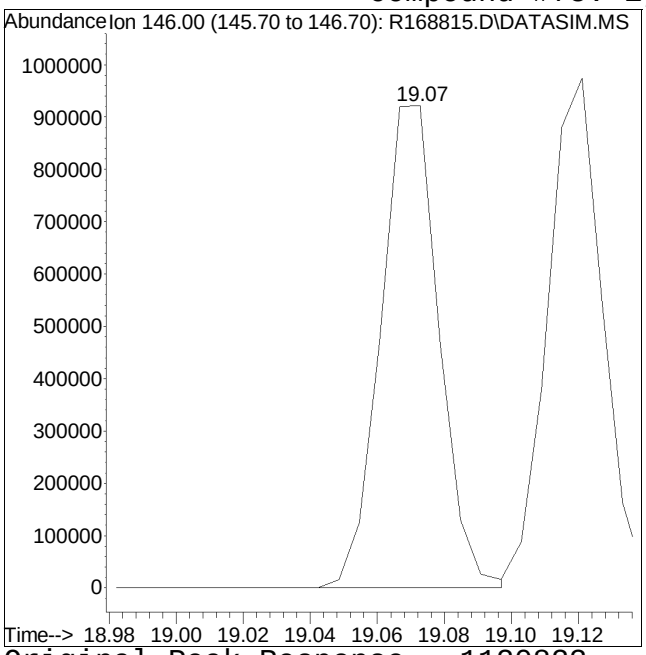
M4 = Poor automated baseline construction.

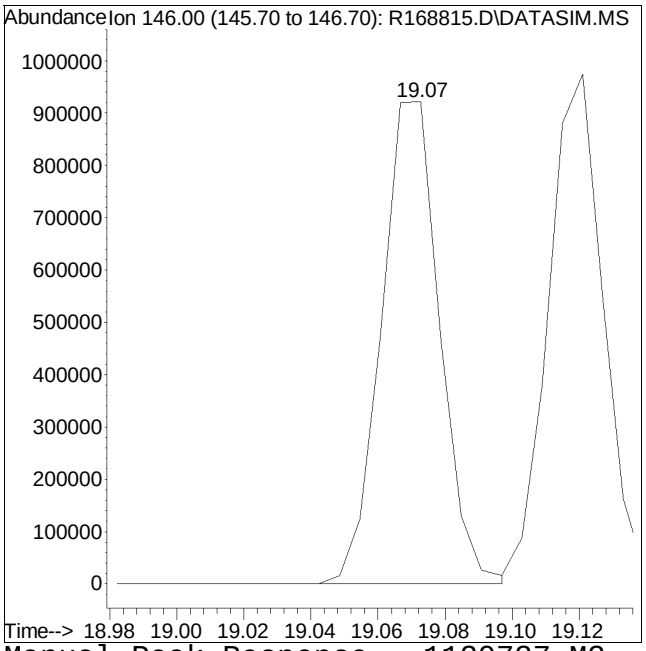
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168815.D
Date Inj'd : 10/23/2019 5:06 pm
Sample : ITO15-SIMSTD20.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:00 pm

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 1120823 Manual Peak Response = 1120737 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:02:50 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.11	49	338187	10.000 ppbV	0.01
Standard Area = 311997			Recovery = 108.39%		
33) 1,4-difluorobenzene	12.35	114	825679	10.000 ppbV	# 0.01
Standard Area = 795323			Recovery = 103.82%		
51) chlorobenzene-D5	16.80	54	134040	10.000 ppbV	0.00
Standard Area = 128792			Recovery = 104.07%		
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.00	65	184698	9.944 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.44%		
53) toluene-D8	15.09	98	571726	10.203 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.03%		
67) bromofluorobenzene	18.00	95	386293	10.246 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.46%		
Target Compounds					Qvalue
2) propylene	3.92	41	458228M6	38.996 ppbV	
3) dichlorodifluoromethane	4.02	85	1636379	44.124 ppbV	99
4) chloromethane	4.23	50	531284	42.889 ppbV	99
5) Freon-114	4.39	85	1852639	43.860 ppbV	90
6) vinyl chloride	4.54	62	658782	44.105 ppbV	97
7) 1,3-butadiene	4.73	54	430316	43.765 ppbV	95
8) bromomethane	5.11	94	703368	42.926 ppbV	100
9) chloroethane	5.37	64	317898	42.517 ppbV	92
10) ethanol	5.58	31	1573007	182.301 ppbV	97
11) vinyl bromide	5.85	106	733144	44.033 ppbV	99
12) acrolein	6.04	56	255385	43.764 ppbV	99
13) acetone	6.22	43	4443492	195.683 ppbV	96
14) trichlorofluoromethane	6.44	101	1691722	45.026 ppbV	100
15) isopropyl alcohol	6.60	45	2437779	97.758 ppbV	100
16) acrylonitrile	6.87	53	448684M6	43.225 ppbV	
17) 1,1-dichloroethene	7.29	61	1040048	43.800 ppbV	98
18) tertiary butyl alcohol	7.39	59	1276076	43.362 ppbV	100
19) methylene chloride	7.47	49	699138	41.724 ppbV	91
20) 3-chloropropene	7.61	41	700574	42.782 ppbV	98
21) carbon disulfide	7.79	76	2045492	41.888 ppbV	96
22) Freon 113	7.81	101	1425757	44.103 ppbV	100
23) trans-1,2-dichloroethene	8.66	61	1171411	49.270 ppbV	98
24) 1,1-dichloroethane	8.90	63	1413024	46.709 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:02:50 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	8.99	73	1983192	46.098	ppbV	99
26) vinyl acetate	9.12	43	1525240	50.755	ppbV	99
27) 2-butanone	9.40	43	1460521	44.822	ppbV	98
28) cis-1,2-dichloroethene	9.92	61	1123493	46.258	ppbV	94
29) Ethyl Acetate	10.21	61	325009	47.048	ppbV	81
30) chloroform	10.27	83	1891770	43.759	ppbV	98
31) Tetrahydrofuran	10.73	42	809799M6	42.860	ppbV	
32) 1,2-dichloroethane	11.12	62	983371	43.990	ppbV	98
34) hexane	10.16	57	1394345	44.776	ppbV	92
36) 1,1,1-trichloroethane	11.41	97	1553826	46.834	ppbV	97
37) benzene	11.93	78	2409261	46.199	ppbV	97
38) carbon tetrachloride	12.11	117	1568191	47.641	ppbV	97
39) cyclohexane	12.23	56	1144995	45.167	ppbV	98
40) dibromomethane	12.84	93	997014	40.991	ppbV	94
41) 1,2-dichloropropane	12.87	63	902841	45.842	ppbV	97
42) bromodichloromethane	13.10	83	1876497	48.379	ppbV	99
43) 1,4-dioxane	13.14	88	565740	48.638	ppbV #	69
44) trichloroethene	13.14	130	1145499	46.564	ppbV	98
45) 2,2,4-trimethylpentane	13.17	57	3569238	43.837	ppbV	98
46) heptane	13.47	43	1250024	43.632	ppbV	99
47) cis-1,3-dichloropropene	14.13	75	5559130	50.372	ppbV	99
48) 4-methyl-2-pentanone	14.16	43	1722587	46.105	ppbV #	87
49) trans-1,3-dichloropropene	14.72	75	1366882	51.532	ppbV	98
50) 1,1,2-trichloroethane	14.91	97	1062092	47.294	ppbV	94
52) toluene	15.19	91	2924932	43.326	ppbV	100
54) 2-hexanone	15.44	43	1356096	39.415	ppbV #	80
55) dibromochloromethane	15.61	129	1966013	51.538	ppbV	98
56) 1,2-dibromoethane	15.85	107	1741766	48.621	ppbV	98
57) tetrachloroethene	16.26	166	1554523	48.665	ppbV #	94
58) 1,1,1,2-tetrachloroethane	16.82	131	1332653	48.303	ppbV	100
59) chlorobenzene	16.84	112	2472424	46.667	ppbV	99
60) ethylbenzene	17.14	91	3770043	45.387	ppbV	98
61) m+p-xylene	17.29	91	5705688	78.900	ppbV	99
62) bromoform	17.36	173	2101386	54.253	ppbV	99
63) styrene	17.56	104	2367017	48.758	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.64	83	2292577	44.639	ppbV	100
65) o-xylene	17.65	91	2856115	42.324	ppbV	99
66) 1,2,3-trichloropropane	17.75	75	1809658	46.054	ppbV	97
68) isopropylbenzene	18.09	105	4025335	44.640	ppbV	96
69) bromobenzene	18.18	77	2097817	46.290	ppbV	91

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:02:50 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	4425271	47.545 ppbV	97
71) 1,3,5-trimethylbenzene	18.63	105	3497585	46.414 ppbV	98
72) tert-butylbenzene	18.94	119	3487366	42.518 ppbV	97
73) 1,2,4-trimethylbenzene	18.94	105	3323149	45.080 ppbV	98
74) Benzyl Chloride	19.05	91	3392536	52.864 ppbV	90
75) 1,3-dichlorobenzene	19.07	146	2830657	49.434 ppbV	98
76) 1,4-dichlorobenzene	19.12	146	2855814	48.819 ppbV	91
77) sec-butylbenzene	19.14	105	4930124	42.818 ppbV	92
78) p-isopropyltoluene	19.25	119	4385817	43.045 ppbV	99
79) 1,2-dichlorobenzene	19.39	146	2713072	49.688 ppbV	98
80) n-butylbenzene	19.57	91	4081519	43.412 ppbV	99
81) 1,2,4-trichlorobenzene	20.81	180	2116353	47.503 ppbV #	95
82) naphthalene	20.93	128	4449282	41.454 ppbV	97
83) 1,2,3-trichlorobenzene	21.18	180	1955650	47.265 ppbV	99
84) hexachlorobutadiene	21.24	225	1742107	46.150 ppbV #	80

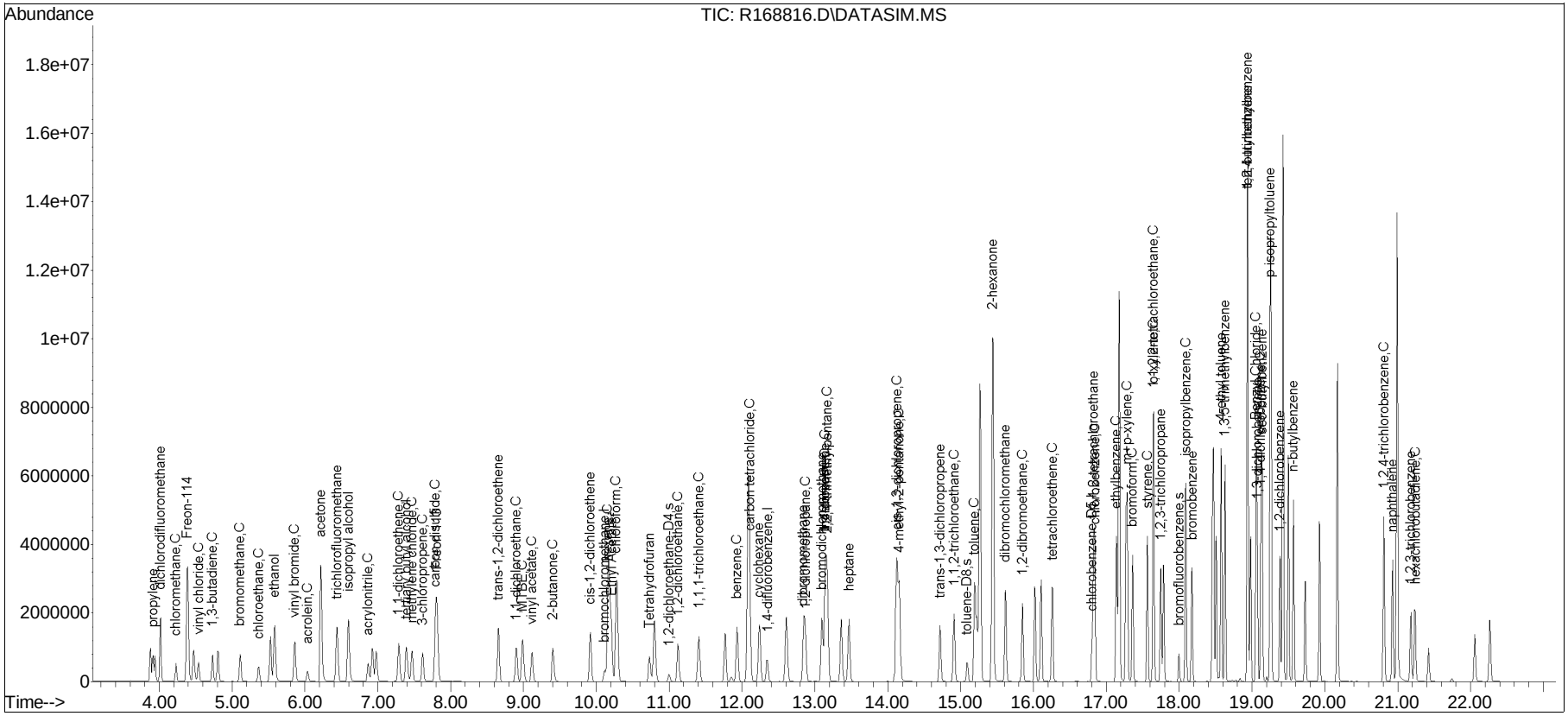
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168816.D
Acq On : 23 Oct 2019 5:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG1300076
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 23 18:02:50 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 17:58:56 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

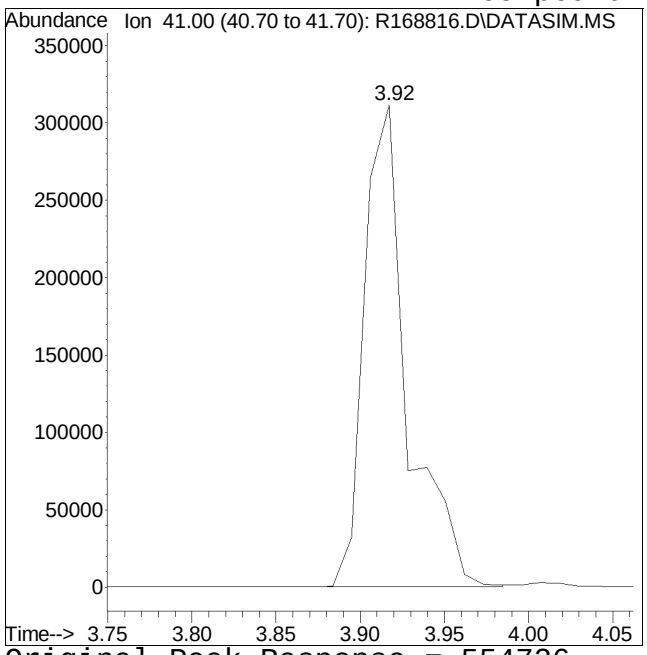


Manual Integration/Negative Proof Report

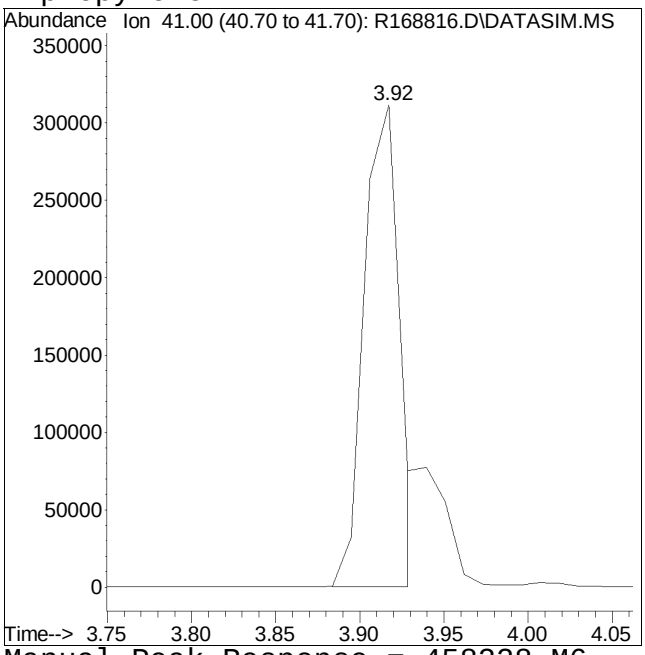
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168816.D
Date Inj'd : 10/23/2019 5:38 pm
Sample : ITO15-SIMSTD50.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:02 pm

Compound #2: propylene



Original Peak Response = 554726



Manual Peak Response = 458228 M6

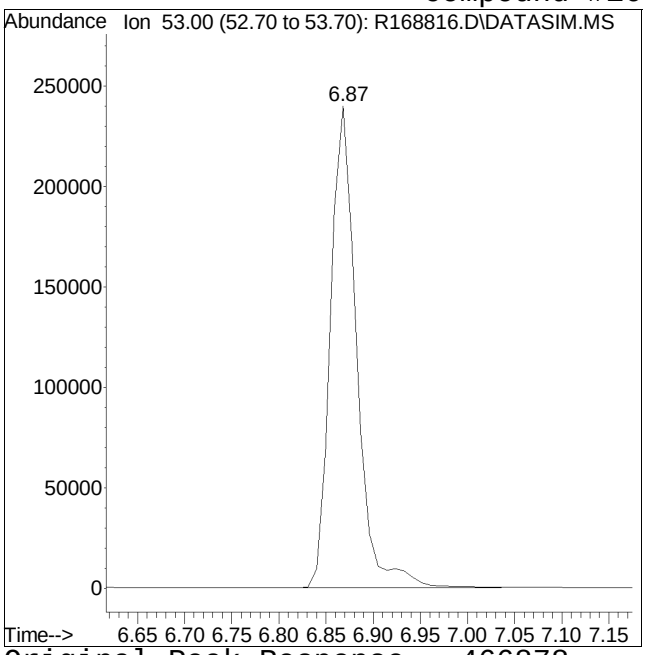
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

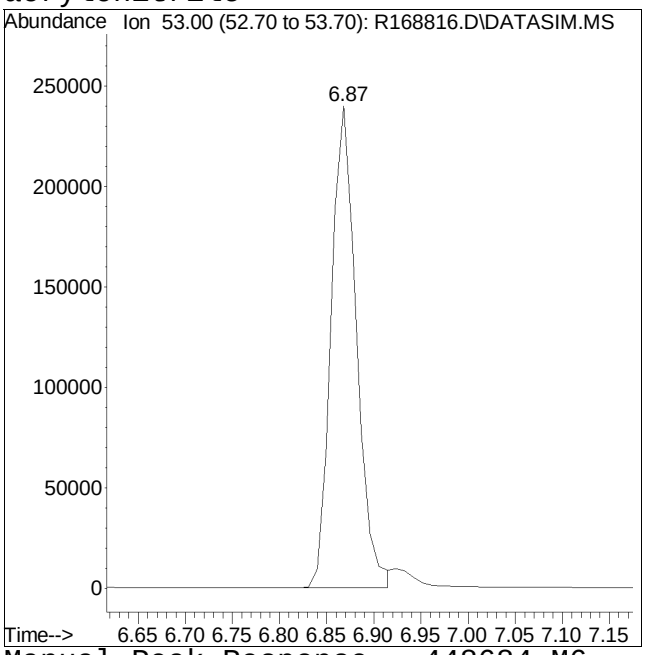
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168816.D
Date Inj'd : 10/23/2019 5:38 pm
Sample : ITO15-SIMSTD50.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:02 pm

Compound #16: acrylonitrile



Original Peak Response = 466878



Manual Peak Response = 448684 M6

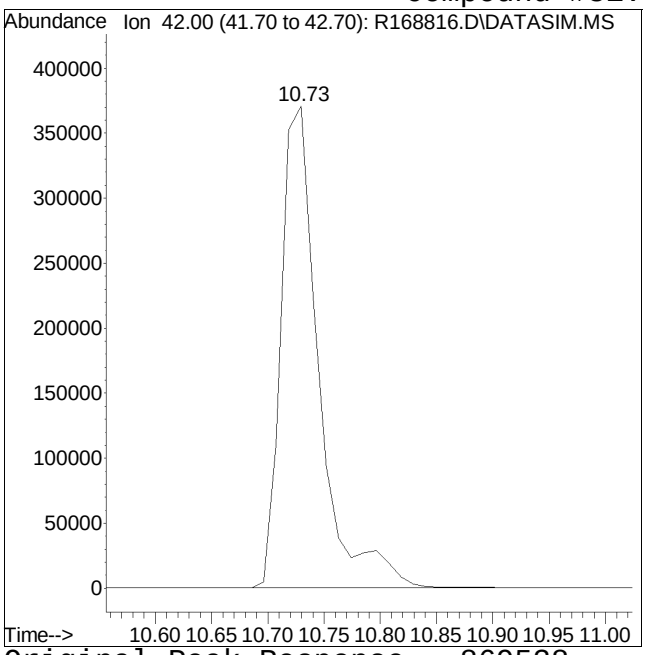
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

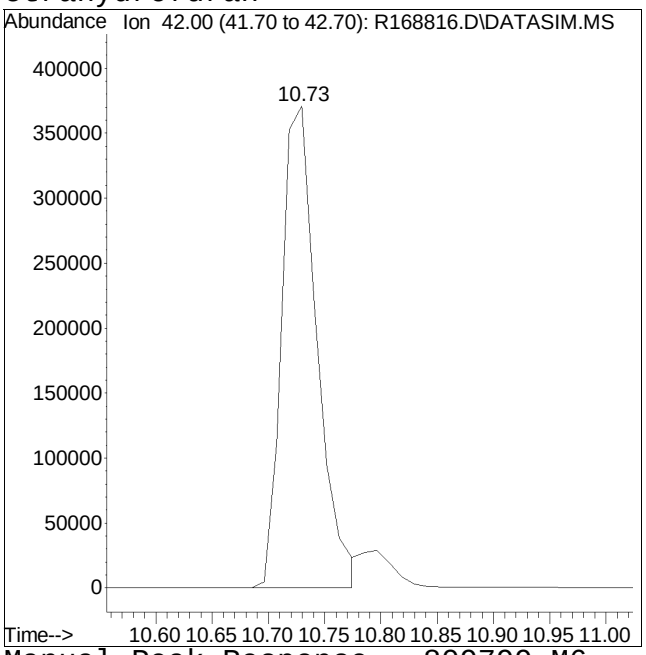
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168816.D
Date Inj'd : 10/23/2019 5:38 pm
Sample : ITO15-SIMSTD50.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/23/2019 6:02 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 869538



Manual Peak Response = 809799 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	104	0.00
2		propylene	0.337	0.336	0.3	113	0.00
3		dichlorodifluoromethane	1.078	1.041	3.4	101	0.00
4	C	chloromethane	0.359	0.354	1.4	106	0.00
5		Freon-114	1.232	1.284	-4.2	109	0.00
6	C	vinyl chloride	0.436	0.445	-2.1	108	0.00
7	C	1,3-butadiene	0.287	0.304	-5.9	113	0.00
8	C	bromomethane	0.478	0.477	0.2	109	0.00
9	C	chloroethane	0.218	0.213	2.3	109	0.00
10		ethanol	0.241	0.218	9.5	95	0.00
11	C	vinyl bromide	0.484	0.481	0.6	108	0.00
12	C	acrolein	0.170	0.151	11.2	100	0.00
13		acetone	0.651	0.547	16.0	87	0.00
14		trichlorofluoromethane	1.099	1.135	-3.3	107	0.00
15		isopropyl alcohol	0.714	0.622	12.9	93	0.00
16	C	acrylonitrile	0.301	0.274	9.0	104	0.00
17	C	1,1-dichloroethene	0.693	0.700	-1.0	108	0.00
18		tertiary butyl alcohol	0.851	0.828	2.7	106	0.00
19	C	methylene chloride	0.482	0.480	0.4	107	0.00
20	C	3-chloropropene	0.474	0.498	-5.1	115	0.00
21	C	carbon disulfide	1.410	1.322	6.2	103	0.00
22		Freon 113	0.943	0.986	-4.6	110	0.00
23		trans-1,2-dichloroethene	0.702	0.758	-8.0	105	0.00
24	C	1,1-dichloroethane	0.889	0.968	-8.9	109	0.00
25	C	MTBE	1.262	1.366	-8.2	111	0.00
26	C	vinyl acetate	0.891	0.853	4.3	106	0.00
27	C	2-butanone	0.949	0.958	-0.9	108	0.00
28		cis-1,2-dichloroethene	0.713	0.764	-7.2	109	0.00
29		Ethyl Acetate	0.202	0.220	-8.9	112	0.00
30	C	chloroform	1.262	1.335	-5.8	110	0.00
31		Tetrahydrofuran	0.545	0.546	-0.2	106	0.00
32	C	1,2-dichloroethane	0.653	0.654	-0.2	105	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00
34	C	hexane	0.372	0.372	0.0	109	0.00
35	s	1,2-dichloroethane-D4	0.225	0.000	100.0#	0#	-11.00#
36	C	1,1,1-trichloroethane	0.399	0.410	-2.8	110	0.00
37	C	benzene	0.626	0.627	-0.2	106	0.00
38	C	carbon tetrachloride	0.397	0.409	-3.0	110	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39		cyclohexane	0.303	0.302	0.3	108	0.00
40		dibromomethane	0.289	0.241	16.6	102	0.00
41	C	1,2-dichloropropane	0.237	0.244	-3.0	110	0.00
42		bromodichloromethane	0.468	0.489	-4.5	111	0.00
43	C	1,4-dioxane	0.140	0.153	-9.3	113	0.00
44	C	trichloroethene	0.296	0.310	-4.7	111	0.00
45	C	2,2,4-trimethylpentane	0.969	0.994	-2.6	112	0.00
46		heptane	0.341	0.346	-1.5	109	-0.01
47	C	cis-1,3-dichloropropene	1.338	1.500	-12.1	115	0.00
48	C	4-methyl-2-pentanone	0.447	0.467	-4.5	109	0.00
49		trans-1,3-dichloropropene	0.322	0.311	3.4	99	0.00
50	C	1,1,2-trichloroethane	0.271	0.287	-5.9	113	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	103	0.00
52	C	toluene	4.962	5.002	-0.8	109	0.00
53	s	toluene-D8	4.189	0.000	100.0#	0#	-15.09#
54		2-hexanone	2.489	2.801	-12.5	108	-0.01
55		dibromochloromethane	2.855	3.284	-15.0	114	0.00
56	C	1,2-dibromoethane	2.665	2.927	-9.8	109	0.00
57	C	tetrachloroethene	2.377	2.572	-8.2	110	0.00
58		1,1,1,2-tetrachloroethane	2.051	2.024	1.3	104	0.00
59	C	chlorobenzene	3.926	4.250	-8.3	110	0.00
60	C	ethylbenzene	6.140	6.374	-3.8	107	0.00
61	C	m+p-xylene	5.281	4.932	6.6	109	0.00
62	C	bromoform	2.914	3.322	-14.0	112	0.00
63	C	styrene	3.613	4.017	-11.2	109	0.00
64	C	1,1,2,2-tetrachloroethane	3.790	4.120	-8.7	107	0.00
65	C	o-xylene	4.957	5.154	-4.0	109	0.00
66		1,2,3-trichloropropane	2.908	2.843	2.2	100	0.00
67	s	bromofluorobenzene	2.820	0.000	100.0#	0#	-17.99#
68	C	isopropylbenzene	6.624	6.708	-1.3	106	0.00
69		bromobenzene	3.356	3.400	-1.3	102	0.00
70		4-ethyl toluene	6.910	7.543	-9.2	104	0.00
71		1,3,5-trimethylbenzene	5.582	5.984	-7.2	105	0.00
72		tert-butylbenzene	5.988	6.016	-0.5	101	0.00
73		1,2,4-trimethylbenzene	5.446	6.082	-11.7	106	0.00
74	C	Benzyl Chloride	4.827	4.941	-2.4	101	0.00
75		1,3-dichlorobenzene	4.267	4.769	-11.8	105	0.00
76	C	1,4-dichlorobenzene	4.354	4.876	-12.0	105	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	sec-butylbenzene	8.414	8.496	-1.0	101	0.00
78	p-isopropyltoluene	7.450	6.966	6.5	92	0.00
79	1,2-dichlorobenzene	4.071	4.567	-12.2	105	0.00
80	n-butylbenzene	6.882	7.313	-6.3	103	0.00
81 C	1,2,4-trichlorobenzene	3.305	4.329	-31.0#	105	0.00
82	naphthalene	7.855	8.179	-4.1	93	-0.01
83	1,2,3-trichlorobenzene	3.068	3.874	-26.3	102	0.00
84 C	hexachlorobutadiene	2.792	3.754	-34.5#	110	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.10	49	323962	10.000 ppbV	0.00
Standard Area = 311997			Recovery	= 103.83%	
33) 1,4-difluorobenzene	12.34	114	847319	10.000 ppbV	0.00
Standard Area = 795323			Recovery	= 106.54%	
51) chlorobenzene-D5	16.80	54	133019	10.000 ppbV	0.00
Standard Area = 128792			Recovery	= 103.28%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	0.00	65	0d	0.000 ppbV	
Spiked Amount 10.000	Range 70 - 130		Recovery	= 0.00%#	
53) toluene-D8	0.00	98	0	0.000 ppbV	
Spiked Amount 10.000	Range 70 - 130		Recovery	= 0.00%#	
67) bromofluorobenzene	0.00	95	0d	0.000 ppbV	
Spiked Amount 10.000	Range 70 - 130		Recovery	= 0.00%#	
Target Compounds					Qvalue
2) propylene	3.91	41	54367M6	4.987 ppbV	
3) dichlorodifluoromethane	4.02	85	168548	4.825 ppbV	100
4) chloromethane	4.23	50	57320	4.931 ppbV	99
5) Freon-114	4.38	85	207989	5.211 ppbV	99
6) vinyl chloride	4.53	62	72117	5.100 ppbV	100
7) 1,3-butadiene	4.73	54	49229	5.293 ppbV	97
8) bromomethane	5.11	94	77187	4.988 ppbV	100
9) chloroethane	5.36	64	34442	4.882 ppbV	99
10) ethanol	5.57	31	176363	22.559 ppbV	97
11) vinyl bromide	5.85	106	77900	4.969 ppbV	100
12) acrolein	6.04	56	24441	4.434 ppbV	99
13) acetone	6.23	43	443267	21.031 ppbV	100
14) trichlorofluoromethane	6.44	101	183901	5.167 ppbV	100
15) isopropyl alcohol	6.60	45	251828	10.881 ppbV	99
16) acrylonitrile	6.87	53	44346M6	4.548 ppbV	
17) 1,1-dichloroethene	7.29	61	113331	5.045 ppbV	99
18) tertiary butyl alcohol	7.40	59	134184	4.868 ppbV	100
19) methylene chloride	7.46	49	77688	4.977 ppbV	99
20) 3-chloropropene	7.61	41	80637	5.249 ppbV	99
21) carbon disulfide	7.79	76	214115	4.686 ppbV	99
22) Freon 113	7.81	101	159788	5.228 ppbV	99
23) trans-1,2-dichloroethene	8.65	61	122782	5.399 ppbV	98
24) 1,1-dichloroethane	8.90	63	156730	5.444 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.00	73	221232	5.410	ppbV		99
26) vinyl acetate	9.12	43	138100	4.785	ppbV		99
27) 2-butanone	9.41	43	155148	5.045	ppbV		98
28) cis-1,2-dichloroethene	9.91	61	123781	5.360	ppbV		98
29) Ethyl Acetate	10.21	61	35604	5.434	ppbV		93
30) chloroform	10.26	83	216201	5.287	ppbV		99
31) Tetrahydrofuran	10.74	42	88502M4	5.009	ppbV		
32) 1,2-dichloroethane	11.12	62	105989	5.010	ppbV		100
34) hexane	10.16	57	157652	5.008	ppbV		97
36) 1,1,1-trichloroethane	11.41	97	173578	5.131	ppbV		99
37) benzene	11.93	78	265833	5.010	ppbV		99
38) carbon tetrachloride	12.09	117	173384	5.157	ppbV		98
39) cyclohexane	12.23	56	128091	4.993	ppbV		98
40) dibromomethane	12.84	93	102218	4.170	ppbV		97
41) 1,2-dichloropropane	12.86	63	103511	5.164	ppbV		98
42) bromodichloromethane	13.10	83	207342	5.226	ppbV		99
43) 1,4-dioxane	13.15	88	64748	5.443	ppbV		94
44) trichloroethene	13.14	130	131529	5.246	ppbV		99
45) 2,2,4-trimethylpentane	13.17	57	421047	5.130	ppbV		98
46) heptane	13.46	43	146519	5.076	ppbV	#	94
47) cis-1,3-dichloropropene	14.13	75	635368	5.606	ppbV		99
48) 4-methyl-2-pentanone	14.16	43	198002	5.232	ppbV		96
49) trans-1,3-dichloropropene	14.72	75	131589	4.820	ppbV		99
50) 1,1,2-trichloroethane	14.90	97	121541	5.303	ppbV		98
52) toluene	15.19	91	332667	5.040	ppbV		100
54) 2-hexanone	15.44	43	186268	5.626	ppbV	#	83
55) dibromochloromethane	15.61	129	218413	5.752	ppbV		100
56) 1,2-dibromoethane	15.84	107	194667	5.491	ppbV		100
57) tetrachloroethene	16.25	166	171090	5.412	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.82	131	134636	4.934	ppbV		100
59) chlorobenzene	16.84	112	282664	5.412	ppbV		99
60) ethylbenzene	17.13	91	423940	5.191	ppbV		99
61) m+p-xylene	17.28	91	656087	9.339	ppbV		99
62) bromoform	17.36	173	220965	5.700	ppbV		99
63) styrene	17.56	104	267156	5.559	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.64	83	274042	5.435	ppbV		100
65) o-xylene	17.64	91	342796	5.199	ppbV		100
66) 1,2,3-trichloropropane	17.74	75	189083	4.887	ppbV		99
68) isopropylbenzene	18.09	105	446156	5.063	ppbV		99
69) bromobenzene	18.17	77	226155	5.066	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\R168813.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.57	105	501690	5.458	ppbV	99
71) 1,3,5-trimethylbenzene	18.62	105	398019	5.361	ppbV	99
72) tert-butylbenzene	18.93	119	400150	5.023	ppbV	100
73) 1,2,4-trimethylbenzene	18.93	105	404543	5.585	ppbV	98
74) Benzyl Chloride	19.05	91	328631	5.118	ppbV	97
75) 1,3-dichlorobenzene	19.07	146	317213	5.589	ppbV	97
76) 1,4-dichlorobenzene	19.11	146	324276	5.599	ppbV	91
77) sec-butylbenzene	19.13	105	565053	5.049	ppbV	99
78) p-isopropyltoluene	19.25	119	463282	4.675	ppbV	98
79) 1,2-dichlorobenzene	19.38	146	303729	5.609	ppbV	98
80) n-butylbenzene	19.56	91	486414	5.313	ppbV	93
81) 1,2,4-trichlorobenzene	20.81	180	287922	6.549	ppbV	97
82) naphthalene	20.92	128	543993	5.206	ppbV #	94
83) 1,2,3-trichlorobenzene	21.18	180	257677	6.314	ppbV	98
84) hexachlorobutadiene	21.23	225	249662	6.722	ppbV	95

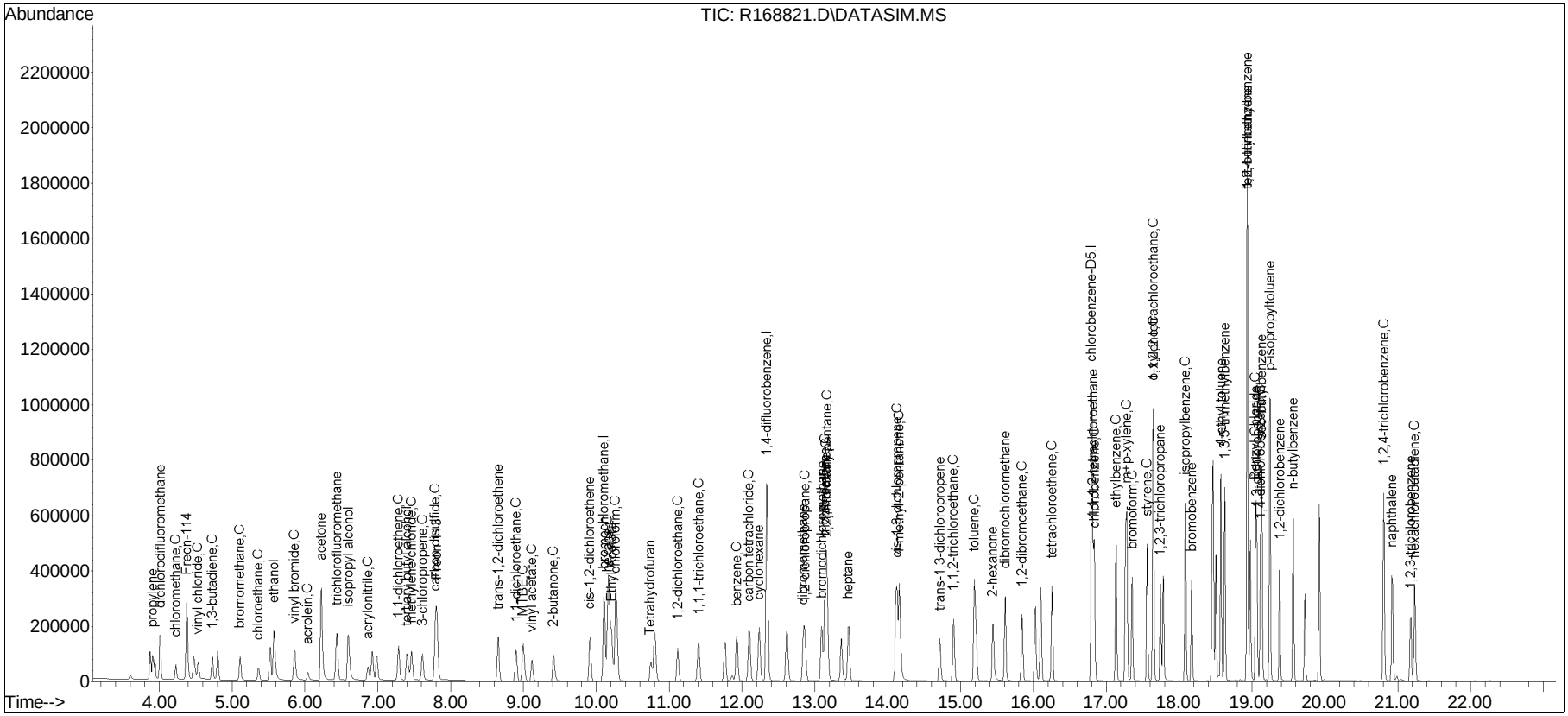
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\
Data File : R168821.D
Acq On : 24 Oct 2019 8:57 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG1300076
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 09:28:46 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191023SIM_ICAL\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Sub List : Default - All compounds listed1023SIM_ICAL\R168813.D

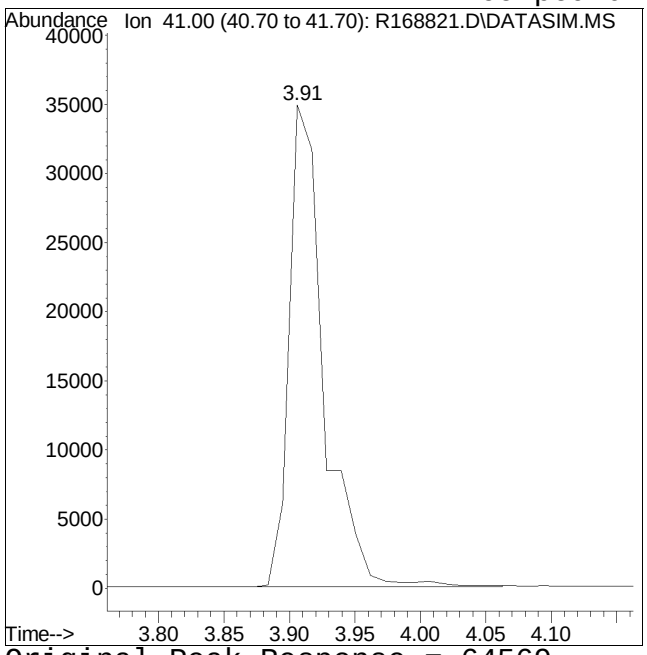


Manual Integration/Negative Proof Report

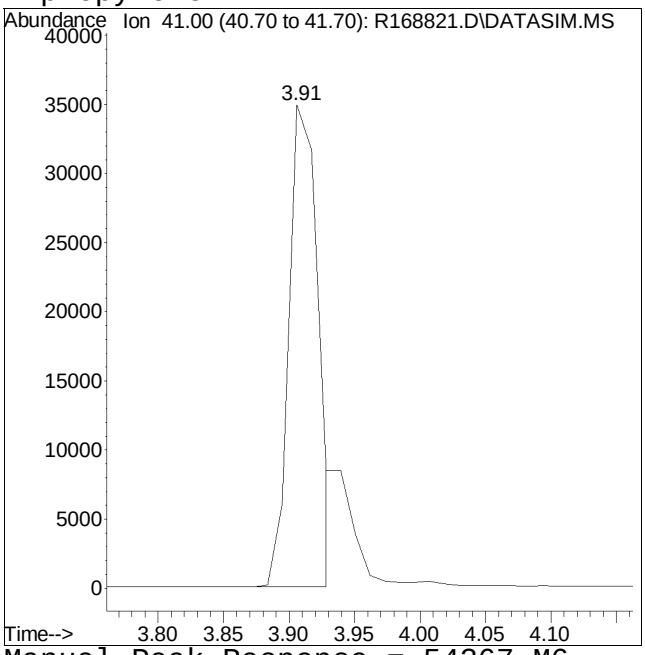
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168821.D
Date Inj'd : 10/24/2019 8:57 am
Sample : CTO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 9:26 am

Compound #2: propylene



Original Peak Response = 64569



Manual Peak Response = 54367 M6

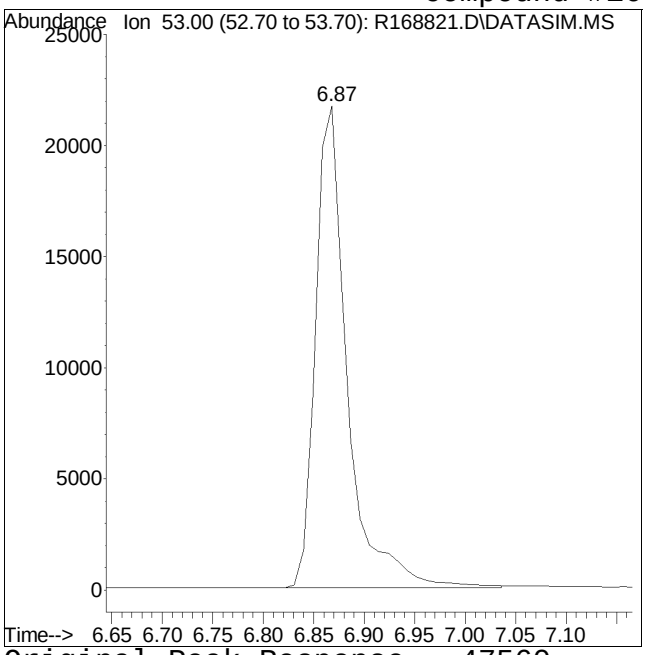
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

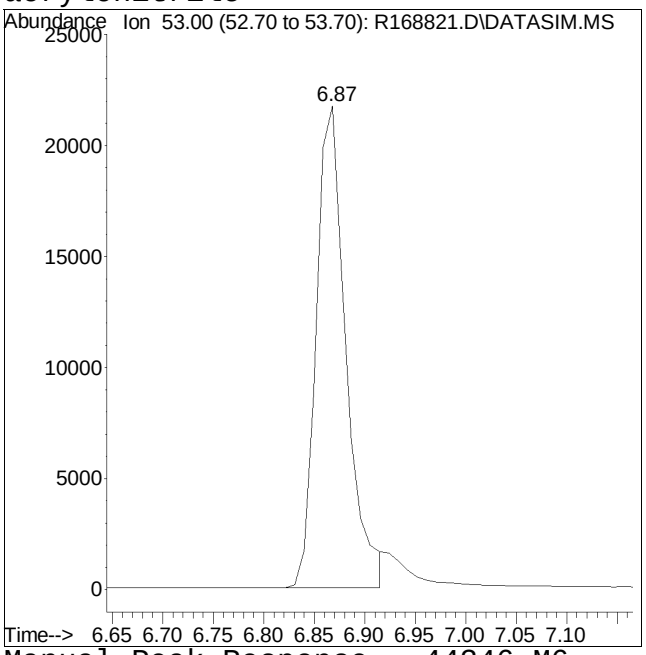
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168821.D
Date Inj'd : 10/24/2019 8:57 am
Sample : CTO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 9:26 am

Compound #16: acrylonitrile



Original Peak Response = 47560



Manual Peak Response = 44346 M6

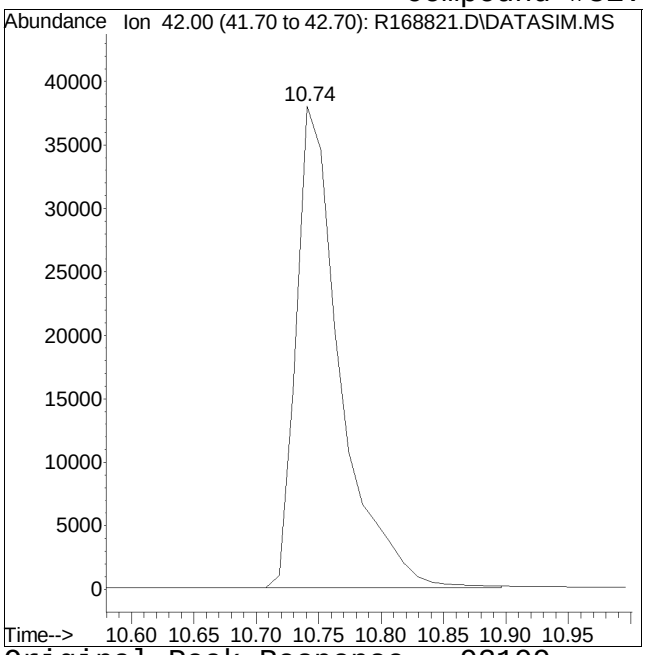
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

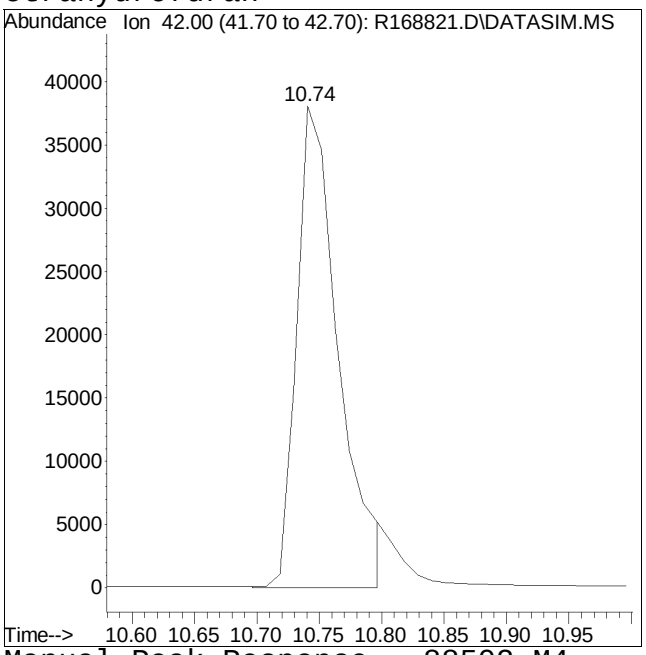
Data Path : O:\Forensics\Data\AIR1\2019Q
Data File : R168821.D
Date Inj'd : 10/24/2019 8:57 am
Sample : CTO15-SIMSTD5.0

Method : TSIM1_191023.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 10/24/2019 9:26 am

Compound #31: Tetrahydrofuran



Original Peak Response = 93199



Manual Peak Response = 88502 M4

M4 = Poor automated baseline construction.

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Calibration Date	: 10/24/19 14:01
Lab File ID	: R168825	Init. Calib. Date(s)	: 10/23/19 10/23/19
Sample No	: WG1300315-2	Init. Calib. Times	: 12:51 17:38
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	103	0
propylene	0.337	0.339	-	-0.6	30	114	.01
dichlorodifluoromethane	1.078	1.053	-	2.3	30	101	0
chloromethane	0.359	0.352	-	1.9	30	105	0
Freon-114	1.232	1.253	-	-1.7	30	106	.01
vinyl chloride	0.436	0.437	-	-0.2	30	106	.01
1,3-butadiene	0.287	0.297	-	-3.5	30	110	0
bromomethane	0.478	0.464	-	2.9	30	106	0
chloroethane	0.218	0.209	-	4.1	30	106	0
ethanol	0.241	0.216	-	10.4	30	94	0
vinyl bromide	0.484	0.465	-	3.9	30	104	0
acrolein	0.17	0.15	-	11.8	30	99	0
acetone	0.651	0.535	-	17.8	30	85	0
trichlorofluoromethane	1.099	1.107	-	-0.7	30	104	0
isopropyl alcohol	0.714	0.609	-	14.7	30	91	0
acrylonitrile	0.301	0.263	-	12.6	30	99	0
1,1-dichloroethene	0.693	0.685	-	1.2	30	105	0
tertiary butyl alcohol	0.851	0.799	-	6.1	30	101	0
methylene chloride	0.482	0.464	-	3.7	30	103	0
3-chloropropene	0.474	0.503	-	-6.1	30	116	0
carbon disulfide	1.41	1.46	-	-3.5	30	114	0
Freon 113	0.943	1.056	-	-12	30	117	0
trans-1,2-dichloroethene	0.702	0.734	-	-4.6	30	102	0
1,1-dichloroethane	0.889	0.942	-	-6	30	106	0
MTBE	1.262	1.326	-	-5.1	30	107	0
vinyl acetate	0.891	0.822	-	7.7	30	101	0
2-butanone	0.949	0.929	-	2.1	30	104	0
cis-1,2-dichloroethene	0.713	0.747	-	-4.8	30	106	0
Ethyl Acetate	0.202	0.211	-	-4.5	30	107	0
chloroform	1.262	1.307	-	-3.6	30	107	0
Tetrahydrofuran	0.545	0.507	-	7	30	98	0
1,2-dichloroethane	0.653	0.643	-	1.5	30	103	0
1,4-difluorobenzene	1	1	-	0	30	104	0
hexane	0.372	0.37	-	0.5	30	107	0
1,1,1-trichloroethane	0.399	0.406	-	-1.8	30	107	0
benzene	0.626	0.625	-	0.2	30	104	0
carbon tetrachloride	0.397	0.406	-	-2.3	30	107	0
cyclohexane	0.303	0.303	-	0	30	106	0
dibromomethane	0.289	0.24	-	17	30	99	0
1,2-dichloropropane	0.237	0.242	-	-2.1	30	107	0
bromodichloromethane	0.468	0.486	-	-3.8	30	108	0
1,4-dioxane	0.14	0.15	-	-7.1	30	109	0
trichloroethene	0.296	0.303	-	-2.4	30	106	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Integral Consulting, Inc.	Lab Number	: L1948939
Project Name	: 135 KENT AVE	Project Number	: E051
Instrument ID	: AIRPIANO1	Calibration Date	: 10/24/19 14:01
Lab File ID	: R168825	Init. Calib. Date(s)	: 10/23/19 10/23/19
Sample No	: WG1300315-2	Init. Calib. Times	: 12:51 17:38
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2,2,4-trimethylpentane	0.969	0.987	-	-1.9	30	109	0
heptane	0.341	0.344	-	-0.9	30	106	0
cis-1,3-dichloropropene	1.338	1.47	-	-9.9	30	111	0
4-methyl-2-pentanone	0.447	0.466	-	-4.3	30	106	0
trans-1,3-dichloropropene	0.322	0.306	-	5	30	95	0
1,1,2-trichloroethane	0.271	0.285	-	-5.2	30	110	0
chlorobenzene-D5	1	1	-	0	30	102	0
toluene	4.962	4.881	-	1.6	30	105	0
2-hexanone	2.489	2.743	-	-10.2	30	105	-.01
dibromochloromethane	2.855	3.194	-	-11.9	30	110	0
1,2-dibromoethane	2.665	2.867	-	-7.6	30	106	0
tetrachloroethene	2.377	2.465	-	-3.7	30	104	0
1,1,1,2-tetrachloroethane	2.051	1.974	-	3.8	30	100	0
chlorobenzene	3.926	4.142	-	-5.5	30	106	0
ethylbenzene	6.14	6.346	-	-3.4	30	106	0
m+p-xylene	5.281	4.866	-	7.9	30	106	0
bromoform	2.914	3.244	-	-11.3	30	108	0
styrene	3.613	3.929	-	-8.7	30	106	0
1,1,2,2-tetrachloroethane	3.79	4.093	-	-8	30	105	0
o-xylene	4.957	5.094	-	-2.8	30	107	0
1,2,3-trichloropropane	2.908	2.838	-	2.4	30	99	0
isopropylbenzene	6.624	6.612	-	0.2	30	103	0
bromobenzene	3.356	3.358	-	-0.1	30	100	0
4-ethyl toluene	6.91	7.347	-	-6.3	30	101	0
1,3,5-trimethylbenzene	5.582	5.91	-	-5.9	30	103	0
tert-butylbenzene	5.988	5.946	-	0.7	30	99	0
1,2,4-trimethylbenzene	5.446	6.02	-	-10.5	30	104	0
Benzyl Chloride	4.827	4.995	-	-3.5	30	101	0
1,3-dichlorobenzene	4.267	4.745	-	-11.2	30	104	0
1,4-dichlorobenzene	4.354	4.721	-	-8.4	30	101	0
sec-butylbenzene	8.414	8.309	-	1.2	30	98	0
p-isopropyltoluene	7.45	6.807	-	8.6	30	89	0
1,2-dichlorobenzene	4.071	4.483	-	-10.1	30	102	0
n-butylbenzene	6.882	7.173	-	-4.2	30	100	0
1,2,4-trichlorobenzene	3.305	4.194	-	-26.9	30	101	0
naphthalene	7.855	8.04	-	-2.4	30	90	0
1,2,3-trichlorobenzene	3.068	3.749	-	-22.2	30	98	0
hexachlorobutadiene	2.792	3.618	-	-29.6	30	106	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	103	0.00
2		propylene	0.337	0.339	-0.6	114	0.01
3		dichlorodifluoromethane	1.078	1.053	2.3	101	0.00
4	C	chloromethane	0.359	0.352	1.9	105	0.00
5		Freon-114	1.232	1.253	-1.7	106	0.01
6	C	vinyl chloride	0.436	0.437	-0.2	106	0.01
7	C	1,3-butadiene	0.287	0.297	-3.5	110	0.00
8	C	bromomethane	0.478	0.464	2.9	106	0.00
9	C	chloroethane	0.218	0.209	4.1	106	0.00
10		ethanol	0.241	0.216	10.4	94	0.00
11	C	vinyl bromide	0.484	0.465	3.9	104	0.00
12	C	acrolein	0.170	0.150	11.8	99	0.00
13		acetone	0.651	0.535	17.8	85	0.00
14		trichlorofluoromethane	1.099	1.107	-0.7	104	0.00
15		isopropyl alcohol	0.714	0.609	14.7	91	0.00
16	C	acrylonitrile	0.301	0.263	12.6	99	0.00
17	C	1,1-dichloroethene	0.693	0.685	1.2	105	0.00
18		tertiary butyl alcohol	0.851	0.799	6.1	101	0.00
19	C	methylene chloride	0.482	0.464	3.7	103	0.00
20	C	3-chloropropene	0.474	0.503	-6.1	116	0.00
21	C	carbon disulfide	1.410	1.460	-3.5	114	0.00
22		Freon 113	0.943	1.056	-12.0	117	0.00
23		trans-1,2-dichloroethene	0.702	0.734	-4.6	102	0.00
24	C	1,1-dichloroethane	0.889	0.942	-6.0	106	0.00
25	C	MTBE	1.262	1.326	-5.1	107	0.00
26	C	vinyl acetate	0.891	0.822	7.7	101	0.00
27	C	2-butanone	0.949	0.929	2.1	104	0.00
28		cis-1,2-dichloroethene	0.713	0.747	-4.8	106	0.00
29		Ethyl Acetate	0.202	0.211	-4.5	107	0.00
30	C	chloroform	1.262	1.307	-3.6	107	0.00
31		Tetrahydrofuran	0.545	0.507	7.0	98	0.00
32	C	1,2-dichloroethane	0.653	0.643	1.5	103	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00
34	C	hexane	0.372	0.370	0.5	107	0.00
36	C	1,1,1-trichloroethane	0.399	0.406	-1.8	107	0.00
37	C	benzene	0.626	0.625	0.2	104	0.00
38	C	carbon tetrachloride	0.397	0.406	-2.3	107	0.00
39		cyclohexane	0.303	0.303	0.0	106	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40		dibromomethane	0.289	0.240	17.0	99	0.00
41	C	1,2-dichloropropane	0.237	0.242	-2.1	107	0.00
42		bromodichloromethane	0.468	0.486	-3.8	108	0.00
43	C	1,4-dioxane	0.140	0.150	-7.1	109	0.00
44	C	trichloroethene	0.296	0.303	-2.4	106	0.00
45	C	2,2,4-trimethylpentane	0.969	0.987	-1.9	109	0.00
46		heptane	0.341	0.344	-0.9	106	0.00
47	C	cis-1,3-dichloropropene	1.338	1.470	-9.9	111	0.00
48	C	4-methyl-2-pentanone	0.447	0.466	-4.3	106	0.00
49		trans-1,3-dichloropropene	0.322	0.306	5.0	95	0.00
50	C	1,1,2-trichloroethane	0.271	0.285	-5.2	110	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	102	0.00
52	C	toluene	4.962	4.881	1.6	105	0.00
54		2-hexanone	2.489	2.743	-10.2	105	-0.01
55		dibromochloromethane	2.855	3.194	-11.9	110	0.00
56	C	1,2-dibromoethane	2.665	2.867	-7.6	106	0.00
57	C	tetrachloroethene	2.377	2.465	-3.7	104	0.00
58		1,1,1,2-tetrachloroethane	2.051	1.974	3.8	100	0.00
59	C	chlorobenzene	3.926	4.142	-5.5	106	0.00
60	C	ethylbenzene	6.140	6.346	-3.4	106	0.00
61	C	m+p-xylene	5.281	4.866	7.9	106	0.00
62	C	bromoform	2.914	3.244	-11.3	108	0.00
63	C	styrene	3.613	3.929	-8.7	106	0.00
64	C	1,1,2,2-tetrachloroethane	3.790	4.093	-8.0	105	0.00
65	C	o-xylene	4.957	5.094	-2.8	107	0.00
66		1,2,3-trichloropropane	2.908	2.838	2.4	99	0.00
68	C	isopropylbenzene	6.624	6.612	0.2	103	0.00
69		bromobenzene	3.356	3.358	-0.1	100	0.00
70		4-ethyl toluene	6.910	7.347	-6.3	101	0.00
71		1,3,5-trimethylbenzene	5.582	5.910	-5.9	103	0.00
72		tert-butylbenzene	5.988	5.946	0.7	99	0.00
73		1,2,4-trimethylbenzene	5.446	6.020	-10.5	104	0.00
74	C	Benzyl Chloride	4.827	4.995	-3.5	101	0.00
75		1,3-dichlorobenzene	4.267	4.745	-11.2	104	0.00
76	C	1,4-dichlorobenzene	4.354	4.721	-8.4	101	0.00
77		sec-butylbenzene	8.414	8.309	1.2	98	0.00
78		p-isopropyltoluene	7.450	6.807	8.6	89	0.00
79		1,2-dichlorobenzene	4.071	4.483	-10.1	102	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	n-butylbenzene	6.882	7.173	-4.2	100	0.00
81 C	1,2,4-trichlorobenzene	3.305	4.194	-26.9	101	0.00
82	naphthalene	7.855	8.040	-2.4	90	0.00
83	1,2,3-trichlorobenzene	3.068	3.749	-22.2	98	0.00
84 C	hexachlorobutadiene	2.792	3.618	-29.6	106	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.102	49	322366	10.000 ppbV	0.00
Standard Area = 322366			Recovery	= 100.00%	
33) 1,4-difluorobenzene	12.339	114	829192	10.000 ppbV	0.00
Standard Area = 829192			Recovery	= 100.00%	
51) chlorobenzene-D5	16.798	54	131868	10.000 ppbV	0.00
Standard Area = 131868			Recovery	= 100.00%	
System Monitoring Compounds					
Target Compounds					Qvalue
2) propylene	3.917	41	54632M6	5.036 ppbV	
3) dichlorodifluoromethane	4.018	85	169765	4.884 ppbV	99
4) chloromethane	4.230	50	56715	4.903 ppbV	99
5) Freon-114	4.386	85	201890	5.084 ppbV	93
6) vinyl chloride	4.543	62	70426	5.005 ppbV	97
7) 1,3-butadiene	4.733	54	47916	5.177 ppbV	92
8) bromomethane	5.109	94	74856	4.861 ppbV	100
9) chloroethane	5.369	64	33663	4.795 ppbV	94
10) ethanol	5.574	31	174420	22.420 ppbV	100
11) vinyl bromide	5.853	106	75009	4.808 ppbV	100
12) acrolein	6.040	56	24156	4.404 ppbV	99
13) acetone	6.226	43	431563	20.577 ppbV	98
14) trichlorofluoromethane	6.440	101	178506	5.040 ppbV	99
15) isopropyl alcohol	6.598	45	245297	10.651 ppbV	100
16) acrylonitrile	6.868	53	42425M6	4.372 ppbV	
17) 1,1-dichloroethene	7.287	61	110358	4.937 ppbV	99
18) tertiary butyl alcohol	7.408	59	128838	4.697 ppbV	98
19) methylene chloride	7.464	49	74725	4.811 ppbV	99
20) 3-chloropropene	7.613	41	81108	5.305 ppbV	99
21) carbon disulfide	7.789	76	235335	5.176 ppbV	97
22) Freon 113	7.808	101	170193	5.596 ppbV	97
23) trans-1,2-dichloroethene	8.655	61	118376	5.231 ppbV	100
24) 1,1-dichloroethane	8.898	63	151761	5.298 ppbV	100
25) MTBE	8.995	73	213702	5.252 ppbV	99
26) vinyl acetate	9.117	43	132539	4.615 ppbV	100
27) 2-butanone	9.409	43	149811	4.896 ppbV	99
28) cis-1,2-dichloroethene	9.912	61	120428	5.241 ppbV	99
29) Ethyl Acetate	10.209	61	33977	5.211 ppbV	91
30) chloroform	10.262	83	210658	5.177 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
31) Tetrahydrofuran	10.741	42	81745M4	4.649	ppbV		
32) 1,2-dichloroethane	11.118	62	103694	4.925	ppbV		100
34) hexane	10.156	57	153600	4.986	ppbV		99
36) 1,1,1-trichloroethane	11.407	97	168248	5.082	ppbV		99
37) benzene	11.932	78	259283	4.993	ppbV		99
38) carbon tetrachloride	12.095	117	168400	5.118	ppbV		97
39) cyclohexane	12.234	56	125544	5.000	ppbV		98
40) dibromomethane	12.840	93	99487	4.148	ppbV		98
41) 1,2-dichloropropane	12.863	63	100346	5.116	ppbV		99
42) bromodichloromethane	13.096	83	201618	5.193	ppbV		99
43) 1,4-dioxane	13.154	88	62308	5.352	ppbV		98
44) trichloroethene	13.142	130	125708	5.124	ppbV		100
45) 2,2,4-trimethylpentane	13.165	57	409286	5.095	ppbV		99
46) heptane	13.468	43	142767	5.054	ppbV		100
47) cis-1,3-dichloropropene	14.126	75	609518	5.495	ppbV		99
48) 4-methyl-2-pentanone	14.160	43	193363	5.221	ppbV		97
49) trans-1,3-dichloropropene	14.716	75	127037	4.755	ppbV		99
50) 1,1,2-trichloroethane	14.901	97	118043	5.263	ppbV		98
52) toluene	15.190	91	321832	4.919	ppbV		100
54) 2-hexanone	15.438	43	180879	5.510	ppbV	#	82
55) dibromochloromethane	15.613	129	210576	5.594	ppbV		100
56) 1,2-dibromoethane	15.840	107	189029	5.378	ppbV		100
57) tetrachloroethene	16.253	166	162508	5.185	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.818	131	130171	4.812	ppbV		100
59) chlorobenzene	16.838	112	273094	5.275	ppbV		99
60) ethylbenzene	17.132	91	418403	5.168	ppbV		99
61) m+p-xylene	17.281	91	641704	9.214	ppbV		99
62) bromoform	17.356	173	213867	5.565	ppbV		100
63) styrene	17.560	104	259031	5.437	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.644	83	269858	5.399	ppbV		99
65) o-xylene	17.644	91	335857	5.138	ppbV		100
66) 1,2,3-trichloropropane	17.744	75	187138	4.879	ppbV		99
68) isopropylbenzene	18.087	105	435931	4.990	ppbV		100
69) bromobenzene	18.172	77	221434	5.004	ppbV		100
70) 4-ethyl toluene	18.575	105	484394	5.316	ppbV		99
71) 1,3,5-trimethylbenzene	18.624	105	389648	5.294	ppbV		99
72) tert-butylbenzene	18.934	119	392011	4.964	ppbV		100
73) 1,2,4-trimethylbenzene	18.934	105	396949	5.528	ppbV		98
74) Benzyl Chloride	19.048	91	329321	5.174	ppbV		99
75) 1,3-dichlorobenzene	19.067	146	312881	5.560	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : Default-LCS-AP2 - All compounds listed

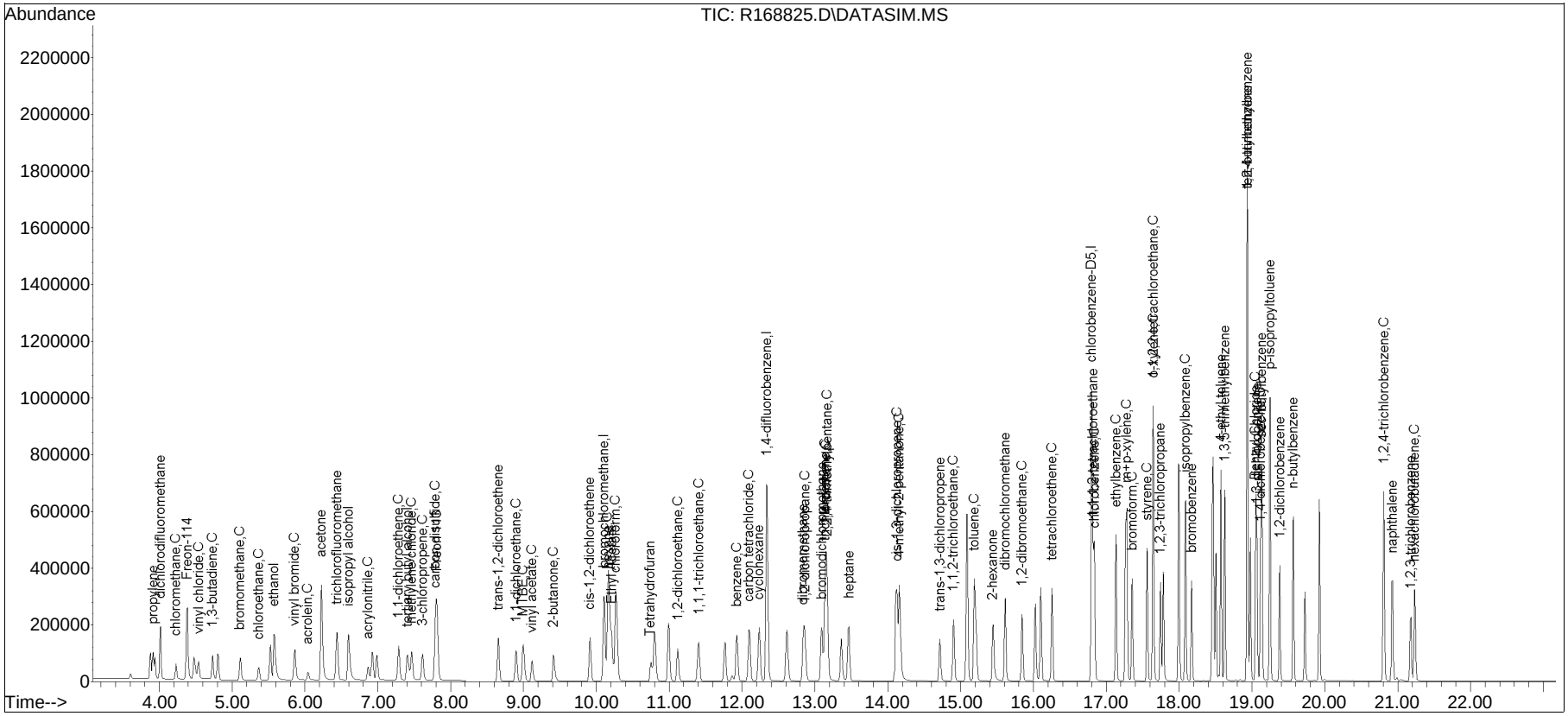
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
76) 1,4-dichlorobenzene	19.115	146	311268M3	5.421 ppbV	
77) sec-butylbenzene	19.133	105	547813	4.937 ppbV	100
78) p-isopropyltoluene	19.248	119	448792	4.568 ppbV	99
79) 1,2-dichlorobenzene	19.381	146	295599	5.506 ppbV	99
80) n-butylbenzene	19.568	91	472945	5.211 ppbV	100
81) 1,2,4-trichlorobenzene	20.811	180	276526	6.344 ppbV	99
82) naphthalene	20.931	128	530120	5.118 ppbV	100
83) 1,2,3-trichlorobenzene	21.183	180	247182	6.109 ppbV	99
84) hexachlorobutadiene	21.231	225	238535	6.479 ppbV	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listedR168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-2,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

