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PERIODIC REVIEW REPORT

OCEANSIDE PLAZA
NASSAU COUNTY, NEW YORK

NYSDEC Site Number: C130158

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1.1 Site Summary

1.1.1 Location and Description

The Site is an irregularly shaped 7.45 acre parcel occupying 3131-3221 Long Beach Road, Oceanside, Nassau County, New York - Section 43, Block 368, Lots 19, 20, 41 thru 45, 75 thru 92, 107 and 355 on the Official Land and Tax Map of Nassau County, New York. The Site contains four single-story buildings used for retail purposes with asphalt-paved driveways and parking areas.

1.1.2 Nature and Extent of Contamination

- An area of soil contamination (tetrachloroethene (PCE) and related compounds) was initially identified immediately east of the dry cleaner facility's rear door - exterior.
- An area of soil contamination (PCE and related compounds) was identified in the vicinity of the dry cleaning machine room - interior.
- A PCE based groundwater plume originating to the east of the dry cleaner facility's rear door and migrating in a southeastern direction was identified.
- A PCE and trichloroethene (TCE) soil vapor plume existed beneath the building.

1.1.3 Summary of Remedial Actions

- Excavation of interior and exterior soils exceeding the unrestricted Soil Cleanup Objectives (SCOs), to a maximum depth of 4.25 feet below grade;
- Active sub-slab depressurization system (SSDS) installation and monitoring to prevent human exposure to vapors emanating from the contaminated soil remaining at the Site;
  - One vertical sub-slab vapor extraction point was added in January 2015, located within the dry cleaner machine room, opposite the Retail Unit 12 (current wine store).
  - On September 1, 2015 a wind turbine was added to the SSDS effluent pipe to allow the system to operate in passive mode.
- Execution and recording of an Environmental Easement to restrict groundwater use and prevent future exposure to any contamination remaining at the Site;

1.2 Effectiveness of the Remedial Program

As provided in the Final Engineering Report, dated December 2013, the selected remedy for the site is **No Further Action** with continued short-term operation of the sub-slab depressurization system (SSDS; $\leq$ 5 years), continued associated monitoring of indoor air quality with the following institutional controls and continued site management. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8.

1.3 Compliance

During this Periodic Review Report time period, the SSDS was non-operational. During a routine SSDS monitoring visit conducted on April 9, 2015, the SSDS was found to be non-operational upon arrival due to an inoperable blower motor (note that although the system is not operating as an active SSDS, it is operating as a passive system with a wind turbine that was installed on September 1, 2015). As described in the previous Periodic Review Report (June 2015), based on the March 2015 soil vapor data, it was recommended to the New York State Department of Environmental Concern (NYSDEC) and New York State Department of Health (NYSDOH) that the SSDS be permanently shut-down. At NYSDEC's request, Reliance Environmental, Inc. submitted a Termination Plan on August 27, 2015 outlining additional vapor

sampling activities. The Termination Plan was approved by NYSDEC, and samples were collected in accordance with the Termination Plan on September 21, 2015. Although the indoor air concentrations in the adjacent retail spaces were below the NYSDOH Indoor Air Guidelines, results indicated that additional vapor mitigation is still required; therefore, a Corrective Measures Work Plan is being submitted as part of this Periodic Review Report.

1.4 Recommendations

1. SSDS Engineering Control
   It is recommended that the active operation of the SSDS Engineering Control (EC) and the associated EC inspection, maintenance tasks and vapor monitoring tasks be reinstated until the next "heating season" in 2016. As such, a Corrective Measures Plan is included in this Period Review Report. The Corrective Measures Plan includes the replacement of the faulty blower.

2. Groundwater Monitoring Termination
   As recommended by NYSDEC in 2015, an additional sample round for groundwater monitoring wells MW-4 and MW-5 was performed. Based upon those results, it is recommended that the groundwater monitoring program be terminated, based on all contaminant concentrations being in compliance with the NYSDEC Groundwater Quality Criteria (GWQC) in both the source area (MW-4) and downgradient (MW-5) groundwater monitoring wells. Source area well, MW-4, has not exhibited contamination above the NYSDEC GWQC for any parameter since April 2012. Downgradient/perimeter well, MW-5, reported all contaminants, but PCE breakdown product, cis 1, 2-dichloroethene, below the NYSDEC GWQC since October 2012. This lone parameter was not detected in the last sample round of December 2015 and had previously exhibited a steady-state/asymptotic concentration trend. If approved, REI will decommission the monitoring wells in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures."

2.0 SITE OVERVIEW

2.1 Site Description

The Site is an irregularly shaped 7.45 acre parcel occupying 3131-3221 Long Beach Road, Oceanside, Nassau County, New York -- Section 43, Block 368, Lots 19, 20, 41 thru 45, 75 thru 92, 107 and 355 on the Official Land and Tax Map of Nassau County, New York (Figure 1). The Site contains four single-story buildings used for retail purposes with asphalt-paved driveways and parking areas.

The Site retail buildings, reported to have been constructed in 1958 and 1976, contain 21 tenants - including Nathan's Famous Restaurant (3131 Long Beach Road), Greenspoint Bank (3151 Long Beach Road), TJ Maxx (3221 Long Beach Road) and multiple tenants occupying addresses 3153 – 3199 Long Beach Road (Figure 2). The surrounding area is comprised of residential and commercial/retail properties.

2.2 Nature and Extent of Contamination

2.2.1 Soils

PCE and related compounds were identified in subsurface soils at the Site, related to a dry cleaning operation located in Retail Space 13 (Figure 2) within the mall. Affected soils were identified both within the facility, near the machine room, and in a grass covered area to the exterior of the rear door of the facility. The interior soils were addressed in 2005, prior to the property owner entering into the Brownfield Cleanup Program (BCP). The delineated exterior soils were identified as the primary source of groundwater contamination in later investigations, and were the subject of Interim Remedial Measures (IRMs) designed to remove these soils/contaminants through excavation and disposal and soil vapor extraction.

Prior to the IRMs, PCE concentrations in the soils ranged from 0.51 mg/kg to 1,200 mg/kg (Table 1). The Track 1 Objective - Unrestricted Use SCO for PCE is 1.3 mg/kg.

2.2.2 Groundwater

PCE and related compounds were identified in groundwater at the Site, in groundwater monitoring wells MW-4 and MW-5. The groundwater monitoring well data, in conjunction with the soil data, indicated the plume originates in the vicinity of well MW-4 (located directly behind the rear door of the dry cleaner). From this point, the plume migrates in a southeastern direction, following the groundwater flow pattern, encompassing well MW-5.

Pre-remedial PCE concentrations in the groundwater ranged from non-detect to 360 µg/l in source area well MW-4, and from 74 µg/l to 160 µg/l in downgradient property boundary well MW-5 (Table 2). The Groundwater Standards/Criteria for PCE is 5.0 µg/l. Cis-1,2-Dichloroethene concentrations in the groundwater ranged from non-detect to 54 µg/l in MW-5. The Groundwater Standards/Criteria for cis-1,2-Dichloroethene is 5.0 µg/l. Vinyl Chloride concentrations in the ground water ranged from non-detect to 17 µg/l in MW-5. The Groundwater Standards/Criteria for vinyl chloride is 2.0 µg/l.

2.2.3 Vapor Intrusion

Indoor air quality samples were collected from the retail spaces immediately adjacent to the dry cleaners (i.e. 12 and 14). Pre-remediation PCE levels in indoor air samples ranged from 2.3 µg/m3 to 880 µg/m^3. TCE levels in indoor air samples ranged from non-detect to 5.9 µg/m^3 (Table 3).

Sub-slab soil vapor samples were collected from three soil vapor ports located within the dry cleaners, four soil vapor ports in adjacent retail spaces (i.e. 9, 12, 14 and 16) and one soil vapor port to the rear (east) of the dry cleaners. Pre-remediation PCE concentrations in the sub-slab soil vapor samples ranged from non-

detect to 81,000 µg/m^3. TCE concentrations in the sub-slab soil vapor samples ranged from non-detect to 380 µg/m^3.

Pre-remediation soil vapor data indicates that the PCE plume encompassed approximately 945 square feet and the TCE plume encompassed approximately 415 square feet. Both plumes center on the dry cleaning operation.

2.3 Remedial Program

1. The interior soils were excavated/disposed in 2005, prior to the property owner entering into the BCP.

2. The exterior soils were excavated/disposed in 2010, to a maximum depth of 4.25 feet. Based upon compliance with the **Tract 1 Objectives - Unrestricted Use Soil Cleanup Objectives**, no further soil remediation activities were warranted.