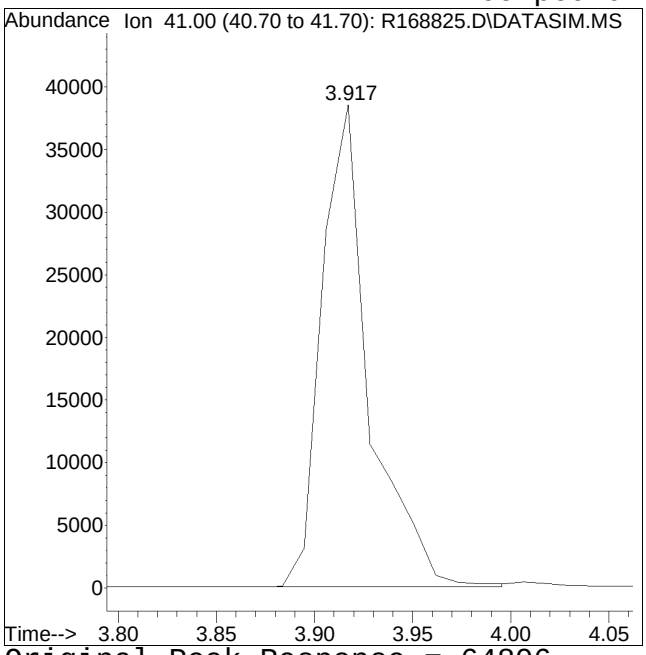


Manual Integration Report

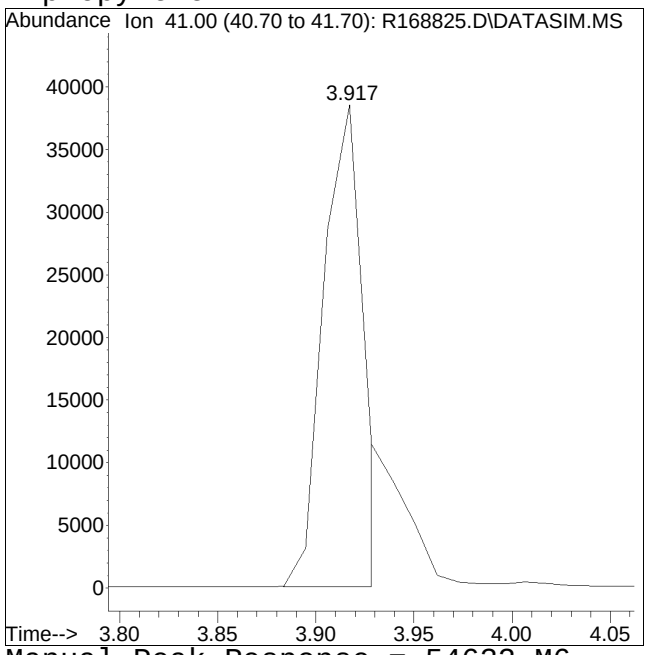
Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168825.D
Date Inj'd : 10/24/2019 2:01 pm
Sample : WG1300315-2,3,250,250

Method : TSIM1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/24/2019 2:26 pm

Compound #2: propylene



Original Peak Response = 64806



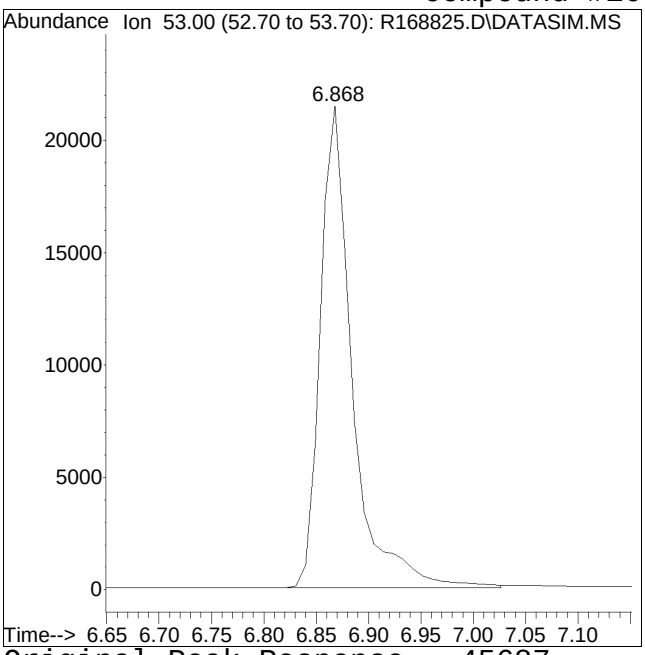
Manual Peak Response = 54632 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

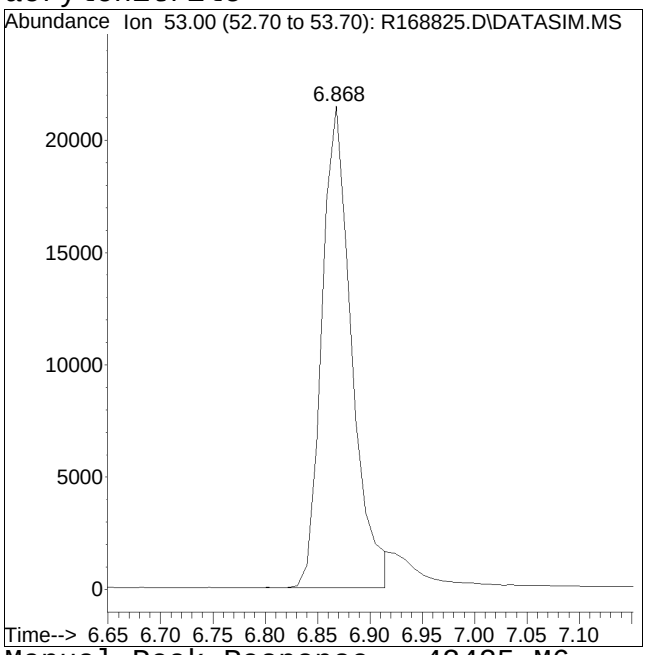
Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TSIM1_191023.M
Data File : R168825.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 2:01 pm Instrument : Air Piano 1
Sample : WG1300315-2,3,250,250 Quant Date : 10/24/2019 2:26 pm

Compound #16: acrylonitrile



Original Peak Response = 45687



Manual Peak Response = 42425 M6

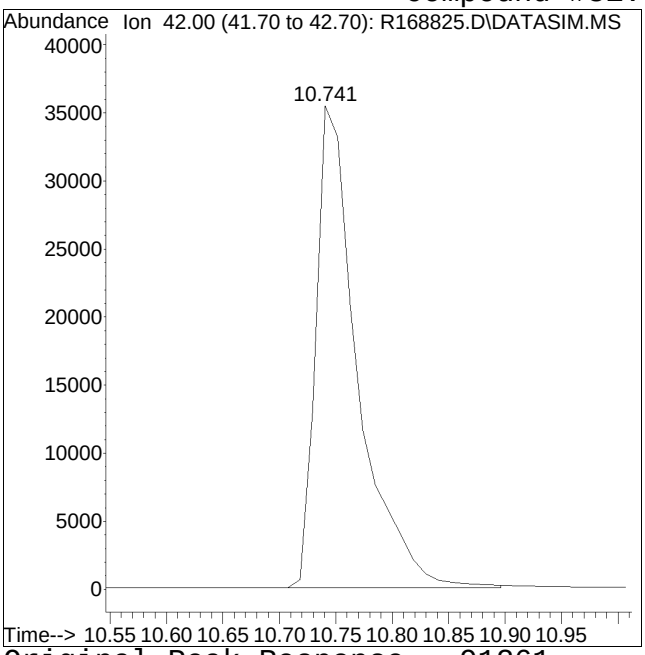
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

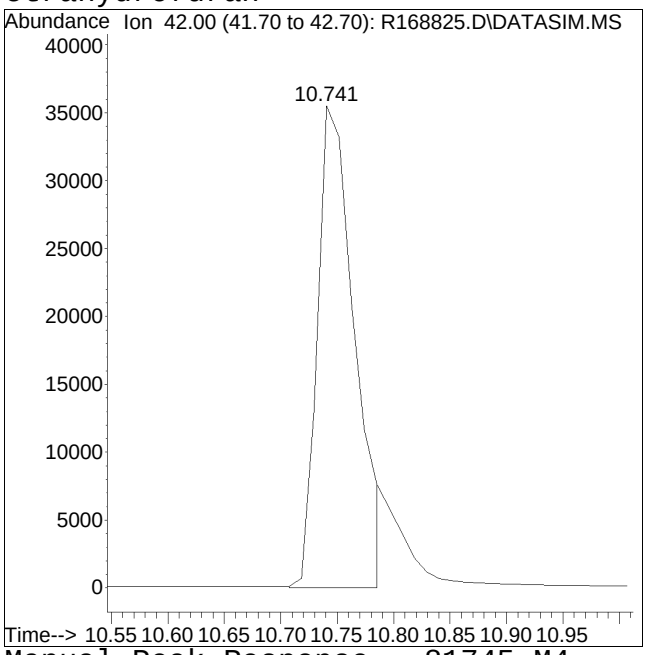
Data Path : O:\Forensics\Data\AIR1\201Q
Data File : R168825.D
Date Inj'd : 10/24/2019 2:01 pm
Sample : WG1300315-2,3,250,250

Method : TSIM1_191023.M
Operator : AIRPIANO1:TS
Instrument : Air Piano 1
Quant Date : 10/24/2019 2:26 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 91261



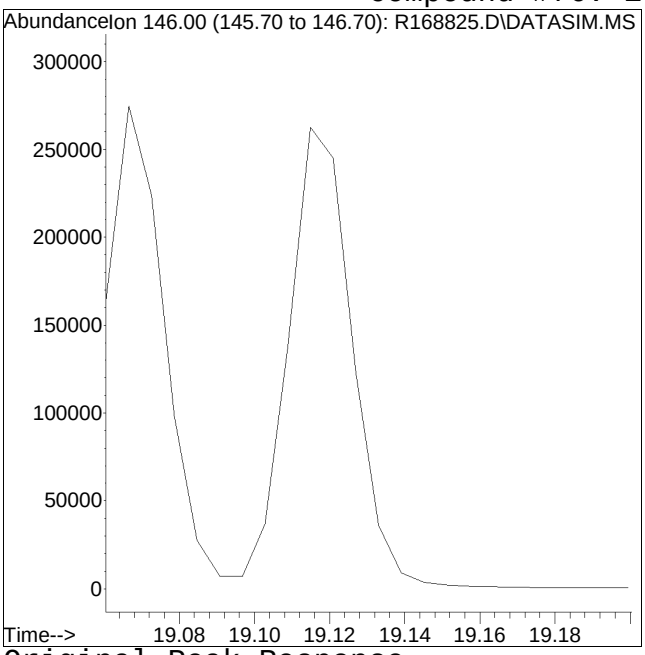
Manual Peak Response = 81745 M4

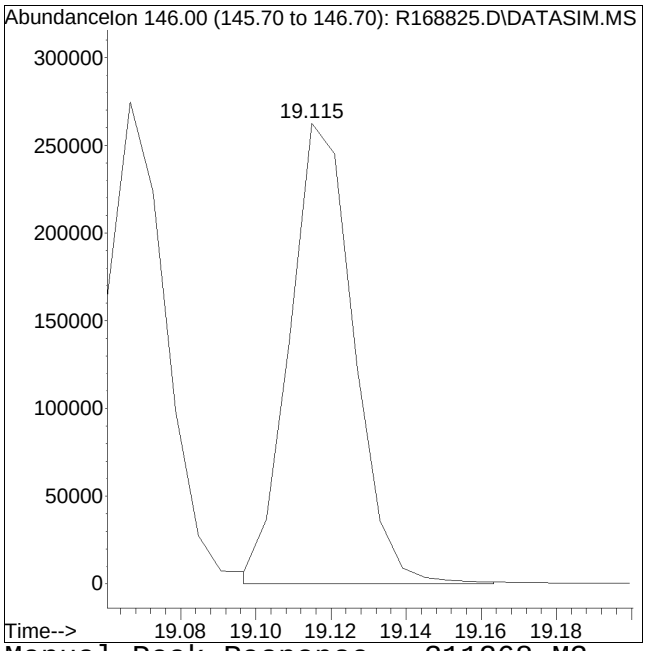
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\AIR1\201QMethod : TSIM1_191023.M
Data File : R168825.D Operator : AIRPIANO1:TS
Date Inj'd : 10/24/2019 2:01 pm Instrument : Air Piano 1
Sample : WG1300315-2,3,250,250 Quant Date : 10/24/2019 2:26 pm

Compound #76: 1,4-dichlorobenzene



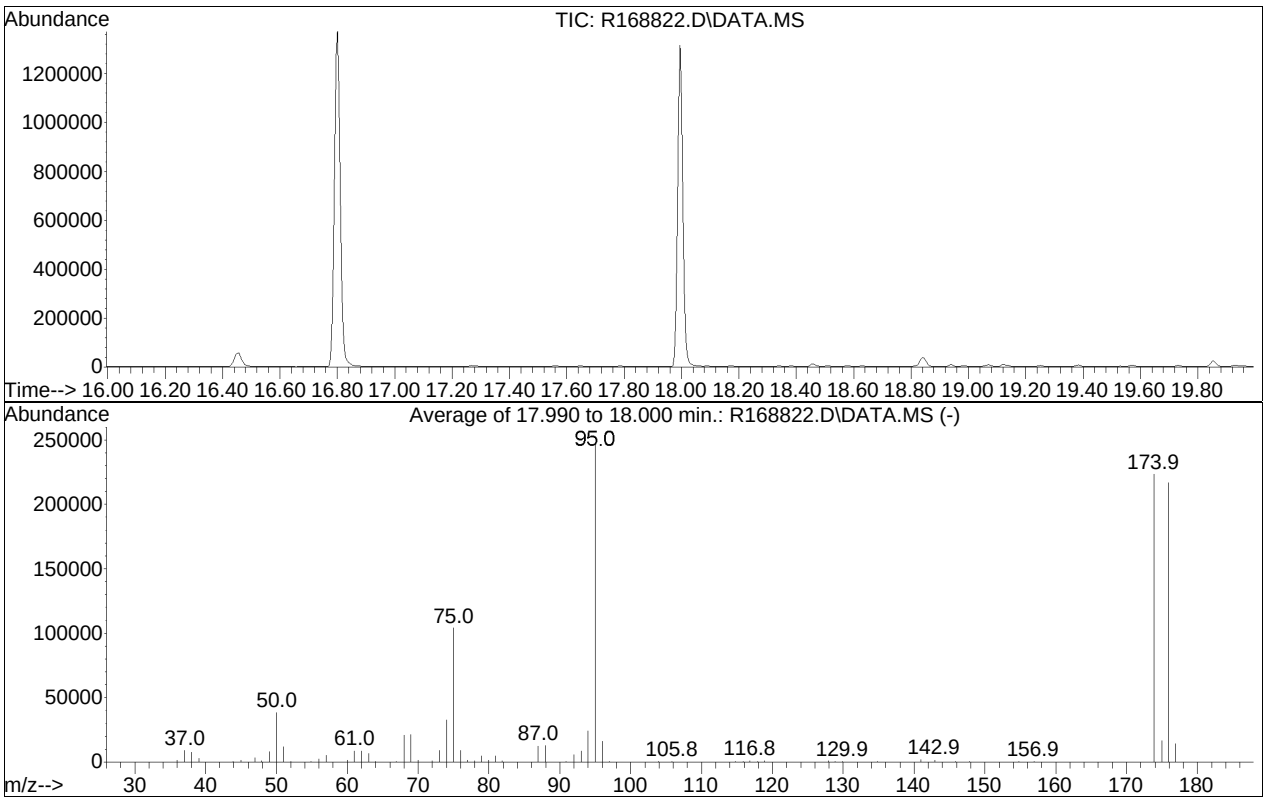


Original Peak Response = Manual Peak Response = 311268 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168822.D
Acq On : 24 Oct 2019 12:26 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-1,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Oct 23 18:03:30 2019



Spectrum Information: Average of 17.990 to 18.000 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.5	38421	PASS
75	95	30	66	42.0	104051	PASS
95	95	100	100	100.0	247872	PASS
96	95	5	9	6.6	16367	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	90.3	223808	PASS
175	174	4	9	7.5	16694	PASS
176	174	93	101	97.0	217067	PASS
177	176	5	9	6.6	14328	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-4,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:52:23 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	315233	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		97.79%	
33) 1,4-difluorobenzene	12.339	114	776235	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		93.61%	
51) chlorobenzene-D5	16.803	54	127597	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		96.76%	

System Monitoring Compounds

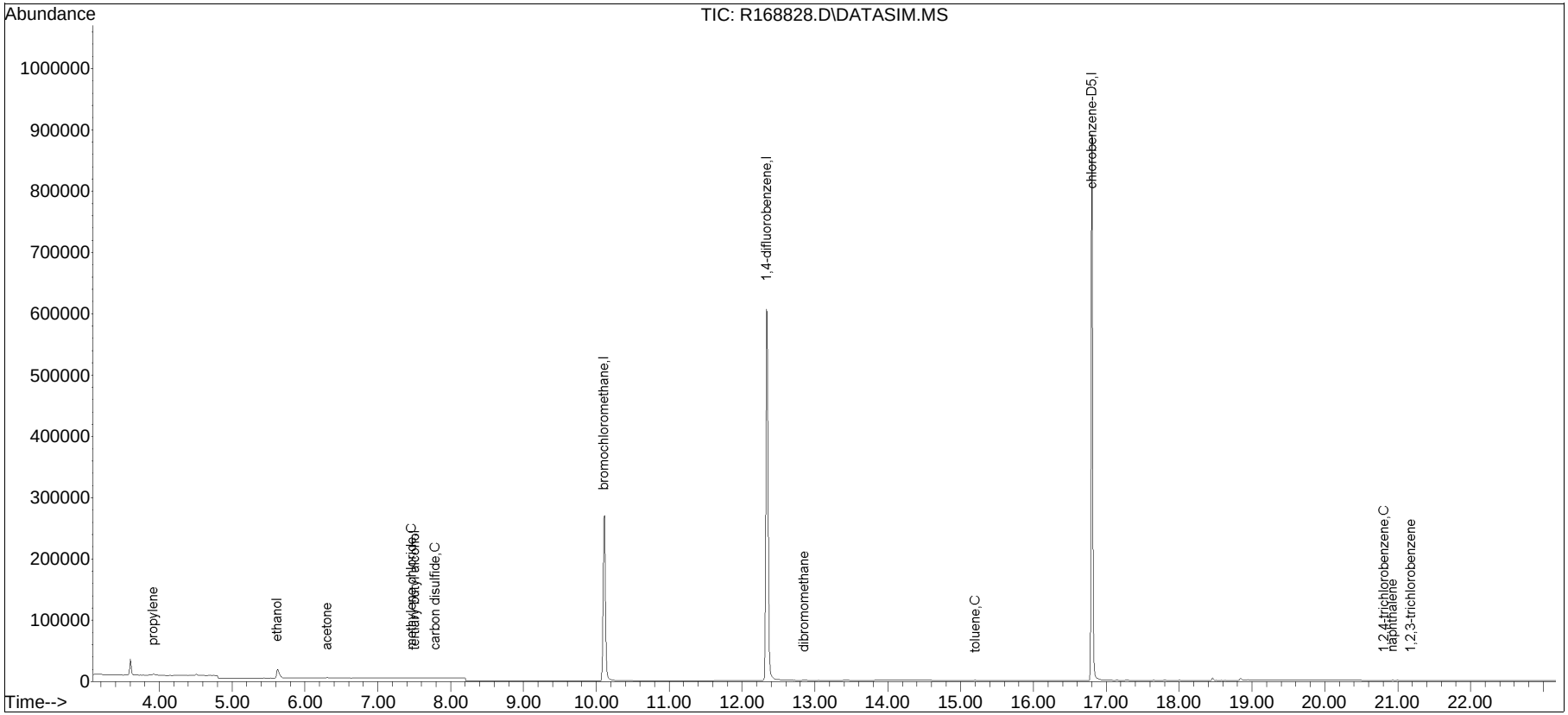
Target Compounds			Qvalue
6) vinyl chloride	4.509	0	N.D.
17) 1,1-dichloroethene	7.268	0	N.D.
28) cis-1,2-dichloroethene	9.920	0	N.D.
36) 1,1,1-trichloroethane	11.440	0	N.D.
38) carbon tetrachloride	12.106	0	N.D.
44) trichloroethene	13.142	0	N.D.
57) tetrachloroethene	16.253	0	N.D.

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listedR168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168828.D
Acq On : 24 Oct 2019 4:24 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-4,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 24 16:52:23 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-3,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	103	0.00
2		propylene	5.000	5.036	-0.7	114	0.01
3		dichlorodifluoromethane	5.000	4.884	2.3	101	0.00
4	C	chloromethane	5.000	4.903	1.9	105	0.00
5		Freon-114	5.000	5.084	-1.7	106	0.01
6	C	vinyl chloride	5.000	5.005	-0.1	106	0.01
7	C	1,3-butadiene	5.000	5.177	-3.5	110	0.00
8	C	bromomethane	5.000	4.861	2.8	106	0.00
9	C	chloroethane	5.000	4.795	4.1	106	0.00
10		ethanol	25.000	22.420	10.3	94	0.00
11	C	vinyl bromide	5.000	4.808	3.8	104	0.00
12	C	acrolein	5.000	4.404	11.9	99	0.00
13		acetone	25.000	20.577	17.7	85	0.00
14		trichlorofluoromethane	5.000	5.040	-0.8	104	0.00
15		isopropyl alcohol	12.500	10.651	14.8	91	0.00
16	C	acrylonitrile	5.000	4.372	12.6	99	0.00
17	C	1,1-dichloroethene	5.000	4.937	1.3	105	0.00
18		tertiary butyl alcohol	5.000	4.697	6.1	101	0.00
19	C	methylene chloride	5.000	4.811	3.8	103	0.00
20	C	3-chloropropene	5.000	5.305	-6.1	116	0.00
21	C	carbon disulfide	5.000	5.176	-3.5	114	0.00
22		Freon 113	5.000	5.596	-11.9	117	0.00
23		trans-1,2-dichloroethene	5.000	5.231	-4.6	102	0.00
24	C	1,1-dichloroethane	5.000	5.298	-6.0	106	0.00
25	C	MTBE	5.000	5.252	-5.0	107	0.00
26	C	vinyl acetate	5.000	4.615	7.7	101	0.00
27	C	2-butanone	5.000	4.896	2.1	104	0.00
28		cis-1,2-dichloroethene	5.000	5.241	-4.8	106	0.00
29		Ethyl Acetate	5.000	5.211	-4.2	107	0.00
30	C	chloroform	5.000	5.177	-3.5	107	0.00
31		Tetrahydrofuran	5.000	4.649	7.0	98	0.00
32	C	1,2-dichloroethane	5.000	4.925	1.5	103	0.00
33	I	1,4-difluorobenzene	10.000	10.000	0.0	104	0.00
34	C	hexane	5.000	4.986	0.3	107	0.00
36	C	1,1,1-trichloroethane	5.000	5.082	-1.6	107	0.00
37	C	benzene	5.000	4.993	0.1	104	0.00
38	C	carbon tetrachloride	5.000	5.118	-2.4	107	0.00
39		cyclohexane	5.000	5.000	0.0	106	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-3,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40		dibromomethane	5.000	4.148	17.0	99	0.00
41	C	1,2-dichloropropane	5.000	5.116	-2.3	107	0.00
42		bromodichloromethane	5.000	5.193	-3.9	108	0.00
43	C	1,4-dioxane	5.000	5.352	-7.0	109	0.00
44	C	trichloroethene	5.000	5.124	-2.5	106	0.00
45	C	2,2,4-trimethylpentane	5.000	5.095	-1.9	109	0.00
46		heptane	5.000	5.054	-1.1	106	0.00
47	C	cis-1,3-dichloropropene	5.000	5.495	-9.9	111	0.00
48	C	4-methyl-2-pentanone	5.000	5.221	-4.4	106	0.00
49		trans-1,3-dichloropropene	5.000	4.755	4.9	95	0.00
50	C	1,1,2-trichloroethane	5.000	5.263	-5.3	110	0.00
51	I	chlorobenzene-D5	10.000	10.000	0.0	102	0.00
52	C	toluene	5.000	4.919	1.6	105	0.00
54		2-hexanone	5.000	5.510	-10.2	105	-0.01
55		dibromochloromethane	5.000	5.594	-11.9	110	0.00
56	C	1,2-dibromoethane	5.000	5.378	-7.6	106	0.00
57	C	tetrachloroethene	5.000	5.185	-3.7	104	0.00
58		1,1,1,2-tetrachloroethane	5.000	4.812	3.8	100	0.00
59	C	chlorobenzene	5.000	5.275	-5.5	106	0.00
60	C	ethylbenzene	5.000	5.168	-3.4	106	0.00
61	C	m+p-xylene	10.000	9.214	7.9	106	0.00
62	C	bromoform	5.000	5.565	-11.3	108	0.00
63	C	styrene	5.000	5.437	-8.7	106	0.00
64	C	1,1,2,2-tetrachloroethane	5.000	5.399	-8.0	105	0.00
65	C	o-xylene	5.000	5.138	-2.8	107	0.00
66		1,2,3-trichloropropane	5.000	4.879	2.4	99	0.00
68	C	isopropylbenzene	5.000	4.990	0.2	103	0.00
69		bromobenzene	5.000	5.004	-0.1	100	0.00
70		4-ethyl toluene	5.000	5.316	-6.3	101	0.00
71		1,3,5-trimethylbenzene	5.000	5.294	-5.9	103	0.00
72		tert-butylbenzene	5.000	4.964	0.7	99	0.00
73		1,2,4-trimethylbenzene	5.000	5.528	-10.6	104	0.00
74	C	Benzyl Chloride	5.000	5.174	-3.5	101	0.00
75		1,3-dichlorobenzene	5.000	5.560	-11.2	104	0.00
76	C	1,4-dichlorobenzene	5.000	5.421	-8.4	101	0.00
77		sec-butylbenzene	5.000	4.937	1.3	98	0.00
78		p-isopropyltoluene	5.000	4.568	8.6	89	0.00
79		1,2-dichlorobenzene	5.000	5.506	-10.1	102	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-3,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	n-butylbenzene	5.000	5.211	-4.2	100	0.00
81 C	1,2,4-trichlorobenzene	5.000	6.344	-26.9	101	0.00
82	naphthalene	5.000	5.118	-2.4	90	0.00
83	1,2,3-trichlorobenzene	5.000	6.109	-22.2	98	0.00
84 C	hexachlorobutadiene	5.000	6.479	-29.6	106	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-3,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : Default-LCS-AP2 - All compounds listed

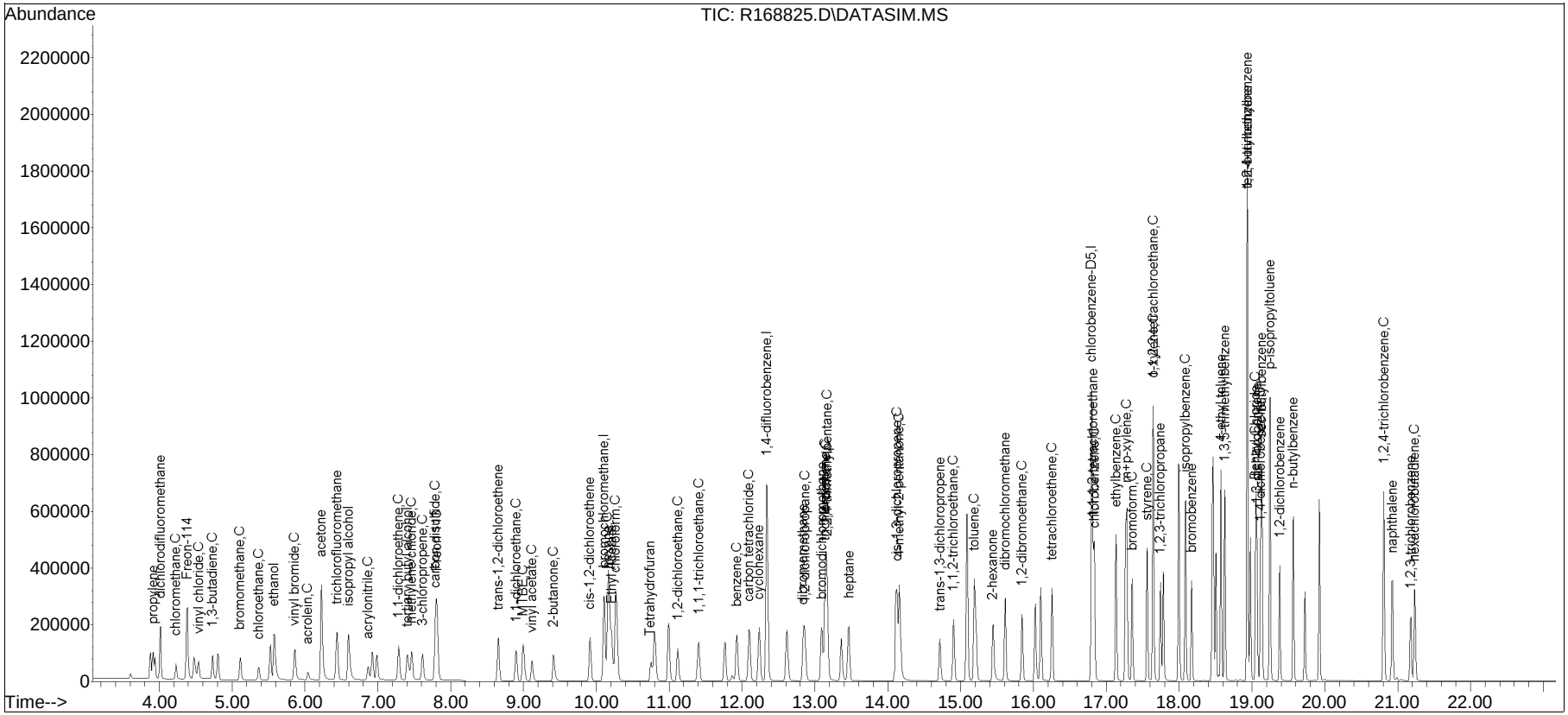
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.102	49	322366	10.000 ppbV	0.00
Standard Area = 322366			Recovery = 100.00%		
33) 1,4-difluorobenzene	12.339	114	829192	10.000 ppbV	0.00
Standard Area = 829192			Recovery = 100.00%		
51) chlorobenzene-D5	16.798	54	131868	10.000 ppbV	0.00
Standard Area = 131868			Recovery = 100.00%		
System Monitoring Compounds					
Target Compounds					Qvalue
6) vinyl chloride	4.543	62	70426	5.005 ppbV	97
17) 1,1-dichloroethene	7.287	61	110358	4.937 ppbV	99
28) cis-1,2-dichloroethene	9.912	61	120428	5.241 ppbV	99
36) 1,1,1-trichloroethane	11.407	97	168248	5.082 ppbV	99
38) carbon tetrachloride	12.095	117	168400	5.118 ppbV	97
44) trichloroethene	13.142	130	125708	5.124 ppbV	100
57) tetrachloroethene	16.253	166	162508	5.185 ppbV	99

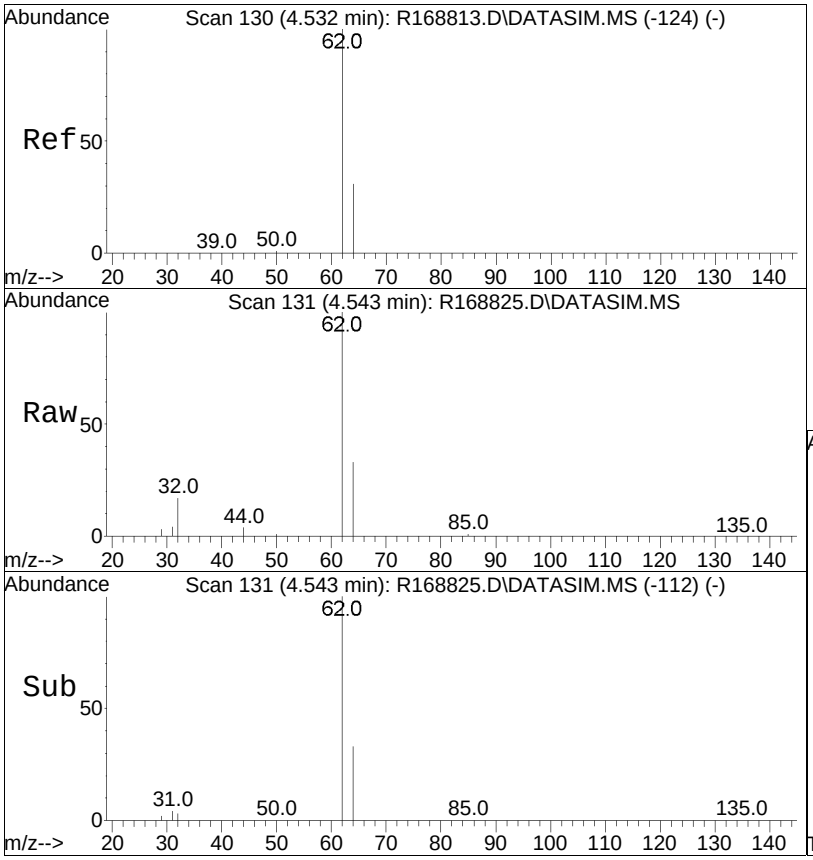
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listedR168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168825.D
Acq On : 24 Oct 2019 2:01 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-3,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 24 14:27:24 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

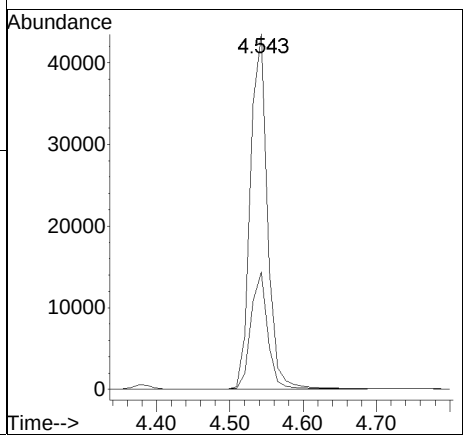


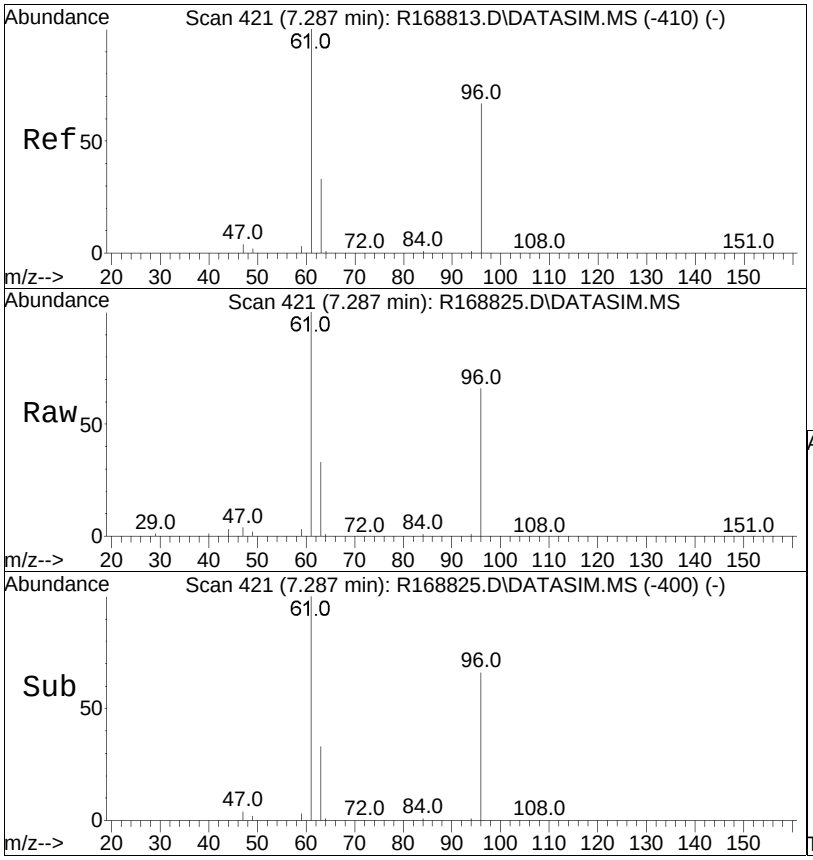


#6
vinyl chloride
Concen: 5.01 ppbV
RT: 4.543 min Scan# 131
Delta R.T. 0.011 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion: 62 Resp: 70426

Ion	Ratio	Lower	Upper
62	100		
64	33.0	25.3	37.9

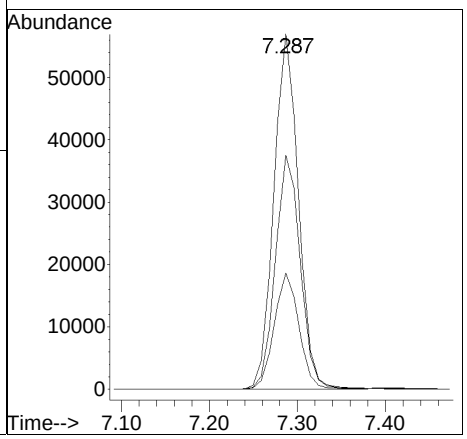


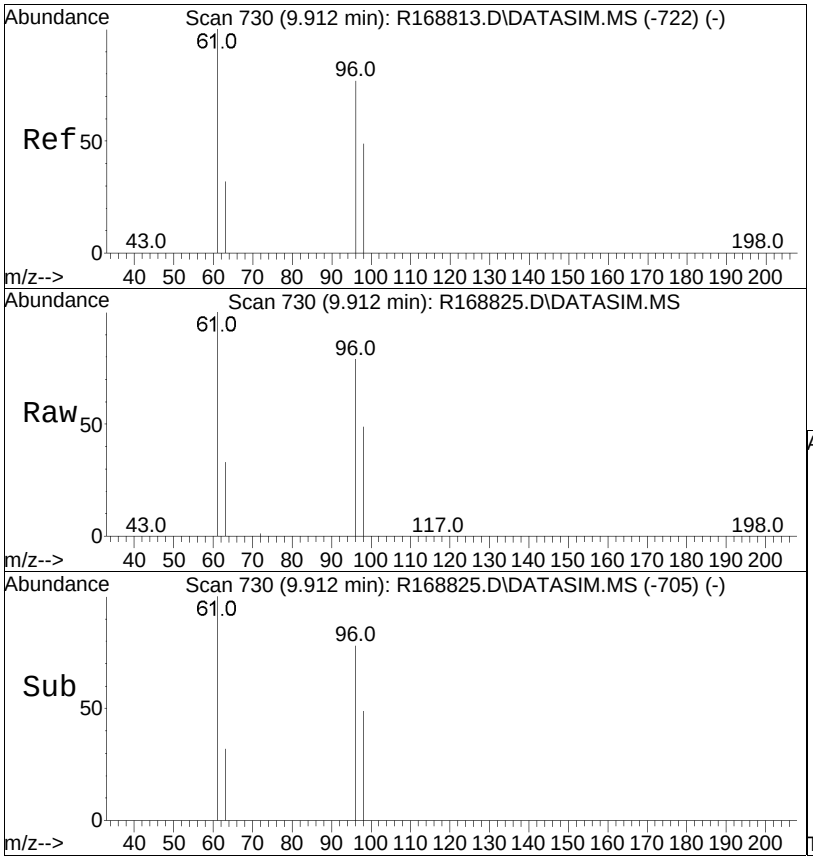


#17
1,1-dichloroethene
Concen: 4.94 ppbV
RT: 7.287 min Scan# 421
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion: 61 Resp: 110358

Ion	Ratio	Lower	Upper
61	100		
96	65.9	53.3	79.9
63	32.8	26.4	39.6

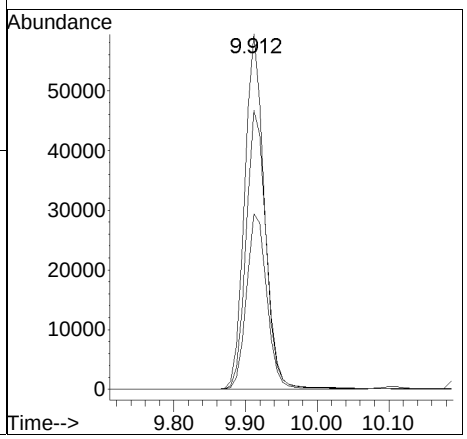


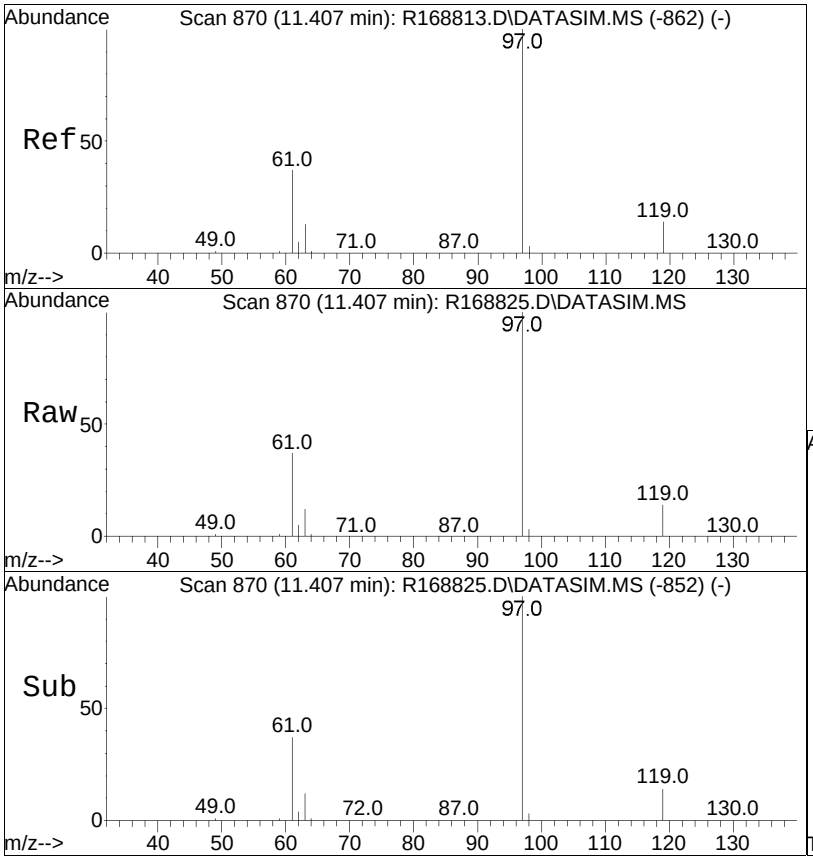


#28
cis-1,2-dichloroethene
Concen: 5.24 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion: 61 Resp: 120428

Ion	Ratio	Lower	Upper
61	100		
96	78.5	61.7	92.5
98	49.4	39.0	58.4

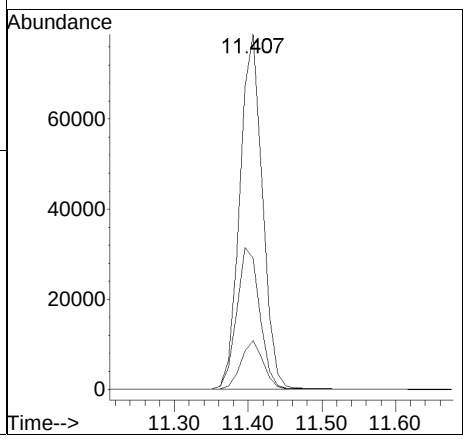


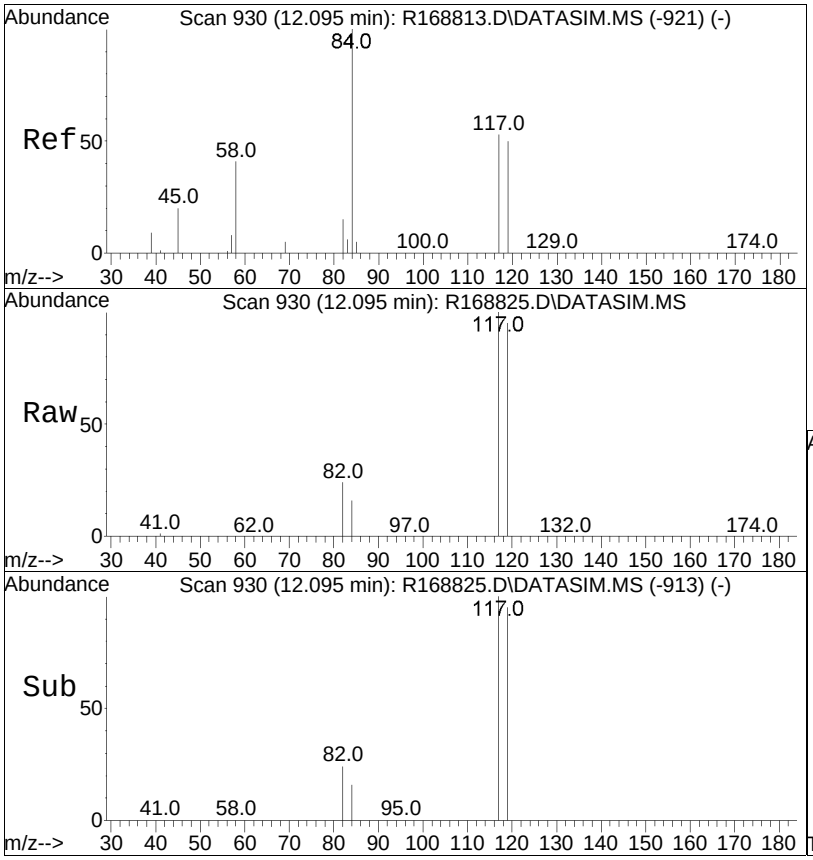


#36
1,1,1-trichloroethane
Concen: 5.08 ppbV
RT: 11.407 min Scan# 870
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion: 97 Resp: 168248

Ion	Ratio	Lower	Upper
97	100		
61	36.9	30.0	45.0
119	13.7	10.9	16.3

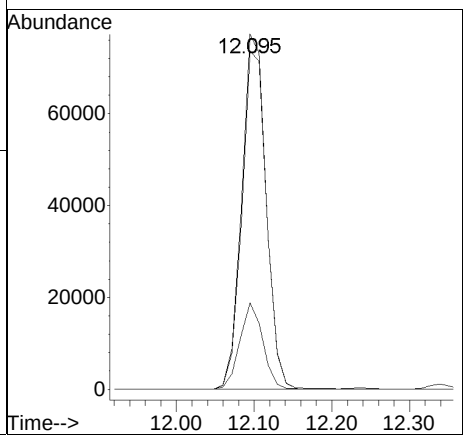


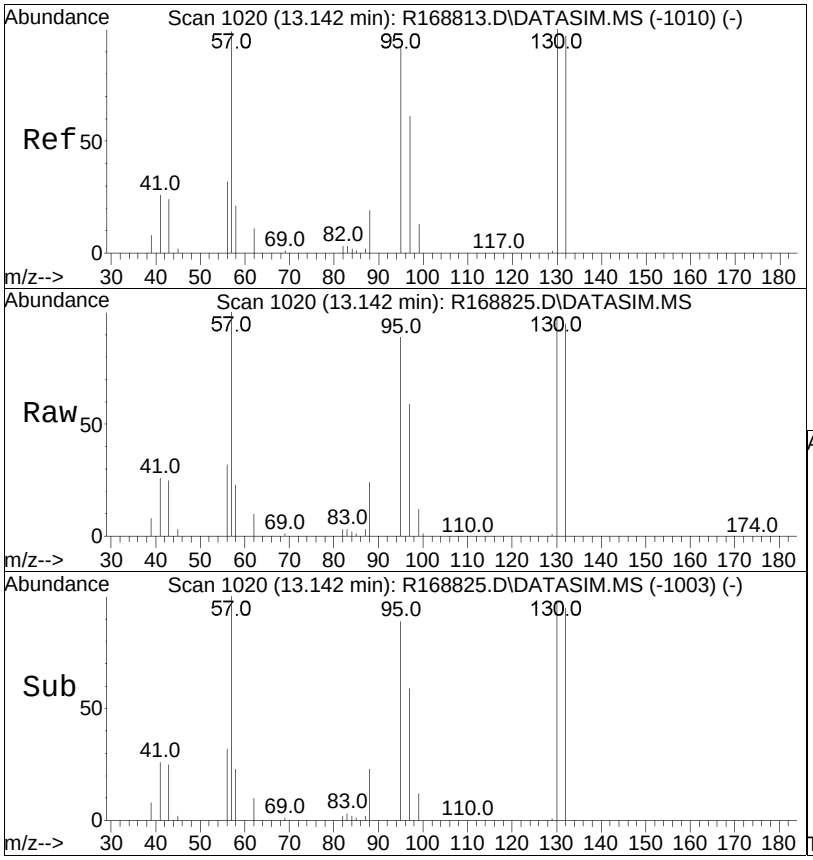


#38
carbon tetrachloride
Concen: 5.12 ppbV
RT: 12.095 min Scan# 930
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion:117 Resp: 168400

Ion	Ratio	Lower	Upper
117	100		
119	95.1	75.6	113.4
82	24.3	23.1	34.7

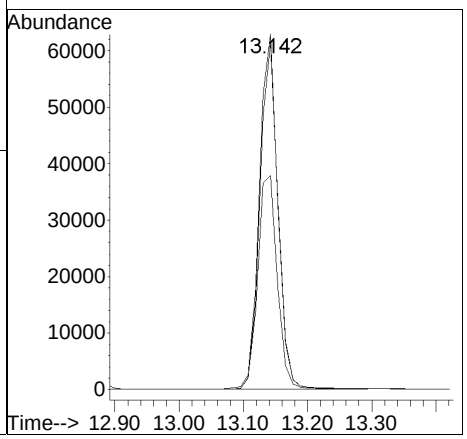


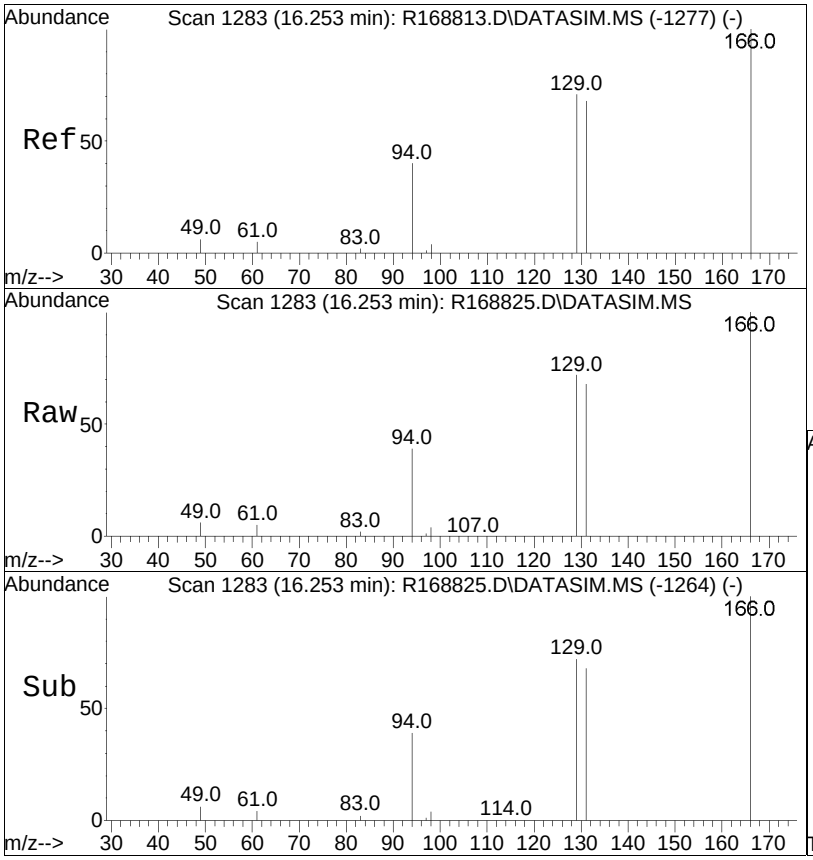


#44
trichloroethene
Concen: 5.12 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion:130 Resp: 125708

Ion	Ratio	Lower	Upper
130	100		
132	97.5	78.0	117.0
97	60.2	48.9	73.3

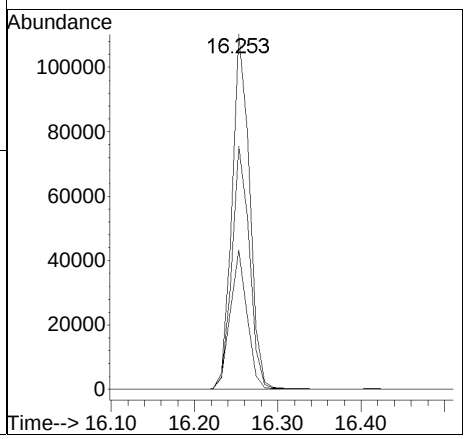




#57
tetrachloroethene
Concen: 5.18 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168825.D
Acq: 24 Oct 2019 2:01 pm

Tgt Ion:166 Resp: 162508

Ion	Ratio	Lower	Upper
166	100		
131	68.5	54.5	81.7
94	39.2	31.8	47.6



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168833.D
Acq On : 24 Oct 2019 7:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-5,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 07:43:28 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2019\191024SIM\R168825.D
Sub List : 7-NY-SIM - .

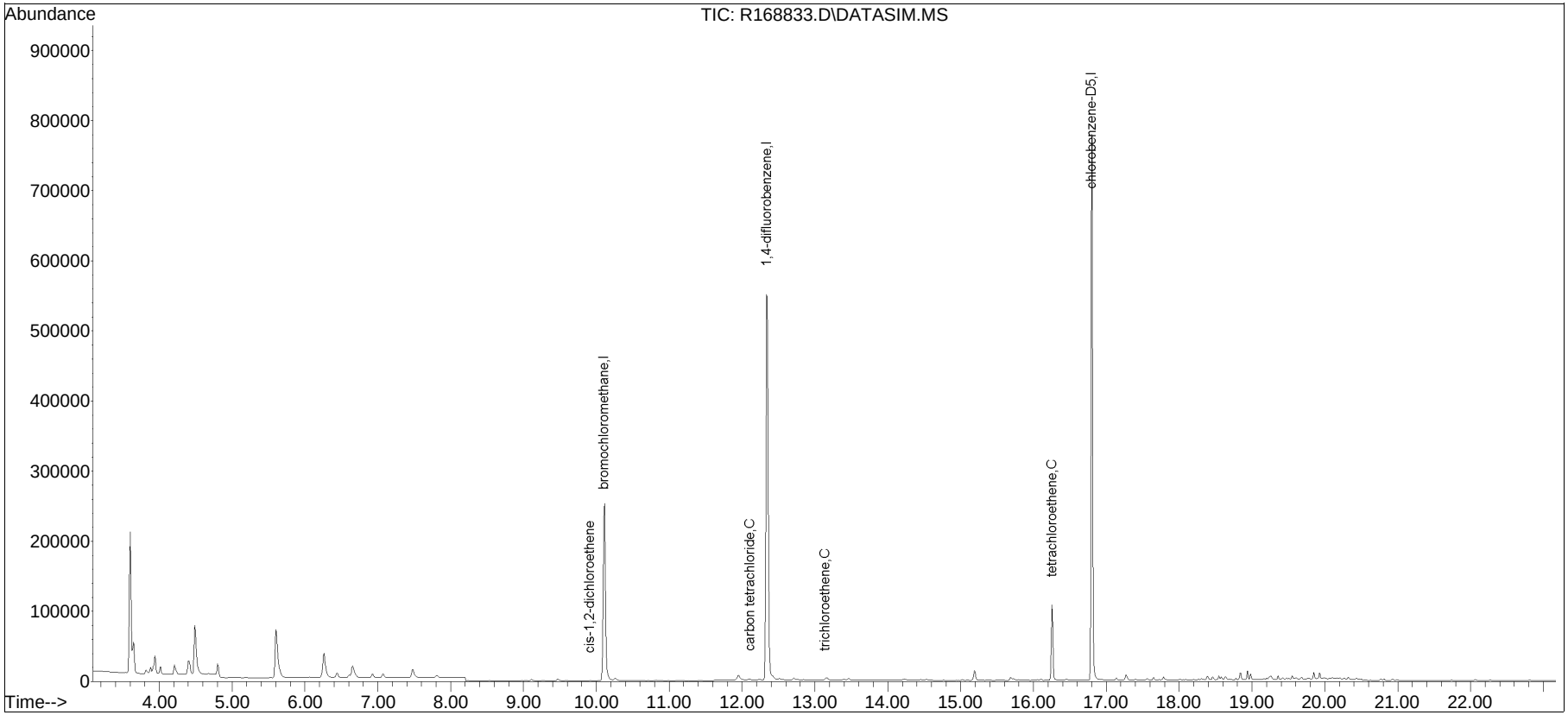
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.102	49	288198	10.000	ppbV	0.00
Standard Area = 322366			Recovery =		89.40%	
33) 1,4-difluorobenzene	12.339	114	706016	10.000	ppbV	0.00
Standard Area = 829192			Recovery =		85.15%	
51) chlorobenzene-D5	16.798	54	111484	10.000	ppbV	0.00
Standard Area = 131868			Recovery =		84.54%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.543		0	N.D.		
17) 1,1-dichloroethene	7.287		0	N.D.		
28) cis-1,2-dichloroethene	9.912	61	549	0.027	ppbV #	88
36) 1,1,1-trichloroethane	11.407		0	N.D.		
38) carbon tetrachloride	12.106	117	1662	0.059	ppbV	96
44) trichloroethene	13.142	130	636	0.030	ppbV	94
57) tetrachloroethene	16.253	166	56337	2.126	ppbV	99

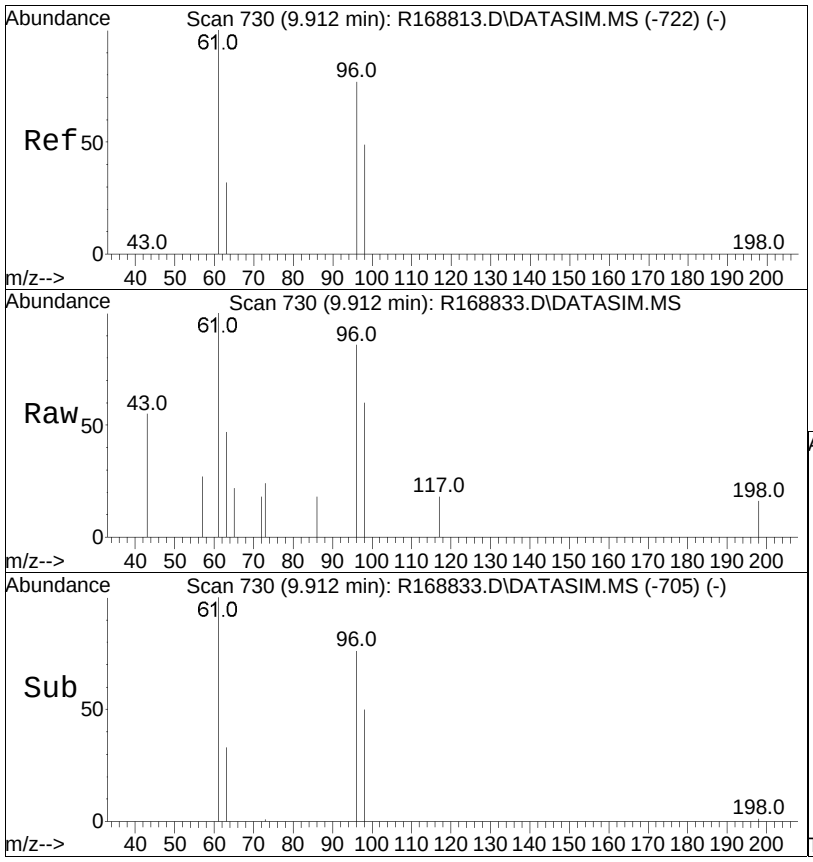
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\AIR1\2019\191024SIM\R168825.D

Data Path : O:\Forensics\Data\AIR1\2019\191024SIM\
Data File : R168833.D
Acq On : 24 Oct 2019 7:30 pm
Operator : AIRPIANO1:TS
Sample : WG1300315-5,3,250,250
Misc : WG1300315,ICAL16240
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 25 07:43:28 2019
Quant Method : O:\Forensics\Data\AIR1\2019\191024SIM\TSIM1_191023.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Oct 23 18:03:30 2019
Response via : Initial Calibration

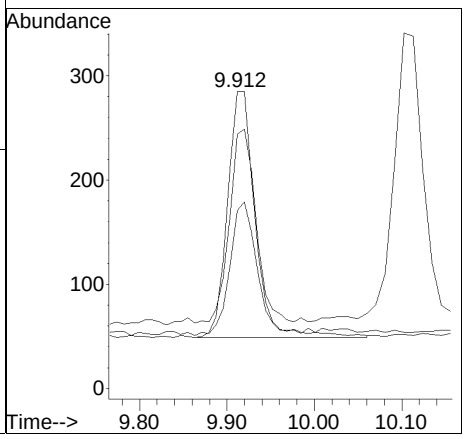


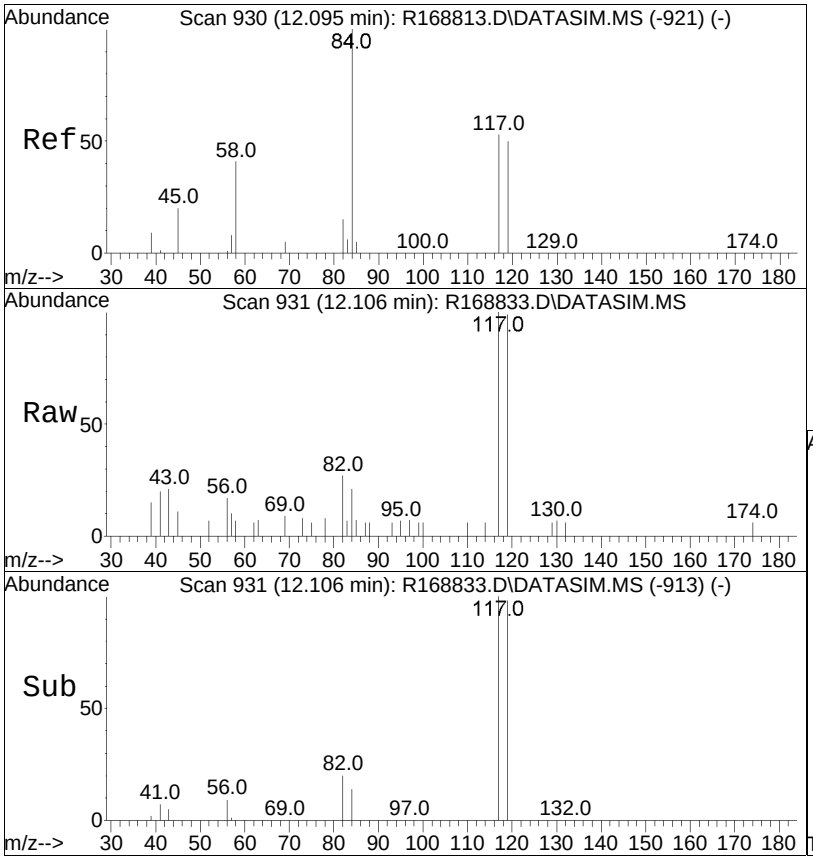


#28
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 9.912 min Scan# 730
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion: 61 Resp: 549

Ion	Ratio	Lower	Upper
61	100		
96	85.6	61.7	92.5
98	60.0	39.0	58.4#

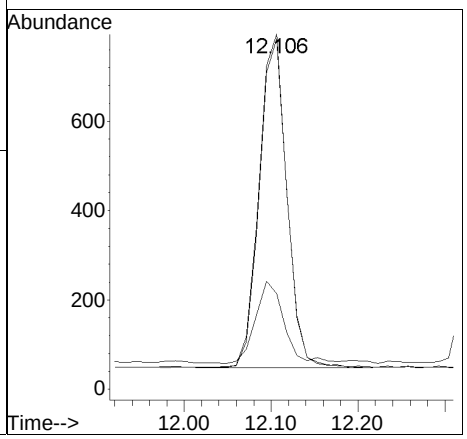


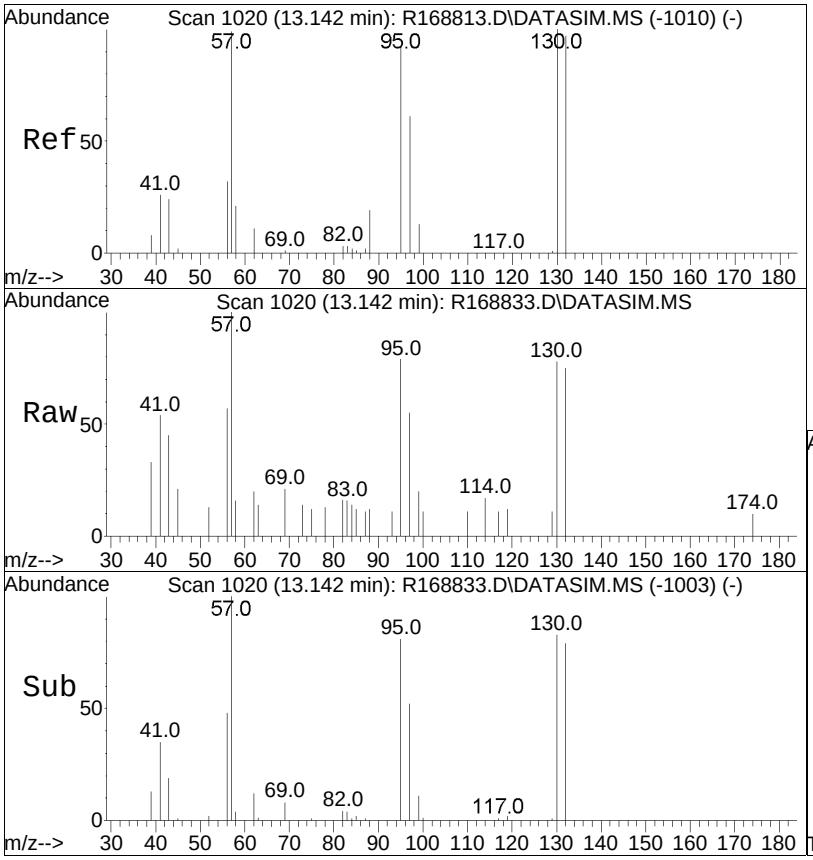


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.106 min Scan# 931
Delta R.T. 0.012 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:117 Resp: 1662

Ion	Ratio	Lower	Upper
117	100		
119	98.6	75.6	113.4
82	26.9	23.1	34.7

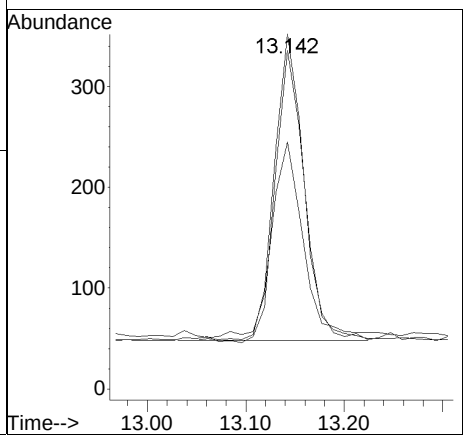


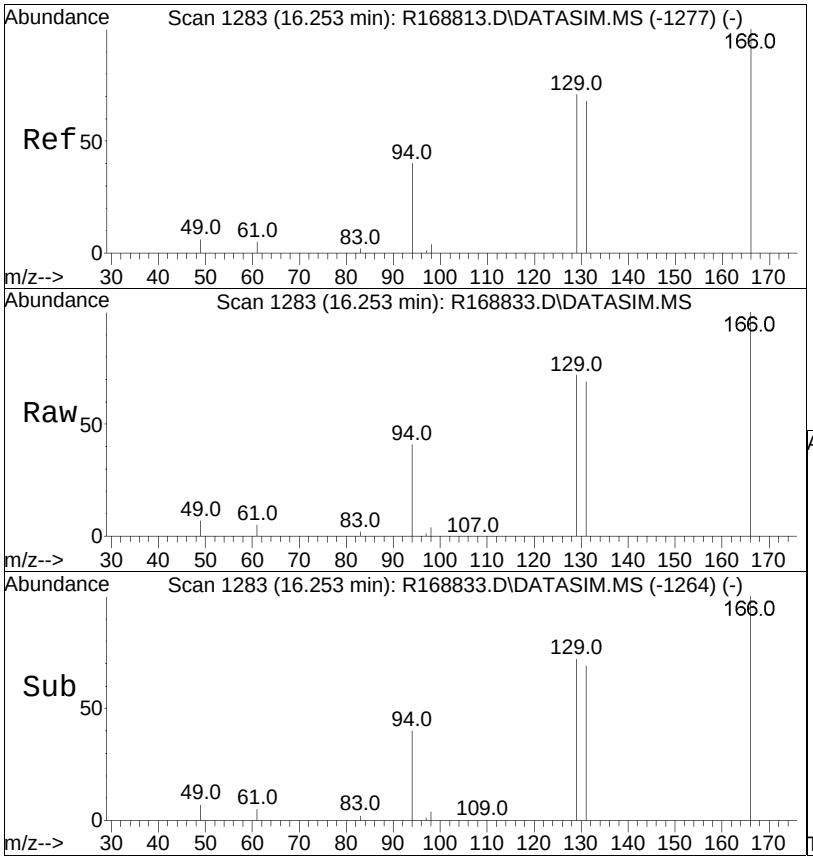


#44
trichloroethene
Concen: 0.03 ppbV
RT: 13.142 min Scan# 1020
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:130 Resp: 636

Ion	Ratio	Lower	Upper
130	100		
132	95.5	78.0	117.0
97	69.6	48.9	73.3

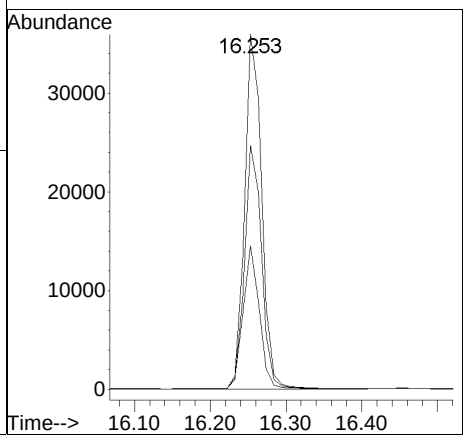




#57
tetrachloroethene
Concen: 2.13 ppbV
RT: 16.253 min Scan# 1283
Delta R.T. -0.000 min
Lab File: R168833.D
Acq: 24 Oct 2019 7:30 pm

Tgt Ion:166 Resp: 56337

Ion	Ratio	Lower	Upper
166	100		
131	68.7	54.5	81.7
94	40.5	31.8	47.6



Manual Integration Report

Data Path	: O:\Forensics\Data\AIR1\201	QMethod	: TSIM1_191023.M
Data File	: R168833.D	Operator	: AIRPIANO1:TS
Date Inj'd	: 10/24/2019 7:30 pm	Instrument	: Air Piano 1
Sample	: WG1300315-5,3,250,250	Quant Date	: 10/25/2019 7:43 am

There are no manual integrations or false positives in this file.