3. In July 2009, an SSDS was constructed utilizing perforated plastic piping installed within the interior soil remediation excavation. After construction of the system, performance monitoring was conducted to demonstrate that the system was reducing impacts to indoor air. The remedial process will be considered complete when monitoring data indicates that the SSDS is no longer required to protect indoor air quality from being impacted by the soil vapor.
   - The 2014 Periodic Review Report recommended the installation of an additional soil vapor extraction point to better capture vapors beneath tenant space #12. The NYSDEC concurred with this recommendation (Site Management Periodic Review Report Response Letter, November 17, 2014) and the point was installed on January 8, 9 and 12, 2015 (see point #5 below).
   - The 2015 Periodic Review Report recommended that the requirement to operate the SSDS EC be terminated and the associated EC inspection, maintenance tasks and vapor monitoring tasks be discontinued, as supported by the March 25, 2015 vapor results. Subsequently, NYSDEC requested the submission of a termination sampling plan to include a sampling event within 14 days of the plan approval and a second event during the upcoming heating season, after December 1, 2015 (Site Management Periodic Review Report Response Letter, August 14, 2015). The Termination Plan was submitted on August 27, 2015, and related sampling conducted on September 1, 2015. Although indoor air concentrations were below NYSDOH Indoor Air Guidelines for the retail spaces adjacent to the dry cleaner, based on sub-slab results, this data indicated that addition mitigation is still required.

4. Asymptotic concentration levels/trends of all groundwater contaminants were exhibited through the November 2013 groundwater sampling event. In 2013, an Environmental Easement to restrict groundwater use and prevent future exposure to any contamination remaining at the Site was executed and recorded.
   - The 2014 Periodic Review Report recommended that the groundwater monitoring program be terminated, based on the non-detect and asymptotic patterns demonstrated. The NYSDEC requested the collection of an additional round of groundwater sampling (Site Management Periodic Review Report Response Letter, November 17, 2014), which was conducted on March 10, 2015.
   - The 2015 Periodic Review Report recommended that the groundwater monitoring program be terminated, based on the non-detect and asymptotic patterns demonstrated. The NYSDEC requested the collection of an additional round of groundwater sampling (Site Management Periodic Review Report Response Letter, August 14, 2015), which was conducted on December 9, 2015.

3.0 REMEDY EVALUATION

As provided in the Final Engineering Report, dated December 2013, the selected remedy for the site is **No Further Action** with continued short-term operation of the sub-slab depressurization system (SSDS; ≤ 5 years), continued associated monitoring of indoor air quality with the following institutional controls and continued site management. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Institutional Controls
   A series of Institutional Controls is required by the Decision Document to prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination (groundwater). Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under the Site Management Plan (SMP).

   These Institutional Controls are:

   - Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
   - Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.
   - Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

2. Short Term Engineering Control - Sub-Slab Depressurization System
   An active SSDS has been installed at the former Jef El dry cleaner (currently vacant/Retail Space 13). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of the SMP). Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

   The active 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 system will be submitted by the property owner to the NYSDEC and NYSDOH. It is expected that the SSDS will be discontinued within 5 years (short-term engineering control).

3. Soil Vapor Intrusion Evaluation
   Until the SSDS can be discontinued, prior to the construction of any enclosed structures located over areas that contain remaining contamination and/or the potential for soil vapor intrusion (SVI) has been identified (see Figure 10 of the SMP), an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

4. Excavation Work Plan

The Site has been remediated for unrestricted use. Any future intrusive work that encounters contamination (e.g. groundwater) will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix B to the SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section B-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan.

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, any short-term engineering controls described in the SMP.

4.0 IC/EC PLAN COMPLIANCE

4.1 Introduction

Since remaining contaminated groundwater/soil vapor exists beneath the Site, IC/ECs are required to protect human health and the environment. This Section summarizes the IC/ECs required by the SMP at the Site, as well as provides a summary of the IC/EC performance and effectiveness.

4.2 Engineering Controls

4.2.1 Sub-Slab Depressurization System

As discussed in the SMP, an active SSDS has been installed at the former Jef El dry cleaner (currently vacant retail space) and began operation in July 2009. This SSDS was installed by converting the existing 2 inch diameter horizontal screened sub-slab piping (installed following the interior excavation activities) to an active system. The 2 inch screened pipe is approximately 10 feet long. A 4.0-Hp regenerative blower was connected to the existing sub-slab piping via 4-inch diameter Schedule 40 PVC piping as shown on Figure 3. The blower is rated for 200 cubic feet per minute and 90 inches of water vacuum. The blower was installed on the roof of the dry cleaning facility and is housed in a weather tight enclosure. The weather tight enclosure has a ventilation fan and thermostat. A knock-out tank was also installed at the inlet to the blower to prevent water from being drawn into the blower. The knock-out tank has a high level switch to shut down the blower if the knock-out tank fills with water. A dilution valve has been installed at the inlet to the blower to control the vacuum and flow rate. Vacuum gauges have been installed at the knock out tank and the inlet to the blower. A pressure gauge was installed on the discharge of the blower. The discharge from the blower was connected to a vapor phase carbon (VPGAC) drum and away from any roof air intakes.

In addition to the horizontal 2-inch diameter sub-slab piping, on January 8, 9, and 12, 2015 Roux Associates installed a new 2-inch diameter vertical extraction point in accordance with the recommendations provided in Section 7.2 of the PRR submitted to NYSDEC in September 2014. The purpose of this additional extraction point was to address sub-slab vapor levels persisting beneath Retail Unit 12 (current wine store). This new sub-slab extraction point was located in the dry cleaner space, immediately adjacent to the north wall separating the dry cleaner from the wine store (Figure 3).

The vertical extraction point was constructed 4-inch diameter Schedule 40 PVC well screen set 18-inches below the concrete slab. The extraction point was sealed at the concrete slab, and connected to the existing SSDS riser using 4-inch diameter PCV pipe. A shut off valve was installed on the new vertical suction point. The SSDS system was configured to allow for operation of both the previously installed horizontal extraction pipe and the new vertical extraction point concurrently, or using the shutoff valves, either point can be shutdown, or throttled down.

This new extraction point was brought online on January 12, 2015, and significantly increased the vacuum influence beneath the former wine store (Retail Unit 12) during SSDS operation.

Additionally, on September 1, 2015 (when the SSDS was non-operational due to faulty blower motor) a wind powered turbine was installed at the termination of the system effluent stack. The purpose of this wind turbine was to allow the system to operate in a passive mode while evaluating the permanent shutdown of the active SSDS with NYSDEC.

4.2.2 SSDS Corrective Measures Completed

No corrective measures were required during the reporting period of this Periodic Review Report.

4.3 Institutional Controls

4.3.1 Environmental Easement

As discussed in the SMP, Institutional Controls have been enacted to prevent exposure to remaining contamination by controlling disturbances of the subsurface contamination (soil vapor and groundwater). Adherence to the Institutional Controls that apply to the Controlled Property is required by the Environmental Easement, which set forth the following Site restrictions:

- The property may be used for Restricted Residential use provided that the Institutional Controls included in the SMP are employed.
- The use of the groundwater underlying the property is prohibited without testing and/or treatment rendering it safe for intended use;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

4.3.2 Environmental Easement Granted

Pursuant to Article 71, Title 36 of the New York State Environmental Conservation Law, an Environmental Easement was granted for the Site on November 12, 2013. The NYSDEC accepted the Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as the Environmental Easement is extinguished.

The controls and requirements listed in the NYSDEC approved SMP, including any and all NYSDEC approved amendments to the SMP, were incorporated into and made part of the Environmental Easement.

4.4 IC/EC Plan Compliance Conclusions and Recommendations

The EC (SSDS) was not operational during the reporting period covered by this Periodic Review Report (April 1, 2015 through May 12, 2016). As per our discussions with NYSDEC and as described above, during a routine SSDS monitoring visit conducted on April 12, 2015, the SSDS was found to be non-operational upon arrival due to an inoperable blower.

4.5 IC/EC Certification

IC/ECs have been established for the Site in accordance with the SMP. Institutional Controls include the following:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns; and
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

Engineering Controls include the following:

- Short term (i.e., < 5 years) operation of the active SSDS.

As described above, the IC/ECs were not in operational during the Periodic Review Report monitoring period (April 1, 2015 through May 12, 2016). As such, the IC/EC Certification form could not be fully completed and a Corrective Measures Work Plan is being submitted as part of this PRR.

5.0 MONITORING PLAN COMPLIANCE

5.1 Introduction

The Monitoring Plan presented in the SMP is designed to provide measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site and all affected media identified below. Monitoring of other short term Engineering Controls is described in the following section (Section 6.0 O&M Plan Compliance).

Monitoring programs are summarized below in Table 5.1 and outlined in detail in Section 5.2. Results for this monitoring period are provided in Section 5.3.