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
DF = V_{cf} / V_{ci}
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

V_{ci} = 2.7 * PI/14.696

Step 2: Calculate the volume in the canister after pressurization.

V_{cf} = 2.7 * PF/14.696

Step 3: Calculate the dilution factor.

DF = V_{cf} / V_{ci}

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Oct 25 2019, 03:55 pm

Work Group: WG1300315 for Department: 3 GC/MS

Created: 24-OCT-19 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1948939-01	IA19-58-01	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-02	IA19-58-02	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-03	IA19-58-03	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-04	IA19-58-04	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-05	IA19-58-05	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-06	IA19-58-DUP	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
L1948939-07	OA19-58-01	S	TO15-SIM	AIR	DONE	U	1116	1025	S0	Can-6
WG1300315-1	MS BFB Tune Standard	S	TO15-SIM	AIR	DONE	U				
WG1300315-2	Continuing Calibrati	S	TO15-SIM	AIR	DONE	U				
WG1300315-3	Laboratory Control S	S	TO15-SIM	AIR	DONE	U				
WG1300315-4	Laboratory Method Bl	S	TO15-SIM	AIR	DONE	U				
WG1300315-5	Duplicate Sample	S	TO15-SIM	AIR	DONE	U				

Comments:

WG1300315-5 L1948939-03

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Date: 10/23/19

Analyst Initials: RY

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Internal Standard/Surrogate Volume: 100 ml

Sequence File Name: 191023.S

SIM ICAL# **Full Scan ICAL#** **TO12 ICAL#** **APH ICAL#** TO15-CTD 16116

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Check Pass ? Y/N
1	BA1102301	TO15_SFS	R168804	250ml			N/A
1	BA1102302	TO15_SFS	R168805	250ml			N/A
1	TA1102301	TO15_SFS	R168806	250ml	TUNE		N/A
5	ITO15-SIMSTD0.02	TO15_SFS	R168807	SS19-028D 50ML 0.02	SIM ONLY		N/A
5	ITO15-SIMSTD0.05	TO15_SFS	R168808	SS19-028D 125ML 0.05	SIM ONLY		N/A
5	ITO15-SIMSTD0.1	TO15_SFS	R168809	SS19-028D 250ML 0.1	SIM ONLY		N/A
6	ITO15-SIMSTD0.2	TO15_SFS	R168810	SS19-028C 50ML 0.2			N/A
6	ITO15-SIMSTD0.5	TO15_SFS	R168811	SS19-028C 125ML 0.5			N/A
6	ITO15-SIMSTD1.0	TO15_SFS	R168812	SS19-028C 250ML 1.0			N/A
7	ITO15-SIMSTD5.0	TO15_SFS	R168813	SS19-028B1 125ML 5.0			N/A
7	ITO15-SIMSTD10.0	TO15_SFS	R168814	SS19-028B1 250ML 10.0			N/A
8	ITO15-SIMSTD20.0	TO15_SFS	R168815	SS19-028A 50ML 20.0			N/A
8	ITO15-SIMSTD50.0	TO15_SFS	R168816	SS19-028A 125ML 50.0			N/A
8	ITO15-LLSTD100.0	TO15_SFS	R168817	SS19-028A 250ML 100.0	NOT USED FOR SIM		N/A
1	BA1102301	TO15_SFS	R168818	250ml			N/A
		Pause					N/A
1	BA1102302	TO15_SFS	R168819	250ml			N/A
2	CTO15-LLSTD10.0	TO15_SFS	R168820	SS19-029A 250ML 10.0	FULL SCAN ICV		N/A
2	CTO15-SIMSTD5.0	TO15_SFS	R168821	SS19-029A 125ML 5.0	SIM ICV		N/A

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

ID: Airpiano 1

Date: 10/24/19

Analyst Initials: RY

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Internal Standard/Surrogate Volume: 100 ml

Sequence File Name: 191024.S

SIM ICAL# 16240 **Full Scan ICAL# 16241** **TO12 ICAL#** **APH ICAL# 16238** TO15-CTD 16116

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Check Pass ? Y/N
1	TA1102401	TO15_SFS	R168822	250ml	TUNE		N/A
2	CA1102401	TO15_SFS	R168823	SS19-028G 250ML 10.0	NJ CC RUN AT WRONG LEVEL		N/A
3	CTO15-LLSTD10.0	TO15_SFS	R168824	SS19-029A 250ML 10.0	LL LCS		N/A
3	CTO15-SIMSTD5.0	TO15_SFS	R168825	SS19-029A 125ML 5.0	SIM LCS		N/A
1	BA1102401	TO15_SFS	R168826	250ml	BLANK FAILED		N/A
1	BA1102401	TO15_SFS	R168827	250ml	BLANK FAILED-PUMPDOWN AND REFILL		N/A
1	BA1102403	TO15_SFS	R168828	250ml	BLANK		N/A
1	L1948939-07,3,250,250	TO15_SFS	R168829	WG1300314,ICAL16241		NY/ 7 SIM	Y
2	L1948939-01,3,250,250	TO15_SFS	R168830	WG1300314,ICAL16241		NY/ 7 SIM	Y
3	L1948939-02,3,250,250	TO15_SFS	R168831	WG1300314,ICAL16241		NY/ 7 SIM	Y
4	L1948939-03,3,250,250	TO15_SFS	R168832	WG1300314,ICAL16241		NY/ 7 SIM	Y
4	L1948939-03DUP,3,250,250	TO15_SFS	R168833	WG1300314,ICAL16241	TO15-LL/ SIM DUP	NY/ 7 SIM	Y
5	L1948939-04,3,250,250	TO15_SFS	R168834	WG1300314,ICAL16241		NY/ 7 SIM	Y
6	L1948939-05,3,250,250	TO15_SFS	R168835	WG1300314,ICAL16241		NY/ 7 SIM	Y
7	L1948939-06,3,250,250	TO15_SFS	R168836	WG1300314,ICAL16241		NY/ 7 SIM	Y
8	L1949265-01,3,250,250	TO15_SFS	R168837	WG1300314,ICAL16241		STD + NAPH	Y
9	L1949104-01,3,250,250	TO15_SFS	R168838	WG1300312,ICAL16240		MCP-SIM	Y
10	L1949104-02,3,250,250	TO15_SFS	R168839	WG1300312,ICAL16240		MCP-SIM	Y
11	L1949104-03,3,250,250	TO15_SFS	R168840	WG1300312,ICAL16240		MCP-SIM	Y
12	L1949104-04,3,250,250	TO15_SFS	R168841	WG1300312,ICAL16240		MCP-SIM	Y
13	L1949104-05,3,250,250	TO15_SFS	R168842	WG1300312,ICAL16240		MCP-SIM	Y
13	L1949104-05DUP,3,250,250	TO15_SFS	R168843	WG1300312,ICAL16240	MCP-TO15-SIM DUP	MCP-SIM	Y

Alpha Analytical Air Lab
Instrument Run Log

14	L1949104-06,3,250,250	TO15_SFS	R168844	WG1300312,ICAL16240	CIS12DCE AND PCE OVERCAL	MCP-SIM	Y
15	L1949065-01D,3,60,250	TO15_SFS	R168845	WG1300314,ICAL16241		PA	Y
16	L1949065-02D,3,75,250	TO15_SFS	R168846	WG1300314,ICAL16241		PA	Y
2	L1949323-01,3,250,250	TO15_SFS	R168847	WG1300312,ICAL16240		MCP-SIM	Y
3	L1949323-02,3,250,250	TO15_SFS	R168848	WG1300312,ICAL16240		MCP-SIM	Y
14	L1949104-06D,3,75,250	TO15_SFS	R168849	WG1300312,ICAL16240		CIS12DCE AND PCE	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

ANALYTICAL REPORT

Lab Number:	L2215527
Client:	Integral Consulting, Inc. 31 West 34th Street Suite 7196 New York, NY 10001
ATTN:	Sara Barbuto
Phone:	(212) 962-4301
Project Name:	135 KENT AVE
Project Number:	E1022
Report Date:	04/08/22

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2215527-01	IA22-01	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 18:42	03/25/22
L2215527-02	IA22-02	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:18	03/25/22
L2215527-03	IA22-03	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:38	03/25/22
L2215527-04	IA22-04	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 18:24	03/25/22
L2215527-05	IA22-05	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:22	03/25/22
L2215527-06	IA22-06	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:34	03/25/22
L2215527-07	IA22-07	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:07	03/25/22
L2215527-08	IA22-08	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:33	03/25/22
L2215527-09	IA22-09	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:32	03/25/22
L2215527-10	IA22-10	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:14	03/25/22
L2215527-11	OA22-01	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:16	03/25/22
L2215527-12	OA22-02	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 13:15	03/25/22
L2215527-13	IA22-11	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:30	03/25/22
L2215527-14	IA22-12	AIR	135 KENT AVE, BROOKLYN, NY	03/23/22 17:42	03/25/22
L2215527-15	IA22-13	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 13:44	03/25/22
L2215527-16	IA22-14	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 15:44	03/25/22
L2215527-17	IA22-15	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 13:32	03/25/22
L2215527-18	IA22-16	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 13:53	03/25/22
L2215527-19	IA22-18	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 15:48	03/25/22
L2215527-20	IA22-19	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 15:46	03/25/22
L2215527-21	IA22-20	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 15:49	03/25/22
L2215527-22	IA22-21	AIR	135 KENT AVE, BROOKLYN, NY	03/24/22 13:34	03/25/22
L2215527-23	UNUSED CAN #3470	AIR	135 KENT AVE, BROOKLYN, NY		03/25/22

Project Name:	135 KENT AVE	**Lab Number:**	L2215527
Project Number:	E1022	**Report Date:**	04/08/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	135 KENT AVE	**Lab Number:**	L2215527
Project Number:	E1022	**Report Date:**	04/08/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 23, 2022. The canister certification results are provided as an addendum.

L2215527-02D, -15D, -20D, -22D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

Sample Receipt

L2215527-10: The sample identified as "FC ID #2343" on the chain of custody was identified as "FC ID #0560" on the container label. At the client's request, the sample is reported as "IA22-10".

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative

Date: 04/08/22

AIR

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-01
Client ID: IA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 03:18
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.528	0.200	--	2.61	0.989	--		1
Chloromethane	0.804	0.200	--	1.66	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	298	5.00	--	562	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.36	1.00	--	22.2	2.38	--		1
Trichlorofluoromethane	0.207	0.200	--	1.16	1.12	--		1
Isopropanol	69.2	0.500	--	170	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	21.5	0.500	--	74.7	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.00	0.500	--	5.90	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-01
Client ID: IA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.843	0.200	--	2.97	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.775	0.200	--	2.92	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-01
Client ID: IA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-01
Client ID: IA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 03:18
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.059	0.020	--	0.371	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.212	0.020	--	1.44	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-02
Client ID: IA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:18
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 03:57
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.484	0.200	--	2.39	0.989	--		1
Chloromethane	0.901	0.200	--	1.86	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	494	5.00	--	931	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	20.0	1.00	--	47.5	2.38	--		1
Trichlorofluoromethane	0.251	0.200	--	1.41	1.12	--		1
Isopropanol	458	0.500	--	1130	1.23	--	E	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	3.29	0.500	--	11.4	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.72	0.500	--	5.07	1.47	--		1
Ethyl Acetate	0.591	0.500	--	2.13	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-02
Client ID: IA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:18
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.217	0.200	--	0.765	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.22	0.200	--	4.60	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.579	0.400	--	2.51	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.261	0.200	--	1.13	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-02
Client ID: IA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:18
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-02
Client ID: IA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:18
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 03:57
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	0.042	0.020	--	0.226	0.107	--		1
Tetrachloroethene	1.13	0.020	--	7.66	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-02 D
Client ID: IA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:18
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 11:20
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Isopropanol	570	2.50	--	1400	6.15	--		5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	93		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	87		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-03
Client ID: IA22-03
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:38
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 04:36
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.487	0.200	--	2.41	0.989	--		1
Chloromethane	0.702	0.200	--	1.45	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	118	5.00	--	222	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.81	1.00	--	16.2	2.38	--		1
Trichlorofluoromethane	0.307	0.200	--	1.73	1.12	--		1
Isopropanol	31.3	0.500	--	76.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.605	0.500	--	1.78	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-03
Client ID: IA22-03
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:38
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.206	0.200	--	0.658	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.404	0.200	--	1.52	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-03
Client ID: IA22-03
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:38
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	91		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-03
Client ID: IA22-03
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:38
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 04:36
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	0.023	0.020	--	0.124	0.107	--		1
Tetrachloroethene	1.15	0.020	--	7.80	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-04
Client ID: IA22-04
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:24
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 05:16
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.491	0.200	--	2.43	0.989	--		1
Chloromethane	0.773	0.200	--	1.60	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	351	5.00	--	661	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.31	1.00	--	22.1	2.38	--		1
Trichlorofluoromethane	0.368	0.200	--	2.07	1.12	--		1
Isopropanol	151	0.500	--	371	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	4.01	0.500	--	13.9	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.563	0.500	--	1.66	1.47	--		1
Ethyl Acetate	1.32	0.500	--	4.76	1.80	--		1
Chloroform	0.210	0.200	--	1.03	0.977	--		1
Tetrahydrofuran	0.577	0.500	--	1.70	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-04
Client ID: IA22-04
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:24
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.319	0.200	--	1.12	0.705	--		1
Benzene	0.228	0.200	--	0.728	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.454	0.200	--	1.71	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-04
Client ID: IA22-04
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:24
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-04
Client ID: IA22-04
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 18:24
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 05:16
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.064	0.020	--	0.403	0.126	--		1
Trichloroethene	0.022	0.020	--	0.118	0.107	--		1
Tetrachloroethene	1.89	0.020	--	12.8	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	91		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-05
Client ID: IA22-05
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:22
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 05:55
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.515	0.200	--	2.55	0.989	--		1
Chloromethane	0.767	0.200	--	1.58	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	169	5.00	--	318	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.80	1.00	--	20.9	2.38	--		1
Trichlorofluoromethane	0.274	0.200	--	1.54	1.12	--		1
Isopropanol	87.2	0.500	--	214	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.68	0.500	--	9.31	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.763	0.500	--	2.25	1.47	--		1
Ethyl Acetate	0.745	0.500	--	2.68	1.80	--		1
Chloroform	0.318	0.200	--	1.55	0.977	--		1
Tetrahydrofuran	0.520	0.500	--	1.53	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-05
Client ID: IA22-05
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:22
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.218	0.200	--	0.768	0.705	--		1
Benzene	0.224	0.200	--	0.716	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.576	0.200	--	2.17	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-05
Client ID: IA22-05
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:22
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	94		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-05
Client ID: IA22-05
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:22
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 05:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--		1
Trichloroethene	0.028	0.020	--	0.150	0.107	--		1
Tetrachloroethene	0.885	0.020	--	6.00	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	90		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-06
Client ID: IA22-06
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 06:34
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	0.989	--		1
Chloromethane	0.729	0.200	--	1.51	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	151	5.00	--	285	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.52	1.00	--	20.2	2.38	--		1
Trichlorofluoromethane	0.235	0.200	--	1.32	1.12	--		1
Isopropanol	57.8	0.500	--	142	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.09	0.500	--	3.21	1.47	--		1
Ethyl Acetate	0.638	0.500	--	2.30	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.556	0.500	--	1.64	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-06
Client ID: IA22-06
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.556	0.200	--	2.10	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-06
Client ID: IA22-06
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	91		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-06
Client ID: IA22-06
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 06:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.061	0.020	--	0.384	0.126	--		1
Trichloroethene	0.023	0.020	--	0.124	0.107	--		1
Tetrachloroethene	0.827	0.020	--	5.61	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	93		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-07
Client ID: IA22-07
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:07
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 07:14
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.479	0.200	--	2.37	0.989	--		1
Chloromethane	0.697	0.200	--	1.44	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	177	5.00	--	334	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.04	1.00	--	19.1	2.38	--		1
Trichlorofluoromethane	0.259	0.200	--	1.46	1.12	--		1
Isopropanol	110	0.500	--	270	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.21	0.500	--	3.57	1.47	--		1
Ethyl Acetate	0.612	0.500	--	2.21	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-07
Client ID: IA22-07
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:07
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.680	0.200	--	2.56	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-07
Client ID: IA22-07
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:07
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-07
Client ID: IA22-07
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:07
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 07:14
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.065	0.020	--	0.409	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.869	0.020	--	5.89	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-08
Client ID: IA22-08
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:33
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 21:44
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.477	0.200	--	2.36	0.989	--		1
Chloromethane	0.673	0.200	--	1.39	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	87.4	5.00	--	165	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.48	1.00	--	13.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	23.0	0.500	--	56.5	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.588	0.500	--	1.73	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-08
Client ID: IA22-08
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:33
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.235	0.200	--	0.751	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.435	0.200	--	1.64	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-08
Client ID: IA22-08
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:33
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.356	0.200	--	1.75	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	112		60-140
chlorobenzene-d5	97		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-08
Client ID: IA22-08
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:33
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 21:44
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.72	0.020	--	11.7	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	115		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-09
Client ID: IA22-09
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 22:22
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.465	0.200	--	2.30	0.989	--		1
Chloromethane	0.663	0.200	--	1.37	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	109	5.00	--	205	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.91	1.00	--	11.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	29.1	0.500	--	71.5	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	9.59	0.500	--	33.3	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-09
Client ID: IA22-09
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.432	0.200	--	1.52	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.382	0.200	--	1.44	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-09
Client ID: IA22-09
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.355	0.200	--	1.75	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	105		60-140
Bromochloromethane	117		60-140
chlorobenzene-d5	104		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-09
Client ID: IA22-09
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 22:22
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.31	0.020	--	8.88	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	107		60-140
bromochloromethane	119		60-140
chlorobenzene-d5	102		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-10
Client ID: IA22-10
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:14
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 23:00
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.483	0.200	--	2.39	0.989	--		1
Chloromethane	0.606	0.200	--	1.25	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	8.76	5.00	--	16.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.50	1.00	--	5.94	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.993	0.500	--	2.44	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.26	0.500	--	7.85	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.783	0.200	--	3.82	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-10
Client ID: IA22-10
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:14
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.227	0.200	--	0.725	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.369	0.200	--	1.39	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-10
Client ID: IA22-10
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:14
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	113		60-140
chlorobenzene-d5	97		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-10
Client ID: IA22-10
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:14
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 23:00
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.031	0.020	--	0.123	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.109	0.020	--	0.586	0.107	--		1
Tetrachloroethene	7.04	0.020	--	47.7	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	102		60-140
bromochloromethane	115		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-11
Client ID: OA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:16
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 18:34
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.466	0.200	--	2.30	0.989	--		1
Chloromethane	0.579	0.200	--	1.20	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	10.2	5.00	--	19.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.93	1.00	--	9.34	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.45	0.500	--	3.56	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-11
Client ID: OA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:16
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.245	0.200	--	0.783	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.348	0.200	--	1.31	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-11
Client ID: OA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:16
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	102		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-11
Client ID: OA22-01
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:16
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 18:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.075	0.020	--	0.472	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.086	0.020	--	0.583	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	103		60-140
bromochloromethane	110		60-140
chlorobenzene-d5	102		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-12
Client ID: OA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:15
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 19:13
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.496	0.200	--	2.45	0.989	--		1
Chloromethane	0.611	0.200	--	1.26	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	5.76	5.00	--	10.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.25	1.00	--	2.97	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.909	0.500	--	2.23	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-12
Client ID: OA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:15
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.200	0.200	--	0.639	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.222	0.200	--	0.837	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-12
Client ID: OA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:15
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	101		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-12
Client ID: OA22-02
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:15
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 19:13
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.058	0.020	--	0.393	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	112		60-140
chlorobenzene-d5	100		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-13
Client ID: IA22-11
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:30
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 23:39
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.455	0.200	--	2.25	0.989	--		1
Chloromethane	0.736	0.200	--	1.52	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	180	5.00	--	339	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.37	1.00	--	17.5	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	28.7	0.500	--	70.5	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.291	0.200	--	1.42	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-13
Client ID: IA22-11
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:30
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.387	0.200	--	1.46	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-13
Client ID: IA22-11
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:30
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.202	0.200	--	0.993	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	103		60-140
Bromochloromethane	115		60-140
chlorobenzene-d5	98		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-13
Client ID: IA22-11
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:30
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 23:39
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.065	0.020	--	0.409	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.779	0.020	--	5.28	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	104		60-140
bromochloromethane	116		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-14
Client ID: IA22-12
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 00:17
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.464	0.200	--	2.29	0.989	--		1
Chloromethane	0.762	0.200	--	1.57	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	167	5.00	--	315	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.66	1.00	--	15.8	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	35.9	0.500	--	88.2	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.681	0.500	--	2.37	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.207	0.200	--	1.01	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-14
Client ID: IA22-12
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.363	0.200	--	1.37	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-14
Client ID: IA22-12
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.293	0.200	--	1.44	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	114		60-140
chlorobenzene-d5	97		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-14
Client ID: IA22-12
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/23/22 17:42
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 00:17
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.063	0.020	--	0.396	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.16	0.020	--	7.87	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	115		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-15
Client ID: IA22-13
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 00:56
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.460	0.200	--	2.27	0.989	--		1
Chloromethane	0.718	0.200	--	1.48	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	554	5.00	--	1040	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	14.3	1.00	--	34.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	45.6	0.500	--	112	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.21	0.500	--	3.57	1.47	--		1
Ethyl Acetate	1.37	0.500	--	4.94	1.80	--		1
Chloroform	0.349	0.200	--	1.70	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-15
Client ID: IA22-13
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.205	0.200	--	0.655	0.639	--		1
Cyclohexane	0.247	0.200	--	0.850	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.331	0.200	--	1.36	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.468	0.200	--	1.76	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.235	0.200	--	1.16	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-15
Client ID: IA22-13
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.643	0.200	--	3.16	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	104		60-140
Bromochloromethane	117		60-140
chlorobenzene-d5	100		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-15
Client ID: IA22-13
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 00:56
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.12	0.020	--	7.59	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	105		60-140
bromochloromethane	119		60-140
chlorobenzene-d5	100		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-15 D
Client ID: IA22-13
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 08:28
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	546	12.5	--	1030	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	102		60-140
Bromochloromethane	116		60-140
chlorobenzene-d5	96		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-16
Client ID: IA22-14
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 01:34
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.473	0.200	--	2.34	0.989	--		1
Chloromethane	0.717	0.200	--	1.48	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	220	5.00	--	415	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.67	1.00	--	23.0	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	26.0	0.500	--	63.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.572	0.500	--	1.69	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.232	0.200	--	1.13	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-16
Client ID: IA22-14
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.280	0.200	--	1.06	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-16
Client ID: IA22-14
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.337	0.200	--	1.66	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	103		60-140
Bromochloromethane	116		60-140
chlorobenzene-d5	98		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-16
Client ID: IA22-14
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:44
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 01:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	0.028	0.020	--	0.072	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.020	0.020	--	0.107	0.107	--		1
Tetrachloroethene	4.78	0.020	--	32.4	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	104		60-140
bromochloromethane	118		60-140
chlorobenzene-d5	97		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-17
Client ID: IA22-15
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 02:12
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.437	0.200	--	2.16	0.989	--		1
Chloromethane	0.697	0.200	--	1.44	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	384	5.00	--	724	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	11.9	1.00	--	28.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	41.8	0.500	--	103	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.553	0.500	--	1.63	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.499	0.200	--	2.44	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-17
Client ID: IA22-15
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.370	0.200	--	1.39	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.326	0.200	--	1.60	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-17
Client ID: IA22-15
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.838	0.200	--	4.12	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	121		60-140
chlorobenzene-d5	103		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-17
Client ID: IA22-15
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:32
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 02:12
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	0.032	0.020	--	0.082	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.061	0.020	--	0.384	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.864	0.020	--	5.86	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	109		60-140
bromochloromethane	122		60-140
chlorobenzene-d5	101		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-18
Client ID: IA22-16
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:53
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 02:51
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.466	0.200	--	2.30	0.989	--		1
Chloromethane	0.623	0.200	--	1.29	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	158	5.00	--	298	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.37	1.00	--	19.9	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	20.7	0.500	--	50.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.574	0.500	--	1.69	1.47	--		1
Ethyl Acetate	2.86	0.500	--	10.3	1.80	--		1
Chloroform	0.246	0.200	--	1.20	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-18
Client ID: IA22-16
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:53
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.443	0.200	--	1.67	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-18
Client ID: IA22-16
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:53
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.474	0.200	--	2.33	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	119		60-140
chlorobenzene-d5	100		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-18
Client ID: IA22-16
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:53
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 02:51
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	3.08	0.020	--	20.9	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	107		60-140
bromochloromethane	120		60-140
chlorobenzene-d5	99		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-19
Client ID: IA22-18
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:48
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 03:29
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	0.989	--		1
Chloromethane	0.719	0.200	--	1.48	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	239	5.00	--	450	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.42	1.00	--	17.6	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	30.7	0.500	--	75.5	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.19	0.500	--	4.29	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-19
Client ID: IA22-18
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:48
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.307	0.200	--	1.16	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-19
Client ID: IA22-18
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:48
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.236	0.200	--	1.16	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	114		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-19
Client ID: IA22-18
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:48
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/08/22 03:29
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	0.020	0.020	--	0.107	0.107	--		1
Tetrachloroethene	5.05	0.020	--	34.2	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	116		60-140
chlorobenzene-d5	94		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-20
Client ID: IA22-19
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:46
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 22:08
Analyst: RY

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.579	0.200	--	2.86	0.989	--		1
Chloromethane	0.735	0.200	--	1.52	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	628	5.00	--	1180	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	37.2	1.00	--	88.4	2.38	--		1
Trichlorofluoromethane	0.250	0.200	--	1.40	1.12	--		1
Isopropanol	131	0.500	--	322	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.03	0.500	--	3.04	1.47	--		1
Ethyl Acetate	4.89	0.500	--	17.6	1.80	--		1
Chloroform	0.591	0.200	--	2.89	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-20
Client ID: IA22-19
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:46
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.226	0.200	--	0.926	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.526	0.200	--	1.98	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-20
Client ID: IA22-19
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:46
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.365	0.200	--	1.79	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	94		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-20
Client ID: IA22-19
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:46
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 22:08
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.113	0.020	--	0.711	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	1.39	0.020	--	9.43	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-20 D
Client ID: IA22-19
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:46
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 07:52
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	671	12.5	--	1260	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	94		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-21
Client ID: IA22-20
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:49
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 22:47
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.591	0.200	--	2.92	0.989	--		1
Chloromethane	0.686	0.200	--	1.42	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	255	5.00	--	480	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.9	1.00	--	25.9	2.38	--		1
Trichlorofluoromethane	0.233	0.200	--	1.31	1.12	--		1
Isopropanol	36.7	0.500	--	90.2	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.52	0.500	--	5.48	1.80	--		1
Chloroform	0.265	0.200	--	1.29	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-21
Client ID: IA22-20
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:49
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.304	0.200	--	1.15	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-21
Client ID: IA22-20
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:49
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.300	0.200	--	1.47	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-21
Client ID: IA22-20
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 15:49
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 22:47
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	0.026	0.020	--	0.140	0.107	--		1
Tetrachloroethene	4.15	0.020	--	28.1	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-22
Client ID: IA22-21
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/07/22 21:28
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.578	0.200	--	2.86	0.989	--		1
Chloromethane	1.04	0.200	--	2.15	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.353	0.200	--	0.781	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	631	5.00	--	1190	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	28.0	1.00	--	66.5	2.38	--		1
Trichlorofluoromethane	0.228	0.200	--	1.28	1.12	--		1
Isopropanol	128	0.500	--	315	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.27	0.500	--	3.75	1.47	--		1
Ethyl Acetate	5.65	0.500	--	20.4	1.80	--		1
Chloroform	0.263	0.200	--	1.28	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-22
Client ID: IA22-21
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.362	0.200	--	1.16	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.724	0.200	--	2.97	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.972	0.200	--	3.66	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.534	0.400	--	2.32	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.200	0.200	--	0.869	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-22
Client ID: IA22-21
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.295	0.200	--	1.45	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	98		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-22
Client ID: IA22-21
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 21:28
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.083	0.020	--	0.522	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.762	0.020	--	5.17	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

SAMPLE RESULTS

Lab ID: L2215527-22 D
Client ID: IA22-21
Sample Location: 135 KENT AVE, BROOKLYN, NY

Date Collected: 03/24/22 13:34
Date Received: 03/25/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 04/08/22 07:15
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	653	12.5	--	1230	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	96		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	85		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 15:19

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 08-19 Batch: WG1624871-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 15:19

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 08-19 Batch: WG1624871-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 135 KENT AVE
Project Number: E1022
Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 15:19

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 08-19 Batch: WG1624871-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 15:57

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 08-19 Batch: WG1624872-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 17:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1624884-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 17:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1624884-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 17:41

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1624884-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 18:20

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-07 Batch: WG1624885-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 20:09

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 20-22 Batch: WG1624888-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 20:09

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 20-22 Batch: WG1624888-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 04/07/22 20:09

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 20-22 Batch: WG1624888-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 04/07/22 20:48

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 20-22 Batch: WG1624889-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 08-19 Batch: WG1624871-3								
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	107		-		70-130	-		
Freon-114	108		-		70-130	-		
Vinyl chloride	97		-		70-130	-		
1,3-Butadiene	110		-		70-130	-		
Bromomethane	104		-		70-130	-		
Chloroethane	92		-		70-130	-		
Ethanol	85		-		40-160	-		
Vinyl bromide	91		-		70-130	-		
Acetone	93		-		40-160	-		
Trichlorofluoromethane	84		-		70-130	-		
Isopropanol	94		-		40-160	-		
1,1-Dichloroethene	92		-		70-130	-		
Tertiary butyl Alcohol	86		-		70-130	-		
Methylene chloride	104		-		70-130	-		
3-Chloropropene	94		-		70-130	-		
Carbon disulfide	95		-		70-130	-		
Freon-113	97		-		70-130	-		
trans-1,2-Dichloroethene	88		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
Methyl tert butyl ether	89		-		70-130	-		
2-Butanone	89		-		70-130	-		
cis-1,2-Dichloroethene	95		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 08-19 Batch: WG1624871-3								
Ethyl Acetate	99		-		70-130	-		
Chloroform	107		-		70-130	-		
Tetrahydrofuran	87		-		70-130	-		
1,2-Dichloroethane	79		-		70-130	-		
n-Hexane	106		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Benzene	102		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	106		-		70-130	-		
1,2-Dichloropropane	99		-		70-130	-		
Bromodichloromethane	108		-		70-130	-		
1,4-Dioxane	109		-		70-130	-		
Trichloroethene	113		-		70-130	-		
2,2,4-Trimethylpentane	105		-		70-130	-		
Heptane	99		-		70-130	-		
cis-1,3-Dichloropropene	112		-		70-130	-		
4-Methyl-2-pentanone	100		-		70-130	-		
trans-1,3-Dichloropropene	93		-		70-130	-		
1,1,2-Trichloroethane	106		-		70-130	-		
Toluene	105		-		70-130	-		
2-Hexanone	104		-		70-130	-		
Dibromochloromethane	116		-		70-130	-		
1,2-Dibromoethane	111		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 08-19 Batch: WG1624871-3								
Tetrachloroethene	118		-		70-130	-		
Chlorobenzene	113		-		70-130	-		
Ethylbenzene	109		-		70-130	-		
p/m-Xylene	110		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	106		-		70-130	-		
1,1,2,2-Tetrachloroethane	127		-		70-130	-		
o-Xylene	111		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	112		-		70-130	-		
1,2,4-Trimethylbenzene	112		-		70-130	-		
Benzyl chloride	100		-		70-130	-		
1,3-Dichlorobenzene	112		-		70-130	-		
1,4-Dichlorobenzene	109		-		70-130	-		
1,2-Dichlorobenzene	112		-		70-130	-		
1,2,4-Trichlorobenzene	119		-		70-130	-		
Hexachlorobutadiene	120		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 08-19 Batch: WG1624872-3								
Vinyl chloride	98		-		70-130	-		25
1,1-Dichloroethene	95		-		70-130	-		25
cis-1,2-Dichloroethene	96		-		70-130	-		25
1,1,1-Trichloroethane	92		-		70-130	-		25
Carbon tetrachloride	97		-		70-130	-		25
Trichloroethene	114		-		70-130	-		25
Tetrachloroethene	118		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1624884-3								
Dichlorodifluoromethane	97		-		70-130	-		
Chloromethane	113		-		70-130	-		
Freon-114	104		-		70-130	-		
Vinyl chloride	100		-		70-130	-		
1,3-Butadiene	112		-		70-130	-		
Bromomethane	111		-		70-130	-		
Chloroethane	102		-		70-130	-		
Ethanol	94		-		40-160	-		
Vinyl bromide	107		-		70-130	-		
Acetone	109		-		40-160	-		
Trichlorofluoromethane	110		-		70-130	-		
Isopropanol	103		-		40-160	-		
1,1-Dichloroethene	104		-		70-130	-		
Tertiary butyl Alcohol	92		-		70-130	-		
Methylene chloride	122		-		70-130	-		
3-Chloropropene	118		-		70-130	-		
Carbon disulfide	100		-		70-130	-		
Freon-113	116		-		70-130	-		
trans-1,2-Dichloroethene	100		-		70-130	-		
1,1-Dichloroethane	105		-		70-130	-		
Methyl tert butyl ether	100		-		70-130	-		
2-Butanone	111		-		70-130	-		
cis-1,2-Dichloroethene	107		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1624884-3								
Ethyl Acetate	103		-		70-130	-		
Chloroform	107		-		70-130	-		
Tetrahydrofuran	105		-		70-130	-		
1,2-Dichloroethane	102		-		70-130	-		
n-Hexane	113		-		70-130	-		
1,1,1-Trichloroethane	122		-		70-130	-		
Benzene	108		-		70-130	-		
Carbon tetrachloride	112		-		70-130	-		
Cyclohexane	111		-		70-130	-		
1,2-Dichloropropane	117		-		70-130	-		
Bromodichloromethane	114		-		70-130	-		
1,4-Dioxane	113		-		70-130	-		
Trichloroethene	121		-		70-130	-		
2,2,4-Trimethylpentane	115		-		70-130	-		
Heptane	123		-		70-130	-		
cis-1,3-Dichloropropene	120		-		70-130	-		
4-Methyl-2-pentanone	126		-		70-130	-		
trans-1,3-Dichloropropene	102		-		70-130	-		
1,1,2-Trichloroethane	127		-		70-130	-		
Toluene	108		-		70-130	-		
2-Hexanone	121		-		70-130	-		
Dibromochloromethane	119		-		70-130	-		
1,2-Dibromoethane	119		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1624884-3								
Tetrachloroethene	113		-		70-130	-		
Chlorobenzene	114		-		70-130	-		
Ethylbenzene	118		-		70-130	-		
p/m-Xylene	120		-		70-130	-		
Bromoform	113		-		70-130	-		
Styrene	118		-		70-130	-		
1,1,2,2-Tetrachloroethane	122		-		70-130	-		
o-Xylene	119		-		70-130	-		
4-Ethyltoluene	114		-		70-130	-		
1,3,5-Trimethylbenzene	117		-		70-130	-		
1,2,4-Trimethylbenzene	126		-		70-130	-		
Benzyl chloride	97		-		70-130	-		
1,3-Dichlorobenzene	116		-		70-130	-		
1,4-Dichlorobenzene	112		-		70-130	-		
1,2-Dichlorobenzene	117		-		70-130	-		
1,2,4-Trichlorobenzene	113		-		70-130	-		
Hexachlorobutadiene	118		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-07 Batch: WG1624885-3								
Vinyl chloride	101		-		70-130	-		25
1,1-Dichloroethene	99		-		70-130	-		25
cis-1,2-Dichloroethene	105		-		70-130	-		25
1,1,1-Trichloroethane	114		-		70-130	-		25
Carbon tetrachloride	104		-		70-130	-		25
Trichloroethene	115		-		70-130	-		25
Tetrachloroethene	107		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 Batch: WG1624888-3								
Dichlorodifluoromethane	104		-		70-130	-		
Chloromethane	99		-		70-130	-		
Freon-114	102		-		70-130	-		
Vinyl chloride	105		-		70-130	-		
1,3-Butadiene	113		-		70-130	-		
Bromomethane	101		-		70-130	-		
Chloroethane	96		-		70-130	-		
Ethanol	99		-		40-160	-		
Vinyl bromide	90		-		70-130	-		
Acetone	86		-		40-160	-		
Trichlorofluoromethane	98		-		70-130	-		
Isopropanol	90		-		40-160	-		
1,1-Dichloroethene	96		-		70-130	-		
Tertiary butyl Alcohol	93		-		70-130	-		
Methylene chloride	101		-		70-130	-		
3-Chloropropene	87		-		70-130	-		
Carbon disulfide	88		-		70-130	-		
Freon-113	89		-		70-130	-		
trans-1,2-Dichloroethene	90		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
Methyl tert butyl ether	91		-		70-130	-		
2-Butanone	83		-		70-130	-		
cis-1,2-Dichloroethene	95		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 Batch: WG1624888-3								
Ethyl Acetate	93		-		70-130	-		
Chloroform	106		-		70-130	-		
Tetrahydrofuran	83		-		70-130	-		
1,2-Dichloroethane	94		-		70-130	-		
n-Hexane	110		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Benzene	97		-		70-130	-		
Carbon tetrachloride	114		-		70-130	-		
Cyclohexane	110		-		70-130	-		
1,2-Dichloropropane	100		-		70-130	-		
Bromodichloromethane	115		-		70-130	-		
1,4-Dioxane	103		-		70-130	-		
Trichloroethene	108		-		70-130	-		
2,2,4-Trimethylpentane	109		-		70-130	-		
Heptane	99		-		70-130	-		
cis-1,3-Dichloropropene	109		-		70-130	-		
4-Methyl-2-pentanone	100		-		70-130	-		
trans-1,3-Dichloropropene	95		-		70-130	-		
1,1,2-Trichloroethane	98		-		70-130	-		
Toluene	87		-		70-130	-		
2-Hexanone	92		-		70-130	-		
Dibromochloromethane	105		-		70-130	-		
1,2-Dibromoethane	91		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 Batch: WG1624888-3								
Tetrachloroethene	97		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	94		-		70-130	-		
p/m-Xylene	95		-		70-130	-		
Bromoform	103		-		70-130	-		
Styrene	91		-		70-130	-		
1,1,2,2-Tetrachloroethane	102		-		70-130	-		
o-Xylene	99		-		70-130	-		
4-Ethyltoluene	92		-		70-130	-		
1,3,5-Trimethylbenzene	84		-		70-130	-		
1,2,4-Trimethylbenzene	99		-		70-130	-		
Benzyl chloride	93		-		70-130	-		
1,3-Dichlorobenzene	100		-		70-130	-		
1,4-Dichlorobenzene	96		-		70-130	-		
1,2-Dichlorobenzene	97		-		70-130	-		
1,2,4-Trichlorobenzene	96		-		70-130	-		
Hexachlorobutadiene	106		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 20-22 Batch: WG1624889-3								
Vinyl chloride	109		-		70-130	-		25
1,1-Dichloroethene	99		-		70-130	-		25
cis-1,2-Dichloroethene	99		-		70-130	-		25
1,1,1-Trichloroethane	96		-		70-130	-		25
Carbon tetrachloride	109		-		70-130	-		25
Trichloroethene	111		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 QC Batch ID: WG1624888-5 QC Sample: L2215527-21 Client ID: IA22-20						
Dichlorodifluoromethane	0.591	0.604	ppbV	2		25
Chloromethane	0.686	0.682	ppbV	1		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	255	258	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	10.9	10.9	ppbV	0		25
Trichlorofluoromethane	0.233	0.232	ppbV	0		25
Isopropanol	36.7	36.8	ppbV	0		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	1.52	1.50	ppbV	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 QC Batch ID: WG1624888-5 QC Sample: L2215527-21 Client ID: IA22-20						
Chloroform	0.265	0.261	ppbV	2		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.304	0.305	ppbV	0		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 20-22 QC Batch ID: WG1624888-5 QC Sample: L2215527-21 Client ID: IA22-20						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.300	0.297	ppbV	1		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 20-22 QC Batch ID: WG1624889-5 QC Sample: L2215527-21 Client ID: IA22-20						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.081	0.086	ppbV	6		25
Trichloroethene	0.026	0.023	ppbV	12		25
Tetrachloroethene	4.15	4.03	ppbV	3		25

Project Name: 135 KENT AVE

Project Number: E1022

Lab Number: L2215527

Report Date: 04/08/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2215527-01	IA22-01	0323	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	3.8	17
L2215527-01	IA22-01	2340	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.3	-13.5	-	-	-	-
L2215527-02	IA22-02	0950	Flow 4	03/23/22	382110		-	-	-	Pass	4.5	4.5	0
L2215527-02	IA22-02	2076	2.7L Can	03/23/22	382110	L2213539-04	Pass	-29.4	-7.4	-	-	-	-
L2215527-03	IA22-03	01067	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.3	5
L2215527-03	IA22-03	2279	2.7L Can	03/23/22	382110	L2213539-04	Pass	-29.6	-7.1	-	-	-	-
L2215527-04	IA22-04	0928	Flow 4	03/23/22	382110		-	-	-	Pass	4.5	4.5	0
L2215527-04	IA22-04	2190	2.7L Can	03/23/22	382110	L2213539-04	Pass	-29.5	-8.1	-	-	-	-
L2215527-05	IA22-05	0237	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.4	2
L2215527-05	IA22-05	195	2.7L Can	03/23/22	382110	L2213539-04	Pass	-29.4	-7.1	-	-	-	-
L2215527-06	IA22-06	0555	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.3	5
L2215527-06	IA22-06	2023	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.4	-7.3	-	-	-	-
L2215527-07	IA22-07	0427	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.7	4
L2215527-07	IA22-07	208	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.7	-6.9	-	-	-	-
L2215527-08	IA22-08	0679	Flow 4	03/23/22	382110		-	-	-	Pass	4.5	4.4	2

Project Name: 135 KENT AVE

Lab Number: L2215527

Project Number: E1022

Report Date: 04/08/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2215527-08	IA22-08	3416	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.4	-7.1	-	-	-	-
L2215527-09	IA22-09	02214	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.6	2
L2215527-09	IA22-09	169	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.1	-6.0	-	-	-	-
L2215527-10	IA22-10	0560	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	5.2	14
L2215527-10	IA22-10	2343	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.3	-6.4	-	-	-	-
L2215527-11	OA22-01	0982	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.5	0
L2215527-11	OA22-01	3707	2.7L Can	03/23/22	382110	L2213539-04	Pass	-29.3	-6.8	-	-	-	-
L2215527-12	OA22-02	01728	Flow 5	03/23/22	382110		-	-	-	Pass	3.0	2.6	14
L2215527-12	OA22-02	3578	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.4	-6.3	-	-	-	-
L2215527-13	IA22-11	02151	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	3.9	14
L2215527-13	IA22-11	3102	2.7L Can	03/23/22	382110	L2214158-05	Pass	-29.3	-7.0	-	-	-	-
L2215527-14	IA22-12	0284	Flow 5	03/23/22	382110		-	-	-	Pass	4.5	4.4	2
L2215527-14	IA22-12	2040	2.7L Can	03/23/22	382110	L2214158-05	Pass	-28.6	-7.4	-	-	-	-
L2215527-15	IA22-13	01204	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	2.3	26
L2215527-15	IA22-13	1053	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.3	-1.1	-	-	-	-

Project Name: 135 KENT AVE

Lab Number: L2215527

Project Number: E1022

Report Date: 04/08/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2215527-16	IA22-14	01079	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	-0.1	214
L2215527-16	IA22-14	982	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.4	-4.3	-	-	-	-
L2215527-17	IA22-15	01297	Flow 5	03/23/22	382110		-	-	-	Pass	3.0	3.0	0
L2215527-17	IA22-15	1977	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.3	0.0	-	-	-	-
L2215527-18	IA22-16	01423	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	2.9	3
L2215527-18	IA22-16	2882	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.4	-2.9	-	-	-	-
L2215527-19	IA22-18	02216	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	1.3	79
L2215527-19	IA22-18	3379	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.4	-6.7	-	-	-	-
L2215527-20	IA22-19	0638	Flow 4	03/23/22	383078		-	-	-	Pass	3.0	3.3	10
L2215527-20	IA22-19	3601	6.0L Can	03/23/22	382110	L2214467-06	Pass	-29.5	-6.3	-	-	-	-
L2215527-21	IA22-20	02093	Flow 3	03/23/22	383078		-	-	-	Pass	3.0	2.1	35
L2215527-21	IA22-20	3271	6.0L Can	03/23/22	382110	L2214467-06	Pass	-29.4	-4.5	-	-	-	-
L2215527-22	IA22-21	0435	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	4.3	36
L2215527-22	IA22-21	3295	6.0L Can	03/23/22	382110	L2214467-07	Pass	-29.3	-2.4	-	-	-	-
L2215527-23	UNUSED CAN #3470	01188	Flow 5	03/23/22	383078		-	-	-	Pass	3.0	2.7	11

Project Name: 135 KENT AVE

Lab Number: L2215527

Project Number: E1022

Report Date: 04/08/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2215527-23	UNUSED CAN #3470	3470	6.0L Can	03/23/22	382110	L2214467-11	Pass	-29.4	-0.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/17/22 01:56
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/17/22 01:56
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2213539
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2213539-04
Client ID: CAN 2993 SHELF 12
Sample Location:

Date Collected: 03/16/22 08:00
Date Received: 03/16/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	91		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/18/22 21:20
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/18/22 21:20
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214158
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214158-05
Client ID: CAN 1804 SHELF 6
Sample Location:

Date Collected: 03/18/22 09:00
Date Received: 03/18/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/22/22 01:02
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/22/22 01:02
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-06
Client ID: CAN 1052 SHELF 31
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/22/22 01:41
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/22/22 01:41
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-07
Client ID: CAN 705 SHELF 32
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/22/22 09:33
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	91		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/22/22 09:33
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2214467
Report Date: 04/08/22

Air Canister Certification Results

Lab ID: L2214467-11
Client ID: CAN 2097 SHELF 33
Sample Location:

Date Collected: 03/21/22 09:00
Date Received: 03/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	91		60-140

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2215527-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-08A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-09A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-10A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-11A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-12A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-13A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-14A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-15A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-16A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-17A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-18A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-19A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-20A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-21A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2215527-22A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2215527-23A	Canister - 6 Liter	NA	NA			Y	Present/Intact		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name: 135 KENT AVE
Project Number: E1022

Lab Number: L2215527
Report Date: 04/08/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

*Values in parentheses indicate holding time in days

Project Name: 135 KENT AVE **Lab Number:** L2215527

Project Number: E1022 **Report Date:** 04/08/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	135 KENT AVE	**Lab Number:**	L2215527
Project Number:	E1022	**Report Date:**	04/08/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Project Name:	135 KENT AVE	**Lab Number:**	L2215527
Project Number:	E1022	**Report Date:**	04/08/22

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 135 KENT AVE **Lab Number:** L2215527
Project Number: E1022 **Report Date:** 04/08/22

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 3

ALPHA ANALYTICAL — **CHAIN OF CUSTODY**

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/26/22

ALPHA Job #: L2215522

Client Information

Client: Integral Consulting Inc.
Address: 340 Kenilworth Rd
Ridgewood NJ 07450
Phone: 908-797-6103
Fax: sbarbuto@integral-corp.com
Email: pmcguire@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 135 Kent Ave
Project Location: 135 Kent Ave, Brooklyn, NY
Project #: ~~Sara~~ E1022
Project Manager: Sara Barbuto
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #: E1022
ap@integral-corp.com

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum (See Comments)	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM TCE Cis-1,2 dce Trichloroethylene VC	APH Subtract Aliphatic Carbon TCE	Fixed Gases	Sulfides & Mercaptans by TO-15		Initial Vacuum Sample Comments (i.e. PID)
15527-01	IA22-01	3/23/22	9:29	18:42	-0.19	-14.18	AA	PM	27L	2340	0323	X	X					-30.43
02	IA22-02		9:31	17:18	-0.08	-7.84				2076	0950	X	X					-30.73
03	IA22-03		9:33	17:38	0.00	-8.91				2279	01067	X	X					-30.69
04	IA22-04		9:36	18:24	0.00	-7.95				2190	0928	X	X					-30.75
05	IA22-05		9:38	17:22	0.00	-7.87				195	0237	X	X					-31.01
06	IA22-06		9:47	17:34	-0.16	-7.70				2023	0555	X	X					-30.60
07	IA22-07		9:40	17:07	0.00	-7.21				208	0427	X	X					-31.02
08	IA22-08		9:51	17:33	0.00	-6.56				3416	0679	X	X					-27.89
09	IA22-09		9:52	17:32	-0.30	-6.87				169	02214	X	X					-29.85
10	IA22-10		9:43	17:14	-0.16	-8.08				2343	2343	X	X					-29.81

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	3/24/22 16:30	[signature] (AM)	3/25/22 9:15
[signature] (AM)	3/25/22 15:00	[signature]	3/25/22 2000
[signature]	3/25/22	[signature]	3/26/22 0040
[signature]	3/26/22	[signature]	3/26/22 0810

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No. 101-02 Rev. (25-Sep-15)

AIR ANALYSIS

PAGE 2 OF 3

Date Rec'd in Lab: 3/26/22

ALPHA Job #: L2215527

ALPHA ANALYTICAL

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Integral Consulting
Address: 340 Kenilworth Rd
Ridgewood NJ 07450
Phone: 908-797-6103
Fax: sbarbuto@integral-corp.com
Email: pmcguire@integral-corp.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 135 Kent
Project Location: 135 Kent Ave, Brooklyn, NY
Project #: E1022
Project Manager: Sara Barbuto
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #: E1022

ap@integral-corp.com

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM Chlorinated(5) ☐	APH Subtract Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15			Sample Comments (i.e. PID)
11	OA22-01	3/23/22	9:43	17:16	-30.59	-8.08	AA	PM	2.7L	3707	0982	X	X						
12	OA22-02	3/24/22	13:25	13:15	-30.53	-7.70	↓	↓	6L	3578	01728	X	X						
13	IA22-11	3/23/22	10:11	17:30	-30.44	-7.61			2.7L	3102	02151	X	X						
14	IA22-12	3/23/22	10:12	17:42	-30.96	-8.12			2.7L	2040	0284	X	X						
15	IA22-13	3/24/22	13:48	13:44	-30.18	-1.36			6L	1053	01204	X	X						
16	IA22-14	3/24/22	13:50	15:44	-30.19	-5.25			6L	982	01074	X	X						
17	IA22-15	3/24/22	14:01	13:32	-30.32	-0.38			6L	1977	01297	X	X						
18	IA22-16	3/24/22	13:55	13:53	-30.43	-3.54			6L	2882	01423	X	X						
~~19~~	~~IA22-17~~	~~3/24/22~~	~~10:25~~		~~-30.05~~				~~6L~~	~~3470~~	~~01188~~	~~X~~	~~X~~						Sample Canister not Retrieved from Apartment C-6
19	IA22-18	3/24/22	14:14	15:48	-30.59	-7.48	↓	↓	6L	3379	02216	X	X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
Patrick McGuire	3/24/22 16:30	Josh Montagna (AM)	3/25/22 9:15
Josh Montagna (AM)	3/25/22 15:00	Anthony Mieu	3/25/22 2000
Anthony Mieu	3/25/22	[illegible]	3/26/22 0040

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

AIR ANALYSIS

PAGE 3 OF 3

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/26/22

ALPHA Job #: L2215522

Client Information

Client: Integral Consulting
Address: 340 Kenilworth Rd
Ridgewood, NJ 07450
Phone: 908-797-6103
Fax:
Email: sbarbuto@integral-corp.com
pmcguire@integral-corp.com

❑ These samples have been previously analyzed by Alpha

Project Information

Project Name: 135 Kent Ave
Project Location: 135 Kent Ave, Brooklyn NY
Project #: E1022
Project Manager: Sara Barbuto
ALPHA Quote #:

Turn-Around Time

❑ Standard ❑ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

❑ FAX
❑ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
❑ EMAIL (standard pdf report)
❑ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

❑ Same as Client info PO #: E1022

ap@integral-corp.com

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ❑

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM (Chlorinated)	APH Subtract Non-petroleum HCs ❑	Fixed Gases	Sulfides & Mercaptans by TO-15			Sample Comments (i.e. PID)
20	1A22-19	3/24/22	1359	15:46	-30.18	-6.55	AA	PM	6L	3601	0638	X	X						
21	1A22-20	↓	13:37	15:49	-30.08	-6.63	↓	↓	↓	3271	02093	X	X						
22	1A22-21	↓	1354	13:34	-30.52	-2.99	↓	↓	↓	3295	0435	X	X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
Patrick McGuire	3/24/22 16:30	Josh Montagna (ALP)	3/25/22 4:15
Josh Montagna (ALP)	3/25/22 15:00	Anthony Green	3/25/22 2035
Anthony Green	3/25/22	[illegible] 3/26/22 0040	

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 Rev: (25-Sep-15)

Appendix B

Data Usability Summary Reports

DATA USABILITY SUMMARY REPORT
REMEDIAL INVESTIGATION SOIL VAPOR SAMPLING

Former Cleaner Sales and Equipment Corp. Site
135 Kent Avenue
Brooklyn, NY 11249
NYSDEC BCP No. 224177

Prepared by:

integral consulting inc.

319 SW Washington St.
Suite 1150
Portland, OR 97204

November 19, 2018

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ACRONYMS AND ABBREVIATIONS

DNR	do not report
DUSR	data usability summary report
EPA	U.S. Environmental Protection Agency
MRL	method reporting limit
NYSDEC	New York State Department of Environmental Conservation
QA/QC	quality assurance and quality control
RPD	relative percent difference

1 INTRODUCTION

Integral Consulting Inc. has prepared this data usability summary report (DUSR) of remedial investigation soil vapor samples on behalf of 135 Kent Avenue Management Corp. for the property located at 135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York (Site). The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program and is listed as NYSDEC Site No. C224177.

This report presents the data validation of soil vapor samples and associated quality control samples taken at 135 Kent Avenue, New York City, New York, and analyzed by Alpha Analytical, Inc. of Mansfield, Massachusetts. The samples were reported in sample delivery group L1842348 and were analyzed for select volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method TO-15 (USEPA 1999).

The samples received a Stage 2B validation, which included a review of all laboratory summary forms of quality control and instrument performance data. The data validation was based on criteria described in EPA's functional guidelines for organic data review (USEPA 2016) and the referenced analytical method.

The quality assurance and quality control (QA/QC) parameters reviewed are discussed in Section 2. All electronic data deliverables were compared to the hard copy data packages, and 10 percent of the field sample results were verified. The definitions of the data qualifiers used are provided in Table 1-1, and descriptions of the reason codes used are provided in Table 1-2. For example, if a data point was estimated due to a replicate outlier, the qualifier "J" and the reason code "Rep" was entered into the database, indicated as J-Rep in the discussion of findings in Section 2.

2 FINDINGS

The data validation findings are provided in this section.

2.1 PARAMETERS REVIEWED

The QA/QC parameters reviewed for each analytical parameter are discussed below and are listed in Table 2-1.

2.2 SAMPLE RECEIPT AND HOLDING TIMES

Samples were received with complete chain-of-custody forms and in good condition, with the exceptions noted below. All analyses were conducted within the holding times in the referenced methods.

The final vacuum reported by the laboratory for Sample SVG-18-18 was greater than 9 in. Hg. The results in this sample were qualified as estimated (J/UJ-Other) because the canister may not have completely filled.

The residual canister vacuums measured at the laboratory for the majority of samples were near ambient pressure. This indicates that the sample is weighted toward the first portion of the sampling interval, and the desired sampling interval may not have been achieved before the canister arrived at ambient conditions. Although the actual sampling interval is uncertain, the canister still filled, and no qualifiers were assigned because of this issue.

2.3 BLANKS

All results from the laboratory method blanks were reported as less than the method reporting limit (MRL).

2.4 LABORATORY CONTROL SAMPLES

The percent recoveries of all laboratory control samples were within laboratory control limits.

2.5 LABORATORY DUPLICATE SAMPLES

The relative percent differences (RPDs) of all laboratory duplicate samples were within laboratory control limits, with the exception noted below.

The RPD for dichlorodifluoromethane was greater than the laboratory control limits in the duplicate analyses of sample WG1172378-5. This sample was a non-project batch quality control sample, and no qualifiers were assigned.

2.6 REPLICATES

Two sets of field replicates were submitted: Samples SVG-15-18 and SVG-DUP01-18 and Samples SVG-21-18 and SVG-DUP2-18. EPA has not established control limits for field replicates. For this project, the target control limit for field replicates is an RPD less than 35 percent for values greater than 5 times the MRL. For values less than 5 times the MRL, the absolute difference should be less than the MRL. These control limits were met for all analytes, with the exceptions noted below.

Trichloroethene and tetrachloroethene RPD values were greater than the control limits in the field replicate Samples SVG-15-18 and SVG-DUP01-18. The trichloroethene and tetrachloroethene results in these samples were qualified as estimated (J/UJ-REP).

Chloroform, toluene, tetrachloroethene, ethylbenzene, *p*/*m*-xylene, *o*-xylene, 4-ethyltoluene, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene RPD values or absolute differences were greater than the control limits in the field replicate Samples SVG-21-18 and SVG-DUP2-18. These results were qualified as estimated (J/UJ-REP).

2.7 METHOD REPORTING LIMITS AND METHODOLOGY

There are no project-specific MRLs specified for this project. The reported MRLs are consistent with the methodology used and the intended uses of the data.

Samples SVG-02-18, SVG-11-18, SVG-17-18, SVG-20-18, SVG-04-18, SVG-05-18, SVG-18-18, SVG-15-18, and SVG-06-18, were analyzed at further dilutions because the tetrachloroethene concentrations exceeded the instrument calibration range. The laboratory "E" flagged these results to indicate the concentrations exceeded the calibration range. These results were qualified as "do not report" (DNR-Other) because a more appropriate result was reported from a dilution analysis.

The laboratory noted that the acetone results in Samples SVG-10-18, SVG-13-18, and SVG-21-18 should be considered estimated due to co-elution with a nontarget peak. These results were qualified as estimated (J-Mi).

2.8 INSTRUMENT PERFORMANCE

The gas chromatograph/mass spectrometer instrument performance checks ("tune") were analyzed at the start of each 24-hour analytical shift, and the method-specified acceptance criteria were met.

2.9 INITIAL CALIBRATION

Initial calibrations were analyzed on all instruments and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The relative standard deviation values for 1,2,4-trichlorobenzene and benzyl chloride were outside the acceptance criteria in one initial calibration. The non-detected results for these analytes in the associated samples were qualified as estimated (UJ-Ci).

2.10 CONTINUING CALIBRATION

Continuing calibrations were analyzed at the appropriate frequency and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The percent difference value for *trans*-1,3-dichloropropene was outside the criteria, biased low, and the percent difference value for hexachlorobutadiene was biased high in one continuing calibration verification standard.

- The non-detected results for *trans*-1,3-dichloropropene in the associated samples were qualified as estimated (UJ-Cc).
- Hexachlorobutadiene was not detected in the associated samples, and no qualifiers were assigned.

The percent difference values for 3-chloropropene, cyclohexane, and heptane, were outside the criteria, biased low, and the bromoform, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene, and hexachlorobutadiene percent difference values were biased high in one continuing calibration verification standard. Only tetrachloroethene was reported from the associated dilution analyses, and no qualifiers were assigned.

2.11 INTERNAL STANDARDS

Internal standards were added to all samples, and the areas and retention times of all internal standards were within the method-specified control limits.

3 OVERALL ASSESSMENT

3.1 DATA QUALIFICATION

A total of 1,710 results were reported. A total of 139 results (8.1 percent) were qualified. Nine of these results were qualified as "DNR" because a more appropriate result was available. No results were rejected, and completeness was 100 percent. A summary of all qualified results is presented in Table 3-1.

3.2 DATA USABILITY

The data meet the criteria set forth in the referenced quality assurance documents, with the exceptions noted above. All results are acceptable for their intended use.

4 REFERENCES

USEPA. 1999. Compendium method TO-15: Determination of volatile organic compounds in air collected in specially-prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS). In: Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition. U.S. Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH. January.

USEPA. 2016. National functional guidelines for Superfund organic methods data review. USEPA-540-R-2016-002, Contract Laboratory Program. Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, Washington, DC. September.

Tables

Table 1-1. Definition of Data Qualifiers

Data Qualifier	Definition
DNR	do not report
J	The associated numerical value is an estimated quantity.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 1-2. Definition of Data Validation Reason Codes

Reason Code	Definition
Cc	Calibration (continuing)
Ci	Calibration (initial)
Mi	Matrix interference
Other	Defined in report
REP	Replicate imprecision

Table 2-1. QA/QC Parameters Reviewed

QA/QC Parameter	Analytical Parameter VOC EPA Method TO-15
Sample receipt and holding times	Q
Blanks	+
Surrogate	NA
Matrix spikes	NA
LCS	D
Replicates	Q
MRL and methodology	Q
Instrument performance	+
Initial calibration	Q
Continuing calibration	Q
Internal standards	D

Notes:

+ = All QA/QC criteria were met.

D = Data are discussed in the report. QA/QC criteria were not met; however, no data were qualified.

Q = Data were qualified and are discussed in the report.