Table 5.1: Monitoring Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Monitoring Wells	Single Event (03/2015)	Groundwater	VOCs (EPA 8260)
SSVS	Annual	Soil Vapor	Vinyl Chloride, 1,1-Dichloroethene, Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Trichloroethene, and Tetrachloroethene (USEPA Method TO-15)
SSVS	Annual	Indoor Air Quality	Vinyl Chloride, 1,1-Dichloroethene, Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Trichloroethene, and Tetrachloroethene (USEPA Method TO-15)

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

5.2 Media Monitoring Program

5.2.1 Sub-Slab Vapor, Indoor Air, Soil Vapor and Ambient Air Quality Monitoring

Vapor and Indoor Air Quality monitoring will be performed on an annual basis to assess the performance of the remedy. Indoor air quality samples, sub-slab vapor samples, soil vapor, and outdoor (ambient) air samples are to be collected from the following locations (numbers correspond to the "Retail Unit" numbers, as shown in Figure 4):

Indoor Air Quality	**Sub-Slab Vapor**	**Ambient**
Unit 14 (IAQ-Book) Unit 12 (IAQ-Vac)	Unit 14 (VS-Book) Unit 12 (VS-Vac) Unit 13 (DCF, DCR, MRE, Fence)	Unit 10 (rear)

All sub-slab vapor, indoor air, soil vapor and ambient air samples were collected following the procedures outlined in the SMP. The annual soil vapor sampling event was conducted on September 21, 2015. The SSDS was non-operational for several months prior to the collection of the September 21, 2015 vapor samples.

Note that in addition to being a requirement in the SMP, the September 21, 2015 vapor samples were collected in accordance with the NYSDEC approved August 27, 2015 Termination Plan. As such, two indoor air samples were collected from inside the former dry cleaner retail space (Unit 13), in addition to the samples specified above in Section 5.2.1.

5.2.2 Groundwater Monitoring

One groundwater monitoring well sampling event, including wells MW-4 and MW-5 (Figure 5), was conducted on December 9, 2015. Following submission of the results, the NYSDEC will determine whether to modify or discontinue future groundwater monitoring. The monitoring wells will then be decommissioned following NYSDEC approval.

The wells were purged a minimum of three well volumes, utilizing an electrical submersible pump outfitted with clean, new, vinyl tubing. The purge water was field screened to monitor the pH, dissolved oxygen, turbidity, and conductivity of the purge water. Upon completion of the purging procedures, a new polyethylene disposable bailer was used to collect water samples from wells. Due to the small diameter of well MW-4, samples were collected from the well using a section of new polyethylene tubing, outfitted with a stainless steel check valve at the base.

5.3 Monitoring Program Results

5.3.1 Sub-Slab Vapor, Indoor Air, Soil Vapor and Ambient Air Quality Monitoring Results

The results for the annual vapor sampling event conducted on September 21, 2015 are provided in Table 3, attached. For reference, in addition to providing the analytical results for the September 2015 event, Table 3 provides the analytical results for all vapor sampling events conducted at the Site since 2007 (prior to the startup of the SSDS on July 30, 2009). All data packages were reviewed by a qualified data validator, and a Data Usability Summary Report (DUSR) was prepared. All data was found to be usable without modification. The following sections provide a summary of the September 21, 2015 vapor data results.

Laboratory analytical data sheets are provided in Appendix A. The DUSR is provided in Appendix B.

5.3.1.1 Sub-Slab Vapor Results

As shown in Table 3, the only compounds detected in the sub-slab vapor samples in September 2015 were PCE and TCE. PCE was detected in all five sub-slab vapor samples collected, with detections ranging from 78 µg/m^3 (collected from the front of the former dry cleaner - Unit 13) to 2,820 µg/m^3 (collected from the middle portion of the former dry cleaner - Unit 13).

Graphs depicting concentration trends for TCE and PCE in sub-slab vapor samples since 2007 are included in Appendix C.

5.3.1.2 Indoor Air Results

As shown in Table 3, on September 21, 2015 PCE and in some instances TCE were detected in indoor air. PCE was detected in Unit 12 (Wine Store) and in Unit 14 (Yogurt Store) at concentrations of 16.7 µg/m^3 and 9.9 µg/m^3, respectively. Note that both concentrations are below the NYSDOH Indoor Air Guidance value of 30 µg/m^3. TCE was detected in the indoor air sample collected from the Yogurt Store (Unit 14) at a concentration of 0.296 µg/m^3, below the NYSDOH Indoor Air Guidance value of 5 µg/m^3.

As discussed above, since this sampling was being conducted to satisfy the Termination Plan in addition to the SMP requirements, two indoor air samples were collected from inside the former dry cleaner. PCE was detected from the sample collected in the front of the former dry cleaner at a concentration of 60.5 µg/m^3, and PCE was detected at 117 µg/m^3 from the sample collected in the rear of the former dry cleaner. Additionally, TCE was detected at 0.242 µg/m^3 and 0.403 µg/m^3 in the front and rear of the former dry cleaner, respectively. Note that at the time these samples were collected, the dry cleaner drop off store was still in operation. These elevated concentrations were likely influenced by the extensive quantity of freshly dry cleaned clothes being stored in the retail space.