EPA = U.S. Environmental Protection Agency
LCS = laboratory control sample
MRL = method reporting limit
NA = not analyzed
QA/QC = quality assurance and quality control
VOC = volatile organic compound

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842348	SVG-01-18	TRANS-1,3-DICHLOROPROPENE	0.908	0.908	U	UJ	Cc
L1842348	SVG-02-18	TETRACHLOROETHENE	2,430	4.52	E	DNR	Other
L1842348	SVG-02-18	TRANS-1,3-DICHLOROPROPENE	3.03	3.03	U	UJ	Cc
L1842348	SVG-03-18	TRANS-1,3-DICHLOROPROPENE	1.51	1.51	U	UJ	Cc
L1842348	SVG-11-18	TETRACHLOROETHENE	158,000	189	E	DNR	Other
L1842348	SVG-11-18	TRANS-1,3-DICHLOROPROPENE	126	126	U	UJ	Cc
L1842348	SVG-17-18	TETRACHLOROETHENE	50,800	75.3	E	DNR	Other
L1842348	SVG-17-18	TRANS-1,3-DICHLOROPROPENE	50.4	50.4	U	UJ	Cc
L1842348	SVG-12-18	TRANS-1,3-DICHLOROPROPENE	26.2	26.2	U	UJ	Cc
L1842348	SVG-20-18	TETRACHLOROETHENE	615,000	273	E	DNR	Other
L1842348	SVG-20-18	TRANS-1,3-DICHLOROPROPENE	183	183	U	UJ	Cc
L1842348	SVG-04-18	TETRACHLOROETHENE	3,000,000	1,060	E	DNR	Other
L1842348	SVG-04-18	TRANS-1,3-DICHLOROPROPENE	708	708	U	UJ	Cc
L1842348	SVG-05-18	TETRACHLOROETHENE	3,000,000	1,060	E	DNR	Other
L1842348	SVG-05-18	TRANS-1,3-DICHLOROPROPENE	708	708	U	UJ	Cc
L1842348	SVG-18-18	1,1,1-TRICHLOROETHANE	168	168	U	UJ	Other
L1842348	SVG-18-18	1,1,2,2-TETRACHLOROETHANE	211	211	U	UJ	Other
L1842348	SVG-18-18	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	235	235	U	UJ	Other
L1842348	SVG-18-18	1,1,2-TRICHLOROETHANE	168	168	U	UJ	Other
L1842348	SVG-18-18	1,1-DICHLOROETHANE	124	124	U	UJ	Other
L1842348	SVG-18-18	1,1-DICHLOROETHENE	122	122	U	UJ	Other
L1842348	SVG-18-18	1,2,4-TRICHLOROBENZENE	228	228	U	UJ	Other
L1842348	SVG-18-18	1,2,4-TRIMETHYLBENZENE	151	151	U	UJ	Other
L1842348	SVG-18-18	1,2-DIBROMOETHANE	236	236	U	UJ	Other
L1842348	SVG-18-18	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHAN	215	215	U	UJ	Other
L1842348	SVG-18-18	1,2-DICHLOROBENZENE	185	185	U	UJ	Other
L1842348	SVG-18-18	1,2-DICHLOROETHANE	124	124	U	UJ	Other
L1842348	SVG-18-18	1,2-DICHLOROPROPANE	142	142	U	UJ	Other
L1842348	SVG-18-18	1,3,5-TRIMETHYLBENZENE	151	151	U	UJ	Other
L1842348	SVG-18-18	1,3-BUTADIENE	67.9	67.9	U	UJ	Other
L1842348	SVG-18-18	1,3-DICHLOROBENZENE	185	185	U	UJ	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842348	SVG-18-18	1,4-DICHLOROBENZENE	185	185	U	UJ	Other
L1842348	SVG-18-18	1,4-DIOXANE	111	111	U	UJ	Other
L1842348	SVG-18-18	2,2,4-TRIMETHYLPENTANE	143	143	U	UJ	Other
L1842348	SVG-18-18	2-BUTANONE	226	226	U	UJ	Other
L1842348	SVG-18-18	2-HEXANONE	126	126	U	UJ	Other
L1842348	SVG-18-18	3-CHLOROPROPENE	96.1	96.1	U	UJ	Other
L1842348	SVG-18-18	4-ETHYLTOLUENE	151	151	U	UJ	Other
L1842348	SVG-18-18	4-METHYL-2-PENTANONE	314	314	U	UJ	Other
L1842348	SVG-18-18	ACETONE	363	363	U	UJ	Other
L1842348	SVG-18-18	BENZENE	98.1	98.1	U	UJ	Other
L1842348	SVG-18-18	BENZYL CHLORIDE	159	159	U	UJ	Other
L1842348	SVG-18-18	BROMODICHLOROMETHANE	206	206	U	UJ	Other
L1842348	SVG-18-18	BROMOFORM	317	317	U	UJ	Other
L1842348	SVG-18-18	BROMOMETHANE	119	119	U	UJ	Other
L1842348	SVG-18-18	CARBON DISULFIDE	95.6	95.6	U	UJ	Other
L1842348	SVG-18-18	CARBON TETRACHLORIDE	193	193	U	UJ	Other
L1842348	SVG-18-18	CHLOROBENZENE	141	141	U	UJ	Other
L1842348	SVG-18-18	CHLOROETHANE	81	81	U	UJ	Other
L1842348	SVG-18-18	CHLOROFORM	150	150	U	UJ	Other
L1842348	SVG-18-18	CHLOROMETHANE	63.4	63.4	U	UJ	Other
L1842348	SVG-18-18	CYCLOHEXANE	106	106	U	UJ	Other
L1842348	SVG-18-18	DIBROMOCHLOROMETHANE	262	262	U	UJ	Other
L1842348	SVG-18-18	DICHLORODIFLUOROMETHANE	152	152	U	UJ	Other
L1842348	SVG-18-18	ETHYL ACETATE	276	276	U	UJ	Other
L1842348	SVG-18-18	ETHYL ALCOHOL	1,450	1,450	U	UJ	Other
L1842348	SVG-18-18	ETHYLBENZENE	133	133	U	UJ	Other
L1842348	SVG-18-18	HEPTANE	126	126	U	UJ	Other
L1842348	SVG-18-18	HEXACHLOROBUTADIENE	327	327	U	UJ	Other
L1842348	SVG-18-18	METHYL TERT BUTYL ETHER	111	111	U	UJ	Other
L1842348	SVG-18-18	METHYLENE CHLORIDE	266	266	U	UJ	Other
L1842348	SVG-18-18	STYRENE	131	131	U	UJ	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842348	SVG-18-18	TETRACHLOROETHENE	187,000	827		J	Other
L1842348	SVG-18-18	TETRACHLOROETHENE	163,000	208	E	DNR	Other
L1842348	SVG-18-18	TETRAHYDROFURAN	226	226	U	UJ	Other
L1842348	SVG-18-18	TOLUENE	116	116	U	UJ	Other
L1842348	SVG-18-18	TRICHLOROETHENE	1,020	165		J	Other
L1842348	SVG-18-18	TRICHLOROFLUOROMETHANE	173	173	U	UJ	Other
L1842348	SVG-18-18	VINYL BROMIDE	134	134	U	UJ	Other
L1842348	SVG-18-18	VINYL CHLORIDE	78.5	78.5	U	UJ	Other
L1842348	SVG-18-18	CIS-1,2-DICHLOROETHENE	212	122		J	Other
L1842348	SVG-18-18	CIS-1,3-DICHLOROPROPENE	139	139	U	UJ	Other
L1842348	SVG-18-18	ISO-PROPYL ALCOHOL	189	189	U	UJ	Other
L1842348	SVG-18-18	N-HEXANE	108	108	U	UJ	Other
L1842348	SVG-18-18	O-XYLENE	133	133	U	UJ	Other
L1842348	SVG-18-18	P/M-XYLENE	267	267	U	UJ	Other
L1842348	SVG-18-18	TERT-BUTYL ALCOHOL	233	233	U	UJ	Other
L1842348	SVG-18-18	TRANS-1,2-DICHLOROETHENE	122	122	U	UJ	Other
L1842348	SVG-18-18	TRANS-1,3-DICHLOROPROPENE	139	139	U	UJ	Other,Cc
L1842348	SVG-15-18	TETRACHLOROETHENE	338,000	269	E	DNR	Other
L1842348	SVG-15-18	TETRACHLOROETHENE	457,000	1,090		J	REP
L1842348	SVG-15-18	TRICHLOROETHENE	496	213		J	REP
L1842348	SVG-15-18	TRANS-1,3-DICHLOROPROPENE	180	180	U	UJ	Cc
L1842348	SVG-19-18	1,2,4-TRICHLOROBENZENE	51.1	51.1	U	UJ	Ci
L1842348	SVG-19-18	BENZYL CHLORIDE	35.6	35.6	U	UJ	Ci
L1842348	SVG-25-18	1,2,4-TRICHLOROBENZENE	59.7	59.7	U	UJ	Ci
L1842348	SVG-25-18	BENZYL CHLORIDE	41.6	41.6	U	UJ	Ci
L1842348	SVG-14-18	1,2,4-TRICHLOROBENZENE	4.95	4.95	U	UJ	Ci
L1842348	SVG-14-18	BENZYL CHLORIDE	3.45	3.45	U	UJ	Ci
L1842348	SVG-24-18	1,2,4-TRICHLOROBENZENE	22.2	22.2	U	UJ	Ci
L1842348	SVG-24-18	BENZYL CHLORIDE	15.5	15.5	U	UJ	Ci
L1842348	SVG-23-18	1,2,4-TRICHLOROBENZENE	1.48	1.48	U	UJ	Ci
L1842348	SVG-23-18	BENZYL CHLORIDE	1.04	1.04	U	UJ	Ci

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842348	SVG-22-18	1,2,4-TRICHLOROBENZENE	2.97	2.97	U	UJ	Ci
L1842348	SVG-22-18	BENZYL CHLORIDE	2.07	2.07	U	UJ	Ci
L1842348	SVG-06-18	1,2,4-TRICHLOROBENZENE	9,280	9,280	U	UJ	Ci
L1842348	SVG-06-18	BENZYL CHLORIDE	6,470	6,470	U	UJ	Ci
L1842348	SVG-06-18	TETRACHLOROETHENE	5,170,000	8,480	E	DNR	Other
L1842348	SVG-07-18	1,2,4-TRICHLOROBENZENE	809	809	U	UJ	Ci
L1842348	SVG-07-18	BENZYL CHLORIDE	564	564	U	UJ	Ci
L1842348	SVG-08-18	1,2,4-TRICHLOROBENZENE	1.48	1.48	U	UJ	Ci
L1842348	SVG-08-18	BENZYL CHLORIDE	1.04	1.04	U	UJ	Ci
L1842348	SVG-10-18	1,2,4-TRICHLOROBENZENE	29.7	29.7	U	UJ	Ci
L1842348	SVG-10-18	ACETONE	143	47.5		J	Mi
L1842348	SVG-10-18	BENZYL CHLORIDE	20.7	20.7	U	UJ	Ci
L1842348	SVG-16-18	1,2,4-TRICHLOROBENZENE	3.71	3.71	U	UJ	Ci
L1842348	SVG-16-18	BENZYL CHLORIDE	2.59	2.59	U	UJ	Ci
L1842348	SVG-DUP01-18	1,2,4-TRICHLOROBENZENE	1,610	1610	U	UJ	Ci
L1842348	SVG-DUP01-18	BENZYL CHLORIDE	1,120	1,120	U	UJ	Ci
L1842348	SVG-DUP01-18	TETRACHLOROETHENE	472,000	1,470		J	REP
L1842348	SVG-DUP01-18	TRICHLOROETHENE	1,300	1,170		J	REP
L1842348	SVG-13-18	1,2,4-TRICHLOROBENZENE	1.86	1.86	U	UJ	Ci
L1842348	SVG-13-18	ACETONE	5.01	2.97		J	Mi
L1842348	SVG-13-18	BENZYL CHLORIDE	1.29	1.29	U	UJ	Ci
L1842348	SVG-21-18	1,2,4-TRICHLOROBENZENE	1.48	1.48	U	UJ	Ci
L1842348	SVG-21-18	1,2,4-TRIMETHYLBENZENE	9.78	0.983		J	REP
L1842348	SVG-21-18	1,3,5-TRIMETHYLBENZENE	2.65	0.983		J	REP
L1842348	SVG-21-18	4-ETHYLTOLUENE	1.98	0.983		J	REP
L1842348	SVG-21-18	ACETONE	4.94	2.38		J	Mi
L1842348	SVG-21-18	BENZYL CHLORIDE	1.04	1.04	U	UJ	Ci
L1842348	SVG-21-18	CHLOROFORM	2.85	0.977		J	REP
L1842348	SVG-21-18	ETHYLBENZENE	2.77	0.869		J	REP
L1842348	SVG-21-18	TETRACHLOROETHENE	12.3	1.36		J	REP
L1842348	SVG-21-18	TOLUENE	7.05	0.754		J	REP

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842348	SVG-21-18	O-XYLENE	4.78	0.869		J	REP
L1842348	SVG-21-18	P/M-XYLENE	11.6	1.74		J	REP
L1842348	SVG-09-18	1,2,4-TRICHLOROBENZENE	824	824	U	UJ	Ci
L1842348	SVG-09-18	BENZYL CHLORIDE	575	575	U	UJ	Ci
L1842348	SVG-DUP2-18	1,2,4-TRICHLOROBENZENE	1.48	1.48	U	UJ	Ci
L1842348	SVG-DUP2-18	1,2,4-TRIMETHYLBENZENE	1.52	0.983		J	REP
L1842348	SVG-DUP2-18	1,3,5-TRIMETHYLBENZENE	0.983	0.983	U	UJ	REP
L1842348	SVG-DUP2-18	4-ETHYLTOLUENE	0.983	0.983	U	UJ	REP
L1842348	SVG-DUP2-18	BENZYL CHLORIDE	1.04	1.04	U	UJ	Ci
L1842348	SVG-DUP2-18	CHLOROFORM	4.77	0.977		J	REP
L1842348	SVG-DUP2-18	ETHYLBENZENE	0.869	0.869	U	UJ	REP
L1842348	SVG-DUP2-18	TETRACHLOROETHENE	18.8	1.36		J	REP
L1842348	SVG-DUP2-18	TOLUENE	1.81	0.754		J	REP
L1842348	SVG-DUP2-18	O-XYLENE	0.869	0.869	U	UJ	REP
L1842348	SVG-DUP2-18	P/M-XYLENE	1.83	1.74		J	REP

Notes:

Cc = calibration (continuing)
Ci = calibration (initial)
DV = data validation
Mi = matrix interference
Other = described in report
REP = replicate imprecision

Data Qualifiers:

DNR = do not report
J = The associated numerical value is an estimated quantity.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY REPORT
REMEDIAL INVESTIGATION CONCRETE SAMPLING

Former Cleaner Sales and Equipment Corp. Site
135 Kent Avenue
Brooklyn, NY 11249
NYSDEC BCP No. 224177

Prepared by:

integral consulting inc.

319 SW Washington St.
Suite 1150
Portland, OR 97204

November 19, 2018

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Table 3-1. Summary of Qualified Data

ACRONYMS AND ABBREVIATIONS

DUSR	data usability summary report
EPA	U.S. Environmental Protection Agency
MS/MSD	matrix spike and matrix spike duplicate
MRL	method reporting limit
NYSDEC	New York State Department of Environmental Conservation
QA/QC	quality assurance and quality control
RPD	relative percent difference
VOC	volatile organic compound
TIC	tentatively identified compound

1 INTRODUCTION

Integral Consulting Inc. has prepared this data usability summary report (DUSR) of remedial investigation concrete samples on behalf of 135 Kent Avenue Management Corp. for the property located at 135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York (Site). The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program and is listed as NYSDEC Site No. C224177.

This report presents the data validation of concrete samples and associated quality control samples taken at 135 Kent Avenue, New York, New York, and analyzed by Alpha Analytical, Inc. of Mansfield, Massachusetts. The samples were reported in sample delivery group L1842205 and were analyzed for select volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) SW-846 Method 8260C (USEPA 2006).

The samples received a Stage 2B validation, which included a review of all laboratory summary forms of quality control and instrument performance data. The data validation was based on criteria described in EPA's functional guidelines for organic data review (USEPA 2016) and the referenced analytical method.

The quality assurance and quality control (QA/QC) parameters reviewed are discussed in Section 2. All electronic data deliverables were compared to the hard copy data packages, and 10 percent of the field sample results were verified. The definitions of the data qualifiers used are provided in Table 1-1, and descriptions of the reason codes used are provided in Table 1-2. For example, if a data point was estimated due to a replicate outlier, the qualifier "J" and the reason code "Rep" was entered into the database, indicated as J-Rep in the discussion of findings in Section 2.

2 FINDINGS

The data validation findings are provided in this section.

2.1 PARAMETERS REVIEWED

The QA/QC parameters reviewed for each analytical parameter are discussed below and are listed in Table 2-1.

2.2 SAMPLE RECEIPT AND HOLDING TIMES

Samples were received with complete chain-of-custody forms, within temperature criteria, and in good condition. All analyses were conducted within the holding times in the referenced method.

2.3 BLANKS

All results from the laboratory method blanks were reported as less than the method detection limit.

2.4 SURROGATES

The percent recoveries of all laboratory surrogates were within laboratory control limits, with the exceptions noted below.

The recoveries of surrogate dibromofluoromethane were less than the lower control limit in Samples CON-01-18, CON-02-18, CON-03-18, and the matrix spike and matrix spike duplicate (MS/MSD):

- The VOC results in Samples CON-01-18, CON-02-18, and CON-03-18 were qualified as estimated (J/UJ-SSR).
- No qualifiers were assigned to the MS/MSD.

2.5 LABORATORY CONTROL SAMPLES

The percent recoveries and relative percent differences (RPDs) of all laboratory control samples were within laboratory control limits.

2.6 MATRIX SPIKES

MS/MSD analysis was performed on Sample CON-01-18. The percent recoveries and RPDs were within laboratory control limits, with the exceptions noted below:

- 1,1,2,2-Tetrachloroethane was not recovered in the MS/MSD and the result was qualified as rejected (R-MS).
- The percent recoveries for 36 VOCs in the MS/MSD were less than the lower control limits. The associated non-detected results were qualified as estimated (UJ-MS).
- The RPDs of seven VOCs in the MS/MSD were greater than the control limits. The associated non-detected results were qualified as estimated (UJ-REP).

2.7 REPLICATES

A laboratory duplicate was performed for total solids, and the RPD was within laboratory control limits.

2.8 METHOD REPORTING LIMITS AND METHODOLOGY

There are no project-specific method reporting limits (MRLs) specified for this project. The reported MRLs are consistent with the methodology used and the intended uses of the data.

The laboratory flagged unknown tentatively identified compounds (TICs) as estimated. These results were qualified as estimated (J-TIC).

The laboratory flagged TICs with presumptive identification as estimated. These results were qualified as estimated and tentatively identified (NJ-TIC).

2.9 INSTRUMENT PERFORMANCE

The gas chromatograph/mass spectrometer instrument performance checks ("tune") were analyzed at the start of each 12-hour analytical shift, and the method-specified acceptance criteria were met.

2.10 INITIAL CALIBRATION

Initial calibrations were analyzed on all instruments and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016).

2.11 CONTINUING CALIBRATION

Continuing calibrations were analyzed at the appropriate frequency and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The percent difference value for chloroethane and *trans*-1-4-dichloro-2-butene were outside the criteria, biased low, in the continuing calibration verification standard. The non-detected results for chloroethane and *trans*-1-4-dichloro-2-butene in the associated samples were qualified as estimated (UJ-Cc).

2.12 INTERNAL STANDARDS

Internal standards were added to all samples, and the areas and retention times of all internal standards were within the method-specified control limits.

3 OVERALL ASSESSMENT

The overall assessment is provided in this section.

3.1 DATA QUALIFICATION

A total of 262 results were reported including TICs. A total of 258 results (98 percent) were qualified as estimated. One result (<1%) was rejected, and completeness was greater than 99 percent. A summary of all qualified results is presented in Table 3-1.

3.2 DATA USABILITY

The data meet the criteria set forth in the referenced quality assurance documents, with the exceptions noted above. All results are acceptable for their intended use with the exception of the rejected result.

4 REFERENCES

USEPA. 2006. Volatile organic compounds by gas chromatography/mass spectrometry (GC/MS), SW-846 Method 8260C Revision 3. U.S. Environmental Protection Agency, Office of Office of Resource Conservation and Recovery (ORCR), Washington, DC. August.

USEPA. 2016. National functional guidelines for Superfund organic methods data review. USEPA-540-R-2016-002, Contract Laboratory Program. Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, Washington, DC. September.

Tables

Table 1-1. Definition of Data Qualifiers

Data Qualifier	Definition
J	The associated numerical value is an estimated quantity.
NJ	Tentative identification or presumptive evidence of the presence of the material at an estimated quantity.
R	Rejected. The data are unusable.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 1-2. Definition of Data Validation Reason Codes

Reason Code	Definition
Cc	Calibration (continuing)
MS	Matrix spike recovery
REP	Replicate imprecision
TIC	Tentatively identified compound
SSR	Surrogate spike/labeled compound recovery

Table 2-1. QA/QC Parameters Reviewed

QA/QC Parameter	Analytical Parameter VOC SW-846 8260C
Sample receipt and holding times	+
Blanks	+
Surrogate	Q
Matrix spikes	Q
LCS	+
Replicates	+
MRL and methodology	Q
Instrument performance	+
Initial calibration	+
Continuing calibration	Q
Internal standards	+

Notes:
+ = All QA/QC criteria were met.
Q = Data were qualified and are discussed in the report.

LCS = laboratory control sample
MRL = method reporting limit
NA = not analyzed
QA/QC = quality assurance and quality control
VOC = volatile organic compound

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-01-18	1,1,1,2-TETRACHLOROETHANE	0.48	0.48	U	UJ	SSR,MS
L1842205	CON-01-18	1,1,1-TRICHLOROETHANE	0.48	0.48	U	UJ	SSR
L1842205	CON-01-18	1,1,2,2-TETRACHLOROETHANE	0.48	0.48	U	R	MS
L1842205	CON-01-18	1,1,2-TRICHLOROETHANE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	1,1-DICHLOROETHANE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	1,1-DICHLOROETHENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	1,1-DICHLOROPROPENE	0.48	0.48	U	UJ	SSR
L1842205	CON-01-18	1,2,3-TRICHLOROBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,2,3-TRICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	1,2,4,5-TETRAMETHYLBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,2,4-TRICHLOROBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,2,4-TRIMETHYLBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,2-DIBROMO-3-CHLOROPROPANE	2.8	2.8	U	UJ	SSR,MS
L1842205	CON-01-18	1,2-DIBROMOETHANE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	1,2-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,2-DICHLOROETHANE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	1,2-DICHLOROETHENE (TOTAL)	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	1,2-DICHLOROPROPANE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	1,3,5-TRIMETHYLBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,3-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,3-DICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	1,3-DICHLOROPROPENE, TOTAL	0.48	0.48	U	UJ	SSR
L1842205	CON-01-18	1,4-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,4-DIOXANE	95	95	U	UJ	SSR
L1842205	CON-01-18	1-HEPTENE, 6-METHYL-	31.4	NA	NJ	NJ	TIC
L1842205	CON-01-18	2,2-DICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	2-BUTANONE	9.5	9.5	U	UJ	SSR
L1842205	CON-01-18	2-HEXANONE	9.5	9.5	U	UJ	SSR
L1842205	CON-01-18	3-CARENE	21.1	NA	NJ	NJ	TIC
L1842205	CON-01-18	4-METHYL-2-PENTANONE	9.5	9.5	U	UJ	SSR
L1842205	CON-01-18	ACETONE	29	9.5		J	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-01-18	ACRYLONITRILE	3.8	3.8	U	UJ	SSR
L1842205	CON-01-18	BENZENE	0.48	0.48	U	UJ	SSR
L1842205	CON-01-18	BROMOBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	BROMOCHLOROMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	BROMODICHLOROMETHANE	0.48	0.48	U	UJ	SSR,MS
L1842205	CON-01-18	BROMOFORM	3.8	3.8	U	UJ	SSR
L1842205	CON-01-18	BROMOMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	CARBON DISULFIDE	9.5	9.5	U	UJ	SSR,REP
L1842205	CON-01-18	CARBON TETRACHLORIDE	0.95	0.95	U	UJ	SSR,REP
L1842205	CON-01-18	CHLOROBENZENE	0.48	0.48	U	UJ	SSR,MS
L1842205	CON-01-18	CHLOROETHANE	1.9	1.9	U	UJ	SSR,REP,Cc
L1842205	CON-01-18	CHLOROFORM	1.4	1.4	U	UJ	SSR
L1842205	CON-01-18	CHLOROMETHANE	3.8	3.8	U	UJ	SSR
L1842205	CON-01-18	DIBROMOCHLOROMETHANE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	DIBROMOMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	DICHLORODIFLUOROMETHANE	9.5	9.5	U	UJ	SSR,REP
L1842205	CON-01-18	ETHYL ETHER	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	ETHYLBENZENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	HEXACHLOROBUTADIENE	3.8	3.8	U	UJ	SSR,MS
L1842205	CON-01-18	ISOPROPYLBENZENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	METHYL TERT BUTYL ETHER	1.9	1.9	U	UJ	SSR
L1842205	CON-01-18	METHYLENE CHLORIDE	4.8	4.8	U	UJ	SSR
L1842205	CON-01-18	NAPHTHALENE	3.8	3.8	U	UJ	SSR,MS
L1842205	CON-01-18	PENTANE, 2,3,3-TRIMETHYL-	5.04	NA	NJ	NJ	TIC
L1842205	CON-01-18	STYRENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	TETRACHLOROETHENE	0.48	0.48	U	UJ	SSR,MS,REP
L1842205	CON-01-18	TOLUENE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	TOTAL TIC COMPOUNDS	262	NA	J	J	TIC
L1842205	CON-01-18	TRICHLOROETHENE	0.48	0.48	U	UJ	SSR,MS
L1842205	CON-01-18	TRICHLOROFLUOROMETHANE	3.8	3.8	U	UJ	SSR,REP
L1842205	CON-01-18	UNKNOWN	3.48	NA	J	J	TIC

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-01-18	UNKNOWN	31.2	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	64.8	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	9.19	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	5.6	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	11	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	22.6	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	28.4	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	6.6	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	3.38	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	7.78	NA	J	J	TIC
L1842205	CON-01-18	UNKNOWN	10.9	NA	J	J	TIC
L1842205	CON-01-18	VINYL ACETATE	9.5	9.5	U	UJ	SSR,MS
L1842205	CON-01-18	VINYL CHLORIDE	0.95	0.95	U	UJ	SSR,REP
L1842205	CON-01-18	XYLENE (TOTAL)	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	CIS-1,2-DICHLOROETHENE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	CIS-1,3-DICHLOROPROPENE	0.48	0.48	U	UJ	SSR
L1842205	CON-01-18	N-BUTYLBENZENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	N-PROPYLBENZENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	O-CHLOROTOLUENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	O-XYLENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	P-CHLOROTOLUENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	1,4-DIETHYLBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	4-ETHYLTOLUENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	P-ISOPROPYLTOLUENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	P/M-XYLENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	SEC-BUTYLBENZENE	0.95	0.95	U	UJ	SSR,MS
L1842205	CON-01-18	TERT-BUTYLBENZENE	1.9	1.9	U	UJ	SSR,MS
L1842205	CON-01-18	TRANS-1,2-DICHLOROETHENE	1.4	1.4	U	UJ	SSR
L1842205	CON-01-18	TRANS-1,3-DICHLOROPROPENE	0.95	0.95	U	UJ	SSR
L1842205	CON-01-18	TRANS-1,4-DICHLORO-2-BUTENE	4.8	4.8	U	UJ	SSR,MS,Cc
L1842205	CON-02-18	1,1,1,2-TETRACHLOROETHANE	0.51	0.51	U	UJ	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-02-18	1,1,1-TRICHLOROETHANE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	1,1,2,2-TETRACHLOROETHANE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	1,1,2-TRICHLOROETHANE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,1-DICHLOROETHANE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,1-DICHLOROETHENE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,1-DICHLOROPROPENE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	1,2,3-TRICHLOROBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2,3-TRICHLOROPROPANE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2,4,5-TETRAMETHYLBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2,4-TRICHLOROBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2,4-TRIMETHYLBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2-DIBROMO-3-CHLOROPROPANE	3	3	U	UJ	SSR
L1842205	CON-02-18	1,2-DIBROMOETHANE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,2-DICHLOROBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,2-DICHLOROETHANE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,2-DICHLOROETHENE (TOTAL)	1	1	U	UJ	SSR
L1842205	CON-02-18	1,2-DICHLOROPROPANE	1	1	U	UJ	SSR
L1842205	CON-02-18	1,3,5-TRIMETHYLBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,3-DICHLOROBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,3-DICHLOROPROPANE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,3-DICHLOROPROPENE, TOTAL	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	1,4-DICHLOROBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,4-DIOXANE	100	100	U	UJ	SSR
L1842205	CON-02-18	2,2-DICHLOROPROPANE	2	2	U	UJ	SSR
L1842205	CON-02-18	2-BUTANONE	10	10	U	UJ	SSR
L1842205	CON-02-18	2-HEXANONE	10	10	U	UJ	SSR
L1842205	CON-02-18	4-METHYL-2-PENTANONE	10	10	U	UJ	SSR
L1842205	CON-02-18	ACETONE	130	10		J	SSR
L1842205	CON-02-18	ACRYLONITRILE	4	4	U	UJ	SSR
L1842205	CON-02-18	BENZENE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	BROMOBENZENE	2	2	U	UJ	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-02-18	BROMOCHLOROMETHANE	2	2	U	UJ	SSR
L1842205	CON-02-18	BROMODICHLOROMETHANE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	BROMOFORM	4	4	U	UJ	SSR
L1842205	CON-02-18	BROMOMETHANE	2	2	U	UJ	SSR
L1842205	CON-02-18	CARBON DISULFIDE	10	10	U	UJ	SSR
L1842205	CON-02-18	CARBON TETRACHLORIDE	1	1	U	UJ	SSR
L1842205	CON-02-18	CHLOROBENZENE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	CHLOROETHANE	2	2	U	UJ	SSR,Cc
L1842205	CON-02-18	CHLOROFORM	1.5	1.5	U	UJ	SSR
L1842205	CON-02-18	CHLOROMETHANE	4	4	U	UJ	SSR
L1842205	CON-02-18	DIBROMOCHLOROMETHANE	1	1	U	UJ	SSR
L1842205	CON-02-18	DIBROMOMETHANE	2	2	U	UJ	SSR
L1842205	CON-02-18	DICHLORODIFLUOROMETHANE	10	10	U	UJ	SSR
L1842205	CON-02-18	ETHYL ETHER	2	2	U	UJ	SSR
L1842205	CON-02-18	ETHYLBENZENE	1	1	U	UJ	SSR
L1842205	CON-02-18	HEXACHLOROBUTADIENE	4	4	U	UJ	SSR
L1842205	CON-02-18	ISOPROPYLBENZENE	1	1	U	UJ	SSR
L1842205	CON-02-18	METHYL TERT BUTYL ETHER	2	2	U	UJ	SSR
L1842205	CON-02-18	METHYLENE CHLORIDE	5.1	5.1	U	UJ	SSR
L1842205	CON-02-18	NAPHTHALENE	4	4	U	UJ	SSR
L1842205	CON-02-18	STYRENE	1	1	U	UJ	SSR
L1842205	CON-02-18	TETRACHLOROETHENE	30	0.51		J	SSR
L1842205	CON-02-18	TOLUENE	1	1	U	UJ	SSR
L1842205	CON-02-18	TOTAL TIC COMPOUNDS	122	NA	J	J	TIC
L1842205	CON-02-18	TRICHLOROETHENE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	TRICHLOROFLUOROMETHANE	4	4	U	UJ	SSR
L1842205	CON-02-18	UNKNOWN	15.3	NA	J	J	TIC
L1842205	CON-02-18	UNKNOWN	3	NA	J	J	TIC
L1842205	CON-02-18	UNKNOWN	46	NA	J	J	TIC
L1842205	CON-02-18	UNKNOWN	16.3	NA	J	J	TIC
L1842205	CON-02-18	UNKNOWN	37.7	NA	J	J	TIC

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-02-18	UNKNOWN ALKANE	3.21	NA	J	J	TIC
L1842205	CON-02-18	VINYL ACETATE	10	10	U	UJ	SSR
L1842205	CON-02-18	VINYL CHLORIDE	1	1	U	UJ	SSR
L1842205	CON-02-18	XYLENE (TOTAL)	1	1	U	UJ	SSR
L1842205	CON-02-18	CIS-1,2-DICHLOROETHENE	1	1	U	UJ	SSR
L1842205	CON-02-18	CIS-1,3-DICHLOROPROPENE	0.51	0.51	U	UJ	SSR
L1842205	CON-02-18	N-BUTYLBENZENE	1	1	U	UJ	SSR
L1842205	CON-02-18	N-PROPYLBENZENE	1	1	U	UJ	SSR
L1842205	CON-02-18	O-CHLOROTOLUENE	2	2	U	UJ	SSR
L1842205	CON-02-18	O-XYLENE	1	1	U	UJ	SSR
L1842205	CON-02-18	P-CHLOROTOLUENE	2	2	U	UJ	SSR
L1842205	CON-02-18	1,4-DIETHYLBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	4-ETHYLTOLUENE	2	2	U	UJ	SSR
L1842205	CON-02-18	P-ISOPROPYLTOLUENE	1	1	U	UJ	SSR
L1842205	CON-02-18	P/M-XYLENE	2	2	U	UJ	SSR
L1842205	CON-02-18	SEC-BUTYLBENZENE	1	1	U	UJ	SSR
L1842205	CON-02-18	TERT-BUTYLBENZENE	2	2	U	UJ	SSR
L1842205	CON-02-18	TRANS-1,2-DICHLOROETHENE	1.5	1.5	U	UJ	SSR
L1842205	CON-02-18	TRANS-1,3-DICHLOROPROPENE	1	1	U	UJ	SSR
L1842205	CON-02-18	TRANS-1,4-DICHLORO-2-BUTENE	5.1	5.1	U	UJ	SSR,Cc
L1842205	CON-03-18	1,1,1,2-TETRACHLOROETHANE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	1,1,1-TRICHLOROETHANE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	1,1,2,2-TETRACHLOROETHANE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	1,1,2-TRICHLOROETHANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,1-DICHLOROETHANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,1-DICHLOROETHENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,1-DICHLOROPROPENE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	1,2,3-TRICHLOROBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,2,3-TRICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,2,4,5-TETRAMETHYLBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,2,4-TRICHLOROBENZENE	1.9	1.9	U	UJ	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-03-18	1,2,4-TRIMETHYLBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,2-DIBROMO-3-CHLOROPROPANE	2.9	2.9	U	UJ	SSR
L1842205	CON-03-18	1,2-DIBROMOETHANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,2-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,2-DICHLOROETHANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,2-DICHLOROETHENE (TOTAL)	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,2-DICHLOROPROPANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	1,3,5-TRIMETHYLBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,3-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,3-DICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,3-DICHLOROPROPENE, TOTAL	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	1,4-DICHLOROBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,4-DIOXANE	96	96	U	UJ	SSR
L1842205	CON-03-18	1-BUTANOL	59	NA	NJ	NJ	TIC
L1842205	CON-03-18	2,2-DICHLOROPROPANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	2-BUTANONE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	2-HEXANONE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	4-METHYL-2-PENTANONE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	ACETONE	8.8	9.6	J	J	SSR
L1842205	CON-03-18	ACRYLONITRILE	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	BENZENE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	BROMOBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	BROMOCHLOROMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	BROMODICHLOROMETHANE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	BROMOFORM	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	BROMOMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	CARBON DISULFIDE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	CARBON TETRACHLORIDE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	CHLOROBENZENE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	CHLOROETHANE	1.9	1.9	U	UJ	SSR,Cc
L1842205	CON-03-18	CHLOROFORM	1.4	1.4	U	UJ	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-03-18	CHLOROMETHANE	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	DIBROMOCHLOROMETHANE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	DIBROMOMETHANE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	DICHLORODIFLUOROMETHANE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	ETHYL ETHER	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	ETHYLBENZENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	HEXACHLOROBUTADIENE	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	HEXANAL	4.95	NA	NJ	NJ	TIC
L1842205	CON-03-18	ISOPROPYLBENZENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	METHYL TERT BUTYL ETHER	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	METHYLENE CHLORIDE	4.8	4.8	U	UJ	SSR
L1842205	CON-03-18	NAPHTHALENE	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	STYRENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	TETRACHLOROETHENE	5.2	0.48		J	SSR
L1842205	CON-03-18	TOLUENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	TOTAL TIC COMPOUNDS	265	NA	J	J	TIC
L1842205	CON-03-18	TRICHLOROETHENE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	TRICHLOROFLUOROMETHANE	3.8	3.8	U	UJ	SSR
L1842205	CON-03-18	UNKNOWN	134	NA	J	J	TIC
L1842205	CON-03-18	UNKNOWN	35.6	NA	J	J	TIC
L1842205	CON-03-18	UNKNOWN	12.2	NA	J	J	TIC
L1842205	CON-03-18	UNKNOWN	4.08	NA	J	J	TIC
L1842205	CON-03-18	UNKNOWN	15.6	NA	J	J	TIC
L1842205	CON-03-18	VINYL ACETATE	9.6	9.6	U	UJ	SSR
L1842205	CON-03-18	VINYL CHLORIDE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	XYLENE (TOTAL)	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	CIS-1,2-DICHLOROETHENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	CIS-1,3-DICHLOROPROPENE	0.48	0.48	U	UJ	SSR
L1842205	CON-03-18	N-BUTYLBENZENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	N-PROPYLBENZENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	O-CHLOROTOLUENE	1.9	1.9	U	UJ	SSR

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/kg)	Method Reporting Limit (µg/kg)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1842205	CON-03-18	O-XYLENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	P-CHLOROTOLUENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	1,4-DIETHYLBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	4-ETHYLTOLUENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	P-ISOPROPYLTOLUENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	P/M-XYLENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	SEC-BUTYLBENZENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	TERT-BUTYLBENZENE	1.9	1.9	U	UJ	SSR
L1842205	CON-03-18	TRANS-1,2-DICHLOROETHENE	1.4	1.4	U	UJ	SSR
L1842205	CON-03-18	TRANS-1,3-DICHLOROPROPENE	0.96	0.96	U	UJ	SSR
L1842205	CON-03-18	TRANS-1,4-DICHLORO-2-BUTENE	4.8	4.8	U	UJ	SSR,Cc

Notes:

Cc = calibration (continuing)
DV = data validation
MS = matrix spike recovery
NA = not applicable
REP = replicate imprecision
SDG = sample delivery group
SSR = surrogate spike/labeled compound recovery
TIC = tentatively identified compound

Data Qualifiers:

J = The associated numerical value is an estimated quantity.
NJ = Tentative identification or presumptive evidence of the presence of the material at an estimated quantity.
R = Rejected. The data are unusable.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Appendix B

Data Usability Summary Reports

DATA USABILITY SUMMARY REPORT
REMEDIAL INVESTIGATION AIR SAMPLING

Former Cleaner Sales and Equipment Corp. Site
135 Kent Avenue
Brooklyn, NY 11249
NYSDEC BCP No. 224177

Prepared by:

integral consulting inc.

319 SW Washington St.
Suite 1150
Portland, OR 97204

April 10, 2018

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Table 3-1. Summary of Qualified Data

ACRONYMS AND ABBREVIATIONS

DNR	do not report
DUSR	data usability summary report
EPA	U.S. Environmental Protection Agency
LCS	laboratory control sample
MRL	method reporting limit
NYSDEC	New York State Department of Environmental Conservation
QA/QC	quality assurance and quality control
RPD	relative percent difference

1 INTRODUCTION

Integral Consulting Inc. has prepared this data usability summary report (DUSR) of remedial investigation air samples on behalf of 135 Kent Avenue Management Corp. for the property located at 135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York (Site). The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program and is listed as NYSDEC Site No. C224177.

This report presents the data validation of indoor and outdoor air samples and associated quality control samples taken at 135 Kent Avenue, New York City, New York, and analyzed by Alpha Analytical, Inc. of Mansfield, Massachusetts. The samples were reported in sample delivery group L1810844 and were analyzed for select volatile organic compounds by U.S. Environmental Protection Agency (EPA) Methods TO-15 and TO-15 SIM (USEPA 1999).

The samples received a Stage 2B validation, which included a review of all laboratory summary forms of quality control and instrument performance data. The data validation was based on criteria described in EPA's functional guidelines for organic data review (USEPA 2016) and the referenced analytical method.

The quality assurance and quality control (QA/QC) parameters reviewed are discussed in Section 2. All electronic data deliverables were compared to the hard copy data packages, and 10 percent of the field sample results were verified. The definitions of the data qualifiers used are provided in Table 1-1, and descriptions of the reason codes used are provided in Table 1-2. For example, if a data point was estimated due to a replicate outlier, the qualifier "J" and the reason code "Rep" would be entered into the database, indicated as J-Rep in the discussion of findings in Section 2.

2 FINDINGS

The data validation findings are provided in this section.

2.1 PARAMETERS REVIEWED

The QA/QC parameters reviewed for each analytical parameter are discussed below and are listed in Table 2-1.

2.2 SAMPLE RECEIPT AND HOLDING TIMES

Samples were received with complete chain-of-custody forms and in good condition, with the exceptions noted below. All analyses were conducted within the holding times in the referenced methods.

The final vacuum reported by the laboratory for Sample IA18-13 was greater than 9 in. Hg. The results in this sample were qualified as estimated (J/UJ-Other) because the canister may not have completely filled.

Field personnel noted the flow controller associated with Sample IA18-22 did not zero properly. The final vacuum measured at the laboratory was within limits; however, the initial vacuum may not be precise. Therefore, the results were qualified as estimated (J/UJ-Other).

The residual canister vacuums measured at the laboratory for Samples IA18-09, IA18-DUP2, and IA18-58 were near ambient pressure. This indicates that the sample is weighted toward the first portion of the sampling interval, and the desired sampling interval may not have been achieved before the canister arrived at ambient conditions. Although the actual sampling interval is uncertain, the canister still filled and no qualifiers were assigned because of this issue.

2.3 BLANKS

All results from the laboratory method blanks were reported as less than the method reporting limit (MRL).

2.4 SURROGATE

The percent recoveries of all reported surrogates were within laboratory control limits.

2.5 LABORATORY CONTROL SAMPLES

The percent recoveries of all laboratory control samples (LCSs) were within laboratory control limits, with the exceptions noted below.

The percent recoveries for dibromochloromethane and bromoform in LCS WG1102770-3 and LCS WG1103162-3 were greater than the laboratory control limits. Because dibromochloromethane and bromoform were not detected in the associated samples, no qualifiers were assigned.

The percent recoveries for several analytes in LCS WG1102773-3 and LCS WG1103163-3 were greater than the laboratory control limits. Because these LCSs are associated with the TO-15 SIM analysis and the analytes with recovery values outside criteria were not reported, no qualifiers were assigned.

2.6 LABORATORY DUPLICATE SAMPLES

The relative percent differences (RPDs) of all laboratory duplicate samples were within laboratory control limits, with the exception noted below.

The RPD for acetone was greater than the laboratory control limits in the duplicate analyses of sample IA18-19. The acetone results in Sample IA18-19 were qualified as estimated (J-REP).

2.7 REPLICATES

One set of field replicates was submitted: Samples IA18-11 and IA18-DUP2. EPA has not established control limits for field replicates. For this project, the target control limit for field replicates is an RPD less than 35 percent for values greater than 5 times the MRL. For values less than 5 times the MRL, the absolute difference should be less than the MRL. These control limits were met for all analytes, with the exceptions noted below.

Acetone, isopropyl alcohol, *cis*-1,2-dichloroethene, and trichloroethene RPD values or absolute differences were greater than the control limits in the field replicate samples. The acetone, isopropyl alcohol, *cis*-1,2-dichloroethene, and trichloroethene results in these samples were qualified as estimated (J/UJ-REP).

2.8 METHOD REPORTING LIMITS AND METHODOLOGY

There are no project-specific MRLs specified for this project. The reported MRLs are consistent with the methodology used and the intended uses of the data.

Samples IA18-04, IA18-15, IA18-19, IA18-20, and IA18-21 were analyzed at further dilutions because of high ethanol or isopropyl alcohol concentrations. The laboratory "E"-flagged these results to indicate the concentrations exceeded the calibration range. These results were qualified as "do not report" (DNR-Other) because a more appropriate result was reported.

The laboratory noted that the acetone results in all samples, except Samples IA18-19 and IA18-58, and the tetrahydrofuran result in Sample IA18-20 should be considered estimated due to co-elution with a non-target peak. These results were qualified as estimated (J-Mi).

During clean canister certification, 1,1,2-trichloro-1,2,2-trifluoroethane was reported in Canister CAN 1050 SHELF 58 at a concentration of 0.529 $\mu g/m^3$. 1,1,2-Trichloro-1,2,2-trifluoroethane was not detected in any samples and no qualifiers were assigned.

2.9 INSTRUMENT PERFORMANCE

The gas chromatograph/mass spectrometer instrument performance checks ("tune") were analyzed at the start of each 24-hour analytical shift, and the method-specified acceptance criteria were met.

2.10 INITIAL CALIBRATION

Initial calibrations were analyzed on all instruments and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The relative standard deviation values for isopropyl alcohol were outside the acceptance criteria in both initial calibrations. The detected isopropyl alcohol results in the associated samples were qualified as estimated (J-Ci).

The relative standard deviation values for benzyl chloride, 1,2,4-trichlorobenzene, and hexachlorobutadiene were outside the acceptance criteria in one initial calibration. These analytes were not detected in the associated samples and no qualifiers were assigned.

The percent difference values for *cis*-1,2-dichlorethene and benzyl chloride were outside the acceptance criteria, biased high, in one initial calibration verification standard.

- The detected *cis*-1,2-dichlorethene results in the associated samples were qualified as estimated (J-Ci).
- Benzyl chloride was not detected in the associated samples and no qualifiers were assigned.

2.11 CONTINUING CALIBRATION

Continuing calibrations were analyzed at the appropriate frequency and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The percent difference values for *tert*-butyl alcohol and *trans*-1,3-dichloropropene were outside the criteria, biased low, and the dibromochloromethane, bromoform, 4-ethyl toluene, 1,2,4-trimethylbenzene, benzyl chloride, and hexachlorobutadiene percent difference values were biased high in one continuing calibration verification standard.

- The nondetected results for *tert*-butyl alcohol and *trans*-1,3-dichloropropene in the associated samples were qualified as estimated (UJ-Cc).
- Dibromochloromethane, bromoform, 4-ethyl toluene, 1,2,4-trimethylbenzene, benzyl chloride, and hexachlorobutadiene were not detected in the associated samples and no qualifiers were assigned.

The percent difference value for *tert*-butyl alcohol was outside the criteria, biased low, and the dibromochloromethane, bromoform, 4-ethyl toluene, 1,2,4-trimethylbenzene, and benzyl chloride percent difference values were biased high in one continuing calibration verification standard.

- The nondetected results for *tert*-butyl alcohol in the associated samples were qualified as estimated (UJ-Cc).
- Dibromochloromethane, bromoform, 4-ethyl toluene, 1,2,4-trimethylbenzene, and benzyl chloride were not detected in the associated samples and no qualifiers were assigned.

The percent difference value for isopropyl alcohol was outside the criteria, biased low, and the 1,2,4-trimethylbenzene and hexachlorobutadiene percent difference values were biased high in one continuing calibration verification standard.

- The isopropyl alcohol results in the associated samples were qualified as estimated (J/UJ-Cc).
- 1,2,4-Trimethylbenzene and hexachlorobutadiene were not detected in the associated samples and no qualifiers were assigned.

2.12 INTERNAL STANDARDS

Internal standards were added to all samples, and the areas and retention times of all internal standards were within the method-specified control limits with the exceptions noted below.

The recovery of internal standard 1,4-difluorobenzene was below acceptance criteria in the laboratory duplicate analysis of Sample IA18-10. Because this is a laboratory quality control sample and criteria were met in the initial analysis of Sample IA18-10, no qualifiers were assigned.

3 OVERALL ASSESSMENT

3.1 DATA QUALIFICATION

A total of 1,580 results were reported. A total of 202 results (13 percent) were qualified. Five of these results were qualified as "DNR" because a more appropriate result was available. No results were rejected, and completeness was 100 percent. A summary of all qualified results is presented in Table 3-1.

3.2 DATA USABILITY

The data meet the criteria set forth in the referenced quality assurance documents, with the exceptions noted above. All results are acceptable for their intended use. A summary of all qualified results is presented in Table 3-1.

4 REFERENCES

USEPA. 1999. Compendium method TO-15: Determination of volatile organic compounds in air collected in specially-prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS). In: Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition. U.S. Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH. January.

USEPA. 2016. National functional guidelines for Superfund organic methods data review. USEPA-540-R-2016-002, Contract Laboratory Program. Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, Washington, DC. September.

Tables

Table 1-1. Definition of Data Qualifiers

Data Qualifier	Definition
DNR	do not report
J	The associated numerical value is an estimated quantity.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 1-2. Definition of Data Validation Reason Codes

Reason Code	Definition
Cc	Calibration (continuing)
Ci	Calibration (initial)
Mi	Matrix interference
Other	Defined in report
REP	Replicate imprecision

Table 2-1. QA/QC Parameters Reviewed

QA/QC Parameter	Analytical Parameter VOC EPA Method TO-15
Sample receipt and holding times	Q
Blanks	+
Surrogate	+
Matrix spikes	NA
LCS	D
Replicates	Q
MRL and methodology	Q
Instrument performance	+
Initial calibration	Q
Continuing calibration	Q
Internal standards	D

Notes:

+ = All QA/QC criteria were met.

D = Data are discussed in the report. QA/QC criteria were not met; however, no data were qualified.

Q = Data were qualified and are discussed in the report.

EPA = U.S. Environmental Protection Agency
LCS = laboratory control sample
MRL = method reporting limit
NA = not analyzed
QA/QC = quality assurance and quality control
VOC = volatile organic compound

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-01	Acetone	9.64	2.38		J	Mi
L1810844	IA18-01	iso-Propyl Alcohol	1.4	1.23		J	Ci
L1810844	IA18-01	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-01	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-01	cis-1,2-Dichloroethene	6.38	0.079		J	Ci
L1810844	IA18-02	Acetone	30.9	2.38		J	Mi
L1810844	IA18-02	iso-Propyl Alcohol	25.8	1.23		J	Ci
L1810844	IA18-02	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-02	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-03	Acetone	17.9	2.38		J	Mi
L1810844	IA18-03	iso-Propyl Alcohol	55.3	1.23		J	Ci
L1810844	IA18-03	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-03	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-04	Acetone	39	2.38		J	Mi
L1810844	IA18-04	iso-Propyl Alcohol	747	1.23	E	DNR	Other
L1810844	IA18-04	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-04	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-04	iso-Propyl Alcohol	885	3.07		J	Ci
L1810844	IA18-05	Acetone	37.3	2.38		J	Mi
L1810844	IA18-05	iso-Propyl Alcohol	487	1.23		J	Ci
L1810844	IA18-05	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-05	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-06	Acetone	42.3	2.38		J	Mi
L1810844	IA18-06	iso-Propyl Alcohol	90.2	1.23		J	Ci,Cc
L1810844	IA18-07	Acetone	10.9	2.38		J	Mi
L1810844	IA18-07	iso-Propyl Alcohol	6.93	1.23		J	Ci
L1810844	IA18-07	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-07	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-07	cis-1,2-Dichloroethene	0.658	0.079		J	Ci
L1810844	IA18-08	Acetone	11.8	2.38		J	Mi
L1810844	IA18-08	iso-Propyl Alcohol	364	1.23		J	Ci
L1810844	IA18-08	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-08	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-08	cis-1,2-Dichloroethene	0.745	0.079		J	Ci
L1810844	IA18-09	Acetone	18.2	2.38		J	Mi
L1810844	IA18-09	iso-Propyl Alcohol	10.4	1.23		J	Ci

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-09	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-09	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-10	Acetone	11.6	2.38		J	Mi
L1810844	IA18-10	iso-Propyl Alcohol	11.5	1.23		J	Ci
L1810844	IA18-10	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-10	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-11	Acetone	29.7	2.38		J	REP,Mi
L1810844	IA18-11	iso-Propyl Alcohol	22.5	1.23		J	REP,Ci
L1810844	IA18-11	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-11	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-11	cis-1,2-Dichloroethene	0.174	0.079		J	REP,Ci
L1810844	IA18-11	Trichloroethene	0.226	0.107		J	REP
L1810844	IA18-12	Acetone	28	2.38		J	Mi
L1810844	IA18-12	iso-Propyl Alcohol	20.6	1.23		J	Ci
L1810844	IA18-12	tert-Butyl Alcohol		1.52	U	UJ	Cc
L1810844	IA18-12	trans-1,3-Dichloropropene		0.908	U	UJ	Cc
L1810844	IA18-12	cis-1,2-Dichloroethene	0.127	0.079		J	Ci
L1810844	IA18-13	Dichlorodifluoromethane	2.13	1.85		J	Other
L1810844	IA18-13	Chloromethane	1.38	0.772		J	Other
L1810844	IA18-13	1,2-Dichloro-1,1,2,2-tetrafluoroethane		2.61	U	UJ	Other
L1810844	IA18-13	1,3-Butadiene		0.827	U	UJ	Other
L1810844	IA18-13	Bromomethane		1.45	U	UJ	Other
L1810844	IA18-13	Chloroethane		0.987	U	UJ	Other
L1810844	IA18-13	Ethyl Alcohol	318	17.6		J	Other
L1810844	IA18-13	Vinyl bromide		1.64	U	UJ	Other
L1810844	IA18-13	Acetone	41.6	4.44		J	Other,Mi
L1810844	IA18-13	Trichlorofluoromethane		2.1	U	UJ	Other
L1810844	IA18-13	iso-Propyl Alcohol	33.9	2.3		J	Other,Ci,Cc
L1810844	IA18-13	tert-Butyl Alcohol		2.84	U	UJ	Other
L1810844	IA18-13	Methylene chloride		3.25	U	UJ	Other
L1810844	IA18-13	3-Chloropropene		1.17	U	UJ	Other
L1810844	IA18-13	Carbon disulfide		1.16	U	UJ	Other
L1810844	IA18-13	1,1,2-Trichloro-1,2,2-Trifluoroethane		2.87	U	UJ	Other
L1810844	IA18-13	trans-1,2-Dichloroethene		1.48	U	UJ	Other
L1810844	IA18-13	1,1-Dichloroethane		1.51	U	UJ	Other
L1810844	IA18-13	Methyl tert butyl ether		1.35	U	UJ	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-13	2-Butanone		2.76	U	UJ	Other
L1810844	IA18-13	Ethyl Acetate	3.41	3.37		J	Other
L1810844	IA18-13	Chloroform	3.39	1.83		J	Other
L1810844	IA18-13	Tetrahydrofuran		2.76	U	UJ	Other
L1810844	IA18-13	1,2-Dichloroethane		1.51	U	UJ	Other
L1810844	IA18-13	n-Hexane	2.32	1.32		J	Other
L1810844	IA18-13	Benzene	1.5	1.19		J	Other
L1810844	IA18-13	Cyclohexane		1.29	U	UJ	Other
L1810844	IA18-13	1,2-Dichloropropane		1.73	U	UJ	Other
L1810844	IA18-13	Bromodichloromethane		2.51	U	UJ	Other
L1810844	IA18-13	1,4-Dioxane		1.35	U	UJ	Other
L1810844	IA18-13	2,2,4-Trimethylpentane		1.75	U	UJ	Other
L1810844	IA18-13	Heptane	2	1.53		J	Other
L1810844	IA18-13	cis-1,3-Dichloropropene		1.7	U	UJ	Other
L1810844	IA18-13	4-Methyl-2-pentanone		3.84	U	UJ	Other
L1810844	IA18-13	trans-1,3-Dichloropropene		1.7	U	UJ	Other
L1810844	IA18-13	1,1,2-Trichloroethane		2.04	U	UJ	Other
L1810844	IA18-13	Toluene	3.42	1.41		J	Other
L1810844	IA18-13	2-Hexanone		1.53	U	UJ	Other
L1810844	IA18-13	Dibromochloromethane		3.19	U	UJ	Other
L1810844	IA18-13	1,2-Dibromoethane		2.87	U	UJ	Other
L1810844	IA18-13	Chlorobenzene		1.72	U	UJ	Other
L1810844	IA18-13	Ethylbenzene	1.78	1.62		J	Other
L1810844	IA18-13	p/m-Xylene	6.6	3.25		J	Other
L1810844	IA18-13	Bromoform		3.87	U	UJ	Other
L1810844	IA18-13	Styrene		1.59	U	UJ	Other
L1810844	IA18-13	1,1,2,2-Tetrachloroethane		2.57	U	UJ	Other
L1810844	IA18-13	o-Xylene	2.27	1.62		J	Other
L1810844	IA18-13	4-Ethyltoluene		1.84	U	UJ	Other
L1810844	IA18-13	1,3,5-Trimethylbenzene		1.84	U	UJ	Other
L1810844	IA18-13	1,2,4-Trimethylbenzene	3.46	1.84		J	Other
L1810844	IA18-13	Benzyl chloride		1.94	U	UJ	Other
L1810844	IA18-13	1,3-Dichlorobenzene		2.25	U	UJ	Other
L1810844	IA18-13	1,4-Dichlorobenzene		2.25	U	UJ	Other
L1810844	IA18-13	1,2-Dichlorobenzene		2.25	U	UJ	Other
L1810844	IA18-13	1,2,4-Trichlorobenzene		2.78	U	UJ	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-13	Hexachlorobutadiene		3.99	U	UJ	Other
L1810844	IA18-13	Vinyl chloride		0.096	U	UJ	Other
L1810844	IA18-13	1,1-Dichloroethene		0.148	U	UJ	Other
L1810844	IA18-13	cis-1,2-Dichloroethene	0.156	0.148		J	Other
L1810844	IA18-13	1,1,1-Trichloroethane		0.204	U	UJ	Other
L1810844	IA18-13	Carbon tetrachloride	0.471	0.235		J	Other
L1810844	IA18-13	Trichloroethene		0.201	U	UJ	Other
L1810844	IA18-13	Tetrachloroethene	7.19	0.254		J	Other
L1810844	IA18-14	Acetone	33.5	2.38		J	Mi
L1810844	IA18-14	iso-Propyl Alcohol	17.2	1.23		J	Ci,Cc
L1810844	IA18-15	Ethyl Alcohol	1360	9.42	E	DNR	Other
L1810844	IA18-15	Acetone	52.3	2.38		J	Mi
L1810844	IA18-15	iso-Propyl Alcohol	25.1	1.23		J	Ci,Cc
L1810844	IA18-16	Acetone	86.2	2.38		J	Mi
L1810844	IA18-16	iso-Propyl Alcohol	70.8	1.23		J	Ci,Cc
L1810844	IA18-17	Acetone	51.3	2.38		J	Mi
L1810844	IA18-17	iso-Propyl Alcohol	62.9	1.23		J	Ci,Cc
L1810844	IA18-19	Ethyl Alcohol	1830	9.42	E	DNR	Other
L1810844	IA18-19	Acetone	76	2.38		J	REP
L1810844	IA18-19	iso-Propyl Alcohol	34.7	1.23		J	Ci,Cc
L1810844	IA18-20	Ethyl Alcohol	1050	9.42	E	DNR	Other
L1810844	IA18-20	Acetone	36.1	2.38		J	Mi
L1810844	IA18-20	iso-Propyl Alcohol	23	1.23		J	Ci,Cc
L1810844	IA18-20	Tetrahydrofuran	3.6	1.47		J	Mi
L1810844	IA18-21	Ethyl Alcohol	976	9.42	E	DNR	Other
L1810844	IA18-21	Acetone	76	2.38		J	Mi
L1810844	IA18-21	iso-Propyl Alcohol	41.5	1.23		J	Ci,Cc
L1810844	OA18-01	Acetone	5.75	2.38		J	Mi
L1810844	OA18-01	iso-Propyl Alcohol		1.23	U	UJ	Cc
L1810844	OA18-02	Acetone	6.63	2.38		J	Mi
L1810844	OA18-02	iso-Propyl Alcohol	2.12	1.23		J	Ci,Cc
L1810844	IA18-DUP2	Acetone	19.7	2.38		J	REP,Mi
L1810844	IA18-DUP2	iso-Propyl Alcohol	15.5	1.23		J	REP,Ci,Cc
L1810844	IA18-DUP2	cis-1,2-Dichloroethene	0.095	0.079		J	REP
L1810844	IA18-DUP2	Trichloroethene		0.107	U	UJ	REP
L1810844	IA18-22	Dichlorodifluoromethane	1.99	0.989		J	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-22	Chloromethane	1.42	0.413		J	Other
L1810844	IA18-22	1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.4	U	UJ	Other
L1810844	IA18-22	1,3-Butadiene		0.442	U	UJ	Other
L1810844	IA18-22	Bromomethane		0.777	U	UJ	Other
L1810844	IA18-22	Chloroethane		0.528	U	UJ	Other
L1810844	IA18-22	Ethyl Alcohol	300	9.42		J	Other
L1810844	IA18-22	Vinyl bromide		0.874	U	UJ	Other
L1810844	IA18-22	Acetone	45.4	2.38		J	Other,Mi
L1810844	IA18-22	Trichlorofluoromethane	1.13	1.12		J	Other
L1810844	IA18-22	iso-Propyl Alcohol	31.2	1.23		J	Other,Ci,Cc
L1810844	IA18-22	tert-Butyl Alcohol		1.52	U	UJ	Other
L1810844	IA18-22	Methylene chloride		1.74	U	UJ	Other
L1810844	IA18-22	3-Chloropropene		0.626	U	UJ	Other
L1810844	IA18-22	Carbon disulfide		0.623	U	UJ	Other
L1810844	IA18-22	1,1,2-Trichloro-1,2,2-Trifluoroethane		1.53	U	UJ	Other
L1810844	IA18-22	trans-1,2-Dichloroethene		0.793	U	UJ	Other
L1810844	IA18-22	1,1-Dichloroethane		0.809	U	UJ	Other
L1810844	IA18-22	Methyl tert butyl ether		0.721	U	UJ	Other
L1810844	IA18-22	2-Butanone	1.73	1.47		J	Other
L1810844	IA18-22	Ethyl Acetate		1.8	U	UJ	Other
L1810844	IA18-22	Chloroform	2.91	0.977		J	Other
L1810844	IA18-22	Tetrahydrofuran		1.47	U	UJ	Other
L1810844	IA18-22	1,2-Dichloroethane		0.809	U	UJ	Other
L1810844	IA18-22	n-Hexane	2.01	0.705		J	Other
L1810844	IA18-22	Benzene	1.33	0.639		J	Other
L1810844	IA18-22	Cyclohexane	0.688	0.688		J	Other
L1810844	IA18-22	1,2-Dichloropropane		0.924	U	UJ	Other
L1810844	IA18-22	Bromodichloromethane		1.34	U	UJ	Other
L1810844	IA18-22	1,4-Dioxane		0.721	U	UJ	Other
L1810844	IA18-22	2,2,4-Trimethylpentane		0.934	U	UJ	Other
L1810844	IA18-22	Heptane	1.25	0.82		J	Other
L1810844	IA18-22	cis-1,3-Dichloropropene		0.908	U	UJ	Other
L1810844	IA18-22	4-Methyl-2-pentanone		2.05	U	UJ	Other
L1810844	IA18-22	trans-1,3-Dichloropropene		0.908	U	UJ	Other
L1810844	IA18-22	1,1,2-Trichloroethane		1.09	U	UJ	Other
L1810844	IA18-22	Toluene	3.15	0.754		J	Other

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result (µg/m^3)	Method Reporting Limit (µg/m^3)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1810844	IA18-22	2-Hexanone		0.82	U	UJ	Other
L1810844	IA18-22	Dibromochloromethane		1.7	U	UJ	Other
L1810844	IA18-22	1,2-Dibromoethane		1.54	U	UJ	Other
L1810844	IA18-22	Chlorobenzene		0.921	U	UJ	Other
L1810844	IA18-22	Ethylbenzene	2.41	0.869		J	Other
L1810844	IA18-22	p/m-Xylene	10.1	1.74		J	Other
L1810844	IA18-22	Bromoform		2.07	U	UJ	Other
L1810844	IA18-22	Styrene		0.852	U	UJ	Other
L1810844	IA18-22	1,1,2,2-Tetrachloroethane		1.37	U	UJ	Other
L1810844	IA18-22	o-Xylene	3.35	0.869		J	Other
L1810844	IA18-22	4-Ethyltoluene	1.88	0.983		J	Other
L1810844	IA18-22	1,3,5-Trimethylbenzene	2.46	0.983		J	Other
L1810844	IA18-22	1,2,4-Trimethylbenzene	5.6	0.983		J	Other
L1810844	IA18-22	Benzyl chloride		1.04	U	UJ	Other
L1810844	IA18-22	1,3-Dichlorobenzene		1.2	U	UJ	Other
L1810844	IA18-22	1,4-Dichlorobenzene		1.2	U	UJ	Other
L1810844	IA18-22	1,2-Dichlorobenzene		1.2	U	UJ	Other
L1810844	IA18-22	1,2,4-Trichlorobenzene		1.48	U	UJ	Other
L1810844	IA18-22	Hexachlorobutadiene		2.13	U	UJ	Other
L1810844	IA18-22	Vinyl chloride		0.051	U	UJ	Other
L1810844	IA18-22	1,1-Dichloroethene		0.079	U	UJ	Other
L1810844	IA18-22	cis-1,2-Dichloroethene	0.135	0.079		J	Other
L1810844	IA18-22	1,1,1-Trichloroethane		0.109	U	UJ	Other
L1810844	IA18-22	Carbon tetrachloride	0.44	0.126		J	Other
L1810844	IA18-22	Trichloroethene	0.14	0.107		J	Other
L1810844	IA18-22	Tetrachloroethene	6.29	0.136		J	Other
L1810844	IA18-58	iso-Propyl Alcohol	2.7	1.23		J	Ci,Cc

Notes:

Cc = calibration (continuing)
Ci = calibration (initial)
DV = data validation
Mi = matrix interference
Other = described in report
REP = replicate imprecision

Data Qualifiers:

DNR = do not report
J = The associated numerical value is an estimated quantity.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY REPORT
OCTOBER 2019 OFFSITE AIR SAMPLING

Former Cleaner Sales and Equipment Corp. Site
135 Kent Avenue
Brooklyn, NY 11249
NYSDEC BCP No. 224177

Prepared for
135 Kent Avenue Management Corp.
135 Kent Avenue
Brooklyn, NY 11249-3154

Prepared by

integral engineering p.c.
1001 6th Avenue
11th Floor
New York, NY 10018

December 17, 2019

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ACRONYMS AND ABBREVIATIONS

EPA	U.S. Environmental Protection Agency
MRL	method reporting limit
NYSDEC	New York State Department of Environmental Conservation
QA/QC	quality assurance and quality control
RPD	relative percent difference
Site	135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York

1 INTRODUCTION

Integral Engineering, P.C., has prepared this data validation report for offsite air sampling results collected at 58 North 6th Street on behalf of 135 Kent Avenue Management Corp. for the property located at 135 Kent Avenue (Block 2333, Lot 5), Brooklyn, New York (Site). The Site is currently enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program and is listed as NYSDEC Site No. C224177.

This report presents the data validation of results obtained from analysis of indoor and outdoor air samples and associated quality control samples collected from the offsite property located at 58 North 6th Street and analyzed by Alpha Analytical, Inc. of Mansfield, Massachusetts. The samples were reported in sample delivery group L1948939 and were analyzed for select volatile organic compounds by U.S. Environmental Protection Agency (EPA) Methods TO-15 and TO-15 SIM (USEPA 1999).

The samples received a Stage 2B validation, which included a review of all laboratory summary forms of quality control and instrument performance data. The data validation was based on criteria described in EPA's functional guidelines for organic data review (USEPA 2016) and the referenced analytical method.

The quality assurance and quality control (QA/QC) parameters reviewed are discussed in Section 2. All electronic data deliverables were compared to the hard copy data packages, and 10 percent of the field sample results were verified. The definitions of the data qualifiers used are provided in Table 1-1, and only one reason code was used, "Ci," indicating an initial calibration issue. For example, the qualifier "J" and the reason code "Ci" would be entered into the database, indicated as J-Ci in the discussion of findings in Section 2.

2 FINDINGS

The data validation findings are provided in this section.

2.1 PARAMETERS REVIEWED

The QA/QC parameters reviewed for each analytical parameter are discussed below and are listed in Table 2-1.

2.2 SAMPLE RECEIPT AND HOLDING TIMES

Samples were received with a complete chain-of-custody form and in good condition, with the exception noted below. All analyses were conducted within the holding times in the referenced methods.

The laboratory noted that the canister identification numbers on two of the tags placed on the canisters were transposed by the laboratory before sending out the canisters. Subsequently, the chain-of-custody form was completed using canister identification numbers listed on the tags and thus the chain-of-custody form also bears transposed numbers for the samples designated IA19-58-01 (L1948939-01) and OA19-58-01 (L1948939-07). These samples were logged in based on the client identification on the tags and the chain-of-custody form.

2.3 BLANKS

All results from the laboratory method blanks were reported as less than the method reporting limit (MRL).

2.4 SURROGATE

The percent recoveries of all reported surrogates were within laboratory control limits.

2.5 LABORATORY CONTROL SAMPLES

The percent recoveries of all laboratory control samples were within laboratory control limits.

2.6 LABORATORY DUPLICATE SAMPLES

The relative percent differences (RPDs) of all laboratory duplicate samples were within laboratory control limits.

2.7 REPLICATES

One set of field replicates was submitted: Samples IA19-58-03 and IA19-58-DUP. EPA has not established control limits for field replicates. For this project, the target control limit for field replicates is an RPD less than 35 percent for values greater than 5 times the MRL. For values less than 5 times the MRL, the absolute difference should be less than the MRL. These control limits were met for all analytes.

2.8 METHOD REPORTING LIMITS AND METHODOLOGY

There are no project-specific MRLs specified for this project. The reported MRLs are consistent with the methodology used and the intended uses of the data.

2.9 INSTRUMENT PERFORMANCE

The gas chromatograph/mass spectrometer instrument performance checks ("tune") were analyzed at the start of each 24-hour analytical shift, and the method-specified acceptance criteria were met.

2.10 INITIAL CALIBRATION

Initial calibrations were analyzed on all instruments and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The relative standard deviation values for ethanol and 3-chloropropene were outside the acceptance criteria in the initial calibration. The ethanol and 3-chloropropene results in the associated samples were qualified as estimated (J/UJ-Ci).

The percent difference values for 1,2,4-trichlorobenzene and hexachlorobutadiene were outside the acceptance criteria, biased high, in the initial calibration verification standard. These analytes were not detected in the associated samples, and no qualifiers were assigned.

2.11 CONTINUING CALIBRATION

Continuing calibrations were analyzed at the appropriate frequency and met the acceptance criteria stated in EPA's functional guidelines for organic data review (USEPA 2016) with the exceptions noted below.

The percent difference value for hexachlorobutadiene was outside the criteria, biased high in one continuing calibration verification standard. This analyte was not detected in the associated samples, and no qualifiers were assigned.

2.12 INTERNAL STANDARDS

Internal standards were added to all samples, and the areas and retention times of all internal standards were within the method-specified control limits.

3 OVERALL ASSESSMENT

3.1 DATA QUALIFICATION

A total of 441 results were reported. A total of 14 results (3.2 percent) were qualified. No results were rejected, and completeness was 100 percent. A summary of all qualified results is presented in Table 3-1.

3.2 DATA USABILITY

The data meet the criteria set forth in the referenced quality assurance documents, with the exceptions noted above. All results are acceptable for their intended use. A summary of all qualified results is presented in Table 3-1.

4 REFERENCES

USEPA. 1999. Compendium method TO-15: Determination of volatile organic compounds in air collected in specially-prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS). In: Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition. U.S. Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH. January.

USEPA. 2016. National functional guidelines for Superfund organic methods data review. USEPA-540-R-2016-002, Contract Laboratory Program. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Washington, DC. September.

Tables

Table 1-1. Definition of Data Qualifiers

Data Qualifier	Definition
J	The associated numerical value is an estimated quantity.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 2-1. QA/QC Parameters Reviewed

QA/QC Parameter	Analytical Parameter VOC EPA Method TO-15
Sample receipt and holding times	D
Blanks	+
Surrogate	+
Matrix spikes	NA
LCS	+
Replicates	+
MRL and methodology	+
Instrument performance	+
Initial calibration	Q
Continuing calibration	D
Internal standards	+

Notes:

+ = All QA/QC criteria were met.

D = Data are discussed in the report. QA/QC criteria were not met; however, no data were qualified.

Q = Data were qualified and are discussed in the report.

EPA = U.S. Environmental Protection Agency
LCS = laboratory control sample
MRL = method reporting limit
NA = not analyzed
QA/QC = quality assurance and quality control
VOC = volatile organic compound

Table 3-1. Summary of Qualified Data

SDG	Sample	Analyte	Result ($\mu g/m^3$)	Method Reporting Limit ($\mu g/m^3$)	Lab Qualifier	DV Qualifier	DV Qualifier Reason
L1948939	IA19-58-01	Ethanol	57.3	9.42		J	Ci
L1948939	IA19-58-01	3-Chloropropene		0.626	U	UJ	Ci
L1948939	IA19-58-02	Ethanol	26.2	9.42		J	Ci
L1948939	IA19-58-02	3-Chloropropene		0.626	U	UJ	Ci
L1948939	IA19-58-03	Ethanol	25.8	9.42		J	Ci
L1948939	IA19-58-03	3-Chloropropene		0.626	U	UJ	Ci
L1948939	IA19-58-04	Ethanol	32.2	9.42		J	Ci
L1948939	IA19-58-04	3-Chloropropene		0.626	U	UJ	Ci
L1948939	IA19-58-05	Ethanol	173	9.42		J	Ci
L1948939	IA19-58-05	3-Chloropropene		0.626	U	UJ	Ci
L1948939	IA19-58-DUP	Ethanol	26.2	9.42		J	Ci
L1948939	IA19-58-DUP	3-Chloropropene		0.626	U	UJ	Ci
L1948939	OA19-58-01	Ethanol	17.1	9.42		J	Ci
L1948939	OA19-58-01	3-Chloropropene		0.626	U	UJ	Ci

Notes:
Ci = calibration (initial)
DV = data validation

Data Qualifiers:
J = The associated numerical value is an estimated quantity.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Appendix C

NOVA Geophysical Engineering Survey Report

GEOPHYSICAL ENGINEERING SURVEY REPORT

Commercial Site
135 Kent Avenue,
Brooklyn, New York 11249

NOVA PROJECT NUMBER
18-0894

DATED
April 14, 2017

PREPARED FOR:
Integral Consulting Inc.
6Foster Street, Suite 8
Wakefield, MA 01880
Tel: 781.863.0988

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

August 14, 2018

Sara Barbuto
Senior Engineer
Integral Consulting Inc.
6 Foster Street, Suite 8
Wakefield, MA 01880
Tel: 781.863.0988
Cell: 860.705.0620

Re: Geophysical Engineering Survey (GES) Report
Commercial Site
135 Kent Avenue,
Brooklyn, New York 11249

Dear Ms. Barbuto:

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 135 Kent Avenue, Brooklyn, New York 11249 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify underground utilities, storage tanks, and other substructures as well as to clear and mark proposed boring areas on August 9th, 2018.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) with a shielded antenna and a Radio Detection RD7100 Electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transduce via the control cable. The transmitter electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the

subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

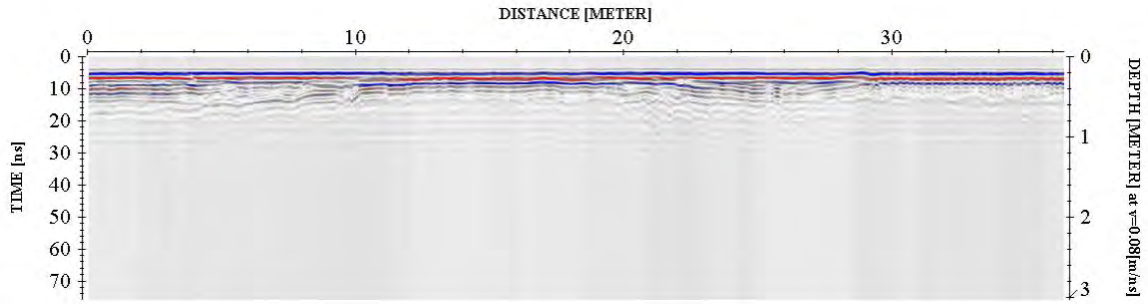
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was also used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

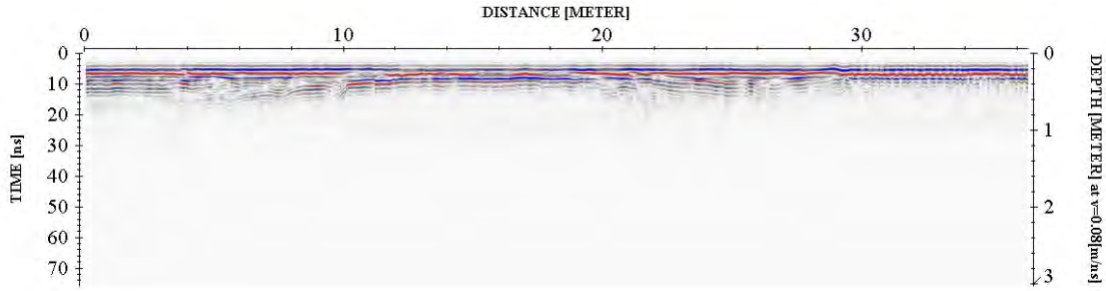
DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing work flow is briefly described in this section.