Graphs depicting concentration trends for PCE in indoor air samples collected from Retail Spaces 12 and 14 since 2007 are included in Appendix C.

5.3.1.3 Soil Vapor and Ambient Air Sample Results

As shown in Table 3, on September 21, 2015 PCE was detected at 102 µg/m^3 and TCE was detected at 0.113 µg/m^3 in soil vapor sample VS-Fence (located outside and behind Unit 13). PCE was the only compound detected in the ambient air sample and was found at a concentration of 0.197 µg/m^3.

5.3.1.4 Sub-Slab/Indoor Air Results Evaluation

The sub-slab and indoor air results described above and presented in Table 3 were compared to the NYSDOH Soil Vapor/Indoor Air Matrices for TCE and PCE (Matrix 1 and 2, respectively). A summary of this evaluation is provided below:

Retail Unit	Action Required with Respect to PCE	Action Required with Respect to TCE
Retail Unit 12 (Wine Store)	Mitigate	No Further Action Required
Retail Unit 14 (Yogurt Store)	Monitor / Mitigate	Take reasonable and practical actions to identify sources and reduce exposure

Based on this evaluation, the results indicate that mitigation and monitoring are required based on PCE concentrations in Retail Spaces 12 and 14, and as such, a Corrective Measures Work Plan for the restoration of SSDS operations was prepared and is included as part of this PRR submission.

5.3.2 Groundwater Monitoring Results

The results for the groundwater monitoring well sampling event conducted on December 9, 2015 are provided in Table 2, attached. For reference, in addition to providing the analytical results for the December 9, 2015 event, Table 2 provides the analytical results for all groundwater sampling events conducted at the Site since 2005. All data packages were reviewed by a qualified data validator, and a DUSR was prepared. All data was found to be usable without modification.

As shown in Table 2, all analyzed compounds were reported at concentrations below the NYSDEC GWQC in groundwater monitoring wells MW-4 and MW-5 during the December 9, 2015 sampling event. All compounds have been reported below the NYSDEC GWQC in well MW-4 since April 2012. Only cis-1,2-dichloroethene (PCE breakdown product) has been reported in well MW-5 at concentrations above the

NYSDEC GWQC since October 2012. Laboratory analytical data sheets are provided in Appendix D. The DUSR is provided in Appendix E.

Graphs depicting concentration trends for cis-1,2-dichloroethene in groundwater monitoring well MW-5 since 2009 are included in Appendix F.

5.4 Site-Wide Inspection

5.4.1 Inspection Procedures

As presented in the SMP, site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed, for the purpose of compiling sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that Site records are up to date.

5.4.2 Inspection Findings

A site-wide inspection was conducted on March 10, 2015 and included a reconnaissance of the Site exterior and the interior of Unit 13, currently occupied by Sunshine Dry Cleaners. A copy of the Site-Inspection Form is provided in Appendix G and summarized below.

- The Site was found to be in compliance with all ICs, as the Site usage has not changed, groundwater beneath the Site is not being used and the remaining contaminated material has not been disturbed.
- The SSDS was operational upon arrival. There were no obvious odors found within either Unit 12, Unit 13 or Unit 14; with the exception of the dry cleaning machine room located within Unit 13. The machine is not currently in-use and odors were only detected upon opening the access door.
- The Site was reported to be in good condition with no foreign debris being identified on the grounds and all structures being of sound construction.
- As noted above, the SSDS was operational at the time of the inspection. The blower was subsequently reported to be non-operational on March 25, 2015.
- A review of the Site records indicated all inspection, operation and maintenance, and monitoring activities have been completed, as outlined in the SMP.
- No additional observations relevant to the remedy were documented.

5.5 Monitoring Plan Compliance Conclusions and Recommendations

As stated above, the SSDS was not operational during the PRR reporting period. With NYSDEC approval, sampling was conducted on September 21, 2015 as part of the SSDS Termination Plan. Findings are summarized below.

- Based on the results of the September 21, 2015 vapor samples, mitigation and/or monitoring is required in retail spaces 12 and 14. As such, Reliance Environmental, Inc. is submitting a Corrective Measures Work Plan to restore the SSDS system.
- Based upon compliance with the NYSDEC GWQC in the source area (MW-4) and downgradient (MW-5) groundwater monitoring wells, Reliance Environmental, Inc. on behalf of Oceanside Plaza Associates, LLC, is recommending that the groundwater monitoring component be discontinued. Well abandonment would be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures."