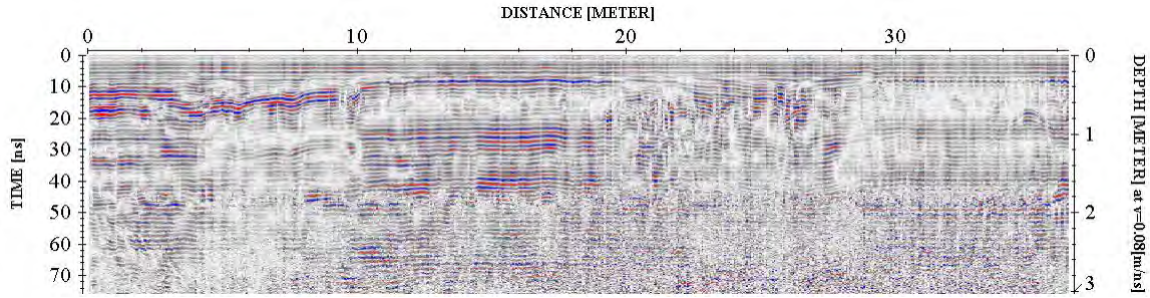
Step 1. Import Raw RAMAC data to standard processing format



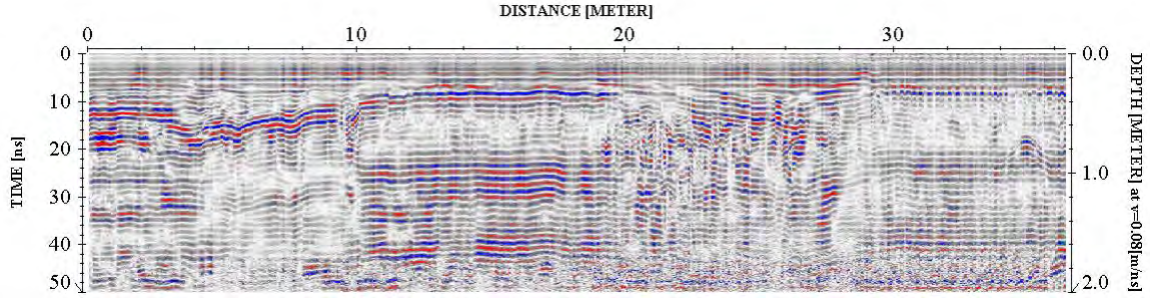
Step 2. Remove instrument noise *(dewow)*



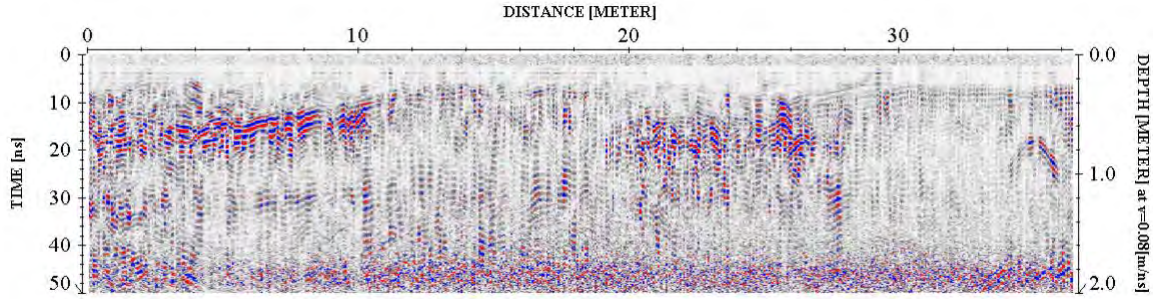
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Sunny

Temperature: 80° F

Surface: Concrete, Asphalt, Wood Flooring, Linoleum

Geophysical Noise Level: Geophysical noise at the site was high due to being located in an urban environment. A cellar within the survey area was inaccessible and unable to be scanned.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- The GES identified subsurface utilities: Water, gas, electric, telecom and sewer service within the survey area. Additionally, two gas mains were identified within the sidewalk of the survey area. Two sewer systems were identified within the two buildings within the survey area. These anomalies (utilities) are shown in the site survey plan.
- The GES did not identify any major anomalies consistent with underground storage tanks (USTs) during the survey.
- All detected subsurface anomalies were marked in the onsite mark out.
- Multiple boring locations were cleared. All cleared boring locations were marked in the onsite mark out.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.

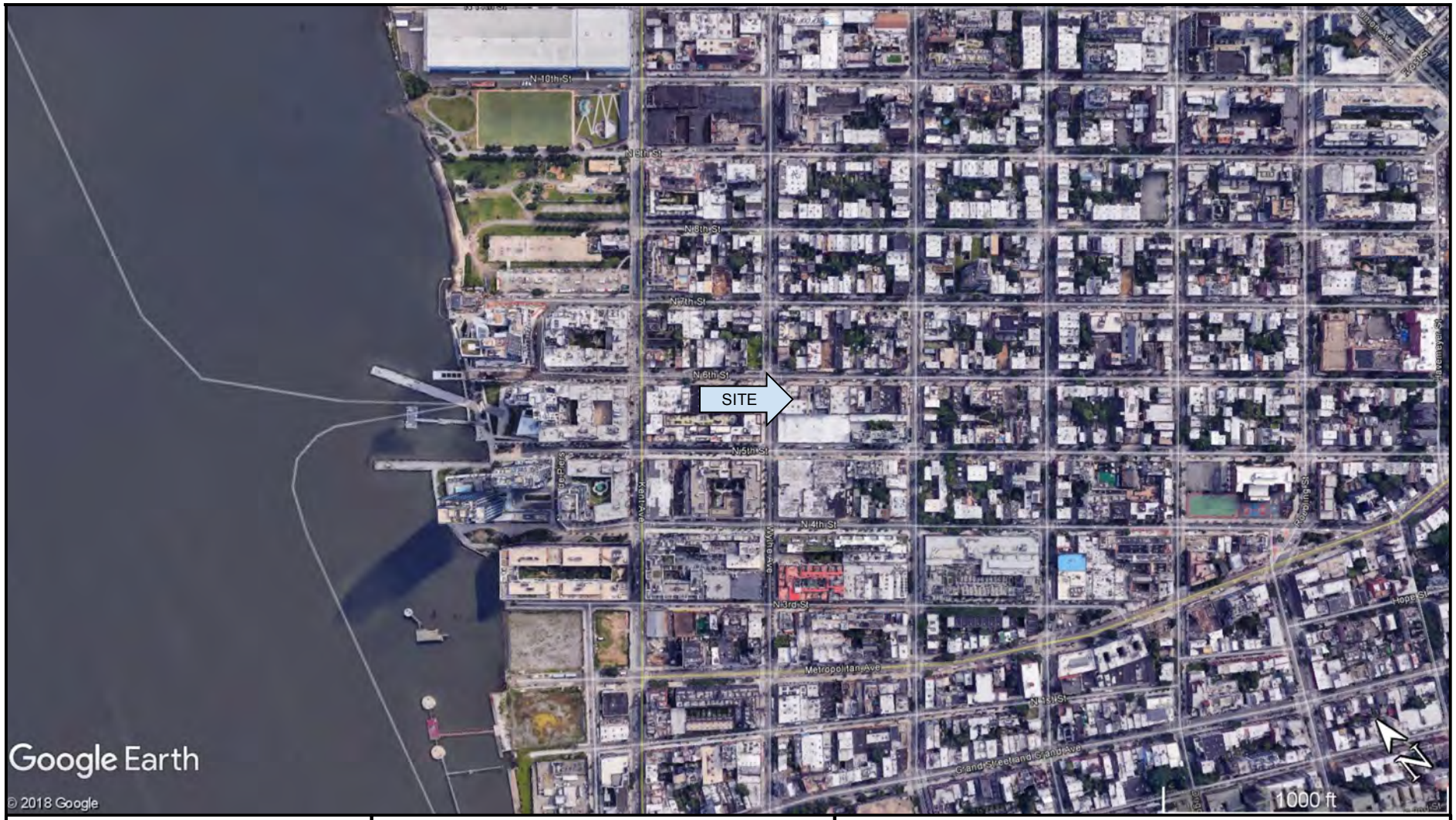
Project Engineer

Attachments:

Geophysical Images

Survey Plan

Site Location Map



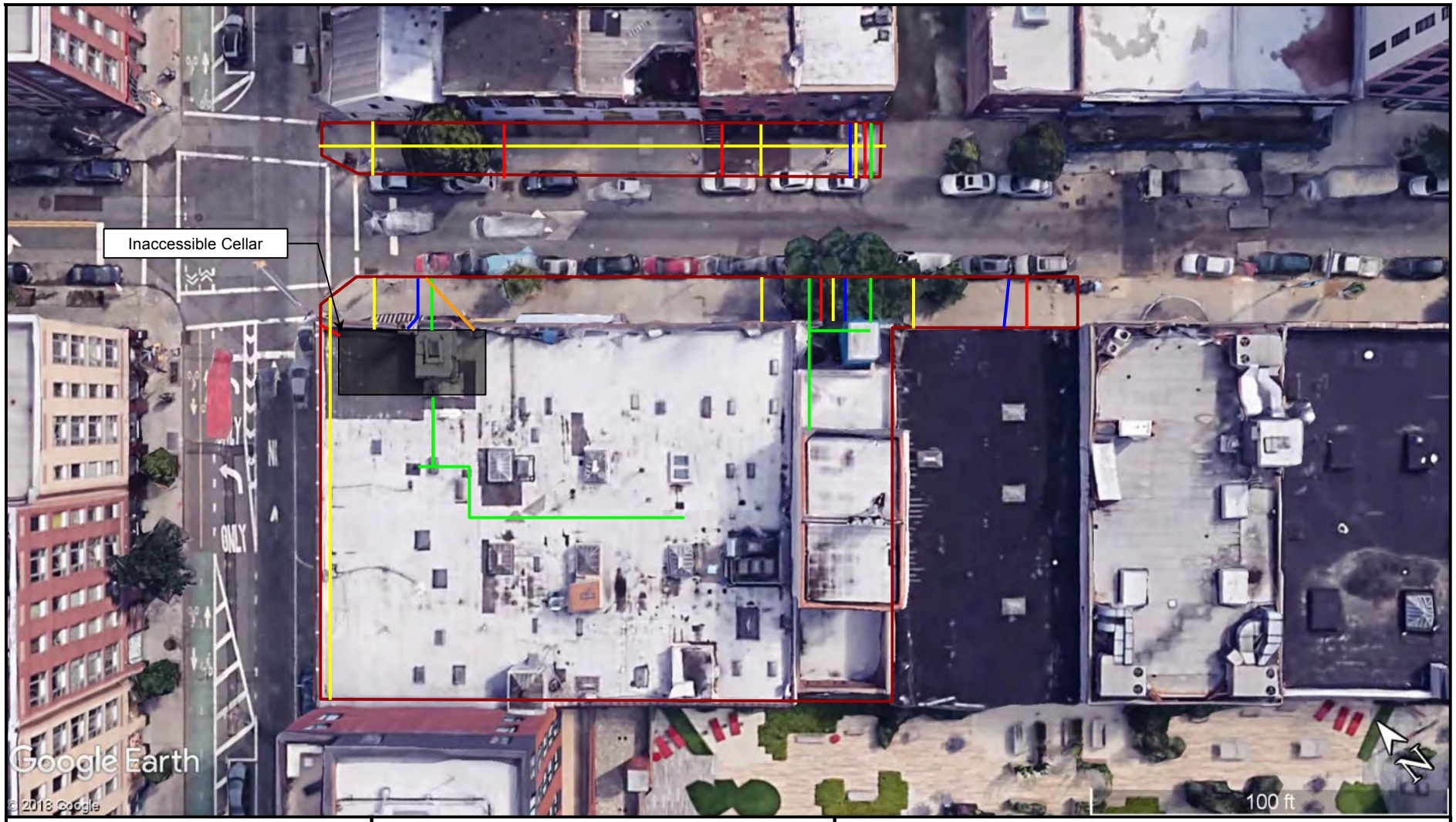
NOVA Geophysical Services

Subsurface Mapping Solutions
56-01 Marathon Parkway, # 765
Douglaston, New York 11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.nova-gsi.com

SITE LOCATION MAP

SITE:	**Commercial Site** 135 Kent Avenue, Brooklyn, New York 11249
CLIENT:	Integral
DATE:	August 9th, 2018
AUTH:	Chris Steinley

LEGEND



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SURVEY PLAN

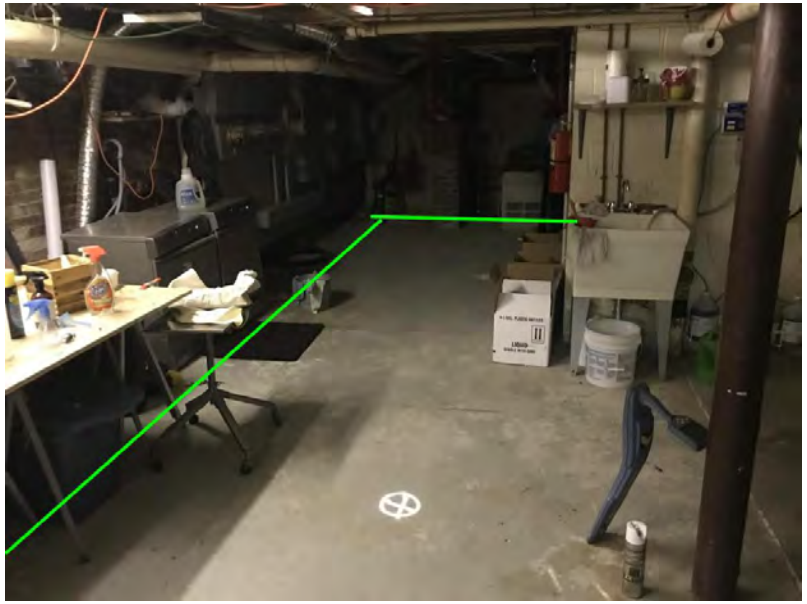
SITE:	**Commercial Site** 135 Kent Avenue, Brooklyn, New York 11249
CLIENT:	Integral
DATE:	August 9th, 2018
AUTH:	Chris Steinley

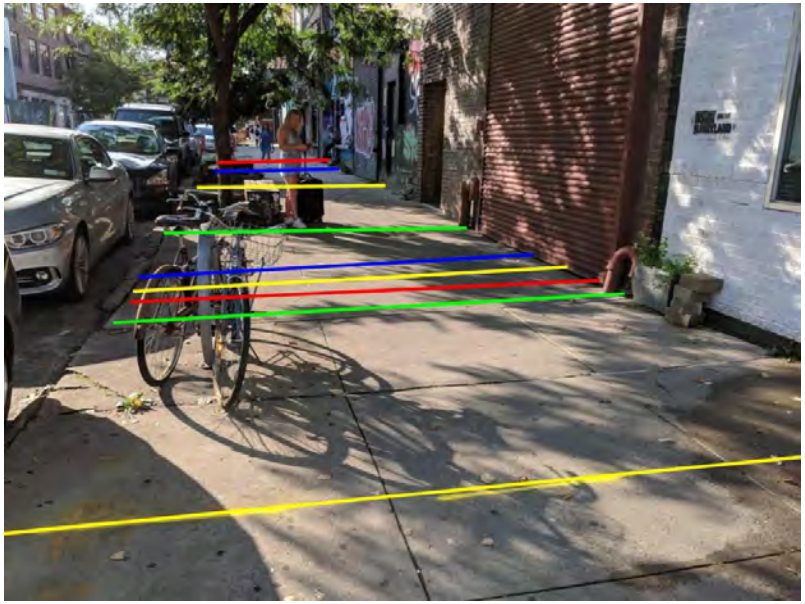
LEGEND

- Survey Area
- Electric
- Sewer
- Gas
- Water
- Telecom

GEOPHYSICAL IMAGES

Commercial Site
135 Kent Avenue,
Broooklyn, New York 11249
August 9th, 2018





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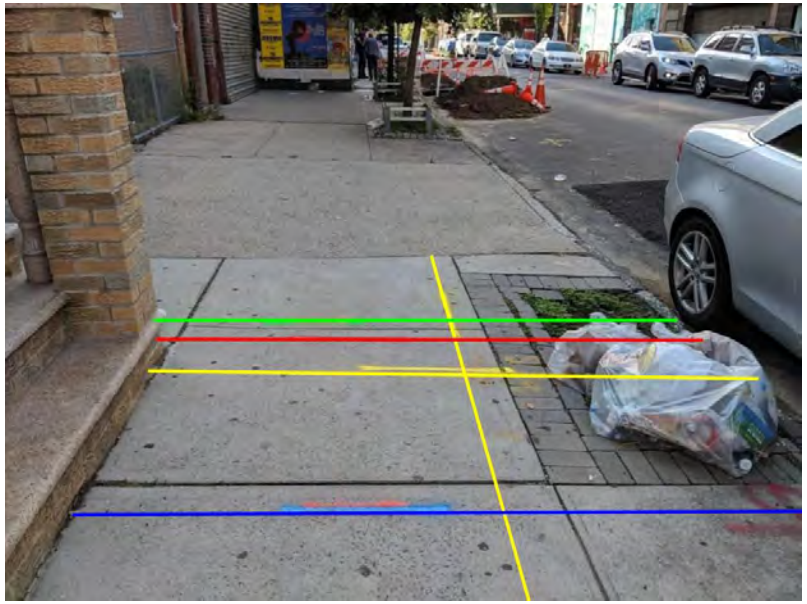

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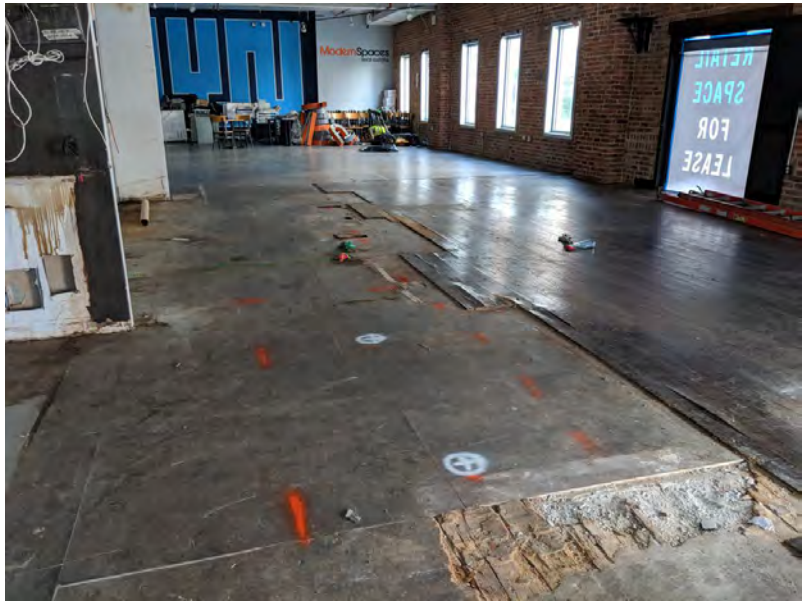

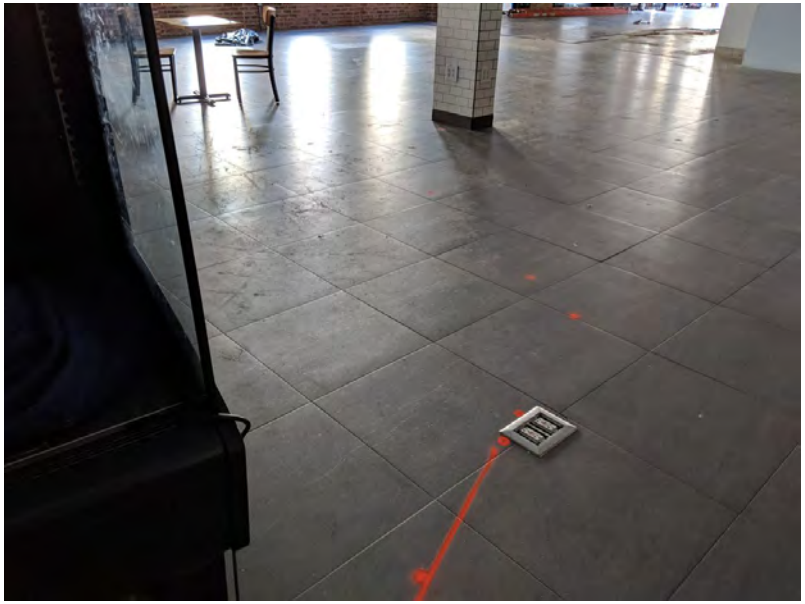

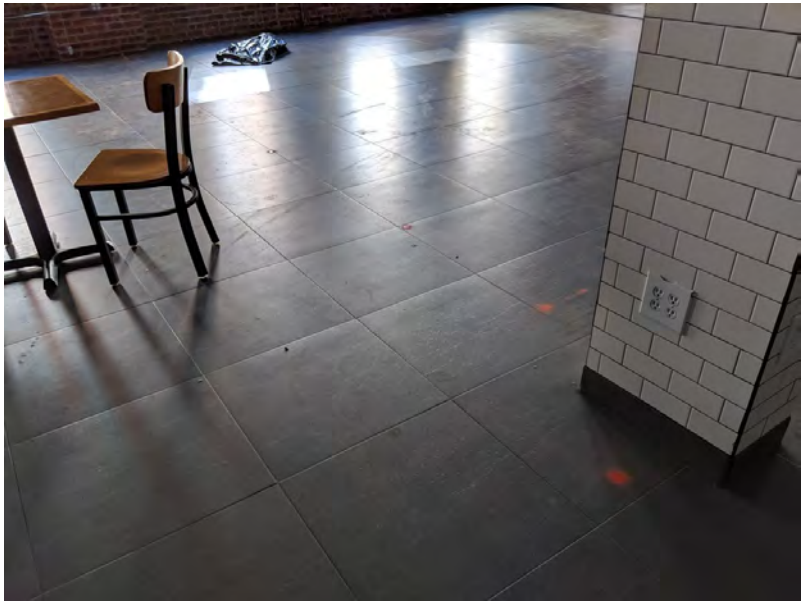

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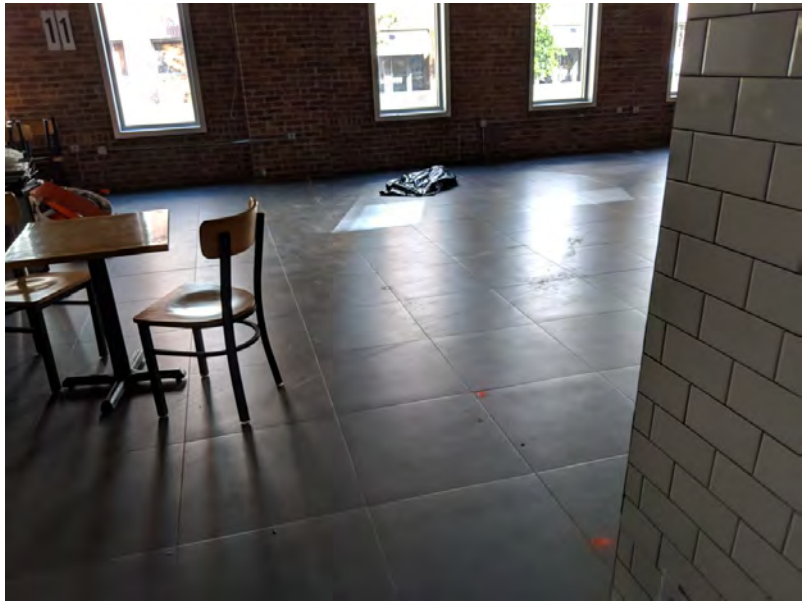

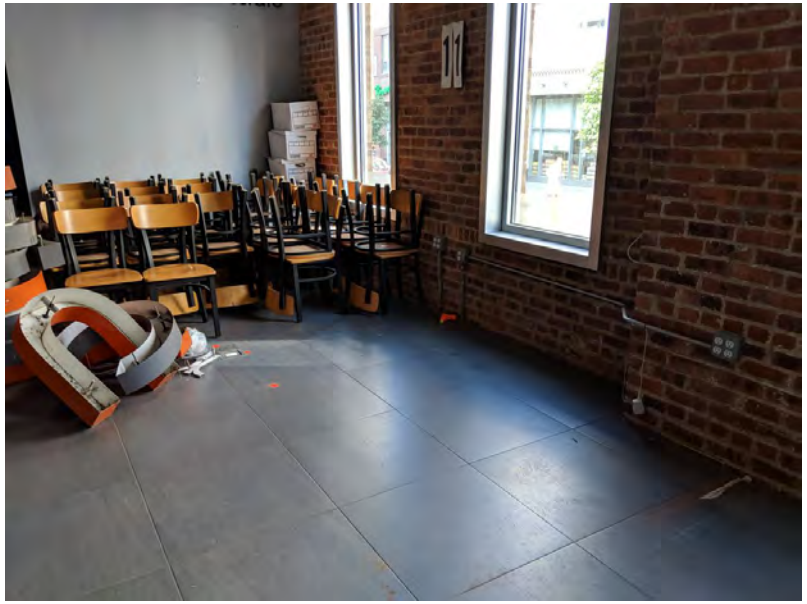

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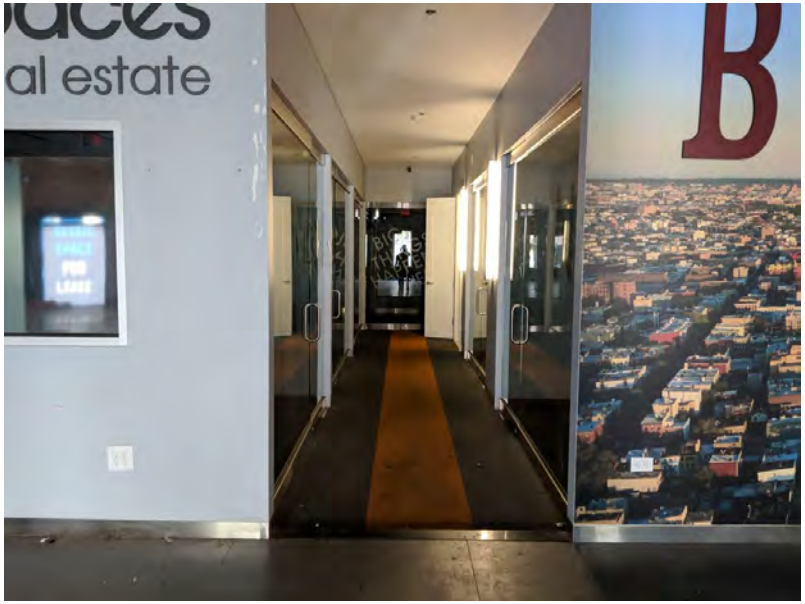

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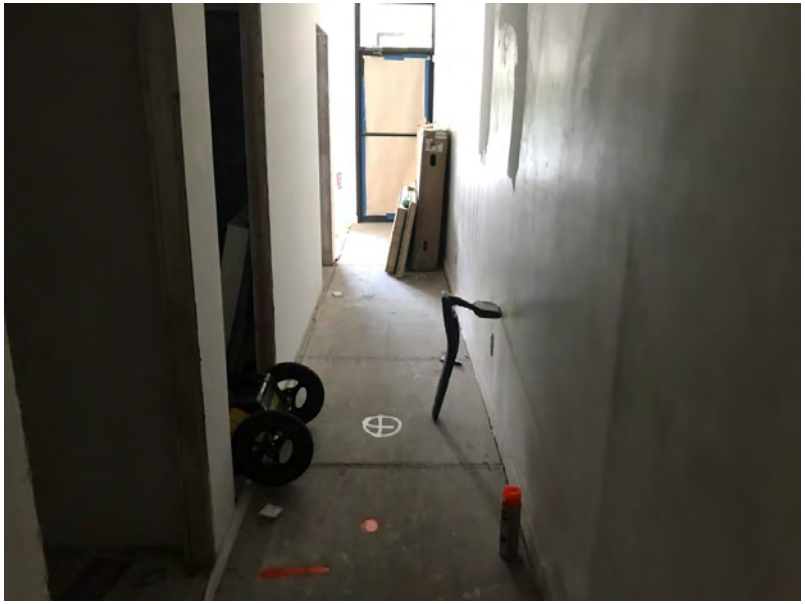

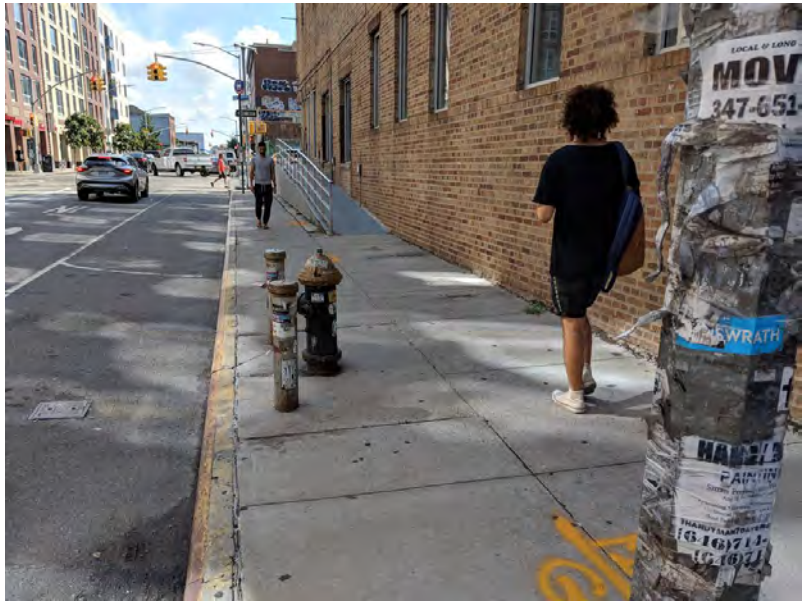

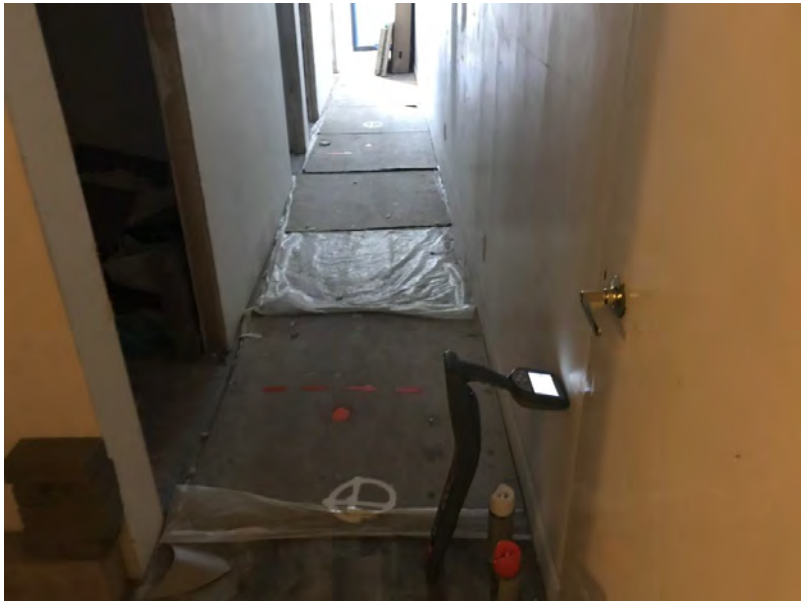

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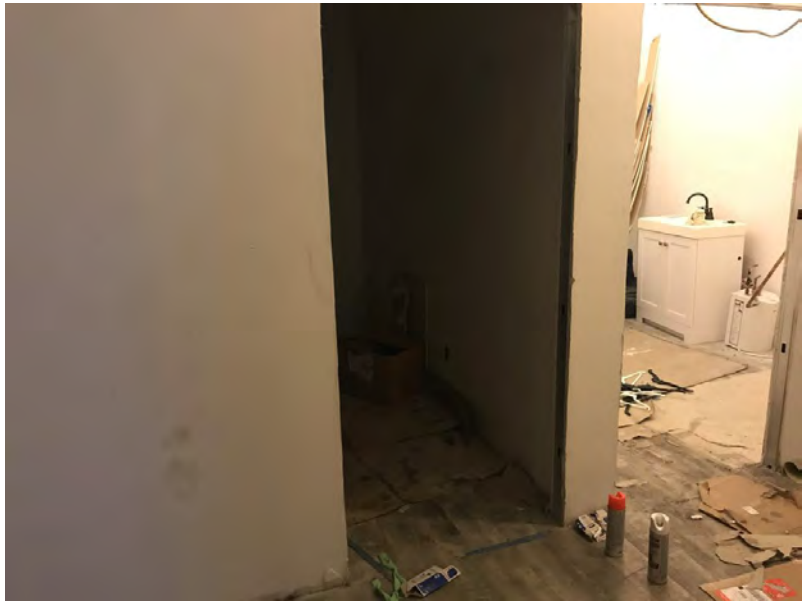

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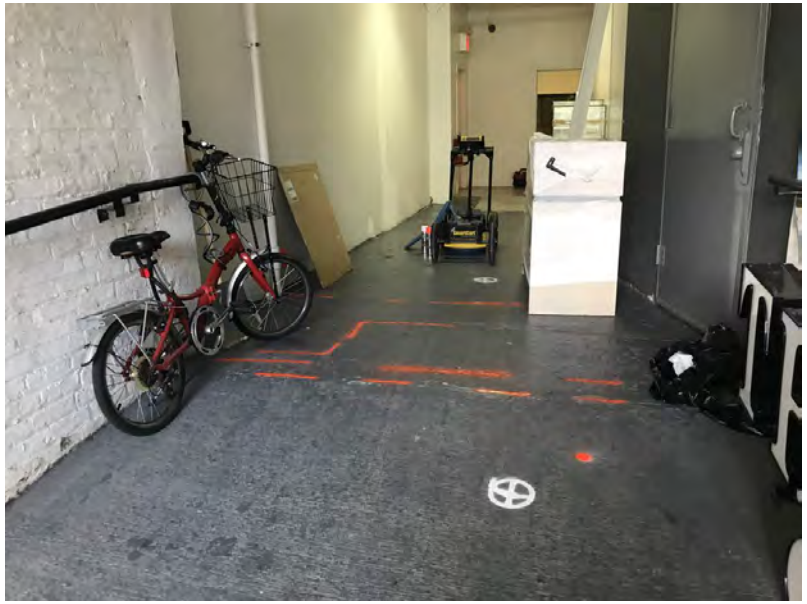
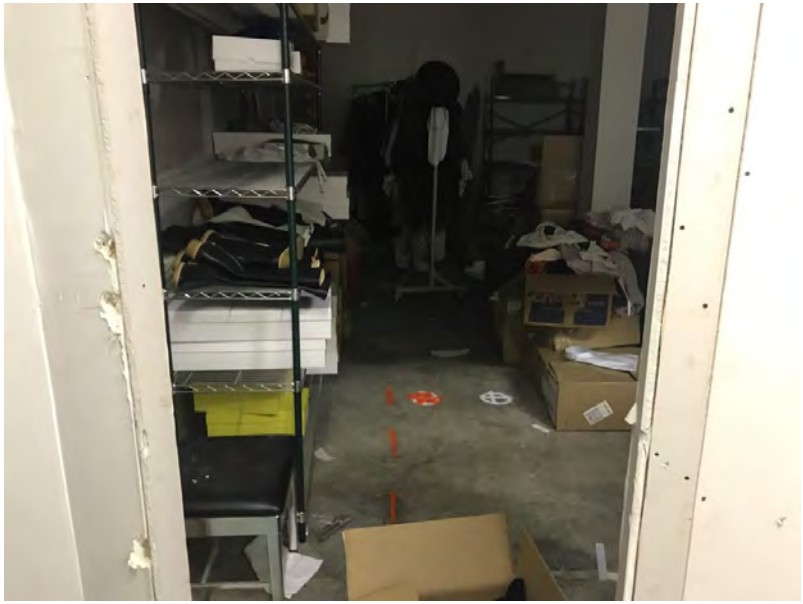
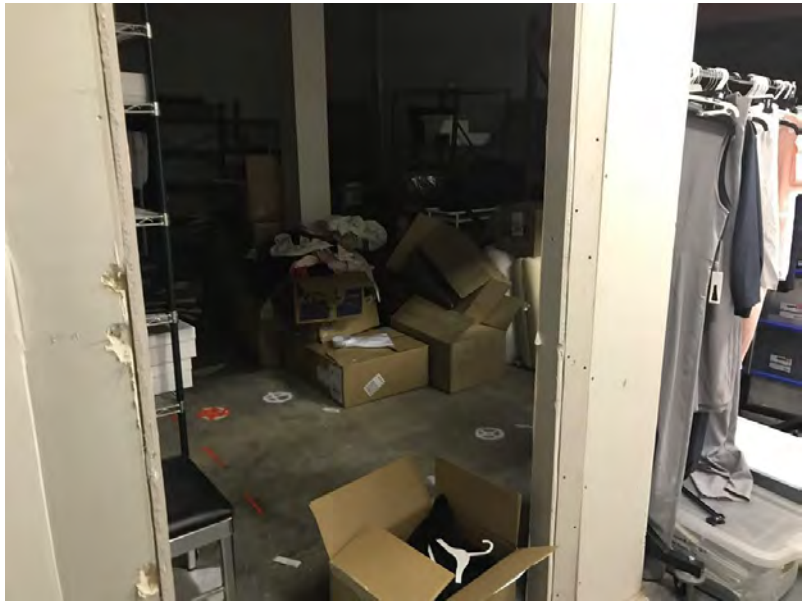
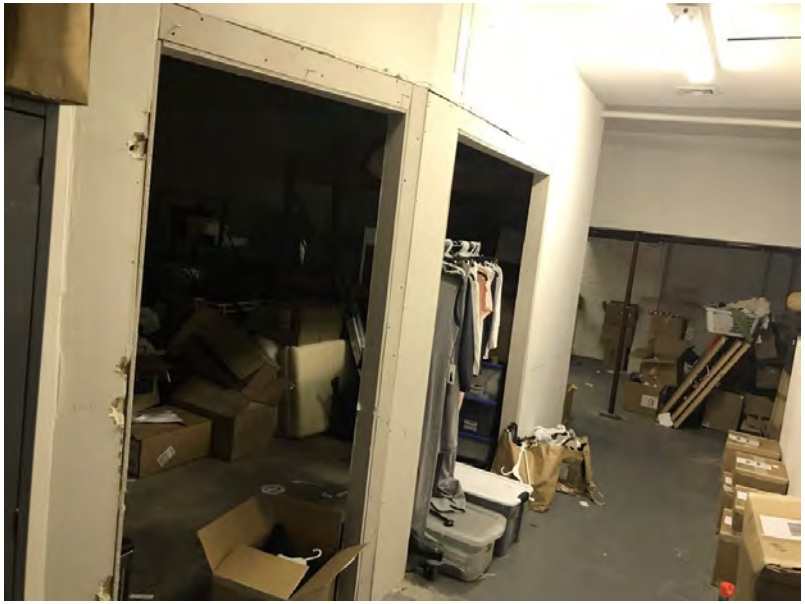






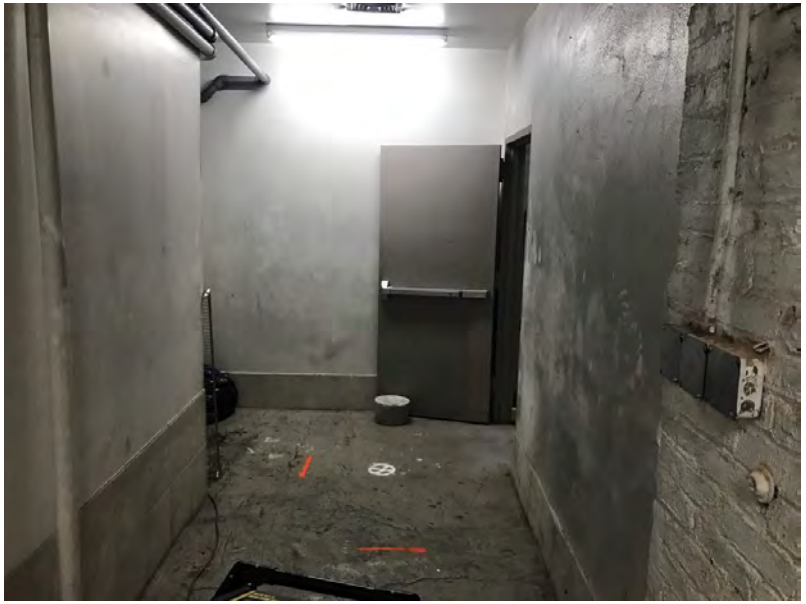


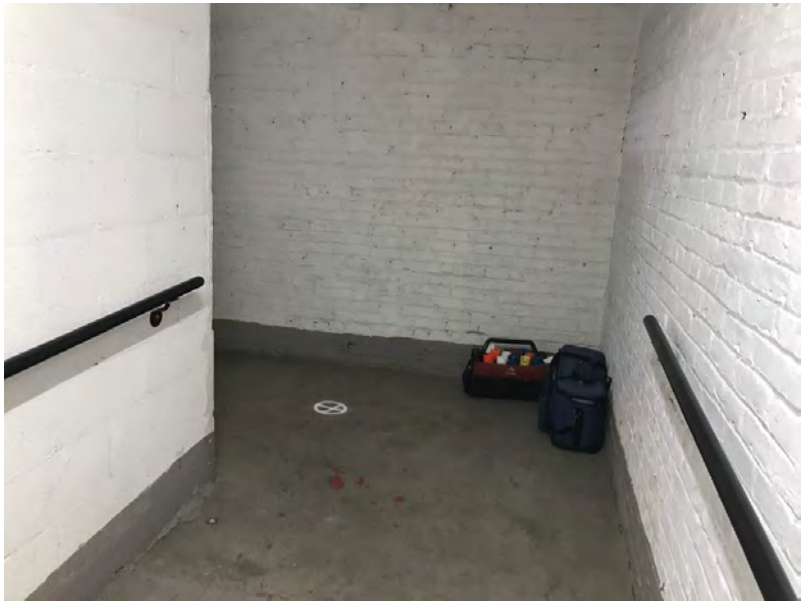
GEOPHYSICAL IMAGES

Commercial Site
135 Kent Avenue,
Broooklyn, New York 11249
August 9th, 2018

GEOPHYSICAL IMAGES

Commercial Site
135 Kent Avenue,
Broooklyn, New York 11249
August 9th, 2018





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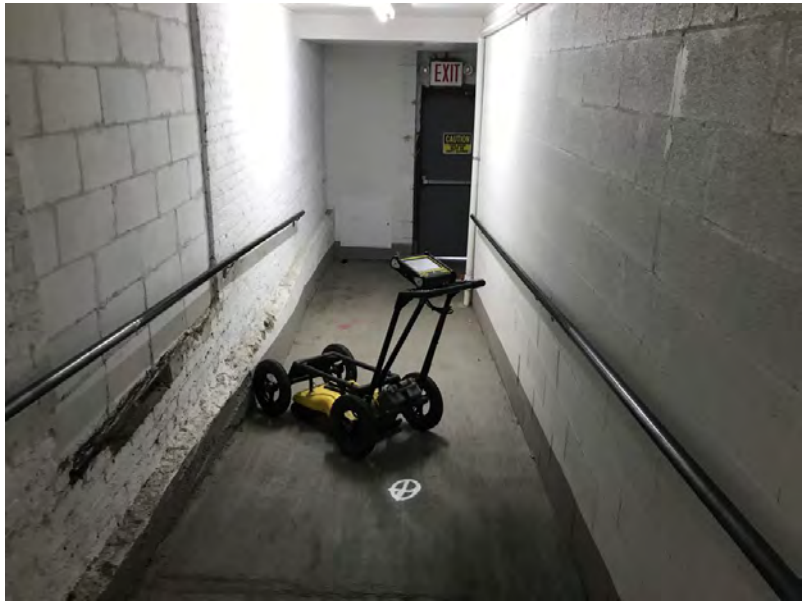

GEOPHYSICAL IMAGES

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GEOPHYSICAL IMAGES

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August 9th, 2018

Appendix D

S2C2 Inc. MIP/HPT Report

S2C2 inc.

Streamlined Site Characterization & Closure

High-Resolution Subsurface Characterization Using the Combination Membrane Interface Probe-Hydraulic Profiling Tool (MiHPT) with Electrical Conductivity (EC) Technologies

135 Kent Avenue, Brooklyn, NY

October 30, 2018

PREPARED FOR

Integral Consulting Inc.
6 Foster Street, Suite 8
Wakefield, MA 01880
(781) 863-0988

PREPARED BY

S2C2, Inc.
5 Johnson Drive, Suite 12
Raritan, New Jersey 08869
(908) 253-3200
www.s2c2inc.com

S2C2 inc.

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Figure 1: Location Map
Figure 2: XSD Response Test Histogram

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Appendix A: MiHPT Logs and Cross Sections

Appendix B: Standalone 4Dim Player User Guide

Introduction/Objectives

Integral Consulting Inc. (Integral) contracted S2C2 Inc. (S2C2) to conduct a High-Resolution Site Characterization (HRSC) investigation of subsurface volatile organic compound (CVOC) impacts, at 135 Kent Avenue in Brooklyn, NY. This HRSC project was accomplished with the application of Geoprobe®'s combination Membrane Interface-Hydraulic Profiling Tool (MiHPT) and electrical conductivity (EC) technologies. Field work was conducted on seven days September 24th through October 2nd, 2018. S2C2 provided all direct-sensing equipment and AARCO Environmental Services Corp. (AARCO) provided direct-push support.

Equipment Description

The MIP coupled with an EC sensor provides continuous stratigraphic information of the soil as well as a semi-quantitative indicator of total VOC concentrations. The MIP is effective in both saturated and unsaturated materials to detect VOCs in the gaseous, sorbed, dissolved, or free phases. The membrane of the MIP acts as an interface between the VOCs present in the subsurface and gas phase detectors located at the ground surface. The membrane is semi-permeable and is comprised of a thin film polymer impregnated into a stainless-steel screen for support. The membrane is approximately 6.35 millimeters (mm) in diameter and is placed in a heated block attached to the probe. This block is heated to approximately 120 degrees Centigrade (ºC) and is raised at the leading edge to help protect the membrane from damage when being pushed through the geologic matrix. Heating the block helps accelerate diffusion of the VOCs through the membrane. Diffusion occurs due to a concentration gradient between the impacted matrix and the clean carrier gas (e.g., nitrogen) behind the membrane. A constant gas flow of 30-45 milliliters per minute (mL/min) sweeps behind the membrane and carries the diffused VOCs to the gas phase detectors at the ground surface via a trunkline. Travel time from the membrane interface to the detector(s) is approximately 45-90 seconds (depending on the length of the trunkline, flow rate, and ambient air temperature).

S2C2 used a MP 6520 MIP probe, FI 6000 field instrument, MP 6500 MIP controller coupled with a Hewlett-Packard 5890 gas chromatograph and a field laptop with Direct Image Acquisition software to log all MIP data. S2C2 utilized three detectors during this project: a Flame Ionization Detector (FID), a Photo-Ionization Detector (PID) and a Halogen-Specific Detector (XSD). The FID/PID detect total VOCs with the FID more sensitive to straight chain hydrocarbons while the PID will display a higher response for aromatic compounds such as benzene. The XSD only detects halogen-containing hydrocarbons (i.e., chlorinated VOCs). Typical MIP configurations will generally have a detectable response in the presence of VOCs at concentrations as low as 250 parts per billion (ppb) to 1 parts per million (ppm). Output from the detectors was displayed on the field laptop in real-time, displaying: EC, push-rate, detector response, carrier gas pressure and flow and temperature data. These data were viewed continuously during each MIP logging run and digitally recorded.

The HPT system uses a sensitive downhole transducer to measure the pressure response of the sub-surface to a constant, monitored injection of clean water. As the probe is advanced at 20 millimeters per second (mm/s), water is injected through a stainless-steel screen on the side of the probe at a flow rate of approximately 200-300 mL/min. Injection pressure is monitored and plotted

with depth along with the injection flow rate. A low pressure is indicative of higher subsurface permeability while high pressure is indicative of lower permeability. Once the HPT probe has been advanced below the water table, dissipation testing can be performed to estimate the static water level and provide an estimate of hydraulic conductivity (Est. K). The operator will pause advancement of the probe and shut-off the flow of water to the HPT probe. The HPT pressure will then dissipate and once it has stabilized, the operator will return water flow to the HPT and continue advancement of the probe. Upon completion of the log, the operator can utilize equations integrated in the Geoprobe® Direct Image Viewer software to calculate static water level, depth of water table, and Est K. in feet per day (ft/day). To refine the precision of the calculations, multiple dissipation tests can be run in the same log.

The EC capabilities of the MIP probe consists of an electric dipole near the lead-end of the probe. The dipole sends a current into the soil formation which is measured along with the voltage that results. The conductivity is a ratio of current to voltage times a constant and is read in milli-Siemens per meter (mS/m). Because fine grain soils have more surface area through which to conduct electricity, EC is effectively a measurement of the *predominant* soil grain-size and can be used to identify lithologic changes. It is important to note that EC reads the grain-size which is present at the greatest percentage. In general, coarse-grained soils such as gravel and coarse sands have the lowest values (typically 0-20 mS/m) and clay has the greatest values (typically greater than 80 mS/m).

AARCO utilized a Geoprobe® 7822DT and 6610DT track-mounted direct-push unit to advance S2C2's direct-sensing equipment

QA/QC

S2C2 follows a strict QA/QC program following Geoprobe's MIP SOP Technical Bulletin No. MK 3010, revised January 2015. Accordingly, S2C2 performs a response test before and after each MIP push location. This test is accomplished by preparing a known concentration of a specific VOC into 500 ml of water to create a standard and exposing the MIP membrane to that solution. The standard used for this investigation was PCE at a concentration of 2 mg/L (ppm). After the pre-established trip time, the standard is removed, and the maximum MIP response is measured. Performing a response test before and after each MIP run is an important quality control measure that evaluates the integrity of the overall system and checks for degradation of the membrane. If the post-run results are not similar to pre-run results, then corrective action (replacement of membrane, checking for leaks in the system, etc.) may be necessary. Some degradation of the membrane is expected, and replacement of the membrane is considered a routine maintenance task. Without adhering to these QA/QC checks, MIP data from one location cannot accurately be compared to MIP data from other locations. It should be noted that these response tests are not conducted to calibrate the MIP system nor to build a calibration curve, but rather as an overall check on the system. For this project, all the pre- and post-test responses were within expected ranges for the XSD detector.

S2C2 also follows a strict QA/QC program following Geoprobe®'s HPT SOP Technical Bulletin No. MK 3137, prepared January 2015. S2C2 performs a transducer response test before and after each HPT location. The response test is an important quality control test in that it tests the integrity

of the complete system. S2C2 performs the response test by inserting the HPT probe into the HPT reference tube with the valve open and the water pump running. The pressure is captured in this scenario. Then the valve is closed, and the water is allowed to run out of the top of the reference tube. Again, this pressure is captured by the Direct Image Acquisition software. The pump is then shut off and pressure is captured. The valve is then opened and once the water is at equilibrium the pressure is captured. Ideally, the pressure difference observed between the upper and lower water level both with and without flow is 0.217 pounds per square inch (psi). If the pressure differences deviate significantly from this value, then corrective action (replacing the screen or transducer) may be necessary. Without adhering to these QA/QC checks, static water level and Est. K cannot be accurately calculated.

To check the EC dipole, an EC dipole tester configured with high and low EC materials on either end is applied across the EC dipole and the isolated steel body of the probe. If the EC response is within +/- 5% of the target value, the EC test is passed. If either the high or low EC test fails, corrective action (typically opening the probe and reconnecting the EC wires) must be taken.

Summary of Field Investigation

Prior to arriving at the site, AARCO called in the NY One Call mark-out, obtained sidewalk permits (access was challenging and limited due to working in a densely populated urban environment) and a geophysical survey was conducted to identify utilities and potential subsurface structures. Due to the unknown subsurface conditions, air-knifing of locations near identified utilities was being completed at select locations on the first day of work.

Twenty-three locations were initially proposed for the scope of work. S2C2 completed 20 MiHPT logs at 17 locations, during the field event, in 7 days. All locations (except the MiHPT-15 – no pre-probing was completed due to limited height restrictions inside the building) were pre-probed to a minimum depth of 10’ bgs. using 1.5” rods. Most locations on either side of North 6th Street were pre-probed to 20-25’ or pre-probe refusal due to extremely difficult drilling conditions. Without pre-probing the direct-sensing tooling was encountering “refusal” (<1’ per minute push rates) much shallower than when pre-probing was completed. Pre-probing to these depths is not typically done but due to the difficult subsurface conditions it was determined necessary to minimize the chance of damaging the direct-sensing tooling as well as advancing the tooling to deeper depths. Due to difficult subsurface conditions boring depths ranged from less than 10’ bgs. to over 40’ bgs.

Direct Sensing Log Interpretation

Each MiHPT log has the following four graphs of data displayed with depth:

- EC is on the left and is displayed in mS/m. Coarse-grained materials generally have lower EC values while higher values indicate finer-grained materials. A secondary series on this graph plots estimated hydraulic conductivity in ft/day.

- The next graph is the HPT transducer pressure maximum in psi. An increase in HPT pressure indicates lower permeability while lower HPT pressures indicate higher permeability zones. A secondary series on this graph plots the absolute hydrostatic pressure line. Squares on the line indicate where dissipation tests were run and the absolute hydrostatic pressure at that depth. The triangle indicates where the absolute hydrostatic pressure intersects atmospheric pressure and thus the water table (assuming an unconfined system). Note that the absolute hydrostatic pressure may not be straight if confining layers or pumping/injections wells are located nearby.

- The next three graphs display the FID, PID, XSD signals, respectively, in microvolts (uV). The MIP response is dependent on many factors including: lithologic properties, chemical constituents, and the concentration within the formation. MIP response also varies as a result of membrane degradation. The MIP response provides a gross semi-quantitative response to VOCs in the subsurface and can be correlated to known concentrations of specific VOCs in the subsurface by comparing soil and/or groundwater confirmation sampling results to the MIP response.

MiHPT direct-sensing logs are provided in Appendix A of this report and include the following:

- Best-Fit Scale
- Cross Section MiHPT-01 to MiHPT-05 (North Curb - North 6th Street) – EC
- Cross Section MiHPT-01 to MiHPT-05 (North Curb - North 6th Street) – HPT
- Cross Section MiHPT-01 to MiHPT-05 (North Curb - North 6th Street) – XSD

- Cross Section MiHPT-06 to MiHPT-12 (South Curb - North 6th Street) – EC
- Cross Section MiHPT-06 to MiHPT-12 (South Curb - North 6th Street) – HPT
- Cross Section MiHPT-06 to MiHPT-12 (South Curb - North 6th Street) – XSD

- Cross Section MiHPT-01 to MiHPT-20 (Kent Avenue) – EC
- Cross Section MiHPT-01 to MiHPT-20 (Kent Avenue) – HPT
- Cross Section MiHPT-01 to MiHPT-20 (Kent Avenue) – XSD

- Cross Section MiHPT-09 to MiHPT-15 (MiHPT-09 and Interior borings) – EC
- Cross Section MiHPT-09 to MiHPT-15 (MiHPT-09 and Interior borings) – HPT
- Cross Section MiHPT-09 to MiHPT-15 (MiHPT-09 and Interior borings) – XSD

In addition to the provided logs, Geoprobe®'s Direct Image Viewer Software can be used to evaluate all direct-sensing logs and is available at https://geoprobe.com/downloads/direct-image-viewer-32. A user tutorial can also be downloaded at http://geoprobe.com/di-viewer-technical-documents and provides users an overview of available features. This software package automatically opens and displays all types of Geoprobe® direct-image logs and can display single logs or multiple logs in either cross-section or overlay formats. The software also allows for printing and exporting of log graphics.

Discussion of MiHPT Logs

This field event generated 20 logs at 17 locations on the subject site. Average response for 2 ppm of PCE on our response test was approximately .9e5 uV (Figure 2). A dissipation test to determine depth to water could not be completed all location because of the following reasons: boring did not advance below the water table or operator could not locate a zone to perform the dissipation test. Please note that detector response above the water table could be soil gas or soil impacts. Below are discussions on individual logs:

MiHPT-01:
Total depth advanced was 9.35, bgs. Depth to water was not able to be determined – no HPT test. PID and FID impacts were observed in a high HPT zone at approximately 2.5' to 4' bgs. XSD response was very low but observed a slight increase in response at the end of the boring.

MiHPT-02:
Total depth advanced was 11.60' bgs. Depth to water was not able to be determined – no HPT test. A high HPT pressure zone was observed from approximately 7 to 10' bgs. XSD response was very low but observed a slight increase in response at the end of the boring.

MiHPT-03:
Total depth advanced was 25.80' bgs. Depth to water was estimated at 14.65' bgs. A high HPT pressure zone was observed from approximately 2.5' to 17' bgs. PID and FID impacts were observed throughout the high HPT zone. Small XSD response at 16-17' bgs.

MiHPT-04:
Total depth advanced was 12.25' bgs. Depth to water was not able to be determined – no HPT test. Shallow FID impacts were observed at approximately 2.5' bgs. A high HPT pressure zone was observed from approximately 9.5' bgs. to end of boring. PID impacts were observed throughout the high HPT zone.

MiHPT-05:
Total depth advanced was 4.9' bgs. Depth to water was not able to be determined – no HPT test. A high HPT pressure zone was observed starting at 3.5' bgs. bgs. FID and PID impacts were observed from approximately in the high HPT zone.

MiHPT-06:
Total depth advanced was 11.25' bgs. Depth to water was not able to be determined – no HPT test. A high HPT pressure zone was observed from approximately 4.5 to 8' and starting at 10.5' bgs. PID and XSD impacts were observed in the high HPT pressure unit starting at 10.5' bgs. with a maximum value of 2.2 e5 uV (XSD).

MiHPT-07:
Total depth advanced was 28.55' bgs. Depth to water was estimated at 16.05' bgs. High HPT pressure zones were observed throughout the boring alternating with low HPT pressure zones. FID, PID and XSD impacts were observed throughout the boring with a maximum value of 4.9e6

uV (XSD).

MiHPT-09:
Total depth advanced was 15.85' bgs. Depth to water was estimated at 10.5' bgs. High HPT pressure zones were observed throughout the boring alternating with low HPT pressure zones. FID, PID and XSD impacts were observed throughout the boring with a maximum value >1.e7 uV (XSD) 6.65' to 7.65', 9.0' and 15.85' bgs.

MiHPT-10:
Total depth advanced was 3.6' bgs. Depth to water was not able to be determined – no HPT test. High HPT pressure zones were observed starting at 3.5' bgs. to the boring termination. FID, PID and XSD impacts were observed throughout the boring with a maximum value of 3.6e5 uV (XSD).

MiHPT-12:
Total depth advanced was 10.0' bgs. Depth to water was not able to be determined – no HPT test. FID, PID impacts were observed with a maximum value of 1.2e5 uV (PID) at 6.7' bgs.

MiHPT-13:
Total depth advanced was 29.85' bgs. Depth to water was estimated at 18.6' bgs. High HPT pressure zone were observed from 13.5' to 18.5'. FID, PID and XSD impacts were observed throughout that zone with a maximum value > 3.e6 uV (XSD).

MiHPT-14:
Total depth advanced was 25.7' bgs. Depth to water was not able to be determined – no HPT test. Two zones of impacts in high HPT pressure zones: approximately 6.5 to 9' bgs. and 16 to 22' bgs. FID, PID and XSD impacts in both zones with a maximum value > 3.e6 uV (XSD) in both impacted zones.

MiHPT-15:
Total depth advanced was 8.7' bgs. Depth to water was not able to be determined – no HPT test. PID and XSD impacts with a maximum value > 8.7e5 uV (XSD) at approximately 8' bgs.

MiHPT-15b:
Total depth advanced was 8.55' bgs. Depth to water was not able to be determined – no HPT test. PID and XSD impacts with a maximum value > 1.6e6 uV (XSD) at approximately 7.6' bgs.

MiHPT-17:
Total depth advanced was 21.8' bgs. Depth to water was estimated at 4.8' bgs. Low level FID and at approximately 13' bgs. Slight increase on XSD towards bottom of boring but very low response.

MiHPT-19 and 19b:
Total depth advanced was 12.05 and 13.3' bgs. Depth to water was not able to be determined – no HPT test. Slight increase on PID at approximately 8' bgs. on both logs. Little to no XSD response.

MiHPT-19bc:
Total depth advanced was 41' bgs. Depth to water was estimated at 13.6' bgs. PID and XSD

impacts with a maximum value > 2.5e5 uV (XSD) at approximately 20' bgs. This impact was located in a low HPT pressure zone.

MiHPT-20:
Total depth advanced was 36.45' bgs. Depth to water was estimated at 15.95' bgs. FID and PID impacts starting at approximately 6.5' bgs. PID and XSD impacts with a maximum value > 2.4e5 uV (XSD) at approximately 17' bgs. This impact located in a low HPT pressure zone.

Description of Data and Data Processing

Following the creation of direct-sensing logs, the data were exported from DI Viewer as tab-delimited .DAT files which were used to create Studio-formatted data files for kriging and visualization.

The following direct-sensing parameters were chosen for kriging:

- Corrected HPT Pressure (psi)
- XSD response (uV)

Direct-sensing data were processed using C Tech's Data Reduction Tool. Due to the high-density nature of direct-sensing data in the z-axis (20 recorded values for every 1 ft of depth) as compared to the density on x- and y- axes, 3D kriging of data oversampled in the z-direction may produce unacceptable artifacts and require very high computing resources during kriging. To reduce the occurrence of these artifacts, the Data Reduction Tool can assist in selecting the most critical data points (i.e. the max/min points) and preserve them while omitting the less critical data points by using several reduction options. The purpose of this data reduction is to reduce the number of data points to less than 6,000 so that all data can be used during kriging. In addition to targeting a final data set with no more than 6,000 points, the operator will select a data density that is approximately equal to the vertical grid resolution. This will reduce vertical averaging of data points during the kriging routine. HPT pressure data were reduced using gradient optimization and the MIP detector data sets (FID, PID, XSD) were reduced using the max of samples data reduction options.

Geologic Grid Development

The geologic grid was defined by surface topography, MiHPT refusal, and a bottom elevation of -30 feet below mean sea level (ft msl).

- Surface Topography – Surface topography was set to 17 ft msl based on elevations presented on a cross-section previously completed.
- MiHPT refusal was calculated for each boring.
- Bottom – The bottom elevation was assigned to a value just beyond the deepest MIP data point -30 ft msl.

The above surfaces were created in Studio using a natural neighbor estimation method. These geologic layers were kriged within a 10 ft by 10 ft, 2-dimensional rectilinear grid. The grid has 40

cells in the x-direction and 30 cells in the y-direction.

Direct-Sensing Data Kriging

Once the geologic model was finalized, all direct-sensing data were individually kriged using Studio's 3D kriging module within the geologic grid described above using a z resolution of 100 cells. Kriging settings were set individually for each data set based on individual data properties. Grid node values for direct-sensing data were calculated in Studio utilizing an ordinary kriging algorithm using all data points to calculate all nodes (i.e., infinite search radius). In addition to the 3D kriging described above, 2-dimensional (2D) kriging was conducted on the full 3D analytical data sets to create 2D maximum outputs for XSD detector response. Please note that there is no interpolation completed in these calculations and as such there are no exported statistics (i.e. confidence is always 100%). The 3D data sets are collapsed by the maximum value and then kriged in 2D. Since the nodes of the collapsed 3D data set match the 2D grid, the predicted value is simply the maximum value of the 3D data.

It should be noted that the kriged XSD response does extend under the building and off-site away from MiHPT borings MiHPT-13,14, and 15. Confidence of the predicted XSD response in this area is low. In order to limit vertical boundary conditions (i.e. areas of no data), kriged data is not shown below the MiHPT refusal surface.

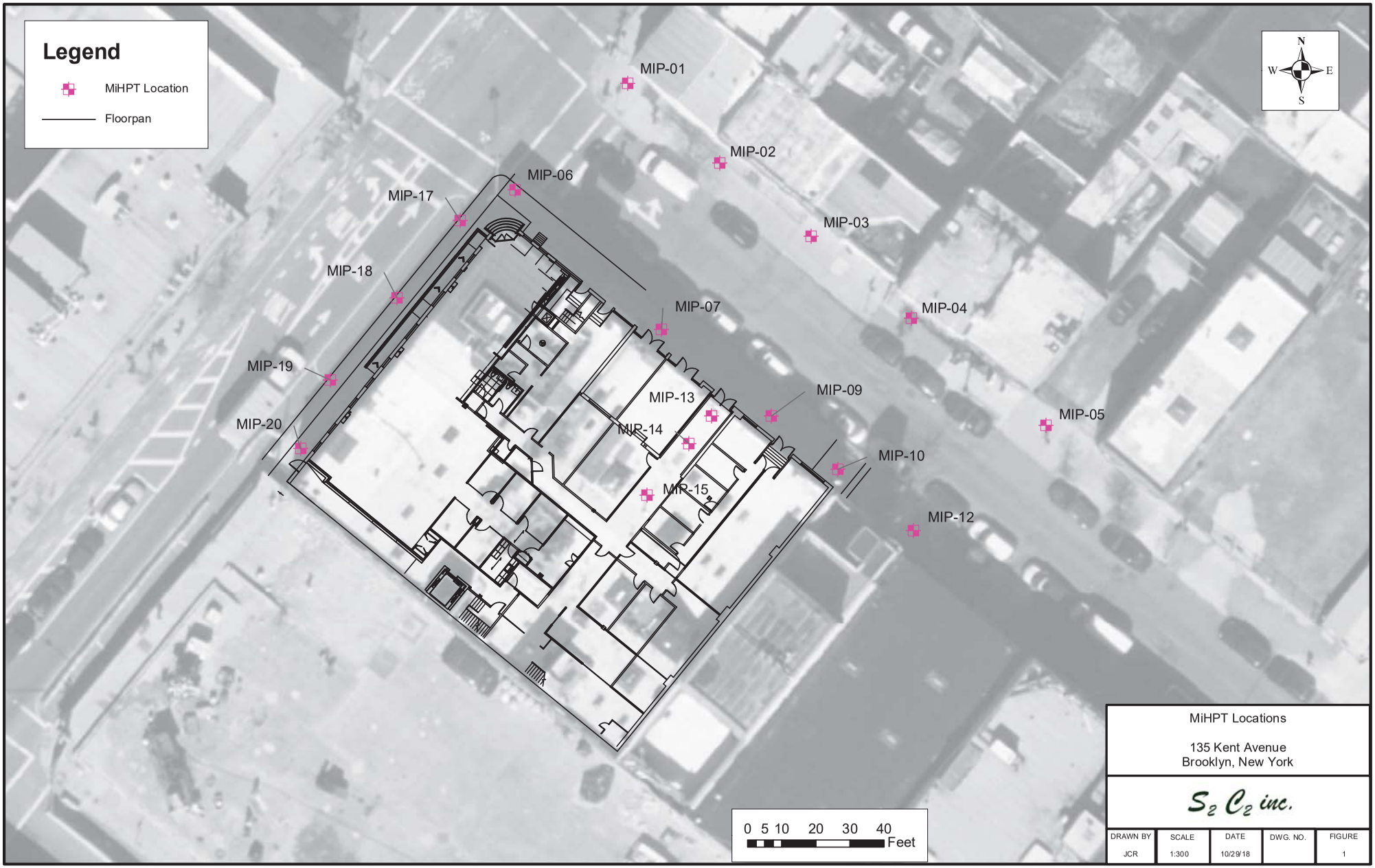
3-Dimensional Conceptual Site Model

In order to illustrate the final 3D-CSM, a 4-D Interactive Model Player (4DIM) file was created and is available electronically. Viewing the 4DIM visualization file requires C Tech Corporation's Standalone 4D Interactive Model Player freeware and is available at http://client.ctech.com/ (see "Standalone 4DIM Player Installation"). Appendix B provides a guide to using the 4Dim player.

4Dim exports were created include the following:

1. KentAvenue_HRSC_103018.4dm

Overall, the kriged data provide predicted values within the geologic grid that can be used to evaluate collaborative data sets in a visual 3-dimensional platform. As with any predictive tool, the statistical confidence of the results is a function of the data density. Based on the collaborative nature of the data evaluated for this Site, the final kriged data sets provide a useful tool for evaluating, updating and confirming the CSM for the Site.



MiHPT Locations

135 Kent Avenue
Brooklyn, New York

S_2 C_2 inc.

DRAWN BY	SCALE	DATE	DWG. NO.	FIGURE
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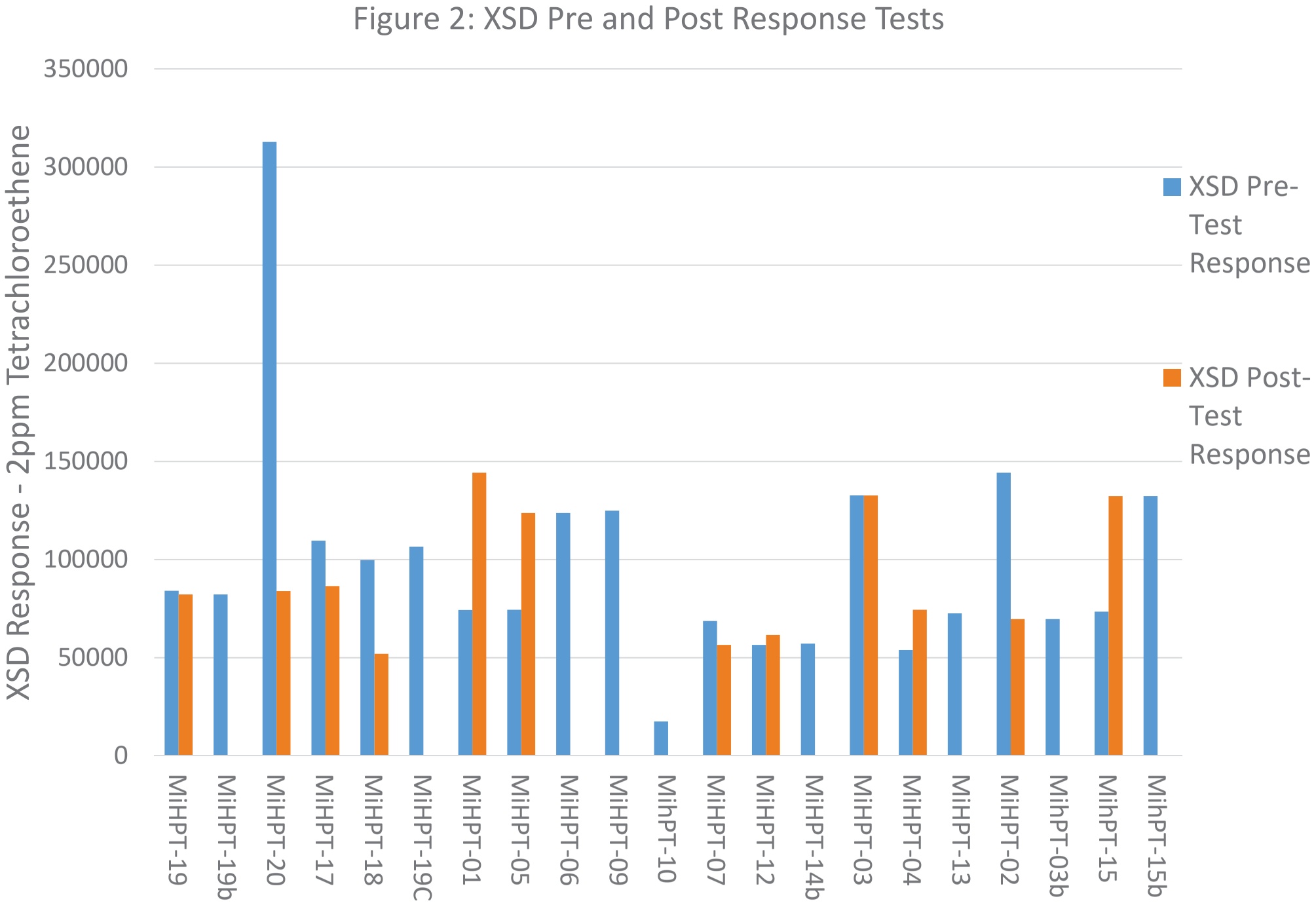
Figure 2: XSD Pre and Post Response Tests
XSD Response - 2ppm Tetrachloroethene
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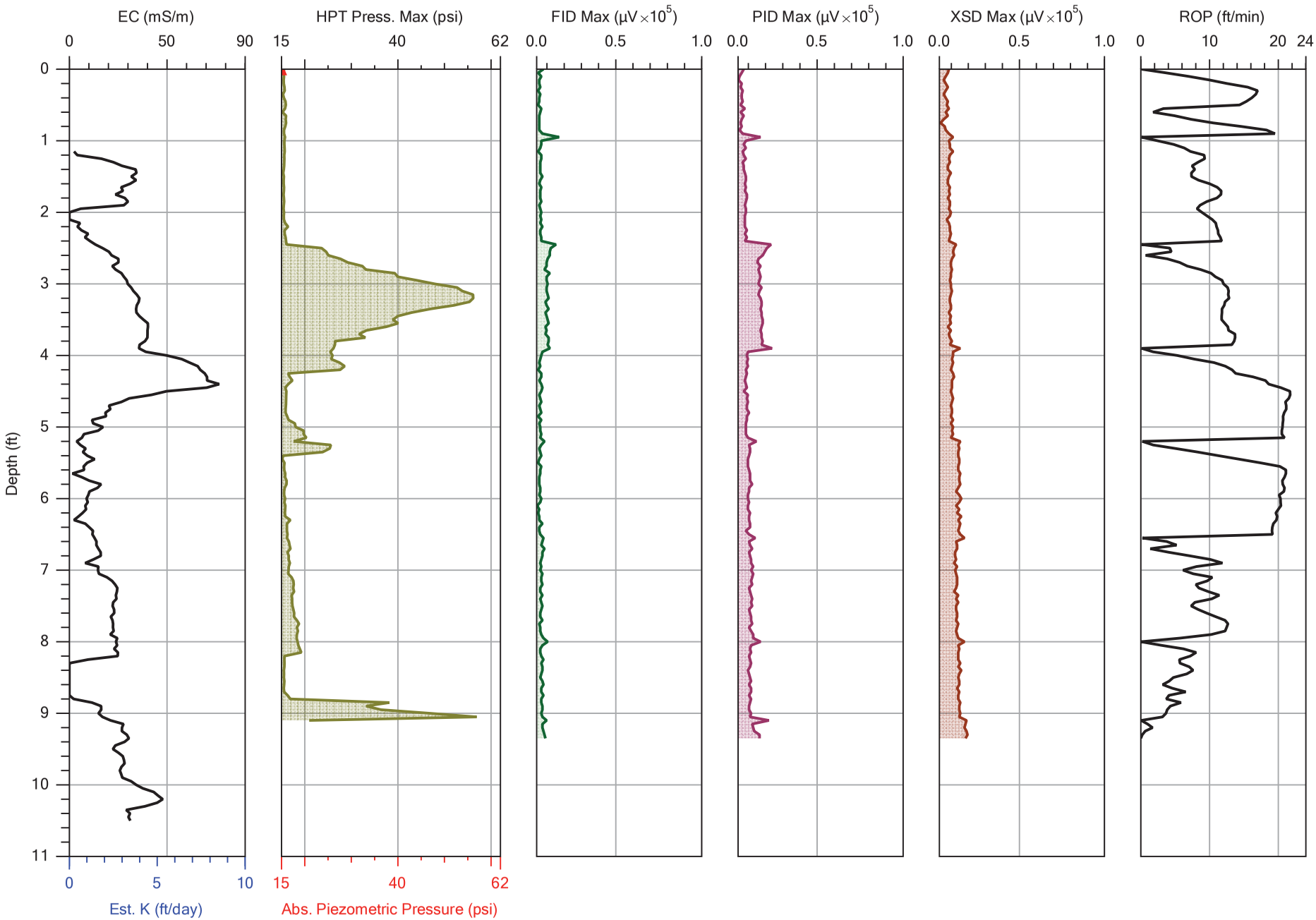
300000
250000
200000
150000
100000
50000
0
MiHPT-19
MiHPT-19b
MiHPT-20
MiHPT-17
MiHPT-18
MiHPT-19C
MiHPT-01
MiHPT-05
MiHPT-06
MiHPT-09
MihPT-10
MiHPT-07
MiHPT-12
MiHPT-14b
MiHPT-03
MiHPT-04
MiHPT-13
MiHPT-02
MihPT-03b
MihPT-15
MihPT-15b
XSD Pre-Test Response
XSD Post-Test Response

Appendix A: MiHPT Logs



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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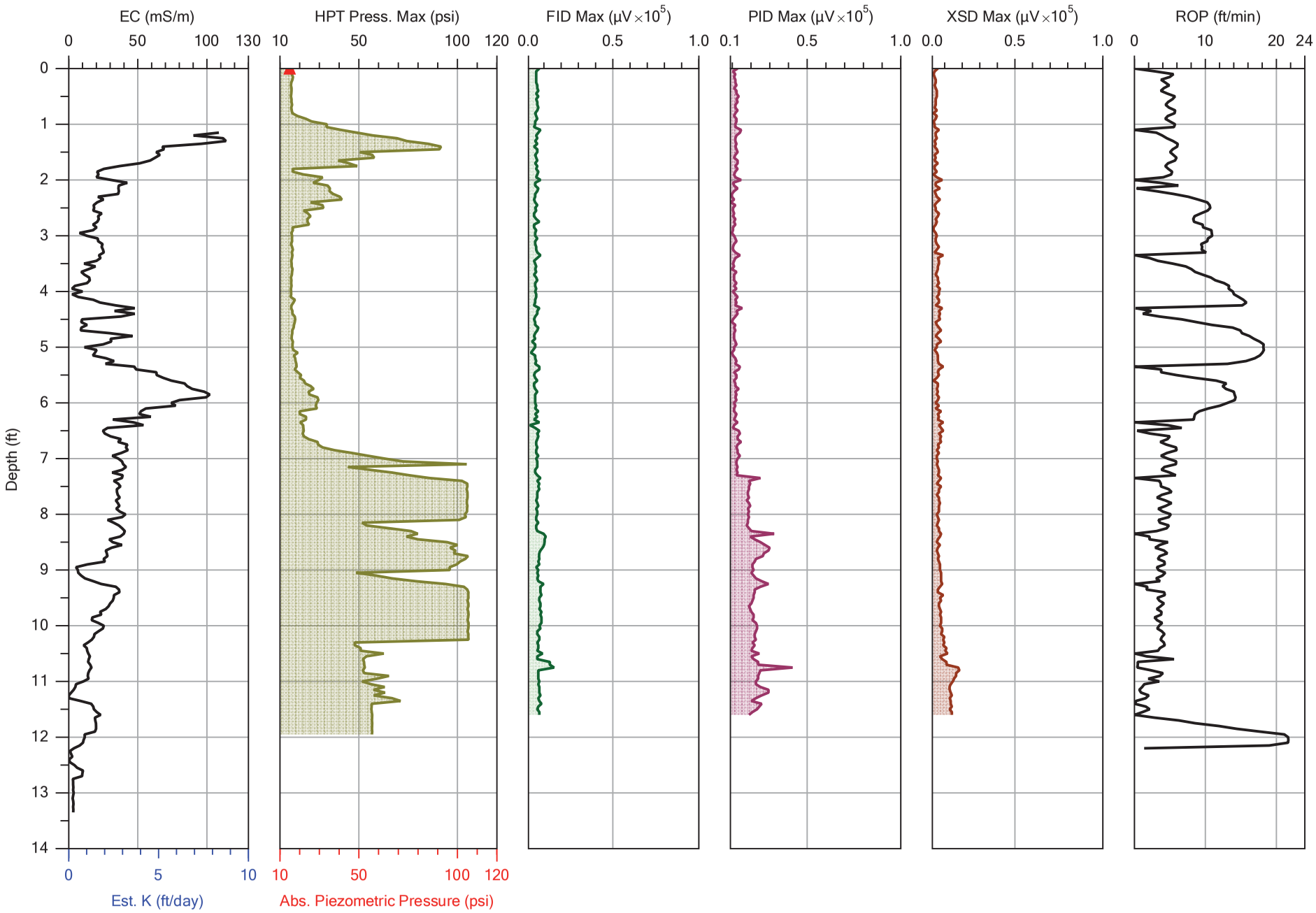
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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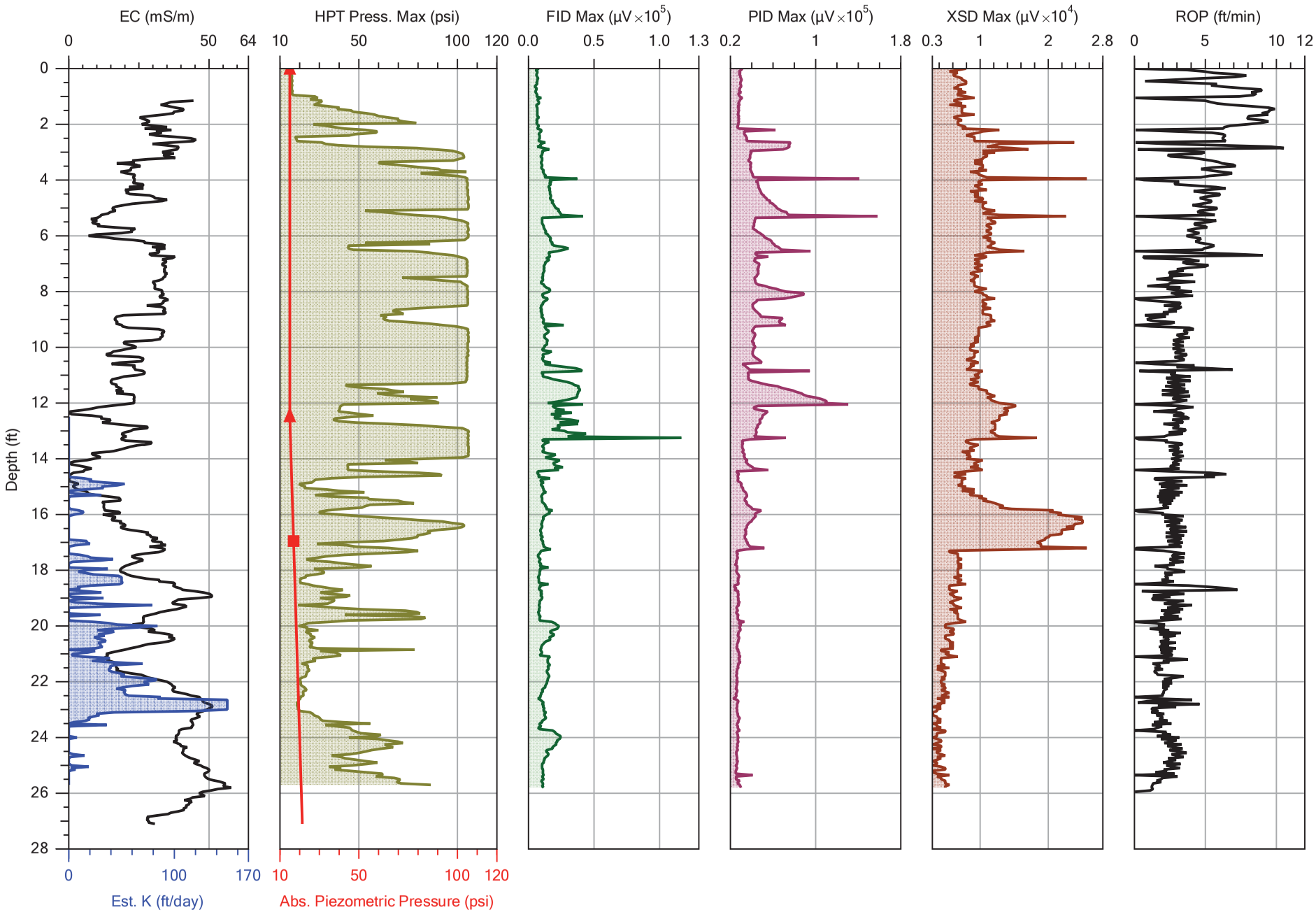
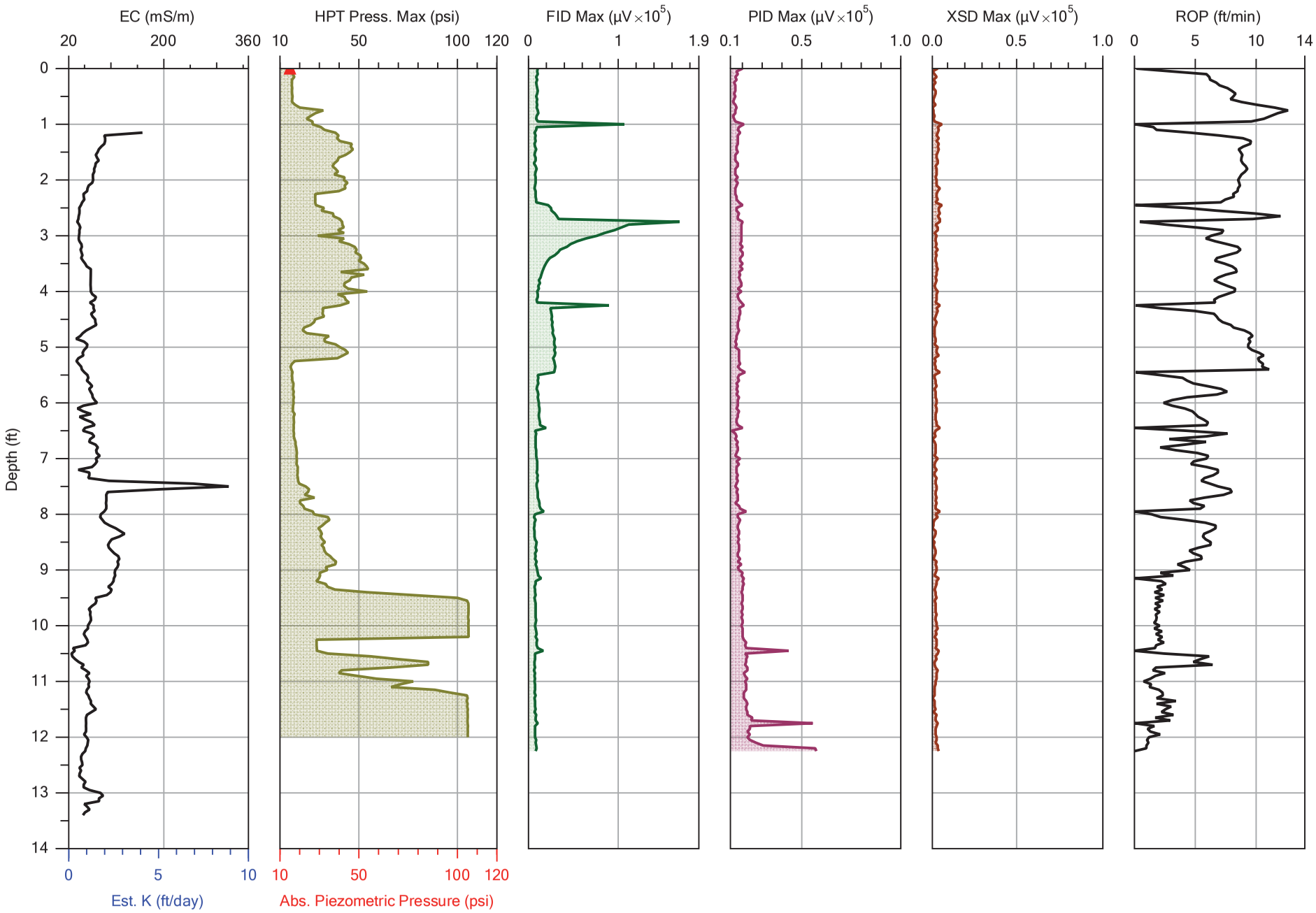
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

		File: MIHPT-03.MHP
Company: S2C2	Operator: MR	Date: 10/1/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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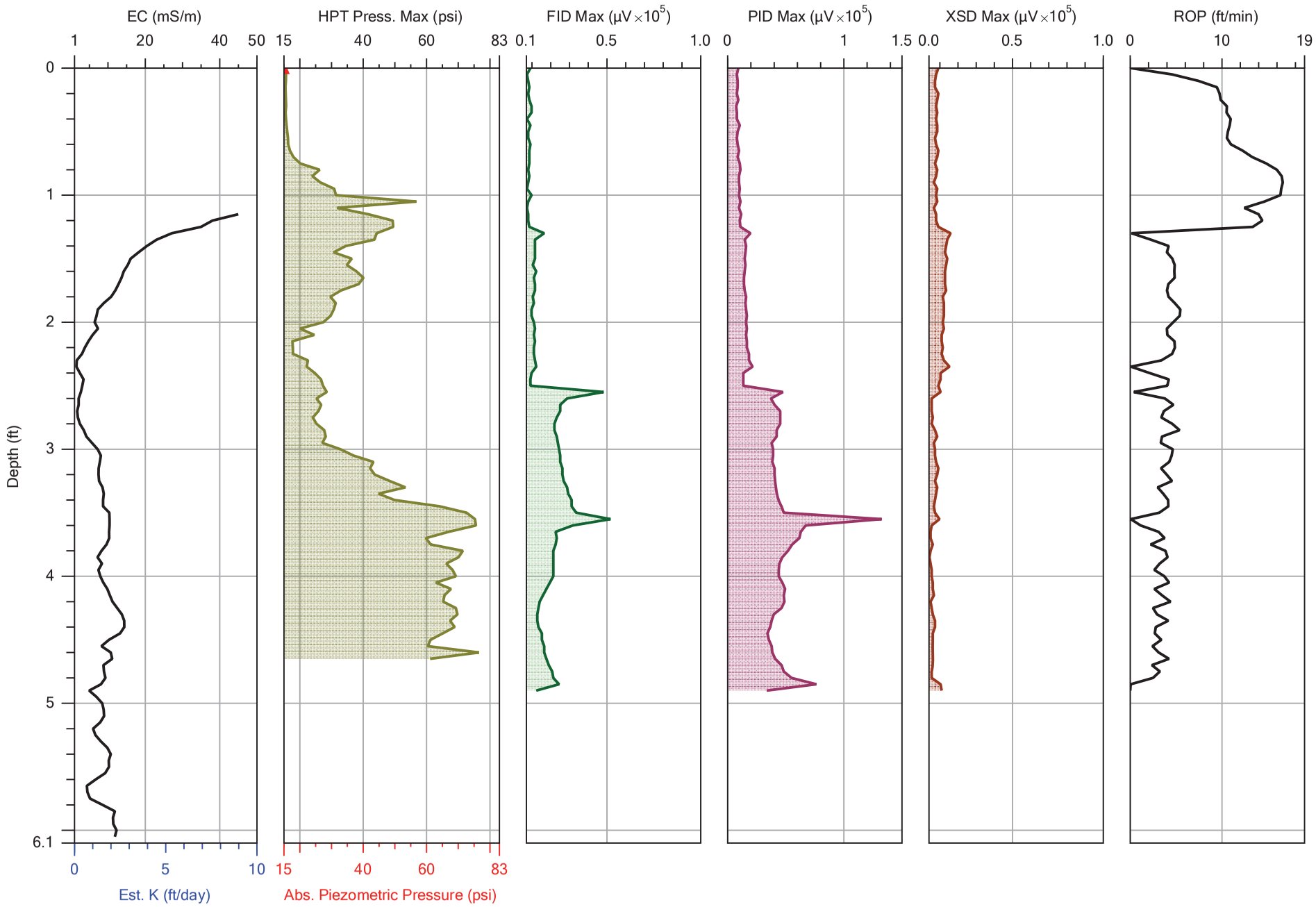
Company: S2C2	Operator: MR	Date: 10/1/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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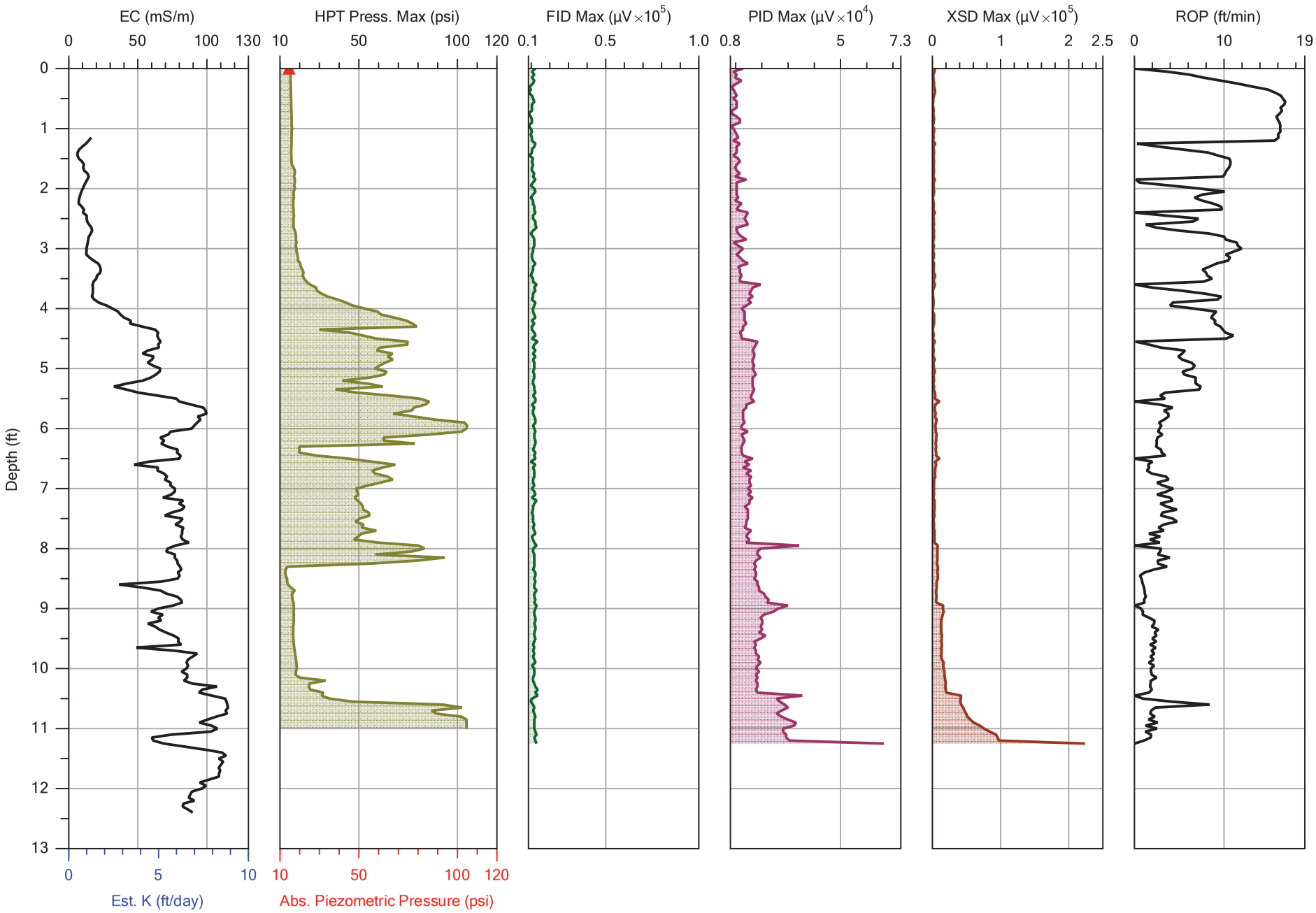
Company: S2C2	Operator: MR	Date: 9/26/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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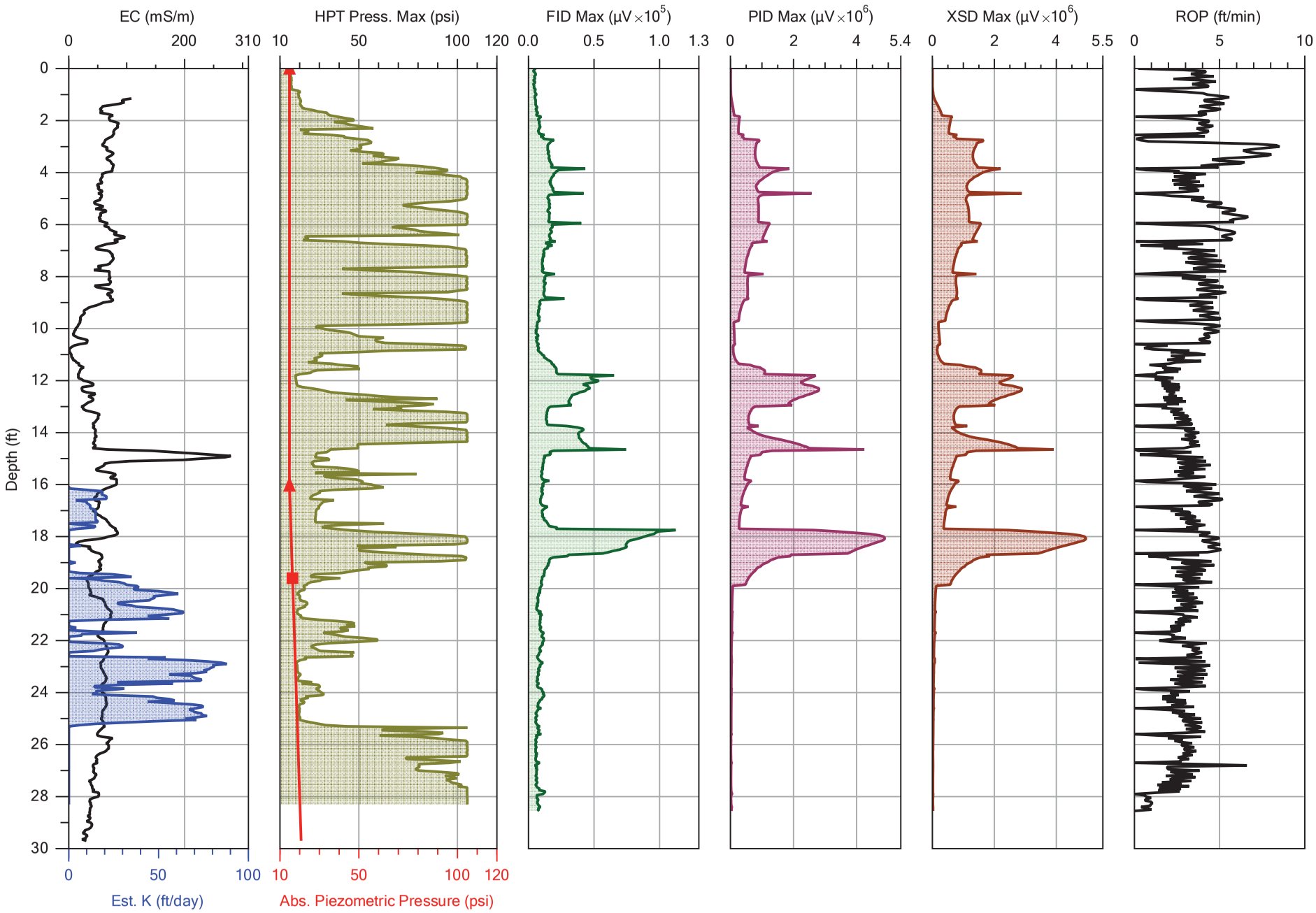
Company: S2C2	Operator: MR	Date: 9/26/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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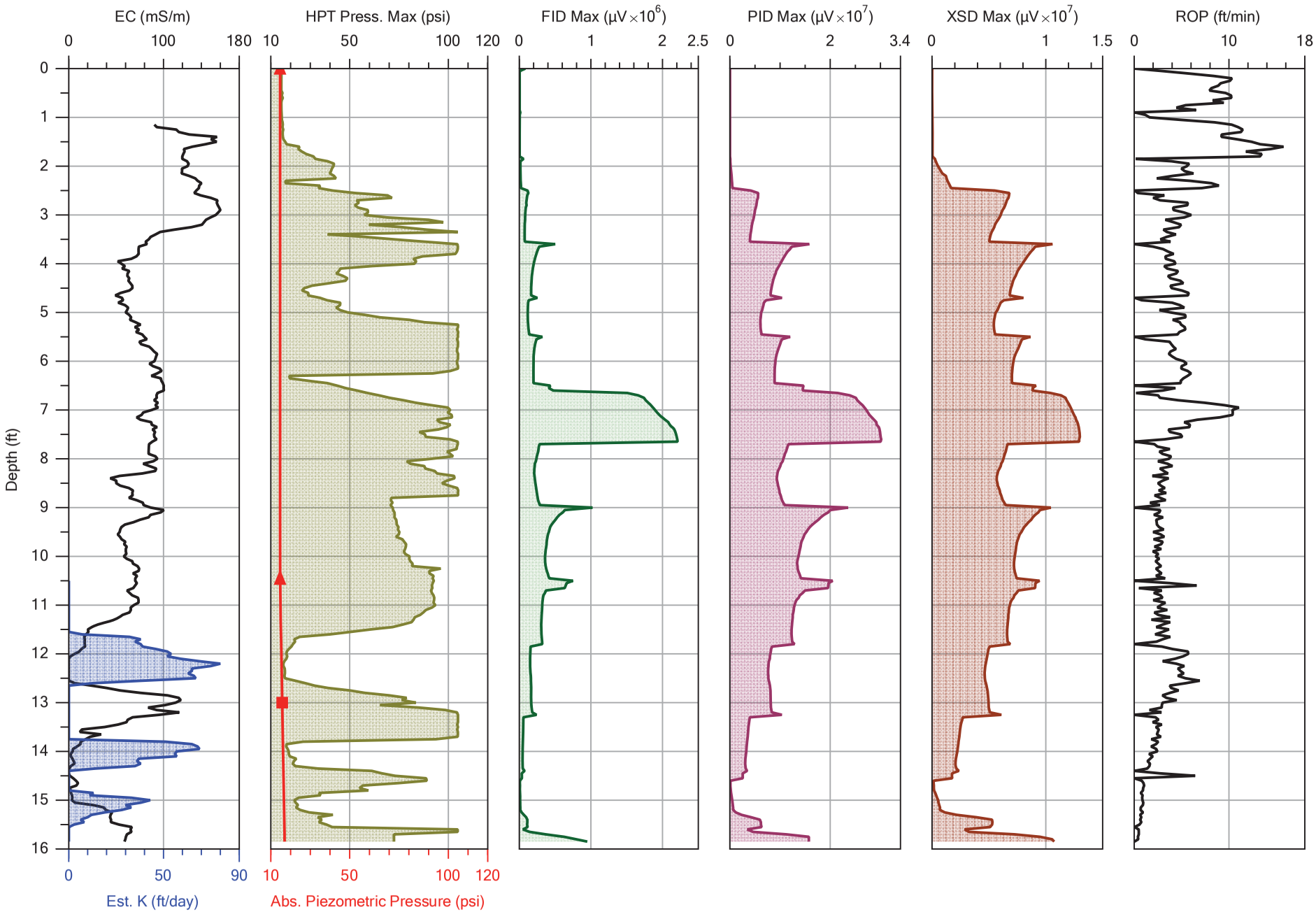
Company: S2C2	Operator: MR	Date: 9/28/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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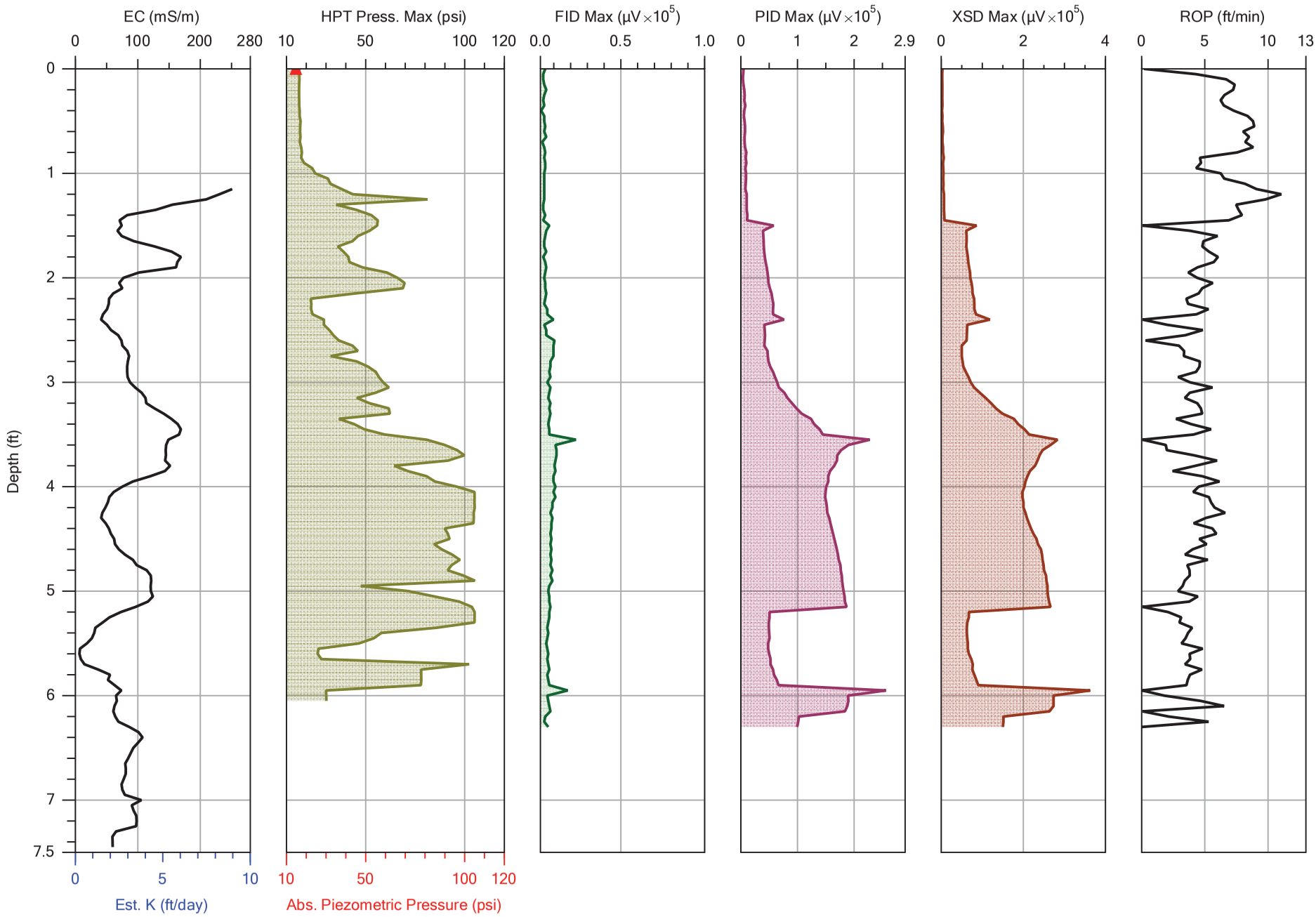
Company: S2C2	Operator: MR	Date: 9/27/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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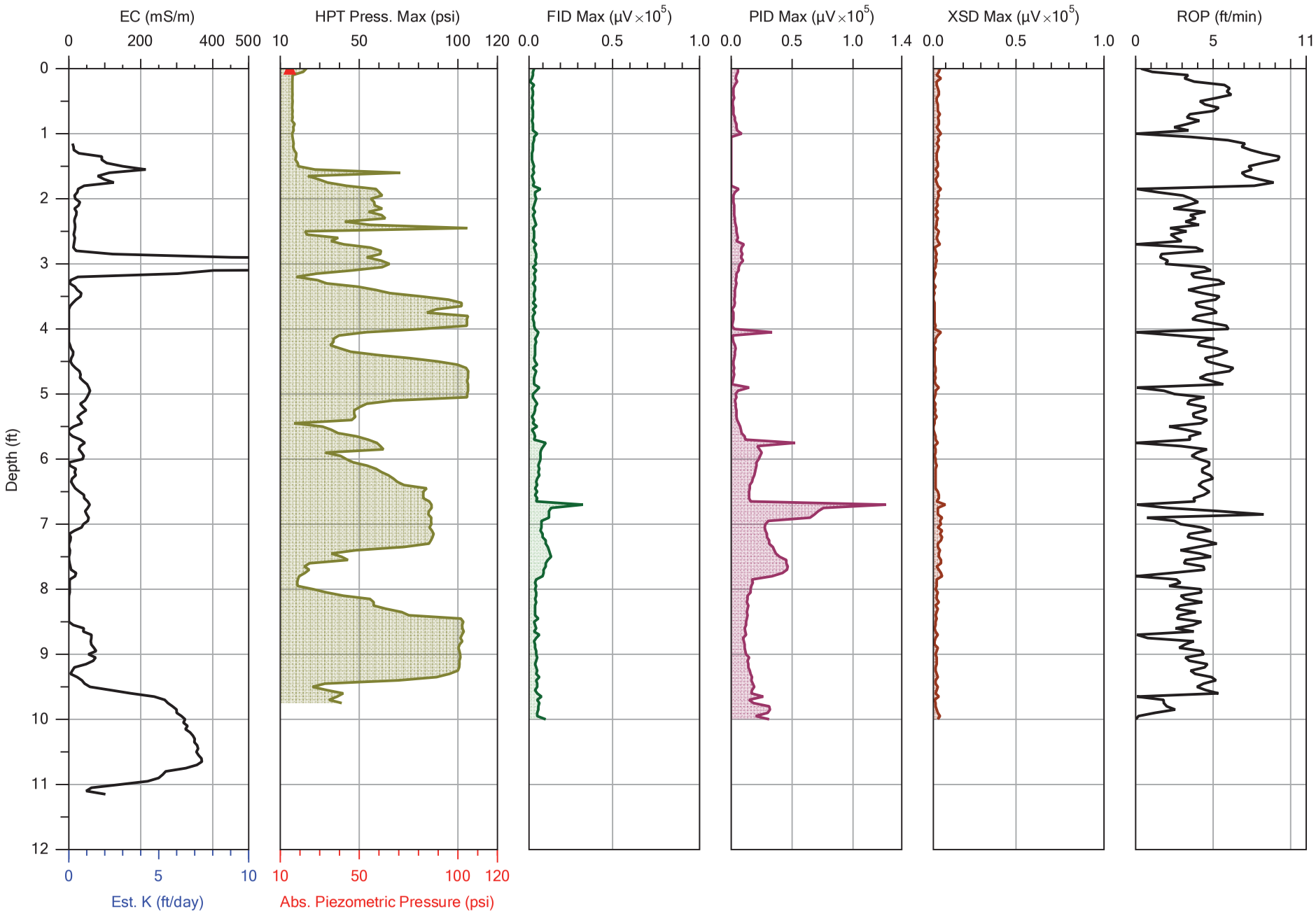
Company: S2C2	Operator: MR	Date: 9/27/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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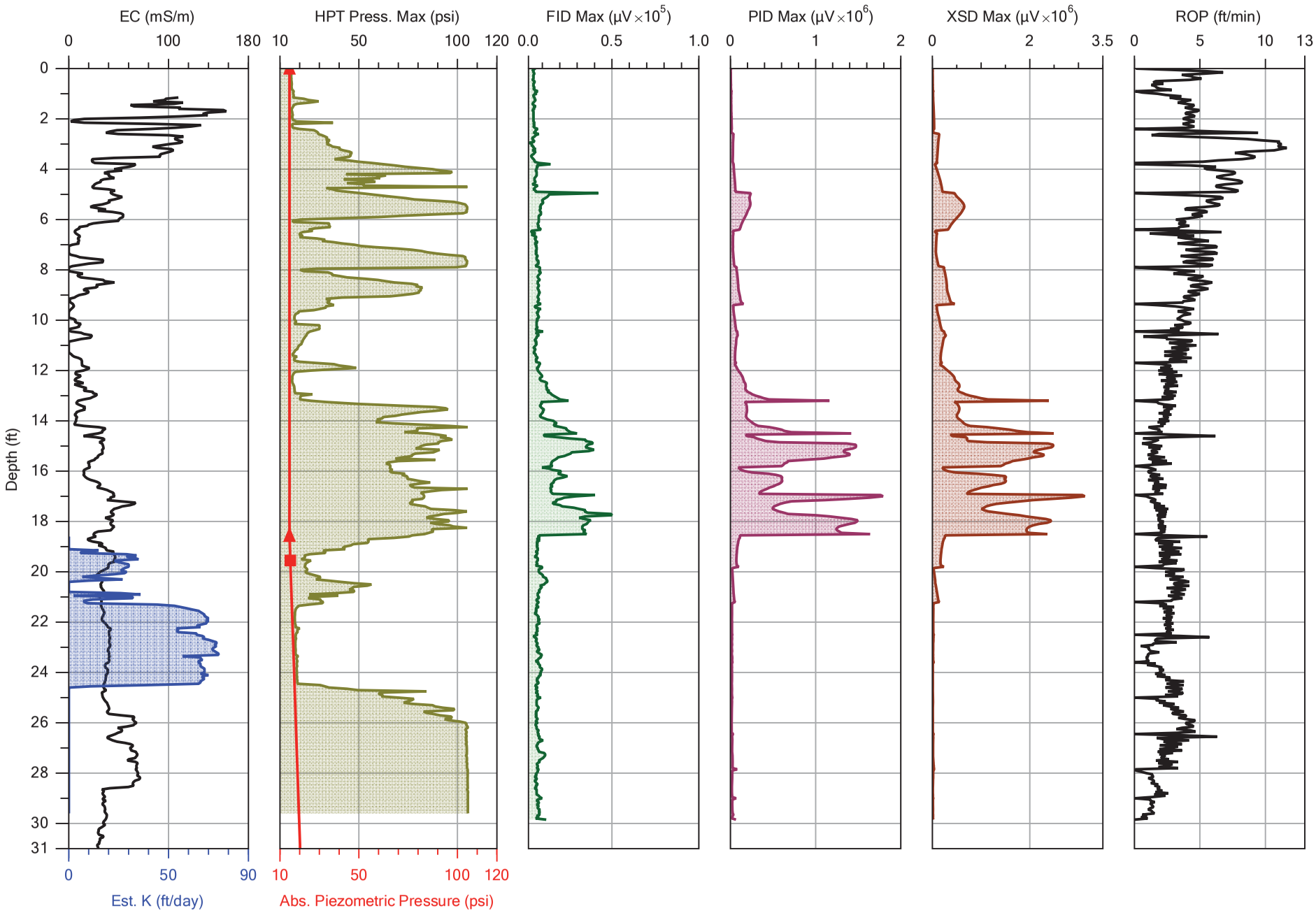
Company: S2C2	Operator: MR	Date: 9/28/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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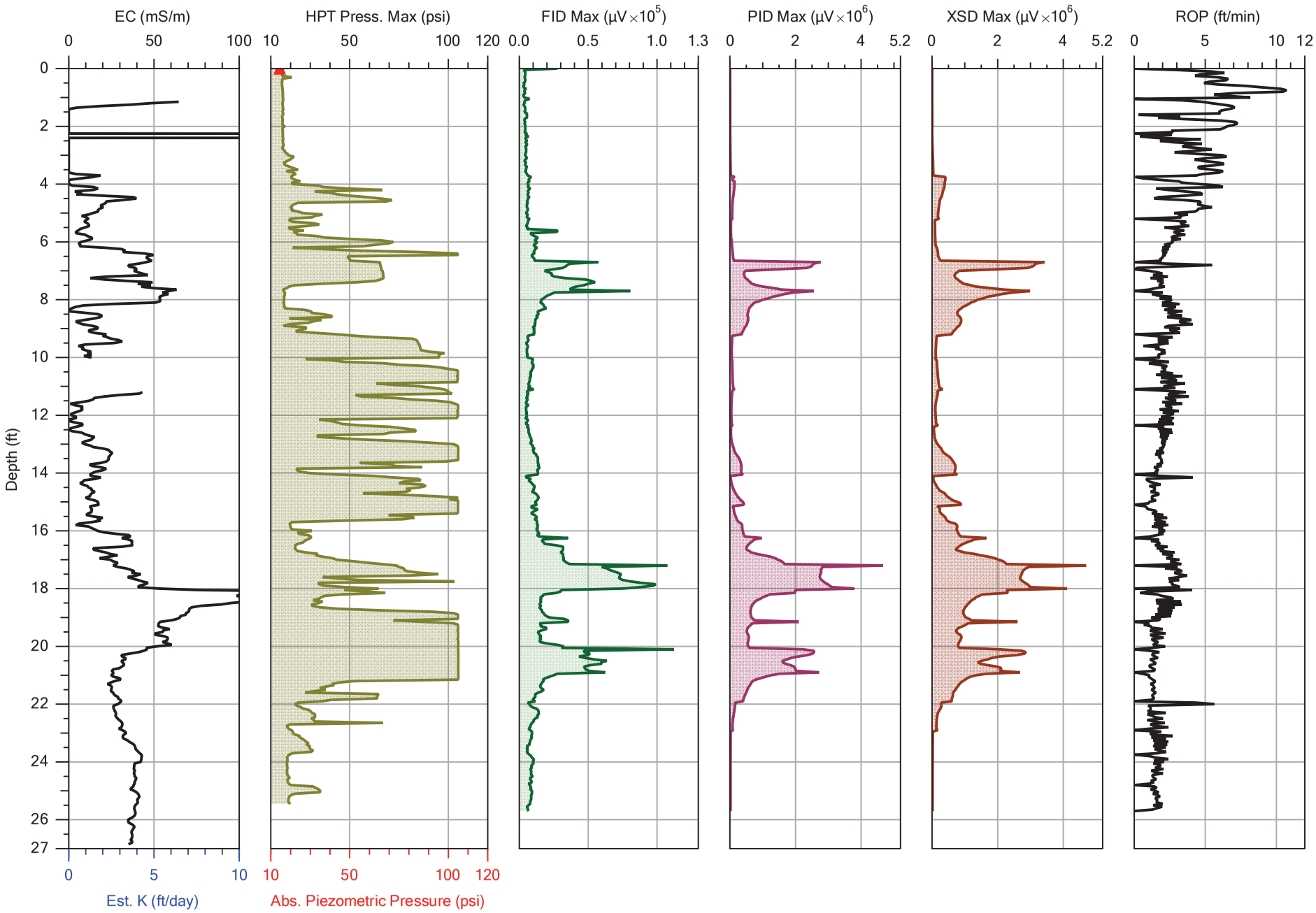
Company: S2C2	Operator: MR	Date: 10/1/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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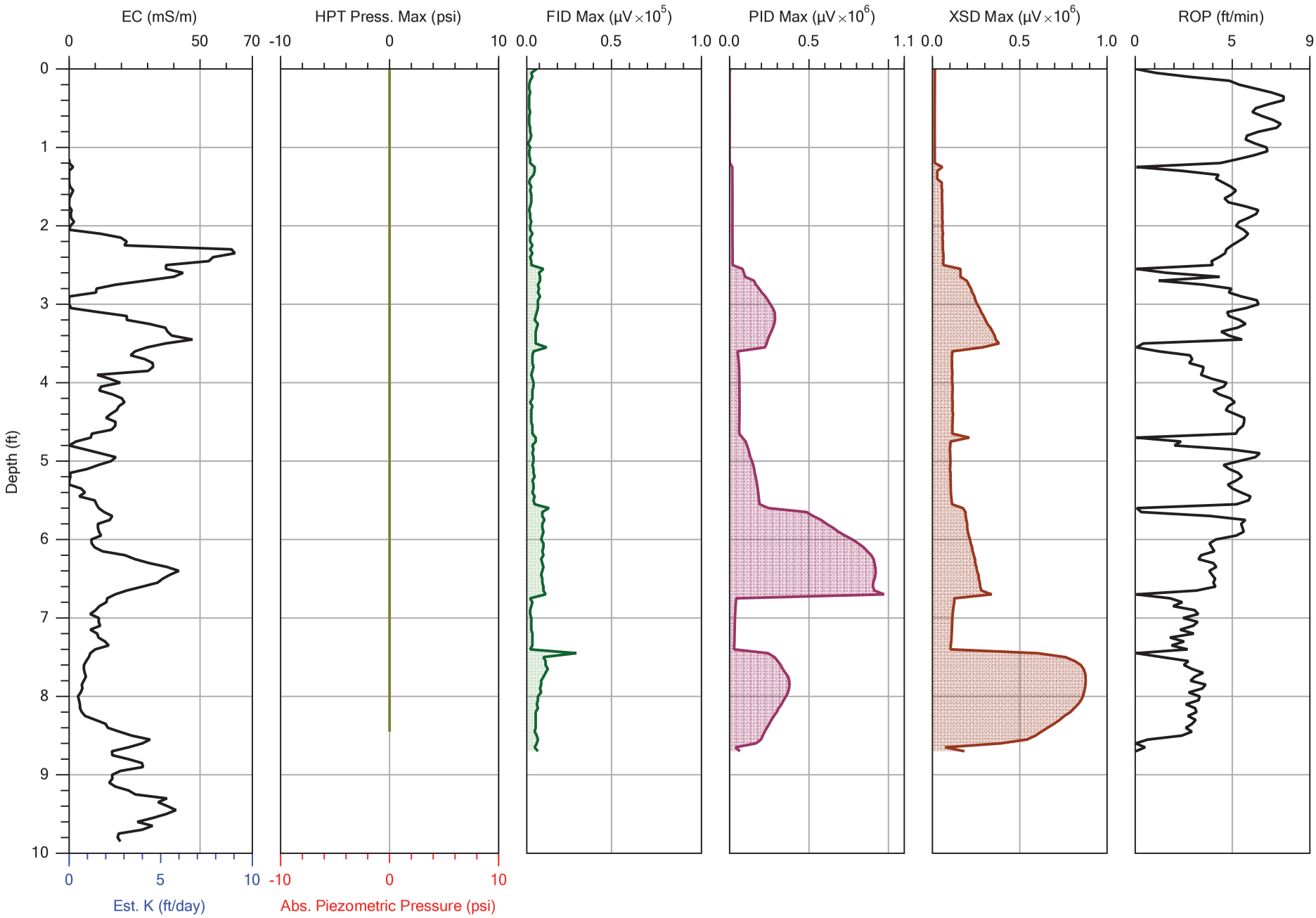
Company: S2C2	Operator: MR	Date: 9/28/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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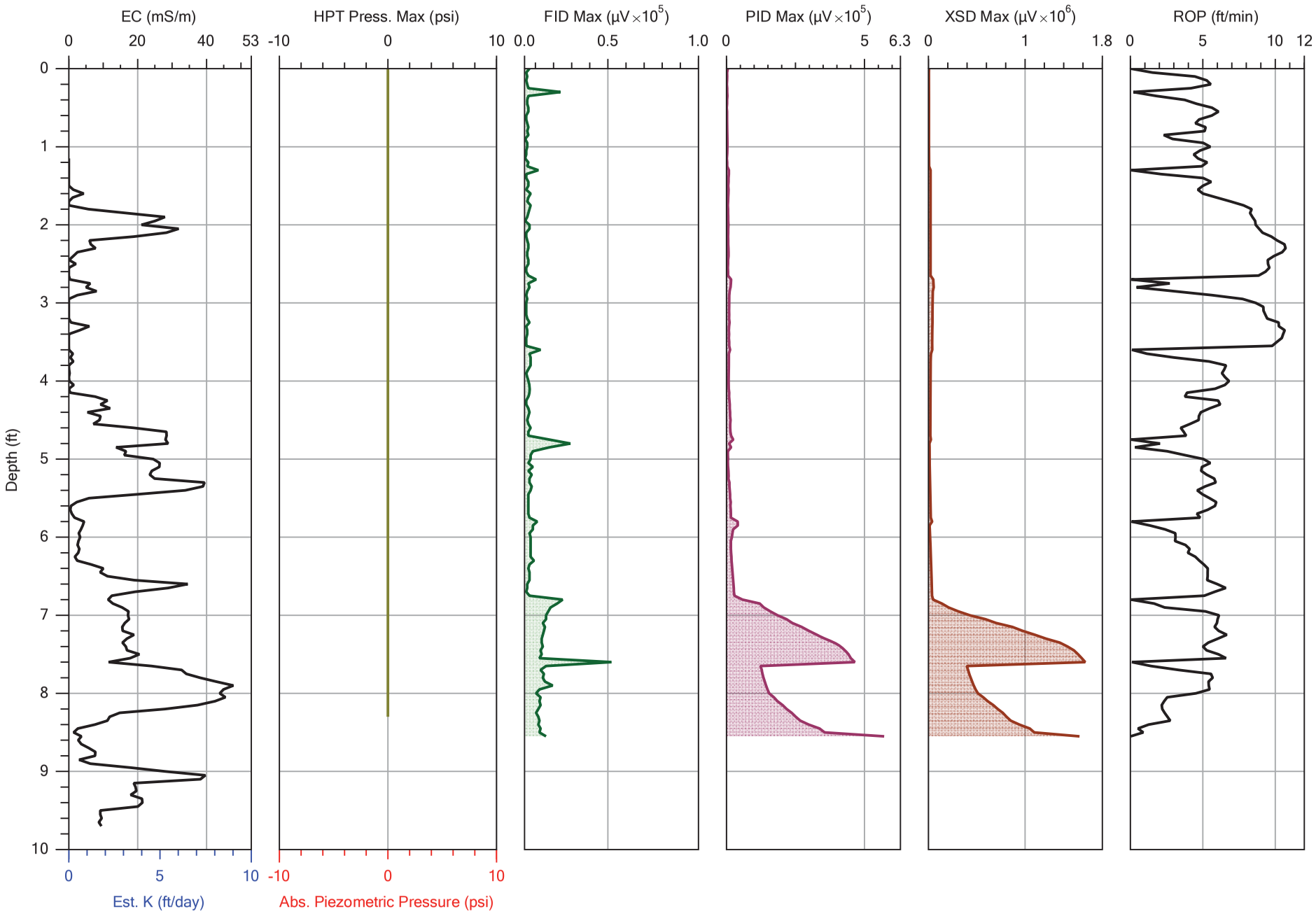
Company: S2C2	Operator: MR	Date: 10/2/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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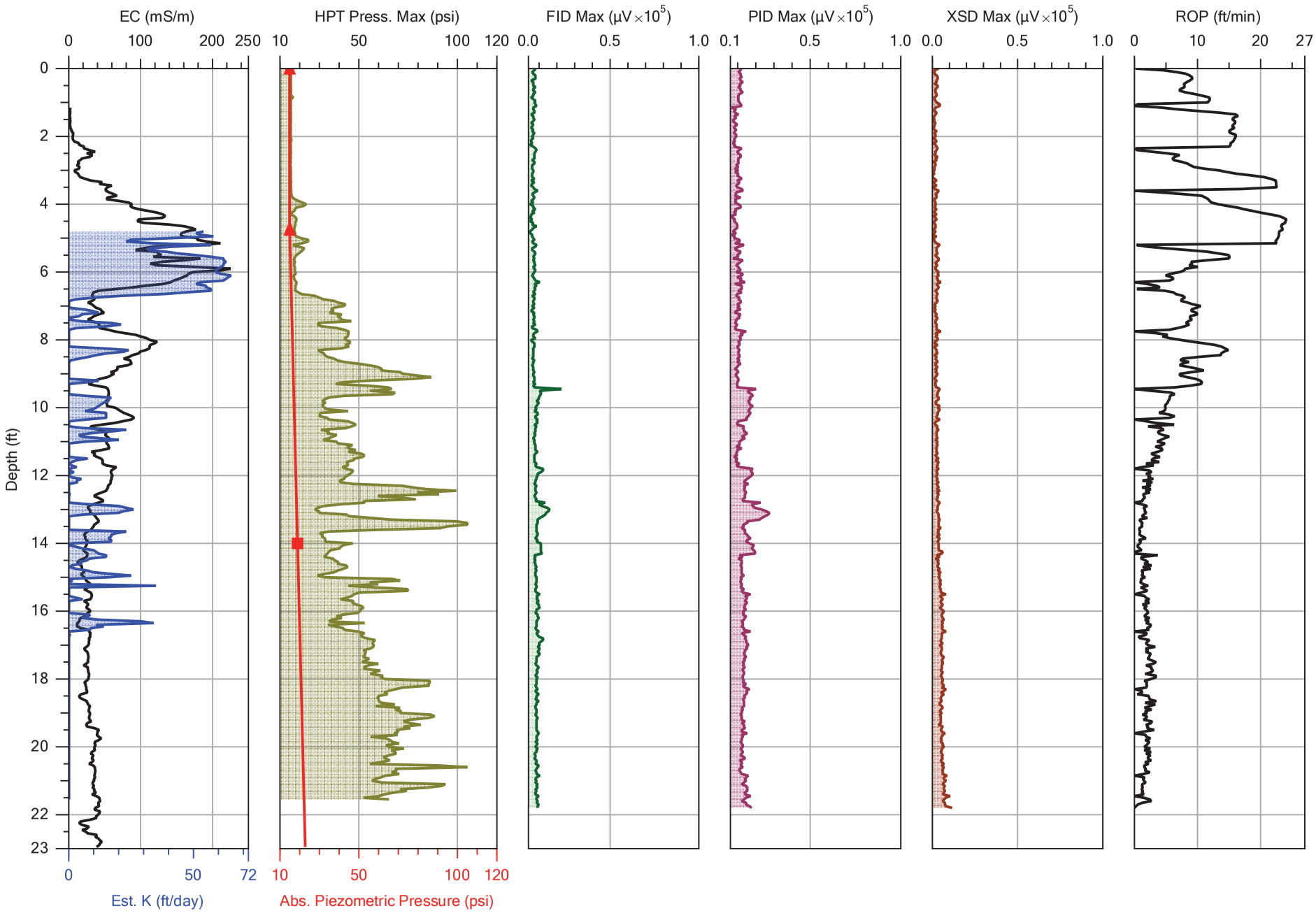
Company: S2C2	Operator: MR	Date: 10/2/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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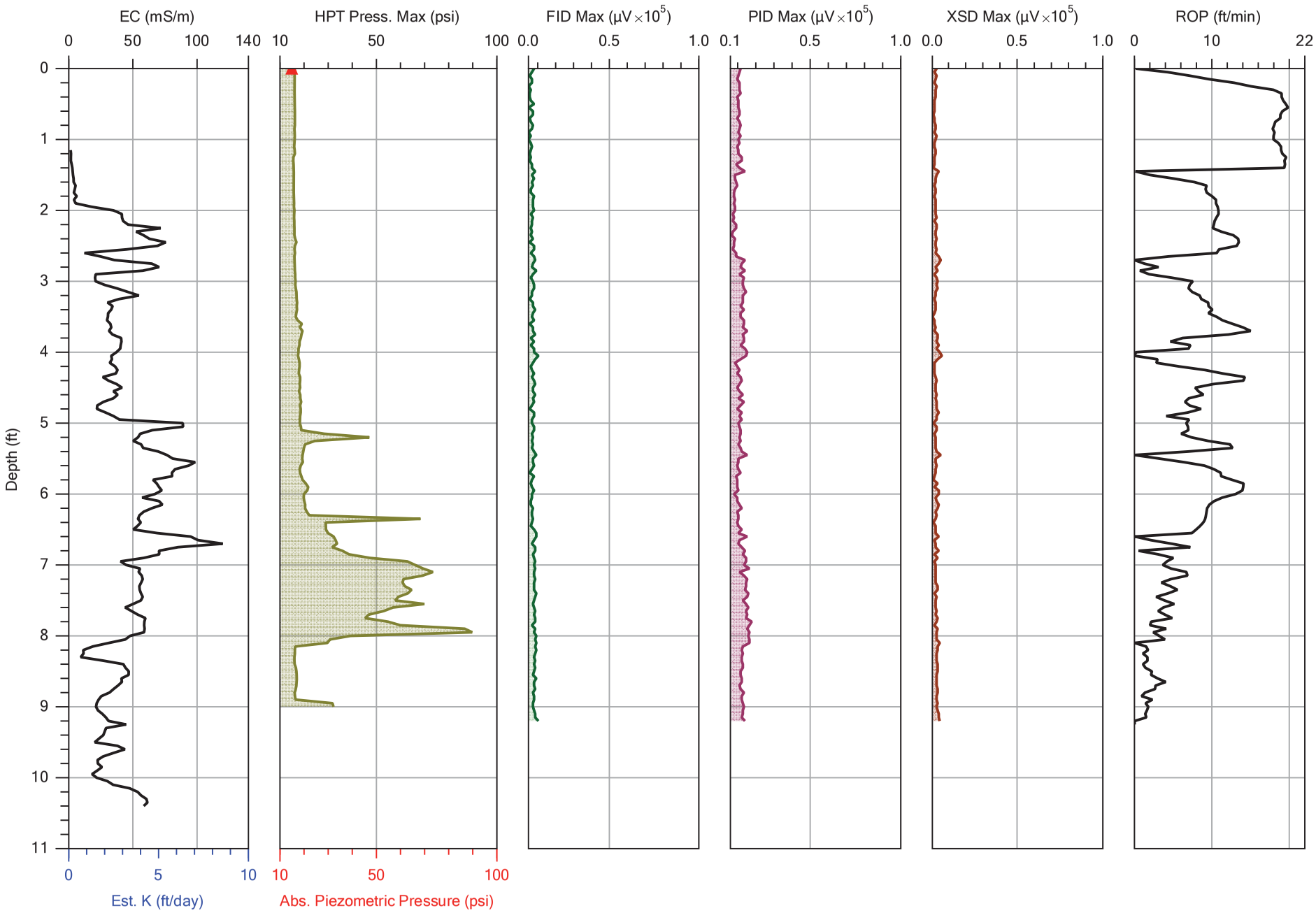
Company: S2C2	Operator: MR	Date: 9/25/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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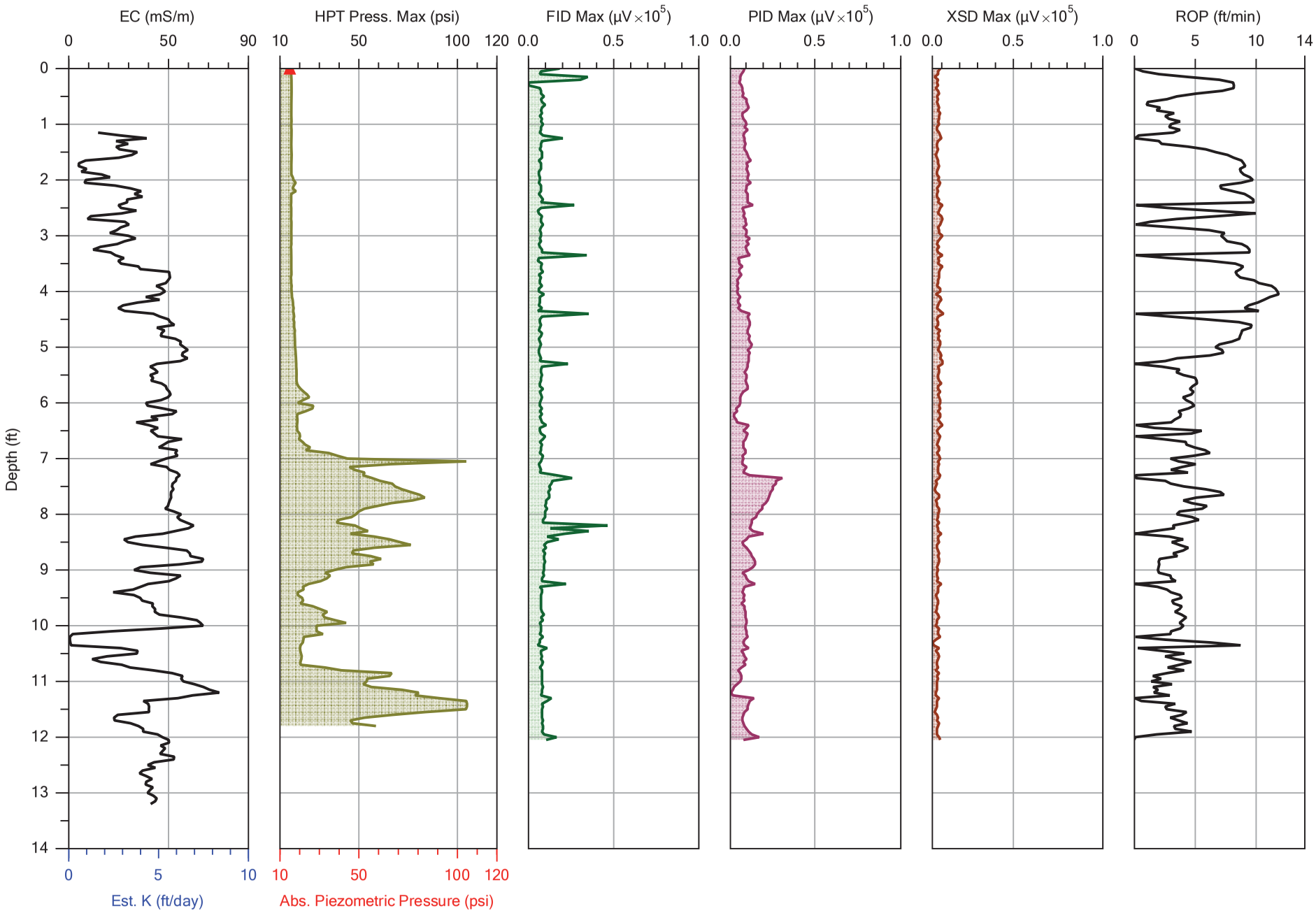
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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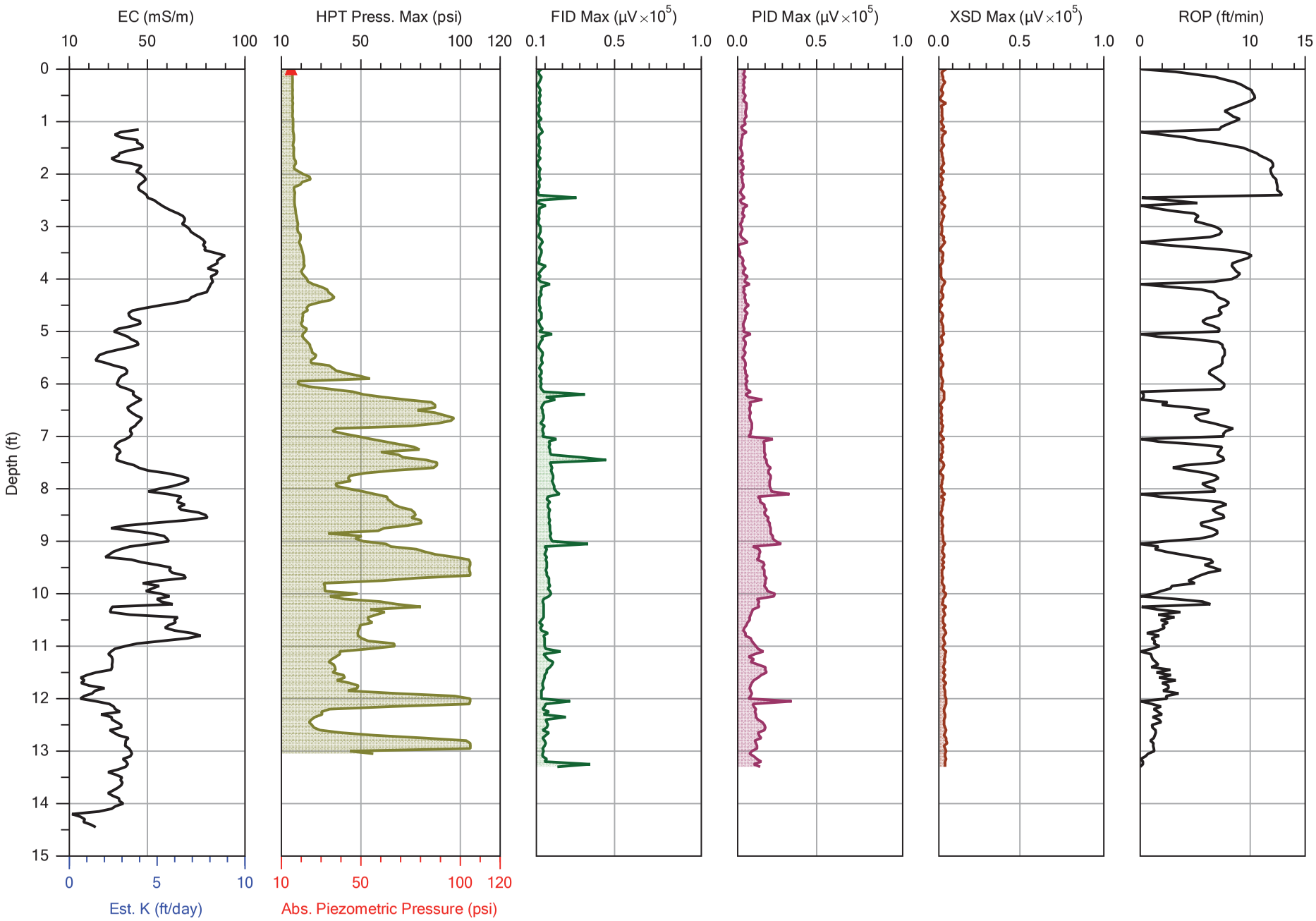
Company: S2C2	Operator: MR	Date: 9/24/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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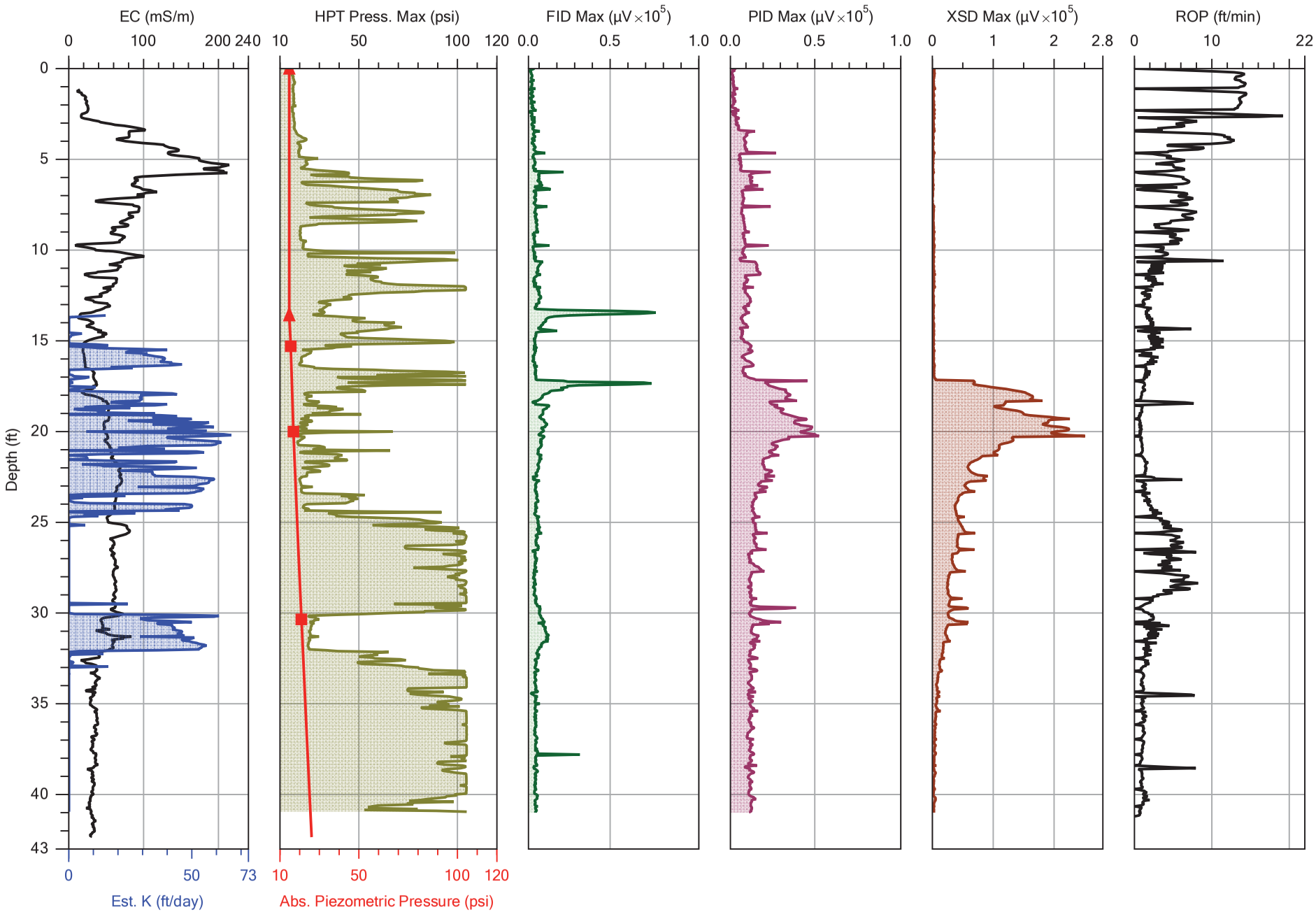
Company: S2C2	Operator: MR	Date: 9/24/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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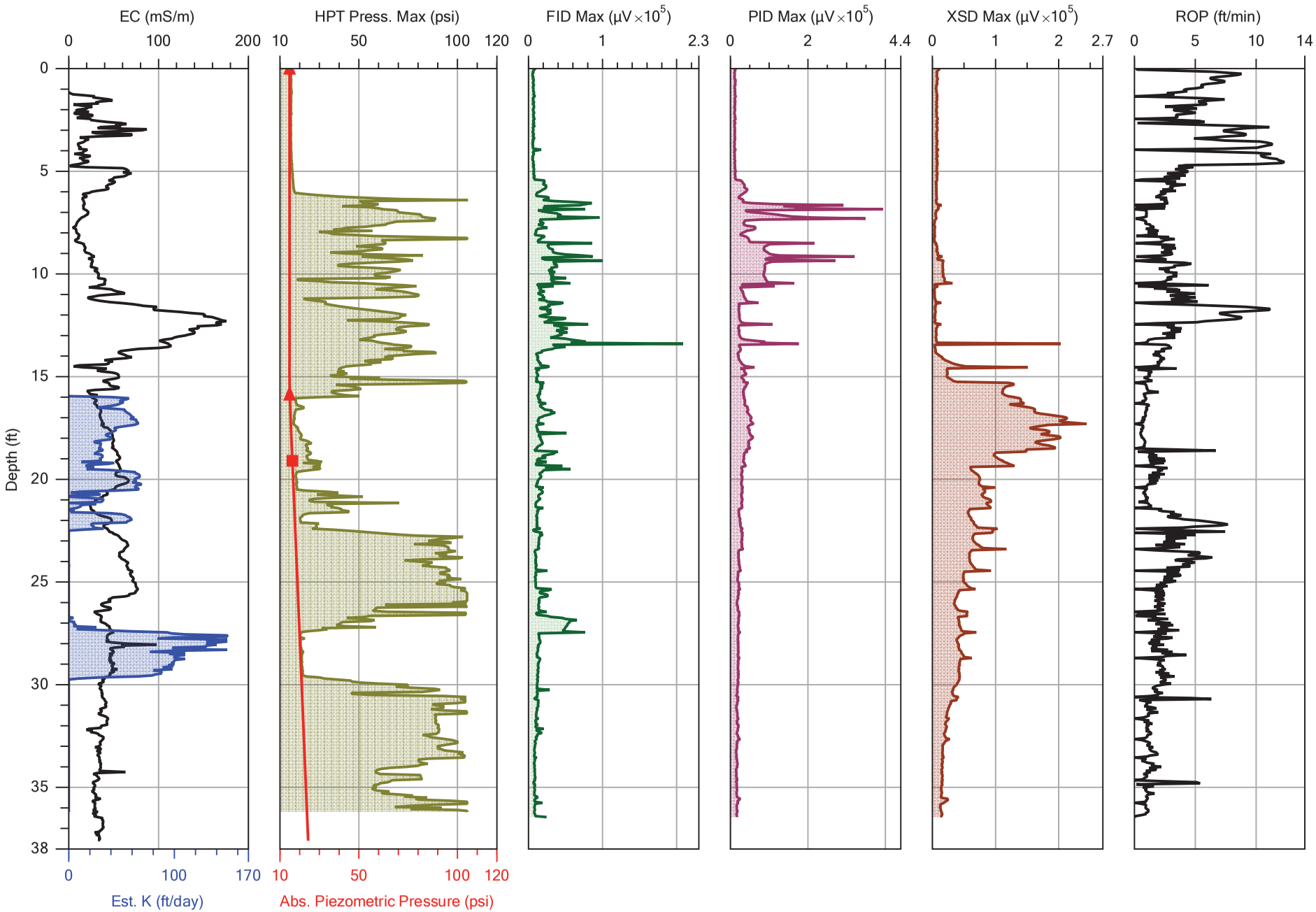
Company: S2C2	Operator: MR	Date: 9/25/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