6.0 OPERATION & MAINTENANCE PLAN COMPLIANCE

6.1 Introduction

Section 4.2 of the SMP describes the operation and maintenance (O&M) activities that are to be performed at the Site. These activities include:

- Sub-slab vapor monitoring (described above in Section 5.0);
- Performance monitoring of the SSDS; and
- Inspection and maintenance of the SSDS.

This section details the O&M Plan activities that are currently implemented as part of the SMP to achieve overall effectiveness of the remedy selected for the site.

6.1.1 O&M Plan Requirements

Table 6.1.1 outlines the O&M Plan components as detailed in the SMP.

Table 6.1.1
O&P Plan Components

Component	Frequency
Site Inspection & Maintenance	Monthly
Regulatory Reporting	Annual Periodic Review Report

6.2 Evaluation of O&M Plan Activities

The following sections describe the actions taken to satisfy the O&M components and provide a summary of the current status of the O&M component.

6.2.1 Site Inspection and Maintenance

The Site inspection and routine maintenance activities include visual inspections, operating data collection and general maintenance. Visual inspection is the routine part of the SSDS operator's activities.

The specific routine maintenance tasks completed as part of the SMP are outlined below:

- Inspect SSDS piping to confirm operation of appropriate valves (i.e., dilution valve);
- Inspect vacuum/pressure gauges for proper operation;
- Check and clean air filter on knockout tank; and
- Check for the presence of water in the knockout tank.

Note that since the SSDS was not operation in active mode during this PRR period, routine site inspections were not completed.

7.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

The following sections present conclusions from inspections and maintenance activities and summarize recommendations for modifications the SSDS and the Monitoring Plan and O&M Plan.

7.1 Conclusions

1. The active SSDS was found to be non-operational on April 9, 2015 due to a faulty blower motor.

2. On September 1, 2015 a wind turbine was added to the SSDS effluent pipe to allow the system to operate in passive mode while system termination was being contemplated with NYSDEC.

3. While September 21, 2015 monitoring data did not identify exceedances of NYSDOH Indoor Air guidance values in retail spaces 12 and 14, when sub-slab and indoor air results are compared to the NYSDOH decision matrices, additional monitoring and mitigation is required.

4. The December 2015 groundwater sample event demonstrated compliance with the NYSDEC GWQC in the source area (MW-4) and downgradient (MW-5) monitoring wells for the contaminants involved.

7.2 Recommendations

1. SSDS EC System
   It is recommended that SSDS system operations be restored on a temporary basis. Details are included in the Corrective Measures Work Plan attached to this PRR.

2. Groundwater Monitoring Termination
   a. It is recommended that the groundwater monitoring program be terminated, based on the non-detect and asymptotic patterns demonstrated, as presented in this report.
   b. Following NYSDEC concurrence, it is recommended that the existing groundwater monitoring wells be properly abandoned/closed in compliance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures."

8.0 CORRECTIVE MEASURES WORK PLAN

As described in the previous sections, the SSDS was found to be non-operational on April 9, 2015. As described in the 2015 PRR, at the time, vapor data supported the shut-down of the SSDS. As such, a Termination Plan was developed dated August 27, 2015 and approved by NYSDEC. This plan included the completion of a full vapor sampling round. On September 21, 2015 this sampling event was completed (note that the SSDS had been non-operation for several months at the time of sample collection). Data from the sampling event indicated that additional monitoring and mitigation are required in retail spaced 12 and 14. Based on this data, the following Corrective Measures Work Plan was prepared.

8.1 SSDS Blower Replacement

As part of this task, a new replacement blower unit for the existing SSDS will be procured. The blower unit will be a new, direct replacement blower unit (Ametek 4 HP Regenerative blower, Model DR656CK72X).

Once received, the replacement blower will be installed on the existing SSDS skid unit by a qualified environmental technician. Following the reconnection of all piping and electric connections, the system will be restarted. Once operations are restored, a complete inspection event will be conducted in accordance with the SMP, and will include:

- Inspect SSDS piping to confirm operation of appropriate valves (i.e., dilution valve);
- Inspect vacuum/pressure gauges for proper operation;
- Check and clean air filter on knockout tank;
- Collection of vacuum readings from all monitoring points to ensure appropriate vacuum influence is achieved; and
- Check for the presence of water in the knockout tank.