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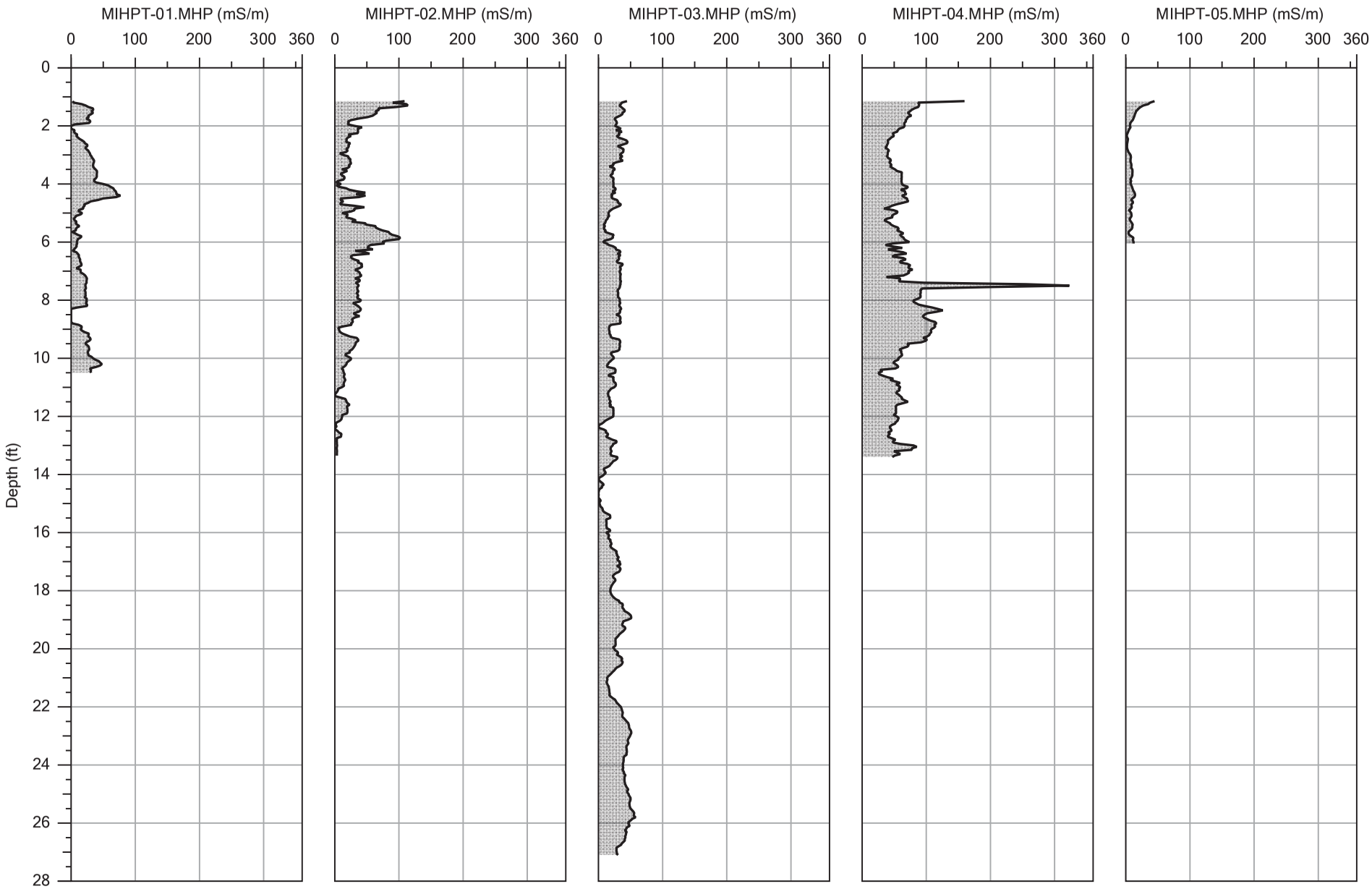
Company: S2C2	Operator: MR	Date: 9/24/2018
Project ID: Kent Street	Client: Integral	Location: Brooklyn, NY



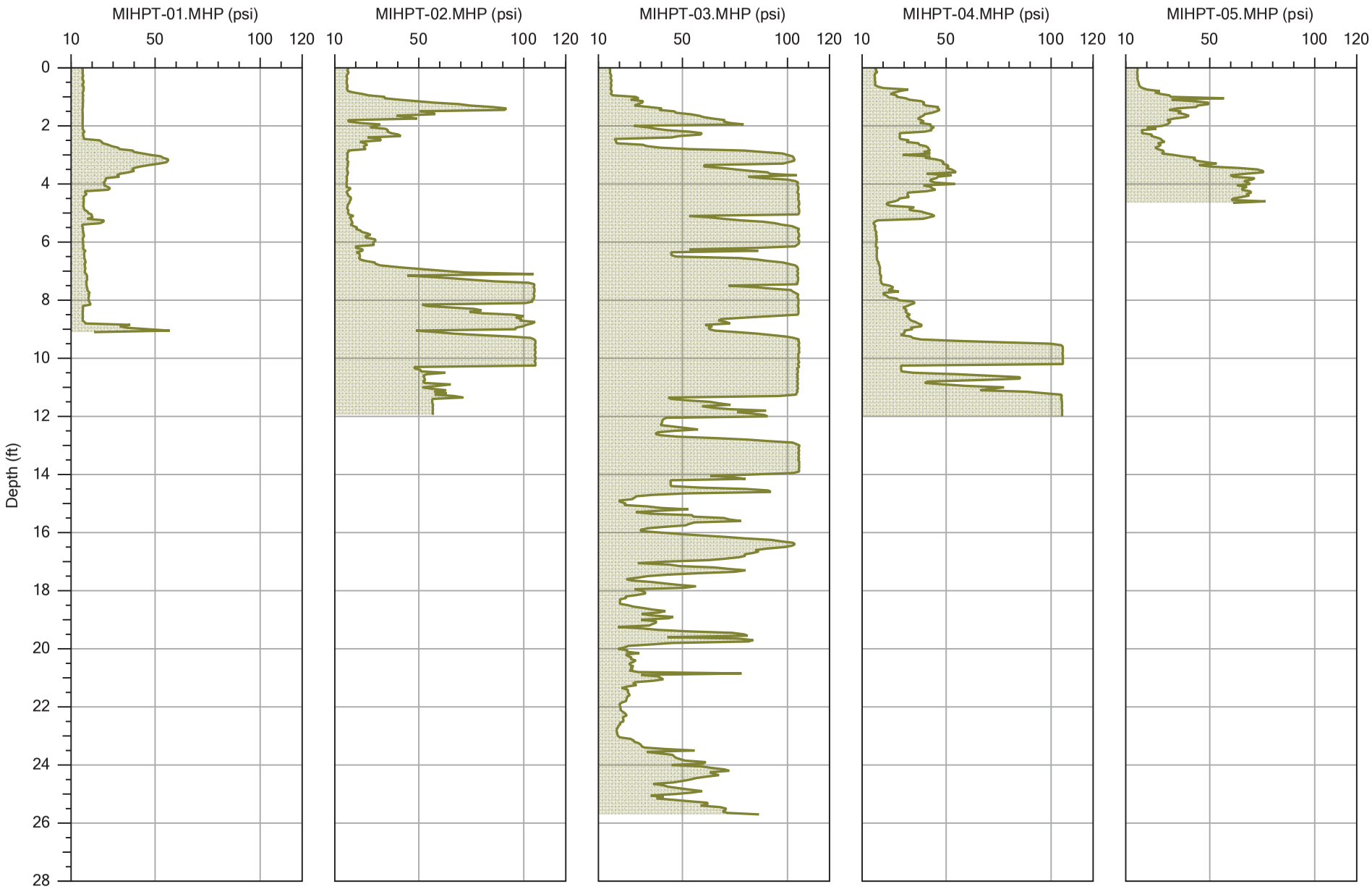
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

EC

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018
MIHPT-02.MHP	10/2/2018
MIHPT-03.MHP	10/1/2018
MIHPT-04.MHP	10/1/2018
MIHPT-05.MHP	9/26/2018



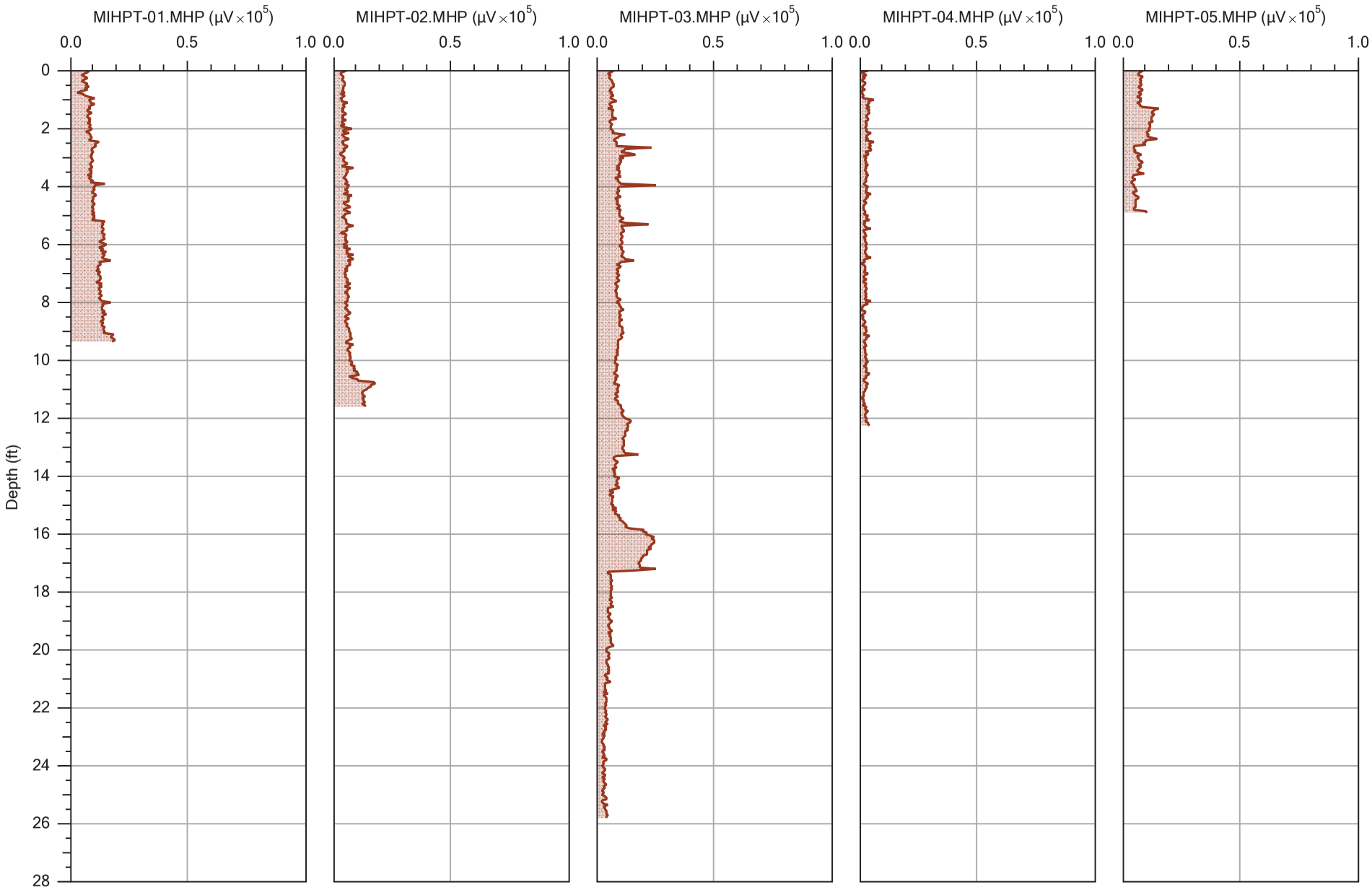
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

HPT Press. Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018
MIHPT-02.MHP	10/2/2018
MIHPT-03.MHP	10/1/2018
MIHPT-04.MHP	10/1/2018
MIHPT-05.MHP	9/26/2018



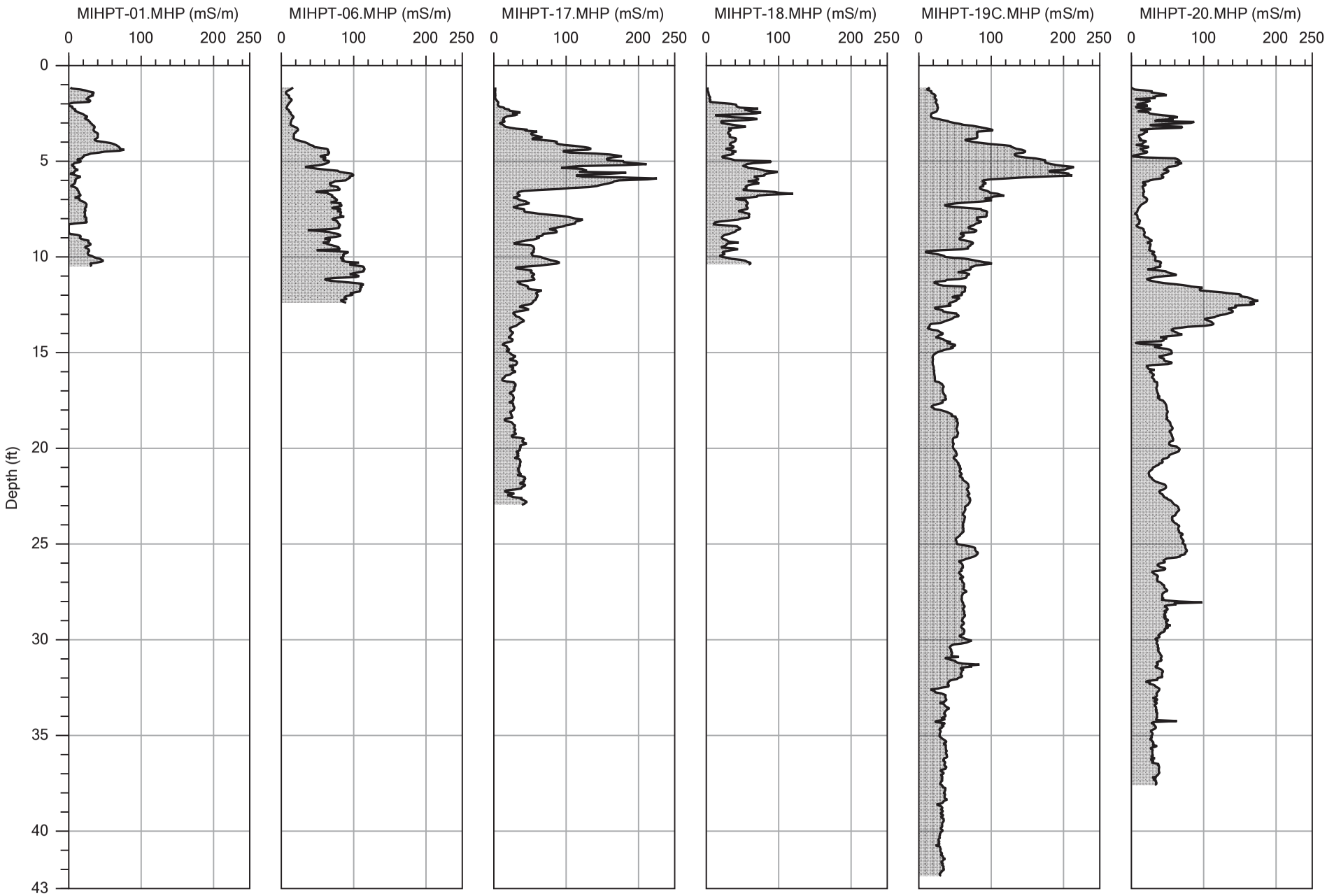
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

XSD Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018
MIHPT-02.MHP	10/2/2018
MIHPT-03.MHP	10/1/2018
MIHPT-04.MHP	10/1/2018
MIHPT-05.MHP	9/26/2018



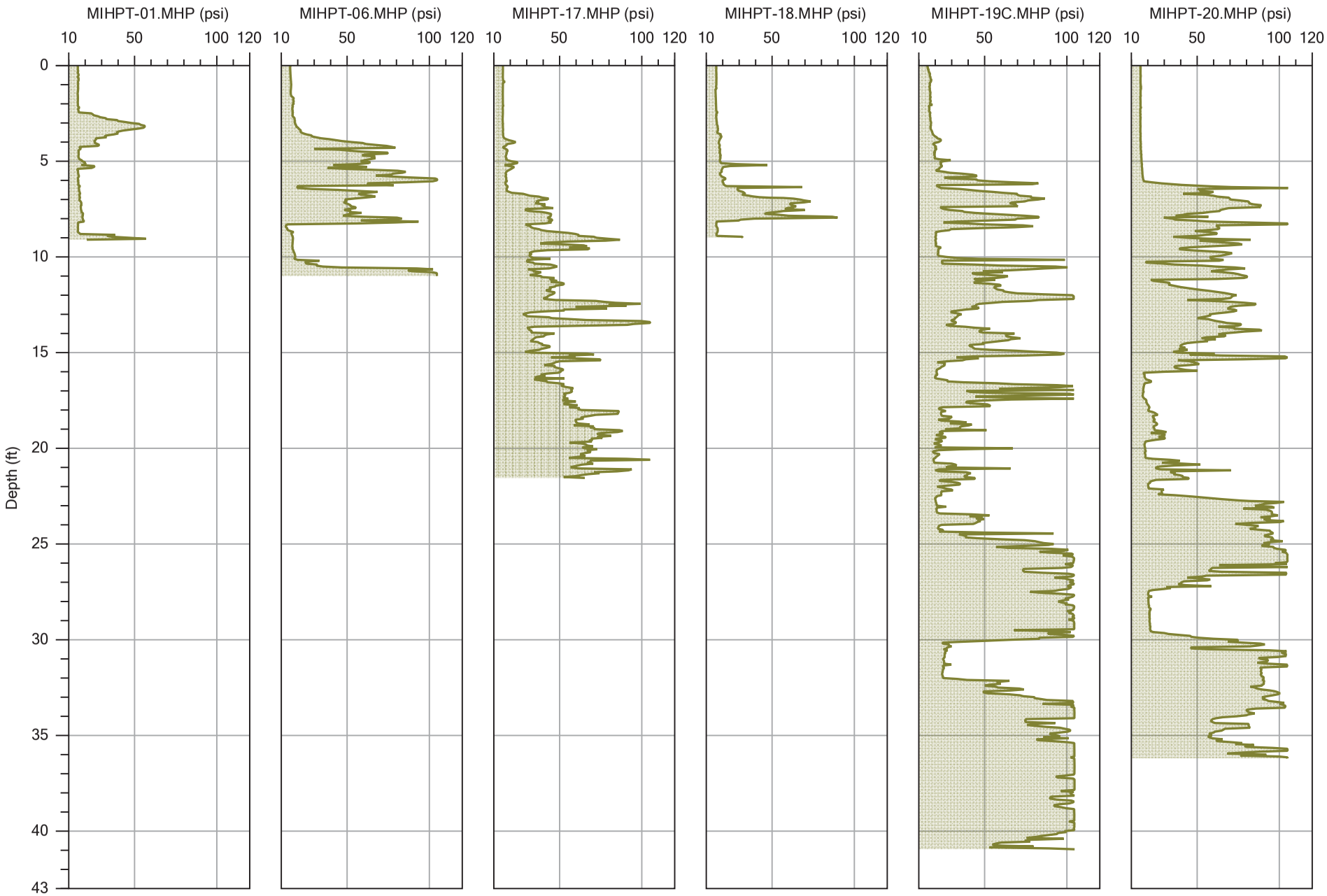
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

EC

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018	MIHPT-18.MHP	9/25/2018
MIHPT-06.MHP	9/26/2018	MIHPT-19C.MHP	9/25/2018
MIHPT-17.MHP	9/25/2018	MIHPT-20.MHP	9/24/2018



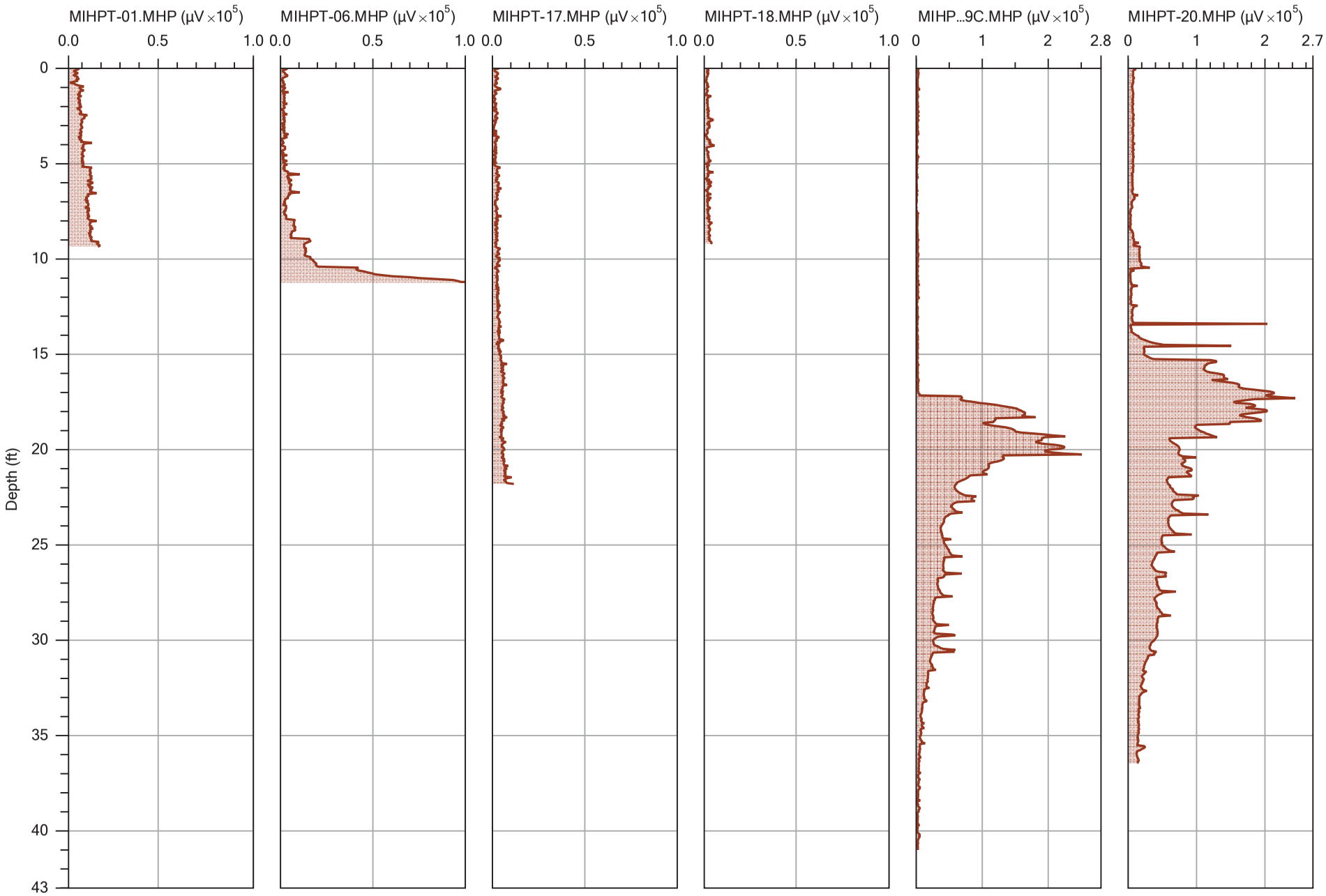
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

HPT Press. Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018	MIHPT-18.MHP	9/25/2018
MIHPT-06.MHP	9/26/2018	MIHPT-19C.MHP	9/25/2018
MIHPT-17.MHP	9/25/2018	MIHPT-20.MHP	9/24/2018



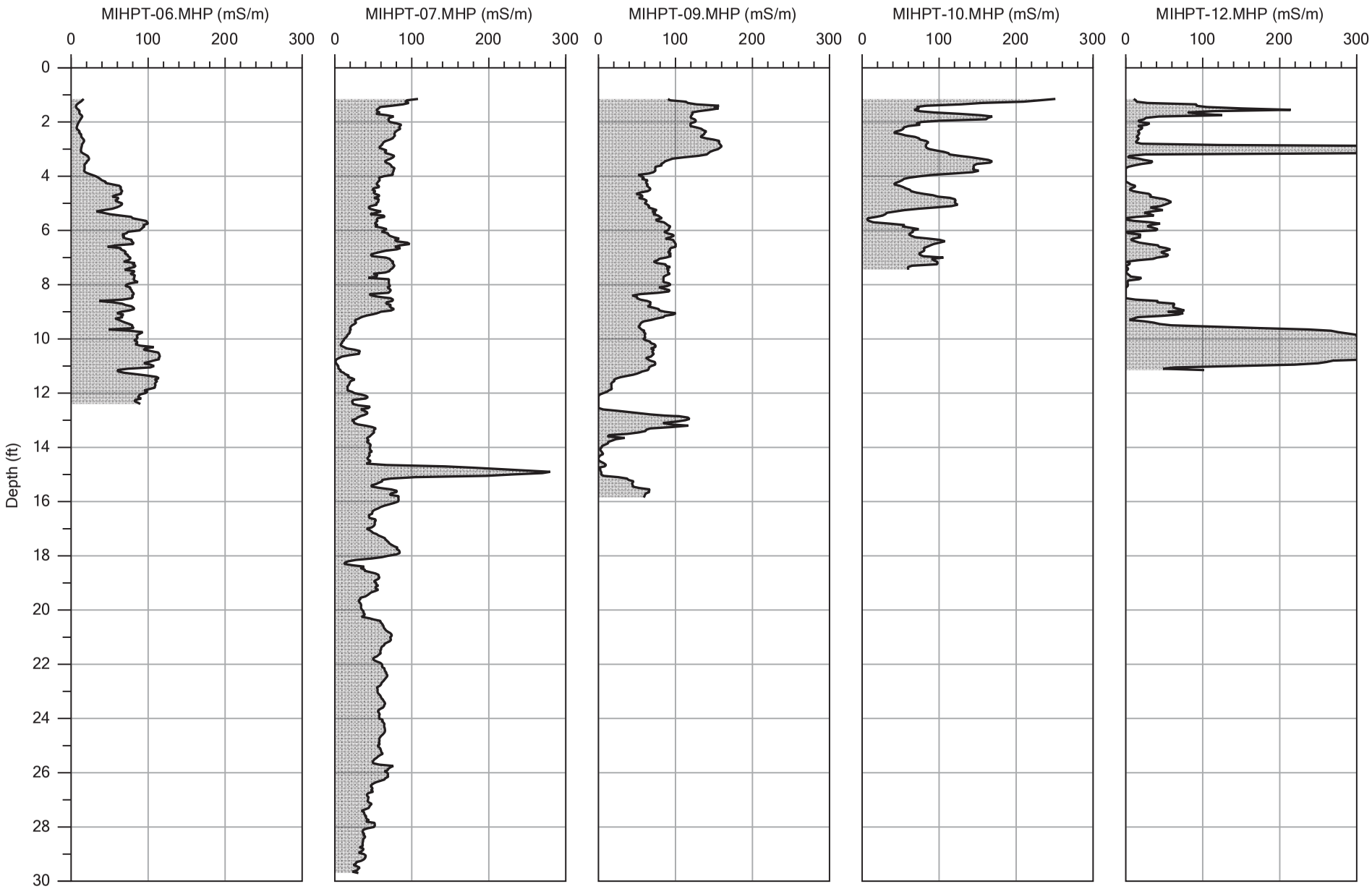
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

XSD Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-01.MHP	9/26/2018	MIHPT-18.MHP	9/25/2018
MIHPT-06.MHP	9/26/2018	MIHPT-19C.MHP	9/25/2018
MIHPT-17.MHP	9/25/2018	MIHPT-20.MHP	9/24/2018



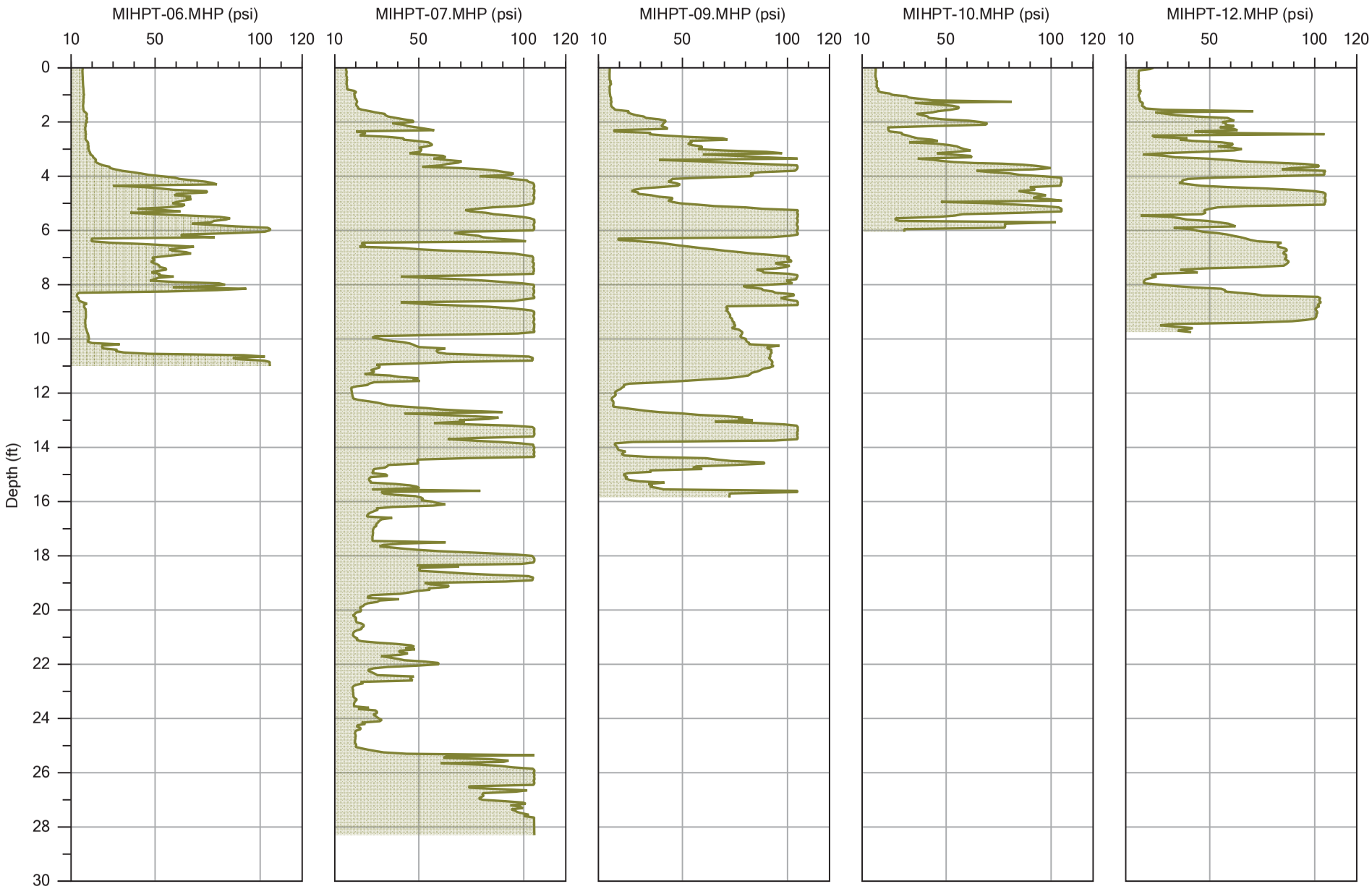
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

EC

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-06.MHP	9/26/2018
MIHPT-07.MHP	9/28/2018
MIHPT-09.MHP	9/27/2018
MIHPT-10.MHP	9/27/2018
MIHPT-12.MHP	9/28/2018



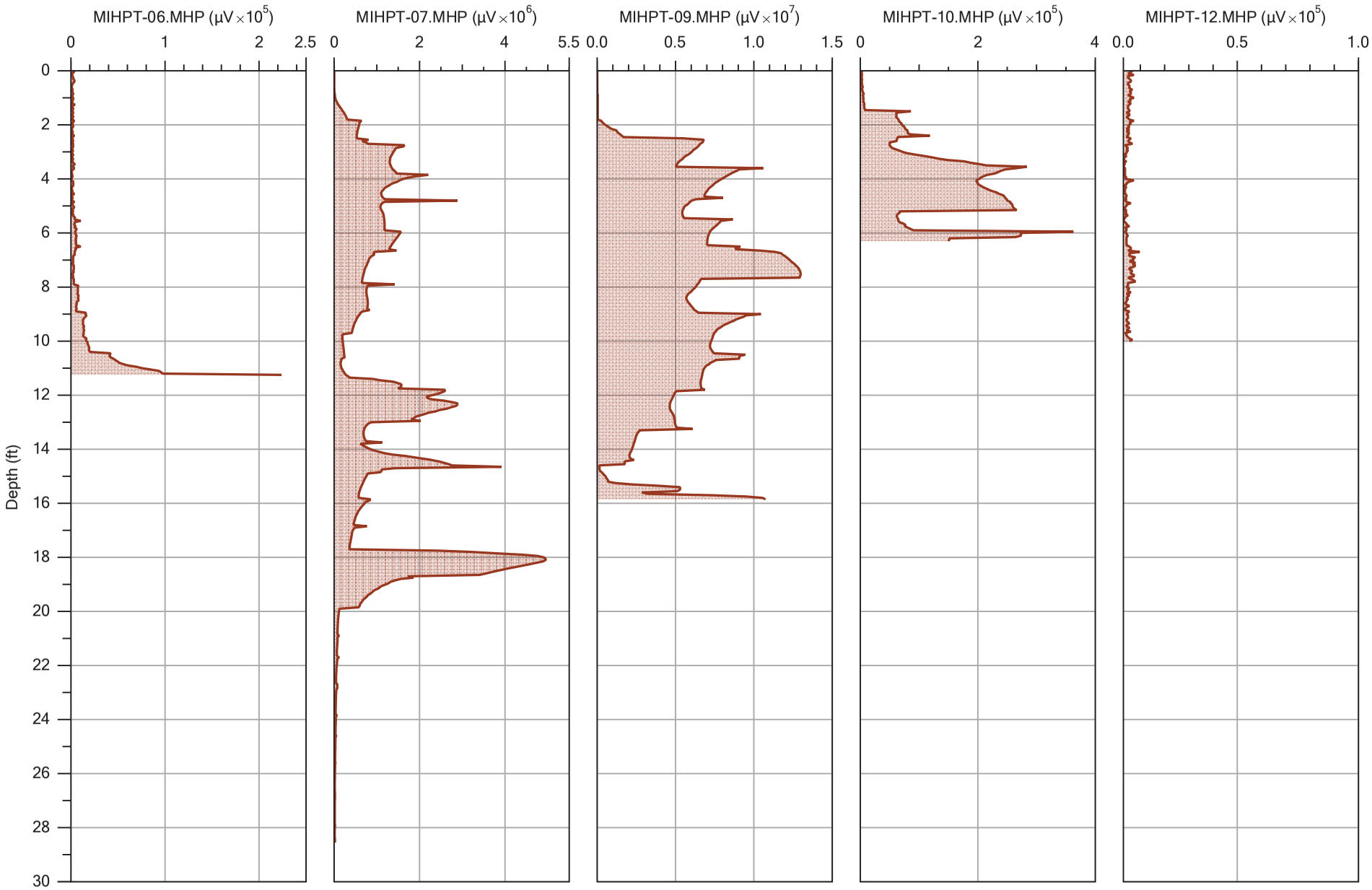
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

HPT Press. Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-06.MHP	9/26/2018
MIHPT-07.MHP	9/28/2018
MIHPT-09.MHP	9/27/2018
MIHPT-10.MHP	9/27/2018
MIHPT-12.MHP	9/28/2018



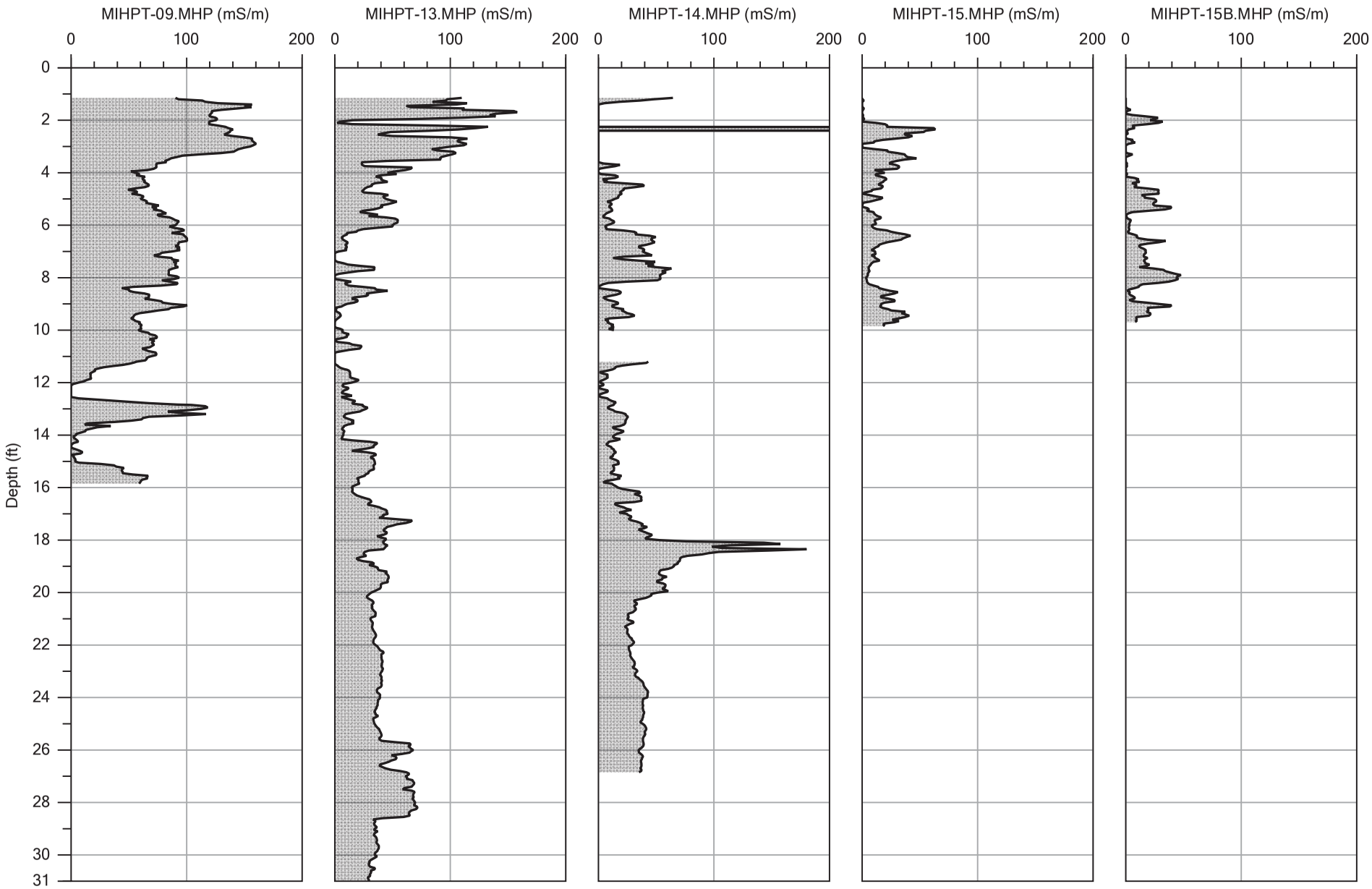
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

XSD Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-06.MHP	9/26/2018
MIHPT-07.MHP	9/28/2018
MIHPT-09.MHP	9/27/2018
MIHPT-10.MHP	9/27/2018
MIHPT-12.MHP	9/28/2018



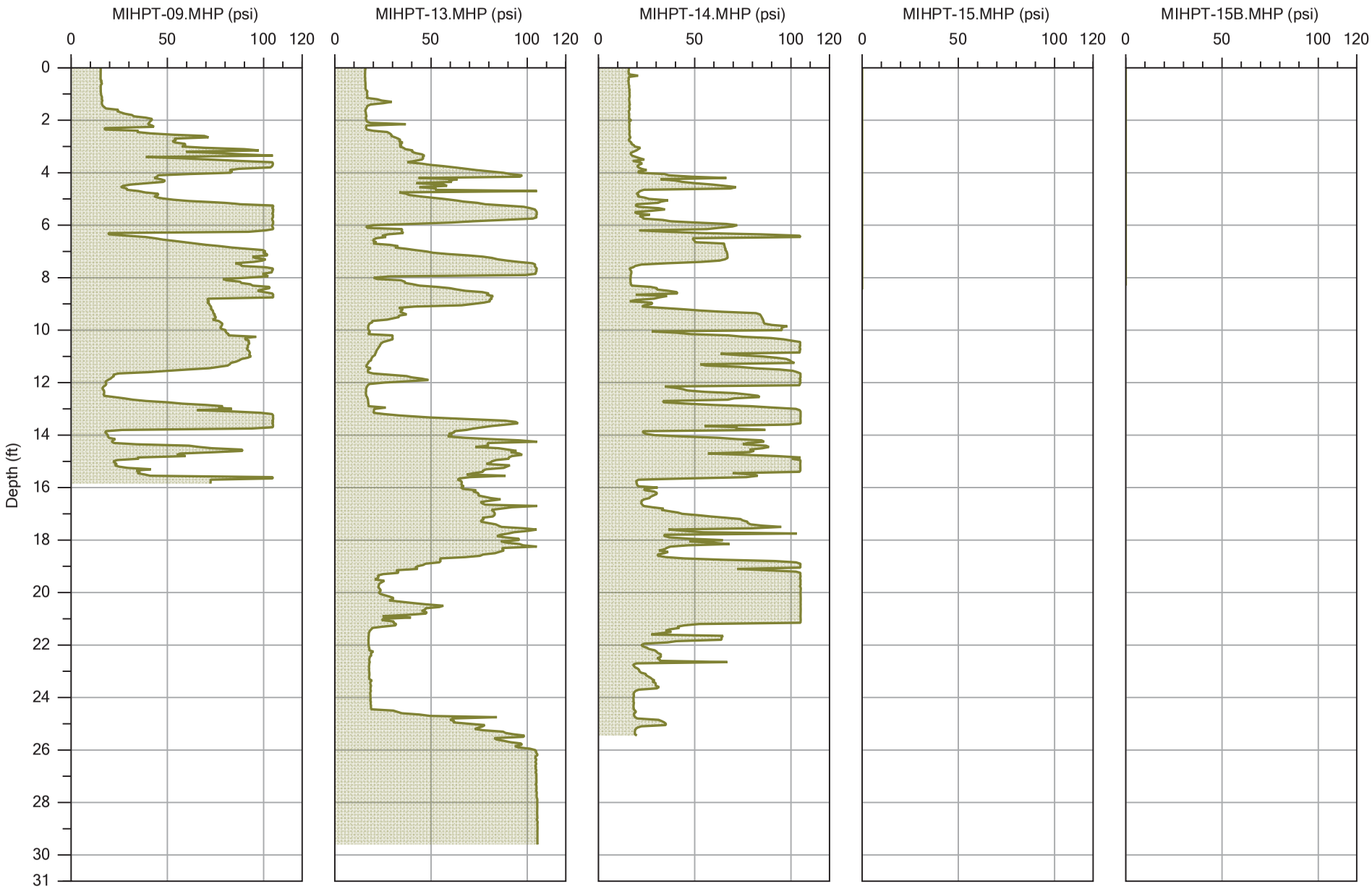
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

EC

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-09.MHP	9/27/2018
MIHPT-13.MHP	10/1/2018
MIHPT-14.MHP	9/28/2018
MIHPT-15.MHP	10/2/2018
MIHPT-15B.MHP	10/2/2018



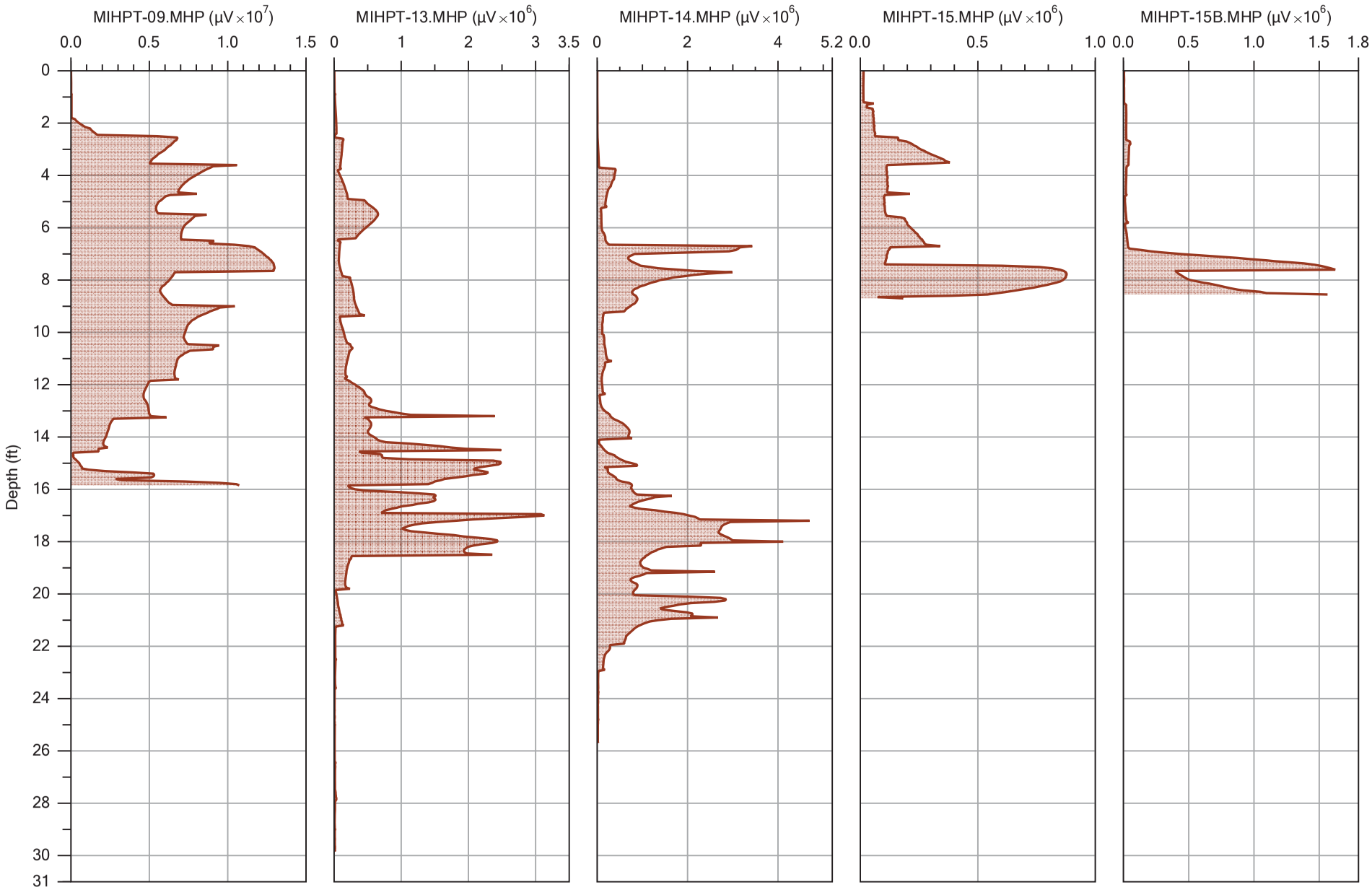
S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

HPT Press. Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-09.MHP	9/27/2018
MIHPT-13.MHP	10/1/2018
MIHPT-14.MHP	9/28/2018
MIHPT-15.MHP	10/2/2018
MIHPT-15B.MHP	10/2/2018



S2C2 inc.

Direct-Push • Direct-Sensing • Data Visualization

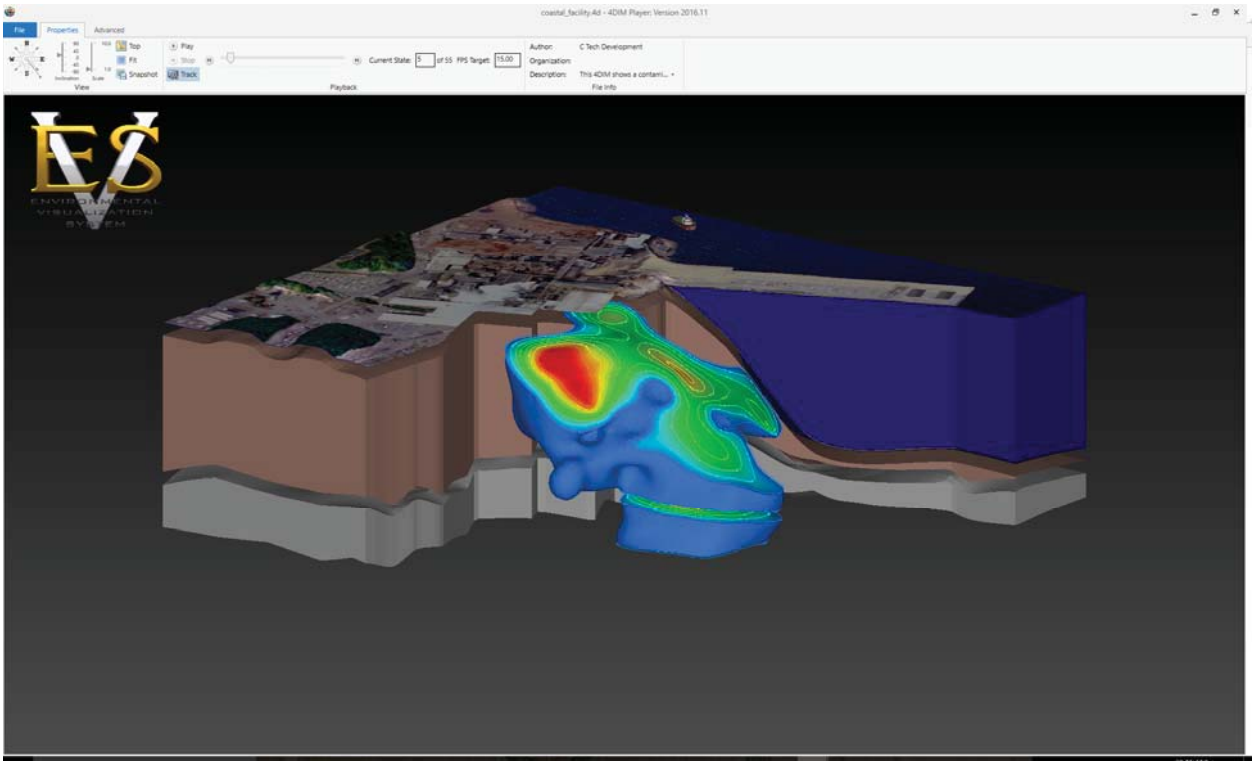
XSD Max

Company: S2C2	Operator: MR
Project ID: Kent Street	Client: Integral

MIHPT-09.MHP	9/27/2018
MIHPT-13.MHP	10/1/2018
MIHPT-14.MHP	9/28/2018
MIHPT-15.MHP	10/2/2018
MIHPT-15B.MHP	10/2/2018

Appendix B: Standalone 4DIM Player User Guide

C Tech's Standalone 4D Interactive Model (4DIM) Player User Guide



A guide to understanding the functions and features within the Standalone 4DIM Player to best present the Conceptual Site Model (CSM) and to get the most value from the 4DIM.

Revision 1.0

September 2017

Standalone 4DIM Player

The 4DIM Player is the required software to view a 4DIM (.4d) that has been generated from Earth Volumetric Studio (EVS). A 4DIM is an animation file in which each frame contains a complete 3D model. Each frame of the model can be zoomed, panned and rotated as a static 3D model or you can interact with the 4DIM as it is playing.

The 4DIM Player can be downloaded for free from the C Tech Development Corporation download page: https://client.ctech.com/

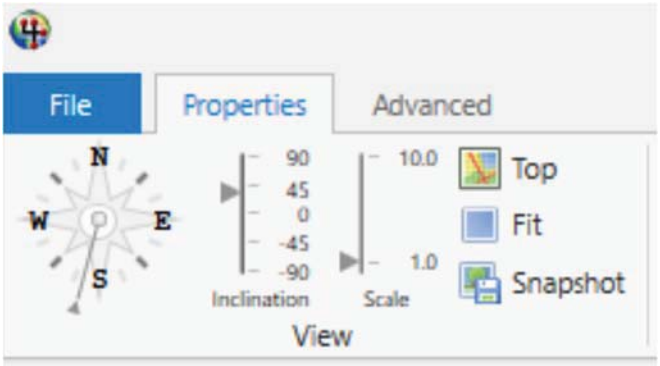
After downloading and installing the 4DIM Player, 4DIM files are ready to be loaded and reviewed.

Properties

The 'Properties' tab at the top left of the 4DIM Player includes three categories; 'View', 'Playback', and 'File Info'.

View

The 'View' category includes the ability to set the view based on azimuth, inclination, and scale.



Top

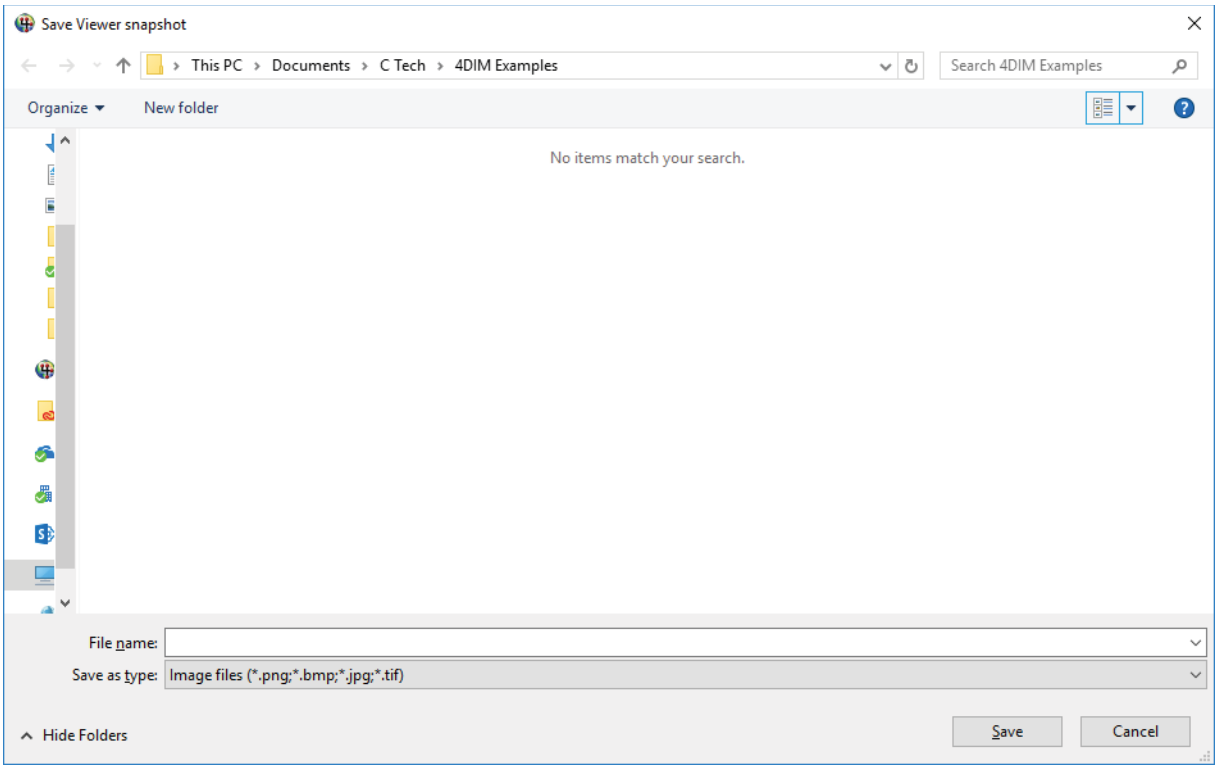
By clicking the 'Top' button, the scene snaps to a 180 azimuth (north at top of screen), 90 inclination (top-view), and scale of 1 (best fit).

Fit

The 'Fit' button will preserve the azimuth and inclination but will snap to a scale of 1 to fit the scene onto the viewing screen.

Snapshot

'Snapshot' will open a 'Save As' window that will allow for the export of the screen view to various image file formats (.png, .bmp, .jpg, or .tif). A .png is the default format.



Playback

The 'Playback' category has controls for the animation sequence.

Play

Clicking the 'Play' button will began moving through the frames, or 'States', at a rate set by the frames per second value, or 'FPS Target'.

Stop

'Stop' is directly below 'Play' and it will simply stop the animation when clicked.

Track

When highlighted, each state change will reset the scene view to the same azimuth, inclination and scale that was set at the time the frame was captured. By unclicking 'Track,' the scene view will remain the same with each state

change. This may be useful when trying to view the same region of the model space while moving through different states.

Forward/Backward

The forward/backward arrows are used to toggle through states one at a time.

Current State

Displays the state number being displayed.

FPS Target

'FPS Target' is the rate (frames per second) at which the animation will play. The default setting is 15.

File Info

The 'File Info' category simply describes the source of the 4DIM being viewed.

Author

The individual who created the 4DIM.

Organization

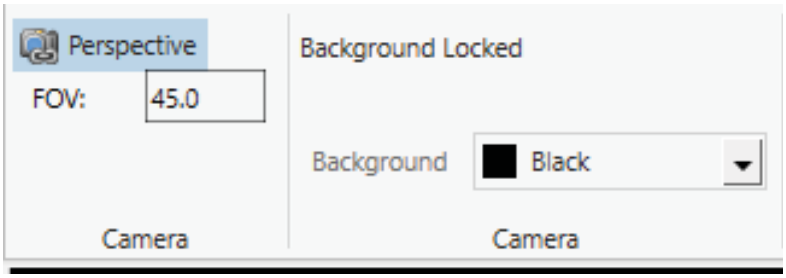
The Author's company.

Description

An optional field that the author may use to further describe the 4DIM.

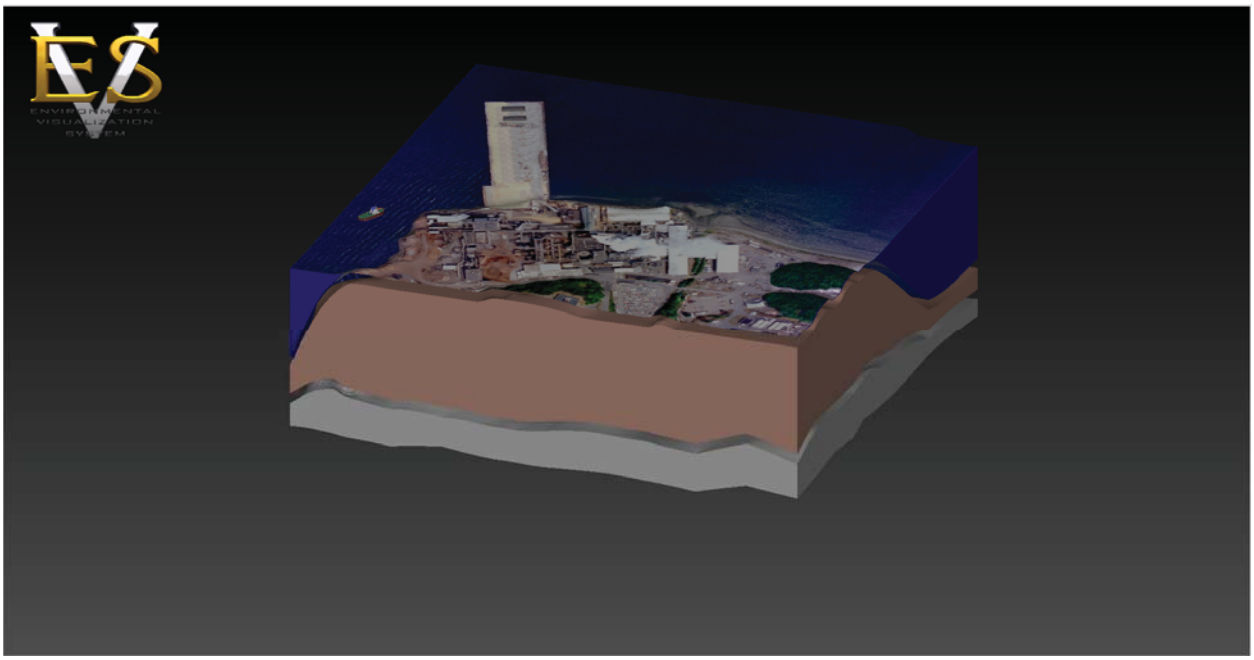
Advanced

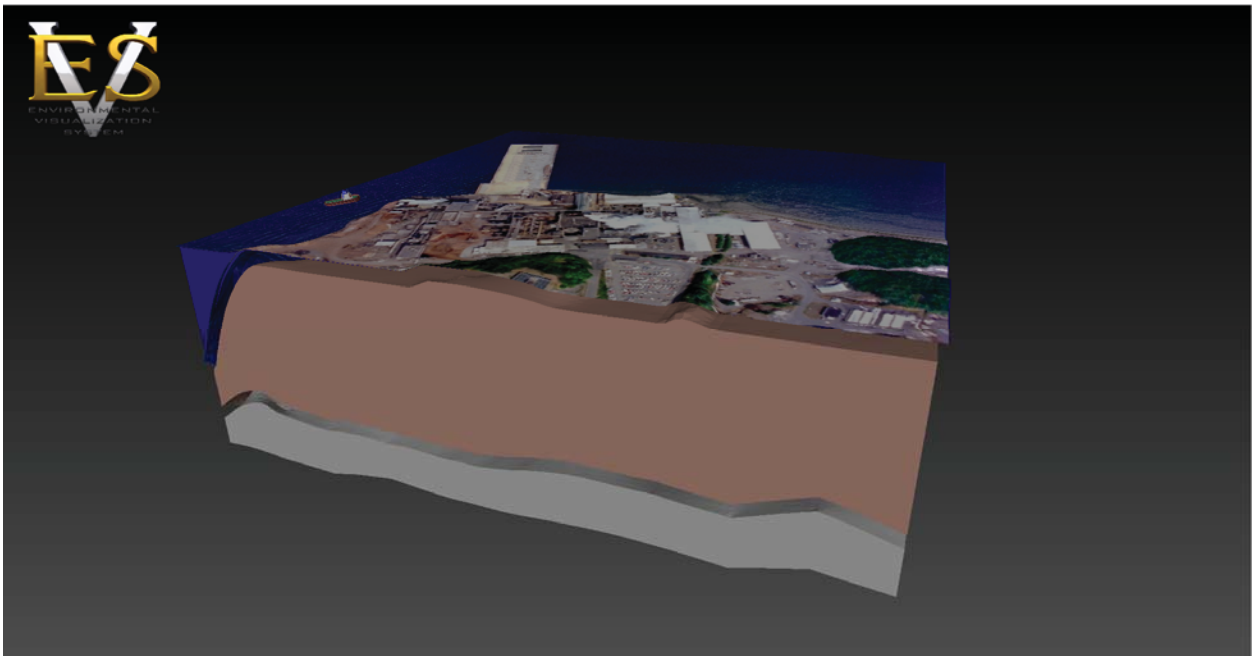
The 'Advanced' tab in the top left of the 4DIM Player contains additional controls over the scene.



Camera

The 'Camera' controls include an option to view in perspective mode and to set the field of view (FOV) to a value between 0.0001 and 360. The two images below show the same scene view with a non-perspective view on the top and a perspective with a FOV or 45 on the bottom.





Appendix E

Manufacturers' Specifications
for Air Filtration Units

Technical specifications for the Airpura R600 and C600 air filtration units are shown on the following pages. These specifications were provided to Integral by NYSDEC in December 2016, as obtained from the Allergy Buyers Club website in April 2015.

https://www.allergybuyersclub.com/

Gift Ideas
Why Buy From Us?
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Availability: In Stock. Ships Within 3-4 Business Days.

Description of Airpura R600 All Purpose Air Purifiers

The Airpura R600 is a great solution for poor indoor air quality as it removes dangerous airborne chemicals and particles, resulting in fresh and clean breathable air. The R600 is a great all purpose air purifier featuring a cleanable pre-filter, 18 lbs of activated carbon and true HEPA filtration. With a powerful motor and unimpeded airflow, the R600 quickly and quietly cleans the air in a room up to 1650 sq. ft. achieving 2 air changes per hour. For allergies or respiratory conditions we recommend a room size of 550 sq. ft. achieving 6 air changes per hour. All Airpura air purifiers have a sealed design, felt gaskets and all metal housing to prevent off-gassing. Their clean modern appearance in a choice of 3 colors will fit any décor.

View all of our Airpura Air Purifiers.

Airpura R600 All Purpose Air Purifiers are ideal for someone who...

- Wants an air purifier that will effectively remove odors, chemicals and gases from the air as well as high-efficiency particle removal.
- Wants an air purifier that offers all purpose air cleaning and is capable of cleaning a large room.

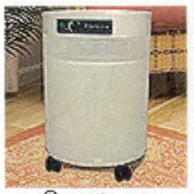
Features of Airpura R600 All Purpose Air Purifiers

- For airborne chemical and particle removal
- Maximum coverage: 1650 sq. ft. (2 air changes/hr)
- Recommended coverage: 550 sq. ft. (6 air changes/hr)
- Large room air purifier
- Traps 99.97% of particles as small as 0.3 microns
- Adsorbs chemicals, noxious gases and odors
- Cleanable pre-filter
- 2 Anti-microbial filters
- 18 lb carbon filter, 2" deep
- True HEPA filter (40 sq. ft of media w/ 10 pleats per inch)
- Separately changeable filters
- Variable Fan Speeds
- Low noise level
- Manual controls
- 360° air intake and outflow
- 4 casters
- ETL certified, conforms to CSA C22.2 no 113 ANSI/UL 507
- Colors: Black, White or Cream
- All metal housing
- Sealed motor chamber
- Sealed electrical chamber

enlarge
Black

enlarge
White

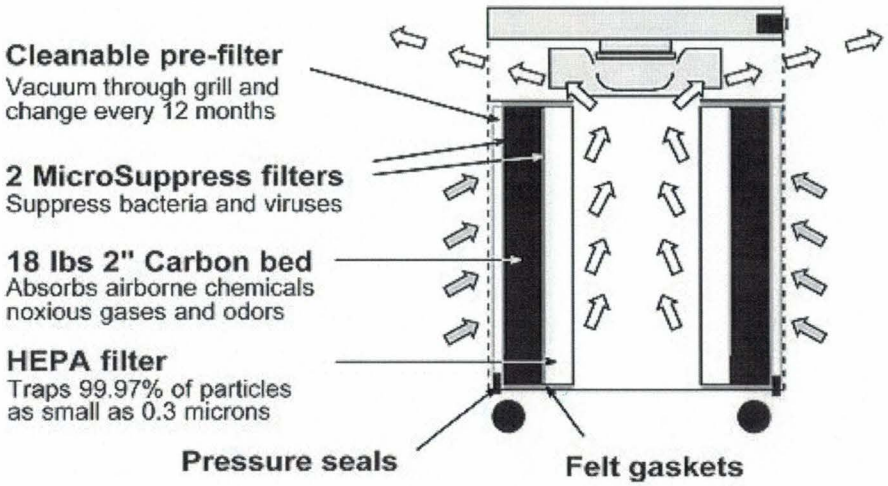
- Pressure sealed filter chamber
- Felt gaskets
- Made in Canada



enlarge
Cream

How it Works:

Airpura's unique pressure seal on the filter chamber ensures that all of the dirty air passes through the filters. Other systems allow leakage and do not achieve the 99.97% HEPA filtration rating. Additionally, the motor and electrical parts are located in a separate compartment which prevents off-gassing from components and does not allow impurities to be re-introduced into the clean air.



Care of:

- Pre-filter: vacuum from outside the unit every 2-3 months and replace every 12 months for normal household use.
- Carbon Filter: replace every 2 years for normal household use.
- HEPA Filter: replace every 5 year for normal household use.

Note: *Filter life is based on continuous operation. Filter life will be longer if only used periodically. When used in heavily polluted environments filters will need to be changed more often.*

Reports by Experts - Airpura R600 All Purpose Air Purifiers

Expert Review: ★★★★½ *Courtesy of AllergyBuyersClub.com*

EXPERT REVIEW PARAMETERS	STAR RATING
1. Airborne Particulate Filtration	★★★★★
2. Gas, Chemical & Odor Filtration	★★★★½
3. Room Coverage	★★★★★
4. Noise Rating	★★★★☆
5. Filter Life & Replacement Costs	★★★★☆
6. Ease of Operation & Filter Replacement	★★★½☆
7. Quality of Construction: Air-tight design, no off-gassing	★★★★★
8. Electronic Filter Life Monitoring	N/A
9. Manufacturer's Credibility, Warranty & Return Policy	★★★★★
10. Quality of Filters	★★★★★
11. Value for Price	★★★★★

The Airpura R600 is the best all around air purifier offered for the price. It combines inexpensive pre-filters, 18 pounds of two inch deep activated carbon and a near perfect true HEPA filter that will provide years of reliability. We are very pleased with the Airpura R600's ability to offer such a broad range of filtration in a large area with surprisingly quiet operation.

Pluses:

- The Airpura R600 air purifier offers excellent removal of all allergens such as pet dander and other particles down to 0.3 microns with an average particle removal efficiency of 97% on the first air pass.
- The Airpura R600's generous 18 pound carbon filter does a very good job at removing common household odors and gases such as those from cleaning products, perfumes and cooking odors.
- The Airpura R600 air purifier has a very powerful fan which moves a lot of air and impressively achieves one of the largest room coverages of all the room air purifiers we sell. The Airpura R600 is able to efficiently clean the air

in a room up to 1650 square feet with 2 air changes per hour or 550 square feet with 6 air changes per hour.

- Not only does the R600 offer large room coverage but it does so without forfeiting a quiet environment. During testing, reviewers were a bit surprised when we turned the fan all the way up to its maximum speed and the noise level was much quieter than expected, especially for the amount of air exiting the air purifier. Our reviewers were even more astonished with the quietness of the medium and low speeds and collectively agreed the Airpura R600 could easily be run on a medium speed in a living room area without being bothersome. The amount of air the R600 is cleaning in comparison to its noise output compelled reviewers to give it a favorable 4-star "very good" noise rating.
- Long lasting HEPA and carbon filters saves money on annual maintenance costs. Although at first glance the Airpura R600's filter replacement costs seem high, they are actually very reasonable considering they are spread over a course of 5 year. When you break down the total filter replacement costs, the average annual cost is $142 a year which is very decedent for high quality filtration. The life of the pre-filter can be extended to 1 year simply by vacuuming it from outside the unit every 2 to 3 months. The HEPA and the carbon filter are top quality and will maintain effectiveness for 5 and 2 years respectively.
- Our reviewers liked that the Airpura R600 air purifier is well built with all metal construction and uses felt gaskets instead of plastic or rubber and the motor and electrical parts are sealed off from the airflow to eliminate any potential off-gassing. These extra steps help ensure the Airpura R600 air purifier is working to fix your air quality issues, not add to them by off-gassing into your home.
- The design of the Airpura air purifier is simple but well engineered. It is very easy to operate offering a wide selection of fan speeds controlled by a variable knob and reviewers like that they could find the perfect setting to fit their particular noise or airflow need.
- Airpura offers an excellent warranty and will stand behind all parts for 5 years and labor to fix it for up to 10 years.
- The Airpura R600 air purifiers is one of the best values for its price. It offers very efficient particle removal as well as very sufficient gas, chemical & odor removal in a large room with relatively little noise.

Minuses:

- The one feature reviewers really wished was included on the Airpura R600 is some type of filter life monitoring to eliminate the guesswork of knowing when it is time to replace the filters. When you are tracking the life of a filter over the course of 2 to 5 years it becomes all too easy to forget how long they have been in use.
- Replacing the filters on the Airpura R600 air purifier is not a 60 second job. Changing the filters is not all that complicated, however it does require a screwdriver and some heavy lifting. To access the filters you must turn this 45 lb machine upside down and remove 4 screws from the bottom plate. Once the bottom plate is removed you can access the filters. Keep in mind the carbon filter weighs a full 18 lbs and may be difficult for some people to replace on their own.

Summary:

The Airpura R600 is an excellent solution for those who are looking for a best all-around air purifier at a moderate price. This air purifier will easily satisfy your need to remove irritating particles that trigger allergies and asthma, as well as remove everyday occurrences of chemicals, gases, and odors present in your indoor air. What's even better is its affordable price and long lasting filers which makes the R600 one of the best value air purifiers for the money.

Technical Specifications of Airpura R600 All Purpose Air Purifiers

	Airpura R600 All Purpose Air Purifier
Model Number	R600
Square Foot Coverage	up to 1650 sq. ft.
Power Requirements	115V or 220V
Energy Consumption	40 watts - 120 watts
Clean Air Density Rate (CADR)	Not tested by AHAM
Rated Air Flow of Fan	560 CFM
Delivered Air Flow	440 CFM
Decibels	28.1 db - 62.3 db (at distance of 6 ft)
Dimensions	23"H x 15"D
Weight	45 lbs
Finish / Color	Black, White or Cream
Warranty	5 yrs parts, 10 yrs labor

5 of **6** (83%) customers would recommend this product to a friend.

Customer Reviews Write a review Choose a sort order

Overall Rating: ★★★★★
Quality: ★★★★★
Value: ★★★★☆
Effective/useful: ★★★★☆
Reliability: ★★★★☆

Wonderful Product! **Date:** April 28, 2014

Pros: high quality, effective, easy to use, met my expectations, Odor control

I purchased this product due to having constant allergies, sinus infections, and having many pets in the house. It has exceeded my expectations and

Quality: ★★★★★
Value: ★★★★★
Effective/useful: ★★★★★
Reliability: ★★★★★

Written By: Michael
I have used this product for: 3-6 months
Expertise: intermediate
This product is: used in addition to another, similar product

Pros: effective, high quality, met my expectations, easy to use, great for removing vocs odors and fumes.
Cons: noisy, no filter replacement indicator

With air purifiers, I always wonder whether they really work as I cannot truly see* whether it's trapping particles or performing the way it is marketed.

I bought the Airpura R600 to clean u... (see entire review)

3 of **3** people found this review helpful.

Overall Rating: ★★★★★
Quality: ★★★★☆
Value: ★★★★★
Effective/useful: ★★★★★
Reliability: ★★★★☆

Written By: John (New York)
I have used this product for: less than a month
Expertise: beginner
This product is: a replacement for another, similar product

Great purchase superb customer service **Date:** May 19, 2011

Pros: reliable, effective, met my expectations, easy to use
Cons: construction of the cage could be stronger, noisy on high only

Mission: To get rid of the pet order (hair) smell in my living room. We have an IQAIR in the basement which we purchased from the allergy buyers club only because we finished the basement and it has n... (see entire review)

11 of **11** people found this review helpful.

1-6 of 6

Filters & Accessories for Airpura R600 All Purpose Air Purifiers

Airpura 18 lb. Carbon Filter

[redacted]

Includes 18 lb. 2" deep activated coconut shell carbon filter for Airpura R600, UV600 & P600 air purifiers. Replace every 2 years for normal household use.

1

Availability: In Stock. Ships Within 3-4 Business Days.

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Select

Description of Airpura C600 Air Purifiers

The Airpura C600 is the ideal air purifier for indoor environments heavily polluted by chemical vapors and toxic gases. It features a robust 26 lb Activated carbon filter that is 3 inches deep to effectively adsorb the largest amount of pollutants on the first air pass. The Airpura C600 has a powerful motor and unimpeded airflow to quickly and quietly clean the air in a room up to 1575 sq. ft. achieving 2 air changes per hour. For heavily polluted environments we recommend a room size of 550 sq. ft. achieving 6 air changes per hour. All Airpura Air Purifiers have a sealed design, felt gaskets and all metal housing to prevent off-gassing and are safe for MCS sufferers.

View all of our Airpura Air Purifiers.

Airpura C600 Air Purifiers are ideal for someone who...

- Lives in an environment polluted by heavy concentrations of chemical vapors or toxic gases.
- Suffers from MCS (Multiple Chemical Sensitivities) and is primarily concerned with removing multiple chemicals from their indoor environment.
- Wants an air purifier capable of adsorbing a large amount of chemicals before needing a filter change.

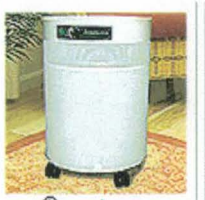
Features of Airpura C600 Air Purifiers

- Designed for heavy chemical and gas removal
- Maximum coverage: 1575 sq. ft. (2 air changes/hr)
- Recommended coverage: 525 sq. ft. (6 air changes/hr)
- Large room air purifier
- Trap carbon dust and particles 1 micron and greater
- Adsorbs airborne chemicals, noxious gases and odors
- Cleanable pre-filter
- 2 Anti-microbial filters
- 26 lb Activated carbon filter, 3" deep
- Micro-barrier particle post filter
- Separately changeable filters
- Variable Fan Speeds
- Low noise level
- Manual controls
- 360° air intake and outflow
- 4 casters
- ETL certified, conforms to CSA C22.2 no 113 ANSI/UL 507
- Colors: Black, White or Cream
- All metal housing
- Sealed motor chamber

enlarge
Black

enlarge
Cream

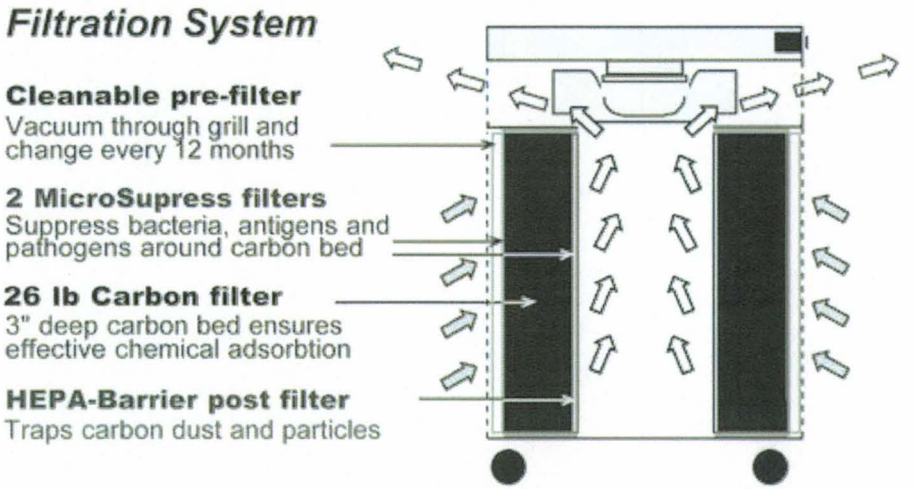
- Sealed electrical chamber
- Pressure sealed filter chamber
- Felt gaskets
- Made in Canada



enlarge
White

How it Works:

The Airpura C600's 3-inch deep carbon filter increases the dwell time of polluted air for more chemical, gas and odor absorption. Airpura's unique pressure seal on the filter chamber ensures that all of the dirty air passes through the filters, without any leakage. Additionally, the motor and electrical parts are located in a separate compartment which prevents off-gassing from components and does not allow impurities to be re-introduced into the clean air. The 560 cfm fan motor combined with variable speed control and unimpeded airflow allows the unit to be set at the desired level of airflow to achieve the results needed.



Care of:

- Pre-filter: vacuum from outside the unit every 2-3 months and replace every 12 months for normal household use.
- Carbon Filter: replace every 2 years for normal household use.
- Micro-Barrier Filter: replace every 12 months for normal household use.

Note: *Filter life is based on continuous operation. Filter life will be longer if only used periodically. When used in heavily polluted environments filters will need to be changed more often.*

Reports by Experts - Airpura C600 Air Purifiers

Expert Review: ★★★★½ *Courtesy of AllergyBuyersClub.com*

EXPERT REVIEW PARAMETERS	STAR RATING
1. Airborne Particulate Filtration	★★★
2. Gas, Chemical & Odor Filtration	★★★★★
3. Room Coverage	★★★★★
4. Noise Rating	★★★★
5. Filter Life & Replacement Costs	★★★½
6. Ease of Operation & Filter Replacement	★★★½
7. Quality of Construction: Air-tight design, no off-gassing	★★★★★
8. Electronic Filter Life Monitoring	N/A
9. Manufacturer's Credibility, Warranty & Return Policy	★★★★★
10. Quality of Filters	★★★★★
11. Value for Price	★★★★★

The Airpura C600 Air Purifier is designed for environment that are heavily polluted by chemical vapors or toxic gases and need a highly efficient carbon filter that is robust enough to remove them. Equipped with a 26 lb, 3 inch deep Activated carbon filter the C600 is able to take on a huge volume of chemical contaminants and provides a long dwell time to efficiently adsorb more chemical pollutants on the first air pass.

Pluses:

- A full 26 lbs of high quality Activated carbon packed 3 inches thick ensures effective chemical adsorbtion.
- Offers one of the largest room coverages of any of our air cleaners at up to 1575 square feet achieving 2 air changes per hour.
- MCS friendly. Airpura does not use any silicone, rubber, or plastic in their gaskets or internal parts and the body is made up of non-off gassing powder coated steel. Furthermore, the motor and electrical parts are separated in a

sealed chamber that prevents any off-gassing while protecting the components from any of the contaminants.
- The variable fan controls make it easy to select a noise level and air flow which suits your preference.
- Considering the volume of air being moved, the highest speed was quieter than we expected. The medium and low settings produce a low background white noise and can be set low enough to make only a whisper.
- Excellent warranty. We are always happy to hear that a manufacturer will stand behind their product and Airpura is no exception with their 5 year warranty on parts, 10 years on labor and motor.

Minuses:

- The Micro-Barrier particle filter is not a HEPA filter. It will capture airborne particulates 1 micron and greater, such as carbon dust, but does not have the ability to capture sub-micron particles.
- No filter change indicators. It is up to you to keep track of filter usage and when they need replacing.
- Replacing the filters requires a bit of work. To access the filters, the C600 needs to be turned upside down so the bottom plate can be unscrewed and removed, then the filters can be lifted out. The unit weighs 49 lbs and the carbon filter alone weighs 26 lbs and can be heavy for some to lift.

Summary:

The Airpura C600 is a specialty air purifier designed for removing a high volume of concentrated chemicals and gases from the indoor air. We recommend the Airpura C600 for indoor environments heavily polluted by high concentrations of chemical or gas vapors produced from fire smoke, second hand smoke, perfumes, cleaning products, cooking odors and off-gassing of toxic gases. The Airpura C600 is also a great choice for use in MCS situations. Please keep in mind this machine is not for sub-micron particle removal. If you are in need of an all-purpose air purifier that will remove a substantial amount of chemicals, gases and odors, as well as offer excellent airborne particle removal, we recommend the Airpura R600.

Technical Specifications of Airpura C600 Air Purifiers

	Airpura C600 Air Purifier
Model Number	C600
Square Foot Coverage	up to 1575 sq. ft.
Power Requirements	115V or 220V
Energy Consumption	40 watts - 120 watts
Clean Air Density Rate (CADR)	Not tested by AHAM

Rated Air Flow of Fan	560 CFM
Delivered Air Flow	420 CFM
Decibels	28.1 db - 62.3 db (at distance of 6 ft)
Dimensions	23"H x 15"D
Weight	49 lbs
Warranty	5 years parts, 10 years labor

3 of **4** (75%) customers would recommend this product to a friend.

Customer Reviews Write a review Choose a sort order

Overall Rating: ★★★★★
Quality: ★★★★★
Value: ★★★★★
Effective/useful: ★★★★★
Reliability: ★★★★★

Written By: B. Roberts
I have used this product for: 2-5 years
Expertise: expert
This product is: used in addition to another, similar product

Is there a better portable consumer air purifier? **Date:** December 21, 2012

Pros: high quality, effective, quiet, reliable, easy to use, met my expectations, Refillable carbon

None come to mind. Has a leg up on other machines in a number of ways. 420 cubic feet per minute delivered on max makes the R600 part of a small group of air purifiers which move significant amoun... (see entire review)

Overall Rating:

Written By: (Manhatten)
I have used this product for: 3-6 months
Expertise: beginner
This product is: the first product I have had like this

Amazing!!!!! **Date:** February 17, 2012

Pros: high quality, effective, quiet, reliable, easy to use, met my expectations

Super quiet, extremely effective and a terrific price for what comes in the box. This unit has been running for the past three months in my home and honestly, the air quality is so significantly bette... (see entire review)

Overall Rating: ★★★★★
Quality: ★★★★★

Gets the Job Done **Date:** October 29, 2011

The owner's manual and technical specifications for the Austin Air HealthMate HM400 air filtration units are shown on the following pages. These specifications were downloaded from the iAllergy website in June 2022.

https://www.iallergy.com/products/austin-air-healthmate-hm400

Owner's Manual

www.austinair.com

TABLE OF CONTENTS

Austin
AIR SYSTEMS

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Choosing a Location 8

5-Year Mechanical Warranty 9

Thank you for choosing Austin Air.

You've made an excellent choice; Austin Air remains the world's most trusted name in portable room air cleaners.

Whether you are using your Austin Air cleaner for relief of asthma and allergy symptoms, or to provide deep, restful sleep, we are confident that you will be completely satisfied with your purchase.

Please take a few minutes to familiarize yourself with important details and safety guidelines outlined in this manual.

Be sure to register your new Austin Air cleaner with us online at www.austinair.com or by mailing the enclosed warranty card.

Austin
AIR SYSTEMS

Operating Instructions

Read all instructions before using your Austin Air cleaner. Follow the directions below for easy set-up and first time operation.

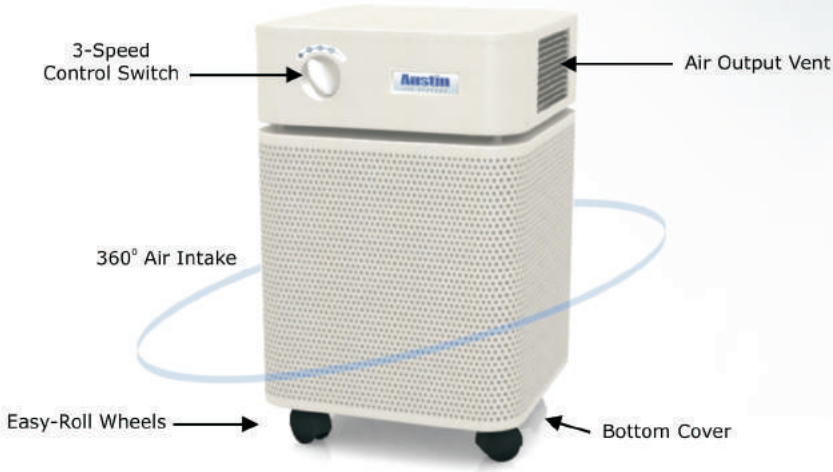
1. Unpack and remove all packing material. Be sure to remove your Austin Air cleaner from the plastic bag.

2. Completely unravel the power cord and place your Austin Air cleaner on a flat, dry, stable surface. Be sure to place your Austin Air cleaner at least eight inches from any wall and so the Air Output Vent is facing towards the room. Failure to do so may reduce the air cleaning efficiency. Inspect the power cord for signs of damage before use. If cord is damaged, DO NOT use.

3. Make sure the Speed Control Switch is in the OFF (0) position and plug the power cord into a 120VAC/60Hz wall outlet.

4. Your Austin Air cleaner features three different speed settings, High (III), Medium (II), or Low (I). The highest setting will provide the fastest, most powerful air cleaning. It is IMPORTANT that you allow your Austin Air cleaner to operate on High (III) for at least the first hour of use. After the first hour, turn the Speed Control Switch to the desired setting.

Features



Important Safety Instructions

PLEASE READ AND SAVE THESE SAFETY INSTRUCTIONS BEFORE USING YOUR AUSTIN AIR CLEANER.

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to persons including the following:

1. Read all instructions before operating your Austin Air cleaner.
2. Always place your Austin Air cleaner on a firm, flat, dry level surface.
3. The Austin Air cleaner must be used in its upright position.
4. Keep your Austin Air cleaner away from heated surfaces, open flames, combustible gases or vapors.
5. Keep your Austin Air cleaner and cord out of the way, where it cannot be stepped on or tripped over.
6. Before operating your Austin Air cleaner, extend the cord and inspect for any signs of damage. Do not use your Austin Air cleaner if the cord is or becomes damaged.
7. Keep your Austin Air cleaner away from water and other liquids.
8. Do not run power cord under carpets, and do not cover with throw rugs.
9. Always turn your Austin Air cleaner to the OFF (0) position and unplug from the wall before moving it, changing the filter or whenever it is not in use. Be sure to pull the plug and not the cord when disconnecting from the outlet.
10. Do not drop, insert or allow any objects to enter into any openings of your Austin Air cleaner. If this occurs, immediately turn off and unplug your Austin Air cleaner and call an Austin Air Customer Service Representative.

Austin AIR SYSTEMS

Important Safety Instructions
Continued

11. Do not block the air openings on your Austin Air cleaner. Blocking the air openings will decrease the efficiency of your Austin Air cleaner and increase risk of injury.

12. Do not use outdoors. Your Austin Air cleaner is intended for indoor use only.

13. To avoid the risk of fire, shock or personal injury, do not use an extension cord.

14. Do not sit, stand or place heavy objects on your Austin Air cleaner.

15. Do not operate your Austin Air cleaner if it malfunctions or becomes damaged in any way.

16. Keep out of the reach of children.

17. DO NOT attempt to repair or adjust any electrical or mechanical functions on your Austin Air cleaner. Doing so will void your warranty. All servicing should be performed by an Authorized Austin Air Representative only.

18. This product is equipped with a Polarized Plug (one prong is wider than the other) as a safety feature. This plug will fit only one way into the power outlet. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. **DO NOT ATTEMPT TO DEFEAT THE SAFETY FEATURE OF THIS POLARIZED PLUG IN ANY WAY.**

Filter Replacement and Warranty

The Austin Air filter warranty is designed to provide the customer with years of worry free operation. Your Austin Air filter has been designed to last up to 5–years under normal residential use, and features a 5-year pro-rated warranty.

Some household environments are more polluted than others, therefore the useful life of the filter media in your Austin Air cleaner may be reduced. To address this issue, Austin Air's pro-rated warranty allows you to receive a discount on your next filter replacement purchase, based on the length of time your filter was used.

If your Austin Air cleaner is used in rooms with unusually high concentrations of tobacco smoke, sawdust, soot, chemical vapors and/or odors, your Austin Air filter will need to be replaced more often. In these circumstances, you should replace your filter once your Austin Air cleaner ceases to emit clean, odorless air. If the odor of the highly concentrated contaminant is present exiting the Air Output Vent, then it is time to replace your filter.

Please Note: The Pro-Rated Warranty is also included with every subsequent filter replacement purchase.

To receive a replacement filter at the pro-rated price, please call Austin Air Systems and ask to speak to a Customer Service Representative. If your filter is out of warranty, please contact the retail store or the dealer where you originally purchased your Austin Air cleaner.

Pro-Rated Filter Replacement Prices

Up to 2-years of use: 40% off the retail price, plus shipping*
2 to 3-years of use: 30% off the retail price, plus shipping*
3 to 4-years of use: 20% off the retail price, plus shipping
4 to 5-years of use: 10% off the retail price, plus shipping

*Austin Air Systems, Ltd reserves the right to refuse a filter replacement at the pro-rated price and/or request that your filter be returned for inspection.

CAUTION

Warning: Do not attempt to clean the filter. Washing or cleaning the filter will void the warranty and may cause injury.

Information is subject to change without notice.

Changing the Filter

You will require a large plastic trash bag, a pair of work gloves and a Phillips screwdriver.

1. Unplug your Austin Air cleaner from the power outlet.

2. Turn your Austin Air cleaner upside down on a soft surface.

3. Using a Phillips screwdriver, remove the four retaining screws from the bottom cover.

4. Wearing a protective pair of work gloves, lift the bottom cover off and set aside.

5. Carefully remove the filter and dispose in a plastic trash bag.

Austin
AIR SYSTEMS

6 Remove the outer pre-filter and dispose in the same plastic trash bag.

7 Install the new outer pre-filter by aligning the pre-filter seam with the power cord.

8 Install the new filter top side down.

9 Replace the bottom cover and screw down tightly.

10 Turn your Austin Air cleaner right side up and operate on the High (III) setting for at least one hour.

Regular maintenance will prolong filter life.

Cleaning Instructions

Your Austin Air cleaner has been designed to require very little maintenance. To remove the dust buildup on the 360-Degree Air Intake, use the brush attachment of your vacuum cleaner. To clean the other surfaces on your Austin Air cleaner, use a soft dampened cloth.

Choosing a Location

From years of research and experience, we recommend that you place your Austin Air cleaner in your bedroom for several reasons.

Pollution is everywhere and the bedroom is no exception. Today, homes are sealed more tightly to conserve energy. Unfortunately, this seals in allergens, mold, bacteria, chemi cals and other contaminants.

Having your Austin Air cleaner in your bedroom will allow you to wake up rested and refreshed without cold like symptoms, such as a stuffy nose, soar throat or cough; the symptoms that occur as a result of your body's reaction to a night of breathing contaminated air.

Austin
AIR SYSTEMS

5-Year Mechanical Warranty

Your Austin Air cleaner is warranted to be free from defects in material and workmanship under normal residential use for 5-years from the date of purchase.

In the event of a malfunction or failure, please call Austin Air Systems to speak to a Customer Service Representative and ask for a Return Authorization Number. Your Austin Air cleaner should then be sent insured and packaged with sufficient protection and postage together with a copy of the original bill of sale.

If the malfunction or failure is a result of defects covered by this warranty, Austin Air Systems will, as its option, repair or replace the air cleaner and return it to the purchaser.

This warranty is limited to the original retail purchaser and is not transferable. The warranty does not cover damage due to accidents, abuse, tampering or misuse, nor does it cover damage resulting from service by persons other than an Authorized Austin Air Systems Representative.

Austin Air Systems, Limited's liability under this warranty is limited to the repair or replacement of a defective Austin Air cleaner with the exception of damages resulting from Austin Air Systems, Limited failure to comply with federal or state warranty law.

Austin Air Systems, Limited shall not be liable for incidental or consequential damages whether direct or indirect. The replacement filters are covered under a separate pro-rated warranty.

This warranty is expressly granted in lieu of all other warranties, which in some states cannot be excluded. There are no warranties, which extend beyond the description of the face hereof and no person, representative, or firm is authorized to commit Austin Air Systems, Limited to further liability or obligation.

If you have any questions concerning the use and care of Austin Air Systems, Limited's products or services under this warranty, please call (716) 856-3700 or email: info@austinair.com.

20-30-09, AA12-01

Our commitment to you.

Backed by the best warranty in the industry, you can take pleasure knowing you've made a sound investment in your Austin Air cleaner.

30-Day, Money-Back Guarantee

In the unlikely event that you're not completely satisfied with your Austin Air cleaner, return it within 30-days, no-questions-asked.

5-Year Mechanical Warranty

Your Austin Air cleaner is warranted to be free from defects in material and workmanship for a period of 5-years from the date of purchase; provided your Austin Air cleaner was operated under normal residential use and that you have completed and returned your warranty registration to Austin Air Systems.

5-Year, Pro-Rated Filter Warranty

Austin Air offers a 5-year, pro-rated filter warranty; the most comprehensive in the industry. No more costly filter replacements every few months or even years. Austin Air filters are designed to last up to 5-years, under normal residential use.

Austin Air Systems, Limited
500 Elk Street
Buffalo, NY 14210
Phone: (716) 856-3700
Fax: (716) 856-6023
E-mail: info@austinair.com

www.austinair.com

Appendix F

Correspondence with Offsite Properties

Integral Engineering, P.C.
1001 6th Avenue
11th Floor
New York, NY 10007

telephone: 212.962.4301
www.integral-corp.com

January 22, 2019 Project No. E051

Hasan Ljikovic
67-32 75th Street
Middle Village, NY 11379

Subject: **Permission to Access 53 North 6th Street for Soil Gas and Indoor Air Sampling**

Dear Mr. Ljikovic,

I am the environmental engineer for the building owner at 135 Kent Avenue in Brooklyn and we would like permission to access your property at 53 N 6th Street for soil gas and indoor air sampling this winter, as requested by New York State Department of Environmental Conservation (NYSDEC). **Please respond to me by telephone or e-mail (see below for contact information) to coordinate a time that would be convenient for you**.

As you may be aware, 135 Kent Avenue is currently undergoing a remedial investigation as required by NYSDEC and New York State Department of Health (NYSDOH). As part of this remedial investigation, NYSDEC is requiring that soil gas and indoor air samples be taken at your property.

Indoor air sampling is proposed for one location in the bottom floor of your property. With your approval and access, we will place the air sample canister and twenty four (24) hours later we will retrieve it. The air sample canister is a stainless steel tank, slightly larger than a basketball, with a pressure gauge on the top (see enclosed figure for an example of the air sample canister). The canister will be placed at breathing level and will collect air for 24 hours.

Soil gas sampling is proposed to be performed immediately following indoor air sampling and would occur at two locations in the bottom floor of your property: one near the main entrance and one in the rear of the building. Integral will collect the soil gas samples in stainless steel canisters connected via tubing to a dime-sized hole drilled in the floor. Each sample will be collected for approximately 24 hours, the sampling canisters will be left overnight and will be collected by Integral personnel the following day. Sampling will be

completed and any necessary repairs to the floor will be made prior to leaving the property.

Please be aware there are several considerations for a successful indoor air sampling event. We ask that you make every effort to **avoid** the following for 24 hours prior to and during sampling in the proposed sampling locations:

1. Opening any windows or vents;
2. Operating ventilation fans unless special arrangements are made;
3. Smoking in the business;
4. Painting;
5. Using a wood stove, fireplace, or other auxiliary heating equipment;
6. Cleaning, waxing or polishing furniture, floors or other woodwork with petroleum- or oil-based products;
7. Using air fresheners, scented candles or odor eliminators;
8. Engaging in any hobbies that use materials containing volatile chemicals;
9. Using cosmetics including hairspray, nail polish, nail polish removers, perfume/cologne, etc.; and
10. Bringing freshly dry-cleaned clothing or furnishings into the building.

Air and soil vapor sampling results will take approximately 3 weeks to be returned to Integral. The data will be provided to the NYSDEC and NYSDOH for their review and recommendations. Integral will prepare and distribute a letter of the sampling results to you for your records.

Please contact me via e-mail (sbarbuto@integral-corp.com) or telephone (860-705-0620) as soon as possible to grant access and advise what times are most convenient for indoor air and soil vapor sampling.

Should you have any questions about the proposed indoor air and soil vapor sampling, please do not hesitate to contact me as well.

Sincerely,

Sara Barbuto

Figure: Example Air Sample Canister

Integral Engineering, P.C.
1001 6th Avenue
11th Floor
New York, NY 10007

telephone: 212.962.4301
www.integral-corp.com

February 11, 2019 Project No. E051

Hasan Ljikovic
67-32 75th Street
Middle Village, NY 11379

Subject: **Permission to Access 53 North 6th Street for Soil Gas and Indoor Air Sampling**

Dear Mr. Ljikovic,

I am the environmental engineer for the building owner at 135 Kent Avenue in Brooklyn and we would like permission to access your property at 53 N 6th Street for soil gas and indoor air sampling this winter, as requested by New York State Department of Environmental Conservation (NYSDEC). **Please respond to me by telephone or e-mail (see below for contact information) to coordinate a time that would be convenient for you**.

As you may be aware, 135 Kent Avenue is currently undergoing a remedial investigation as required by NYSDEC and New York State Department of Health (NYSDOH). As part of this remedial investigation, NYSDEC is requiring that soil gas and indoor air samples be taken at your property.

Indoor air sampling is proposed for one location in the bottom floor of your property. With your approval and access, we will place the air sample canister and twenty four (24) hours later we will retrieve it. The air sample canister is a stainless steel tank, slightly larger than a basketball, with a pressure gauge on the top (see enclosed figure for an example of the air sample canister). The canister will be placed at breathing level and will collect air for 24 hours.

Soil gas sampling is proposed to be performed immediately following indoor air sampling and would occur at two locations in the bottom floor of your property: one near the main entrance and one in the rear of the building. Integral will collect the soil gas samples in stainless steel canisters connected via tubing to a dime-sized hole drilled in the floor. Each sample will be collected for approximately 24 hours, the sampling canisters will be left overnight and will be collected by Integral personnel the following day. Sampling will be

completed and any necessary repairs to the floor will be made prior to leaving the property.

Please be aware there are several considerations for a successful indoor air sampling event. We ask that you make every effort to **avoid** the following for 24 hours prior to and during sampling in the proposed sampling locations:

1. Opening any windows or vents;
2. Operating ventilation fans unless special arrangements are made;
3. Smoking in the business;
4. Painting;
5. Using a wood stove, fireplace, or other auxiliary heating equipment;
6. Cleaning, waxing or polishing furniture, floors or other woodwork with petroleum- or oil-based products;
7. Using air fresheners, scented candles or odor eliminators;
8. Engaging in any hobbies that use materials containing volatile chemicals;
9. Using cosmetics including hairspray, nail polish, nail polish removers, perfume/cologne, etc.; and
10. Bringing freshly dry-cleaned clothing or furnishings into the building.

Air and soil vapor sampling results will take approximately 3 weeks to be returned to Integral. The data will be provided to the NYSDEC and NYSDOH for their review and recommendations. Integral will prepare and distribute a letter of the sampling results to you for your records.

Please contact me via e-mail (sbarbuto@integral-corp.com) or telephone (860-705-0620) as soon as possible to grant access and advise what times are most convenient for indoor air and soil vapor sampling.

Should you have any questions about the proposed indoor air and soil vapor sampling, please do not hesitate to contact me as well.

Sincerely,

Sara Barbuto

Figure: Example Air Sample Canister

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

VIA MAIL

April 15, 2019

Henry Lika
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Nesla Ljikovic
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Hasan Ljikovic
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Occupant
53 North 6th Street
Brooklyn, NY

Re: Request to Access 53 North 6th Street, Brooklyn, NY 11249 For Environmental Sampling

Dear Owner/Occupant:

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has requested the owner of the Former Cleaners Sales & Equipment Corp. Brownfield Cleanup Program site (reference no. C224177) located at 135 Kent Avenue to perform an investigation to define the extent of contamination that may be emanating from their site.

Environmental samples previously collected in the area indicated that volatile organic compounds (VOCs), particularly tetrachloroethene (PCE) and trichloroethene (TCE) are considered site-related compounds of concern and are present in the environment. There is a potential for these VOCs from contaminated groundwater or contaminated soils to enter your building and affect the indoor air quality thru a process known as soil

vapor intrusion (see enclosed Fact Sheet). We are requesting access to your building's basement for the purposes of collecting several environmental samples. The work will involve drilling a small hole (1/2-inch diameter) through the basement floor and setting up small vacuum canisters to collect sub-slab soil vapor and indoor air samples over a 24-hour period. A technician will set up the canisters in the morning, leave and then come back after 24 hours to retrieve them and patch the hole. The sampling will not disrupt any use of the building. This sampling will be performed by Integral Engineering, PC on behalf of the owners of 135 Kent in accordance with a Department-approved work plan and under the oversight of the Department and NYSDOH. Integral has made several attempts to contact you previously without success – see enclosed previous correspondence. **You will not be responsible for any costs associated with this work and your basement will be restored to pre-sample conditions.**

We would like to have this work performed as soon as possible. Please contact Sara Barbuto at (860) 705-0620 or at sbarbuto@integral-corp.com at your earliest convenience to schedule the sampling. Should you have any questions regarding this letter or any aspect of the remedial program, please contact me at (718) 482-7541 or wendi.zheng@dec.ny.gov. Site-related health questions can be directed to the NYSDOH Project Manager, Mrs. Renata Ockerby, at (518) 402-7860.

Thank you for your cooperation in this matter.

Regards,

Wendi Zheng
Project Manager

Enclosures

cc: J. O'Connell, S. Martinkat, M. Warner – NYSDEC
J. Deming, R. Ockerby – NYSDOH
S. Barbuto, K. Brodock – Integral Engineering, P.C.
J. Periconi – Periconi, LLC

PERICONI, LLC
260 MADISON AVENUE, 15TH FL.
NEW YORK, NEW YORK 10016

TEL 212•213•5500
FAX 212•448•0067
jpericoni@periconi.com
www.periconi.com

June 26, 2019

VIA CERTIFIED FIRST CLASS MAIL
RETURN RECEIPT REQUESTED

Henry Lika
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Nesla Ljikovic
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Hasan Ljikovic
53 North 6th Street, LLC
67-32 75th Street
Middle Village, NY 11379

Occupant
53 North 6th Street
Brooklyn, NY 11249

Re: FINAL Request to Access 53 North 6th Street, Brooklyn, NY 11249 for Environmental Sampling

Dear Owner and Occupant:

We represent the owner (the "Owner") of 135 Kent Avenue, Brooklyn, New York 11249, which is located directly across the street from your building at 53 North 6th Street. Both the Owner's environmental consultant, Integral Engineering, P.C. ("Integral"), and the New York State Department of Environmental Conservation ("NYSDEC"), in consultation with the New York State Department of Health ("NYSDOH"), have made numerous attempts to contact you requesting access to your building's basement to conduct necessary environmental sampling as part of the investigation of Brownfield Cleanup Program site (reference no. C224177, the "Site")

located at 135 Kent Avenue. Multiple letters have been sent to you, including letters from Integral, dated January 22, 2019 and February 11, 2019, as well as a letter from the NYSDEC dated April 15, 2019 requesting that you grant Integral access to your property.

Please consider this a final request for access to your building to take environmental sampling as required by the NYSDEC and NYSDOH, to determine the extent of possible contamination, if any, on your property that may have emanated from the Site.

As indicated in previous letters sent to you by Integral and NYSDEC, environmental samples that have been collected in the area indicated that volatile organic compounds (VOCs), particularly tetrachloroethene (PCE) and trichloroethene (TCE), are considered Site-related compounds of concern and are present in the environment. There is a potential for these VOCs, either from contaminated groundwater or contaminated soils, to enter your building and affect the indoor air quality through a process known as "soil vapor intrusion." Consequently, the Owners of 135 Kent Avenue are requesting access to your building's basement for the purposes of collecting several environmental samples.

As noted by Integral in the previous letters they have sent to you, the work will involve the collection of indoor air samples and soil gas samples at lower level of your building. A technician from Integral would be drilling a small hole (1/2-inch diameter) through the basement floor and setting up small vacuum canisters to collect sub-slab soil vapor and indoor air samples over a 24- hour period. The technician will set up the canisters in the morning, leave and then come back after 24 hours to retrieve them and patch the hole. The sampling with not disrupt any use of your building and will be performed by Integral on behalf of the Owners in accordance with the NYSDEC-approved work plan and under the oversight of the NYSDEC and NYSDOH. **You will not be responsible for any costs associated with this work and your basement will be restored to pre-sample conditions.** You will also be provided a summary of the sampling results.

Your failure to respond to repeated requests seeking access to your building prevents Integral, NYSDEC and NYSDOH from determining if your building is being impacted by soil vapor intrusion and what, if any, type of remedial actions might be necessary on your property. Accordingly, if your property is in fact impacted from possible contamination originating from the Site, your continued lack of response and failure to grant the Owner of 135 Kent Avenue access is considered your own failure to mitigate any potential harm to your property.

Please respond promptly, as we would like to have this work performed as soon as possible. Please contact me at (212) 213-5500, or Sara Barbuto at (860) 705-0620 or at sbarbuto@integral-corp.com to schedule the sampling. **Again, this is the final request for access to your building to perform environmental sampling required by the NYSDEC and NYSDOH.**

Thank you for your assistance and prompt attention to this final request.

Very truly yours,

James J. Periconi

Cc (via e-mail only):

Wendi Zheng, Project Manager,
Jane O'Connell, P.E., Regional Engineer, NYSDEC
Patrick Foster, Office of Regional Counsel, NYSDEC
Renata Ockerby, Justin Deming, NYSDOH
Sara Barbuto, Keith Brodock, Integral Engineering, P.C.

Integral Engineering, P.C.
1001 6th Avenue
11th Floor
New York, NY 10007

telephone: 212.962.4301
www.integral-corp.com

January 22, 2019 Project No. E051

Domenic Lanni
410 N Michigan Ave, Suite 850
Chicago, IL 60611

Subject: **Permission to Access 60 North 6th Street for Soil Gas and Indoor Air Sampling**

Dear Mr. Lanni,

I am the environmental engineer for the building owner at 135 Kent Avenue in Brooklyn and we would like permission to access the property at 60 N 6th Street for soil gas and indoor air sampling this winter, as requested by New York State Department of Environmental Conservation (NYSDEC). **Please respond to me by telephone or e-mail (see below for contact information) to coordinate a time that would be convenient for you**.

As you may be aware, 135 Kent Avenue is currently undergoing a remedial investigation as required by NYSDEC and New York State Department of Health (NYSDOH). As part of this remedial investigation, NYSDEC is requiring that soil gas and indoor air samples be taken at your property. As was discussed with you during a phone call on January 16, 2019, Integral may submit existing environmental data from 60 N 6th Street to NYSDEC and NYSDOH to evaluate the need for additional sampling. If the property owner is amendable to this, please submit the data and reporting.

In the event this environmental data is not received by Integral, indoor air sampling will be proposed for one location in the bottom floor of your property. With your approval and access, we will place the air sample canister and twenty four (24) hours later we will retrieve it. The air sample canister is a stainless steel tank, slightly larger than a basketball, with a pressure gauge on the top (see enclosed figure of an example air sample canister). The canister will be placed at breathing level and will collect air for 24 hours.

Soil gas sampling is proposed to be performed immediately following indoor air sampling and would occur at two locations in the bottom floor of your property: one near the main entrance and one in the rear of the building. Integral will collect the soil gas samples in stainless steel canisters connected via tubing to a dime-sized hole drilled in the floor. Each

sample will be collected for approximately 24 hours, the sampling canisters will be left overnight and will be collected by Integral personnel the following day. Sampling will be completed and any necessary repairs to the floor will be made prior to leaving the property.

Please be aware there are several considerations for a successful indoor air sampling event. We ask that you make every effort to **avoid** the following for 24 hours prior to and during sampling in the proposed sampling locations:

1. Opening any windows or vents;
2. Operating ventilation fans unless special arrangements are made;
3. Smoking in the business;
4. Painting;
5. Using a wood stove, fireplace, or other auxiliary heating equipment;
6. Cleaning, waxing or polishing furniture, floors or other woodwork with petroleum- or oil-based products;
7. Using air fresheners, scented candles or odor eliminators;
8. Engaging in any hobbies that use materials containing volatile chemicals;
9. Using cosmetics including hairspray, nail polish, nail polish removers, perfume/cologne, etc.; and
10. Bringing freshly dry-cleaned clothing or furnishings into the building.

Air and soil vapor sampling results will take approximately 3 weeks to be returned to Integral. The data will be provided to the NYSDEC and NYSDOH for their review and recommendations. Integral will prepare and distribute a letter of the sampling results to you for your records.

Please contact me via e-mail (sbarbuto@integral-corp.com) or telephone (860-705-0620) as soon as possible to grant access and advise what times are most convenient for indoor air and soil vapor sampling. Should you have any questions about the proposed indoor air and soil vapor sampling, please do not hesitate to contact me as well.

Sincerely,

Sara Barbuto

Figure: Example Air Sample Canister

Sara Barbuto

From: Kevin Gallagher <Kevin.Gallagher@l3capital.com>
Sent: Tuesday, February 12, 2019 6:59 PM
To: Sara Barbuto; Jonathan Pereira
Cc: Matt Blumenstock; Domenic Lanni; Ryan E. Grommes; Ryan Hess
Subject: RE: Environmental data at 60 N 6th Williamsburg

Hi Sara, I work for L3 Capital which is apart of ownership of 60 N 6th St. I appreciate you reaching out to us. Are you working on behalf of NYSDEC? We haven't received any official notice from any governmental body regarding soil testing outside of your personal request. We prefer to work directly with NYSDEC if this is ultimately their request. Please have them reach out to us if there is any requirement for 60 N 6th St to participate.

Thanks,
Kevin

Kevin Gallagher
Vice President
L3 CAPITAL LLC
410 N. Michigan Ave.
Suite 850
Chicago, IL 60611
(T) 312-878-4858
(C) 703-622-0465
kevin.gallagher@L3capital.com

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

VIA EMAIL

February 15, 2019

Kevin Gallagher
L3 Capital LLC
410 N. Michigan Ave Suite 850
Chicago, IL 60611
kevin.gallagher@L3capital.com

Re: Request to Access 60 North 6th Street, Brooklyn, NY 11249

Dear Mr. Gallagher:

Thank you for taking the time to speak with me today. The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH) have requested the owner of the Former Cleaners Sales & Equipment Corp. Brownfield Cleanup Program site (reference no. C224177) located at 135 Kent Avenue to perform investigation to define the extent of contamination that may be emanating from their site.

We are requesting access to your building's basement for the purposes of collecting these samples. The work will involve drilling a small hole (1/2-inch diameter) through the basement floor and setting up small vacuum canisters to collect air samples over a 24-hour period. A technician will set up the canisters in the morning, leave and then come back after 24 hours to retrieve them and patch the hole. The sampling will not disrupt any use of the building. This sampling will be performed by Integral Engineering, PC on behalf of the owners of 135 Kent in accordance with a Department-approved work plan and under the oversight of the Department and NYSDOH. **You will not be responsible for any costs associated with this work and your basement will be restored to pre-sample conditions.**

We would like to have this work performed as soon as possible. Please give Sara Barbuto a call at (860) 705-0620 or email at sbarbuto@integral-corp.com at your earliest convenience to schedule the sampling. Should you have any questions regarding this letter or any aspect of the remedial program, please contact me at (718) 482-7541 or wendi.zheng@dec.ny.gov. Thank you for your cooperation in this matter.

Regards,

Wendi Zheng

Wendi Zheng
Project Manager

cc: J. O'Connell, S. Martinkat, M. Warner – NYSDEC
R. Ockerby, J. Deming – NYSDOH
S. Barbuto, K. Brodock – Integral Engineering, P.C.
J. Periconi – Periconi, LLC

PERICONI, LLC
260 MADISON AVENUE, 15TH FL.
NEW YORK, NEW YORK 10016

TEL 212•213•5500
FAX 212•448•0067
jpericoni@periconi.com
www.periconi.com

June 26, 2019

VIA CERTIFIED FIRST CLASS MAIL
RETURN RECEIPT REQUESTED

Williamsburg Meridian N. 6th LLC
c/o ASB Capital Management LLC
7501 Wisconsin Avenue, Suite 1300W
Bethesda, MD 20814-6569

Dominic Lanni, Principal
L3 Capital LLC
410 N. Michigan Avenue
Chicago, IL 60611

Kevin Gallagher, Vice President
L3 Capital LLC
410 N. Michigan Avenue
Chicago, IL 60611

Re: Request for Soil and Air Sampling Data from 60 North 6th Street, Brooklyn, NY 11249

Dear Messrs. Gallagher and Lanni:

As one or all of you have previously been informed, the New York State Department of Environmental Conservation ("NYSDEC"), in consultation with the New York State Department of Health ("NYSDOH"), has requested our client, the owner (the "Owner") of 135 Kent Avenue, Brooklyn NY 11249, perform an investigation to define the extent of contamination that may be emanating from its property, which investigation is being conducted under the New York State Brownfield Cleanup Program site (reference no. C224177, the "Site").

To our knowledge, the Owner's environmental consultant, Integral Engineering, P.C. ("Integral") and NYSDEC have made numerous attempts, via both telephone and e-mail, to contact you regarding your property at 60 North 6th Street and its involvement in the investigation for the Site, at least one of which – on February 15, 2019, according to NYSDEC – was successful. See attached letter from NYSDEC to Kevin Gallagher, dated February 15, 2019.

It is also our understanding that you may have developed recent soil and indoor air sampling data pertinent to this investigation; and that the construction plans for your property this summer may include the installation of a sub-slab depressurization system ("SDSS"). Please provide us, and the NYSDEC, with the plans for the installation of the SDSS, along with any soil and indoor air sampling data that has been collected on your property. (If you would prefer to keep this information confidential, it may be provided solely to the NYSDEC and the NYSDOH.)

If you do not have the soil and air sampling data just referred to, or if you fail to provide this information to us or to the NYSDEC/NYSDOH, we demand that you provide access to your property to allow Integral, on behalf of the Owner of 135 Kent Avenue, to conduct necessary environmental sampling to determine the extent of possible contamination, if any, on your property that may have originated from the Site at 135 Kent Avenue. The sampling will allow Integral, NYSDEC, and NYSDOH to determine if your property is impacted and what, if any, type of remedial actions might be necessary on you property. All work will be conducted in accordance with the NYSDEC-approved work plan and under the oversight of the NYSDEC and NYSDOH. **As the NYSDEC has previously informed you, by the same referenced February 19 letter, you will not be responsible for any costs associated with this work.** Additionally, a summary of all sampling results will be provided to you.

We trust that you will respond promptly, as we and the NYSDEC would like to receive a copy of your soil and indoor air sampling data as soon as possible. Alternatively, if you do not have or will not provide any existing sampling data, the NYSDEC and NYSDOH insist that the Owner of 135 Kent Avenue be permitted to perform environmental sampling on your property as soon as possible so that it can comply with its legal obligations under its Brownfield Cleanup Agreement with the NYSDEC.

You may contact me or my associate, Jose Almanzar, at (212) 213-5500 at your earliest convenience to discuss the subjects of this letter, and thereafter to provide the requested information or to schedule the sampling. In addition, we strongly advise that you consult with legal counsel upon receipt of this letter.

If you would prefer to keep any information confidential, you are free to contact Ms. Wendi Zheng, the Project Manager at the NYSDEC, directly at (718) 482-7541 or wendi.zheng@dec.ny.gov. Site-related health questions can be directed to the NYSDOH Project Manager, Mrs. Renata Ockerby, at (518) 402-7860.

We look forward to your assistance and prompt attention to this request.

Very truly yours,

James J. Periconi

Enclosure:	Letter, NYSDEC to Kevin Gallagher (Feb. 15, 2019)
Cc: (w/enc., via First Class Mail):	Occupant, 60 North 6th Street, Brooklyn, NY 12249
Cc (w/enc., via e-mail only):	Wendi Zheng, Project Manager, Jane O'Connell, P.E., Regional Engineer, NYSDEC Patrick Foster, Office of Regional Counsel, NYSDEC Renata Ockerby, J. Deming, NYSDOH Sara Barbuto, Keith Brodock, Integral Engineering, P.C.

Appendix G

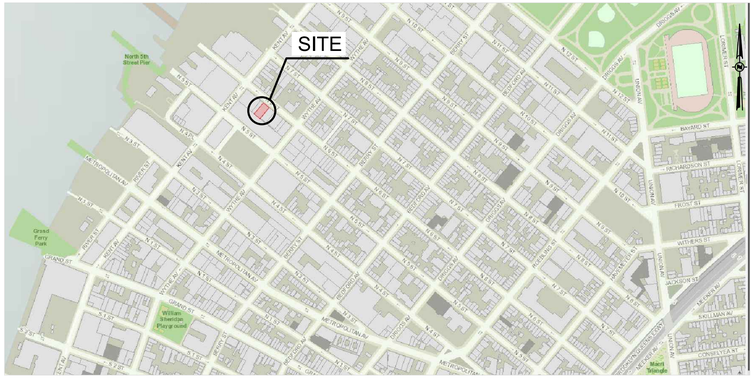
60 North 6th Street SSDS Data

60 North 6th Street Passive SSDS Monitoring

In January, February, March, and July, 2021, Integral met with P. W. Grosser Consulting, Inc., environmental consultant for the owner of 60 North 6th Street, to collect monitoring data for the passive SSDS located at that property. Pressure readings were collected from each of the passive system's two monitoring points. The passive SSDS monitoring data are presented below.

Table G-1. 60 North 6th Street Passive SSDS Monitoring Results

Location	Monitoring Date	Pressure (inches of H_2O)
VMP-1 (west)	January 5, 2021	+0.004
	February 8, 2021	-0.002
	March 24, 2021	-0.002
	July 28, 2021	0.000
VMP-2 (east)	January 5, 2021	-0.003
	February 8, 2021	+0.003
	March 24, 2021	-0.001
	July 28, 2021	0.000



BASEMAP SOURCE: NEW YORK CITY GIS

VICINITY MAP

SCALE: 1" = 500'

0 500' 1,000'

SCOPE

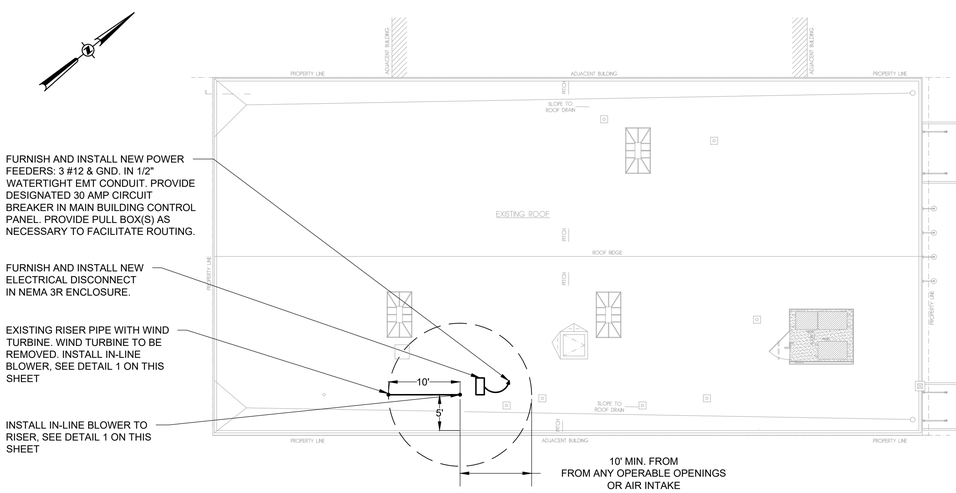
1. RETROFIT THE EXISTING PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS) TO AN ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM AS SHOWN ON THESE DESIGN PLANS.

GENERAL NOTES

1. DRAWING NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE EXCEPT FOR SUB-SLAB DEPRESSURIZATION SYSTEM.
2. COORDINATE ALL WORK FOR SUB-SLAB DEPRESSURIZATION SYSTEM, WITH OTHER TRADES PRIOR TO INSTALLATION.

SYSTEM NOTES

1. TOP OF EFFLUENT STACK TO BE AT LEAST 10' FROM WINDOWS, DOORS OR OTHER BUILDING OPENINGS, OR FROM WINDOWS OR OTHER OPENINGS IN ADJACENT BUILDINGS, INCLUDING AIR INTAKES, LOUVERS, VENTS, ETC.
2. FIELD CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO ANY WORK.
3. SLOPE SOLID PIPING DOWNWARD TOWARDS SSDS SLOTTED PIPING AT 1/8" PER FT OF PIPING.
4. ALL ELECTRICAL TO BE INSTALLED BY LICENSED ELECTRICIAN.
5. PROVIDE DESIGNATED CIRCUIT FOR BLOWER.
6. PROVIDE MINIMUM NEMA 3R PANELS FOR EXTERIOR ELECTRICAL COMPONENTS.
7. ALL EXTERIOR PENETRATIONS FOR ELECTRICAL TO BE BOOTED AND WATER TIGHT.
8. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ENGINEERS APPROVAL PRIOR TO CONSTRUCTION

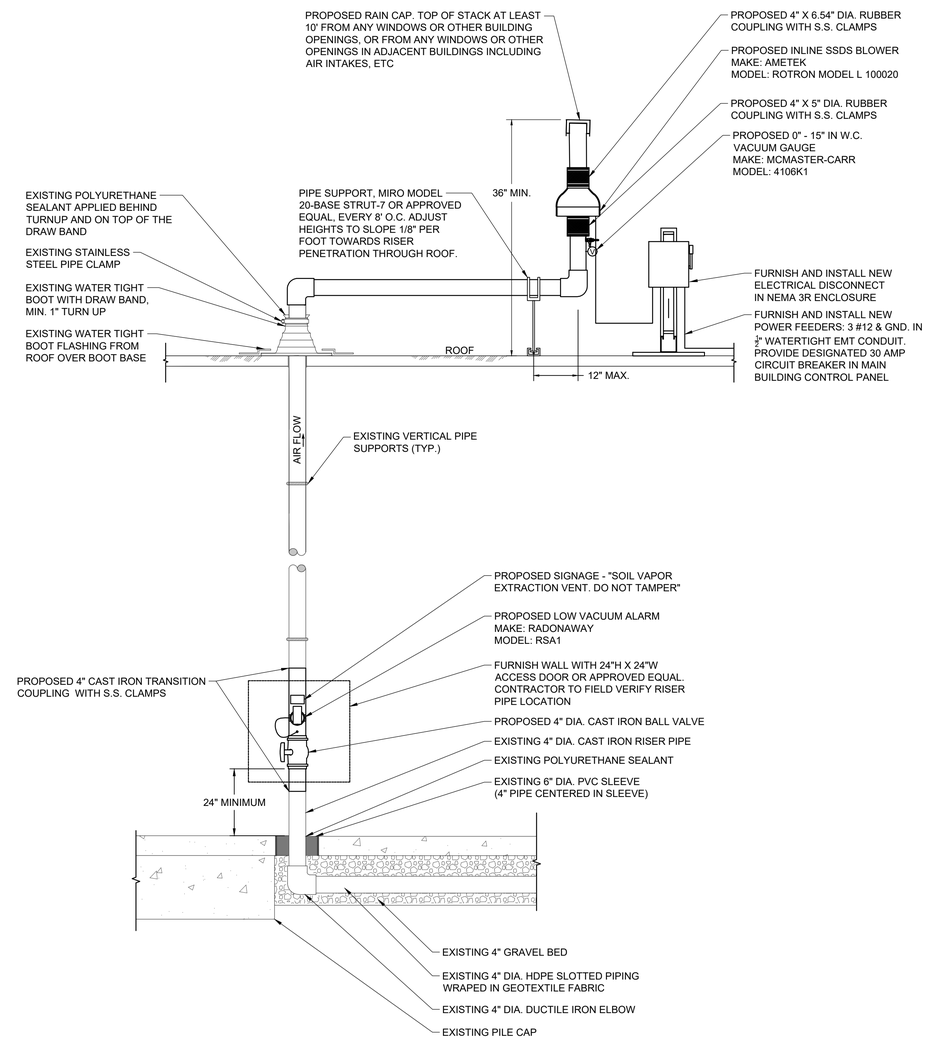


BACKGROUND REFERENCE: A-102 PROVIDED BY L3 CAPITAL DATED 12/01/2017. MODIFIED BY PWGC BASED ON SITE CONDITIONS OBSERVED ON 04/29/2022.

SSDS ROOF PLAN

SCALE: 1" = 10'

0 10 20



1 / - SSDS RISER & ROOF DETAIL

SCALE: NTS

PWGC
CLIENT DRIVEN SOLUTIONS
P.W. GROSSER CONSULTING ENGINEER AND HYDROGEOLOGIST, P.C.
630 Johnson Avenue. • Suite 7
Bohemia • NY • 11716-2618
Phone: (631) 589-6353 • Fax: (631) 589-8705
E-mail: INFO@PWGROSSER.COM

CONSULTANTS

Number	Revision Description	Revision Date
7		
6		
5		
4		
3		
2		
1		

Designed By	WSH	Date Submitted	5/6/2022
Drawn By	WSH	Date Created	5/6/2022
Approved By	EDO	Scale	AS SHOWN

Client:
L3 CAPITAL
410 N MICHIGAN AVENUE, SUITE 7
CHICAGO, IL 60611

Project:
SUB-SLAB DEPRESSURIZATION SYSTEM

Project Address:
60 NORTH 6TH STREET
BROOKLYN, NY 11249

County Tax Map Number:
Contract Number:
Regulatory Reference Number:

Title of Drawing:
PROPOSED ACTIVE SSDS

STATE OF NEW YORK • ERIK JOSEPH DEE-OSEN • LICENSED PROFESSIONAL ENGINEER

Unauthorized alteration or addition to this drawing and related documents is a violation of Section 7209 of the New York State Education Law

Drawing Number:
EN-100

Sheet 1 of 1

PWGC Project Number:
RLE1803