Following the initial restoration of the SSDS, the routine OM&M events described in the SMP will be completed (monthly inspections and maintenance, and annual monitoring). The SSDS requirement will be evaluated next year as part of the PRR, and recommendations for either continuing operations or terminating operations will be made at that time.

8.2 Corrective Action Schedule

Following NYSDEC approval of this Corrective Measures Work Plan, the replacement blower unit will be ordered immediately. Based on discussions with the remediation system vendor, the lead time to obtain the new blow is expected to be 4 weeks. Once the replacement system equipment is received, it will be installed at the Site within one week.

FIGURES

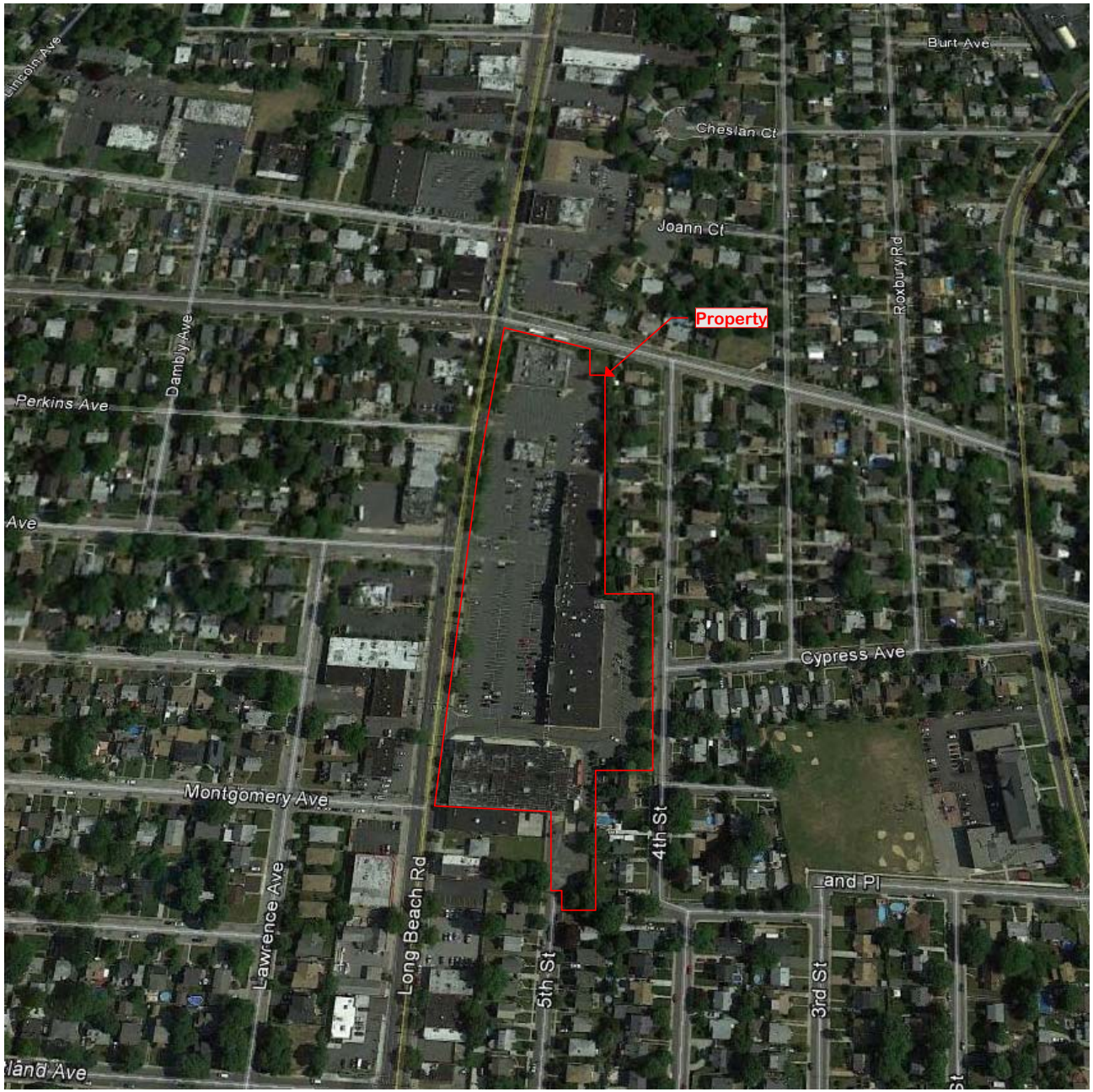

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Figure 1:
Site Location Map

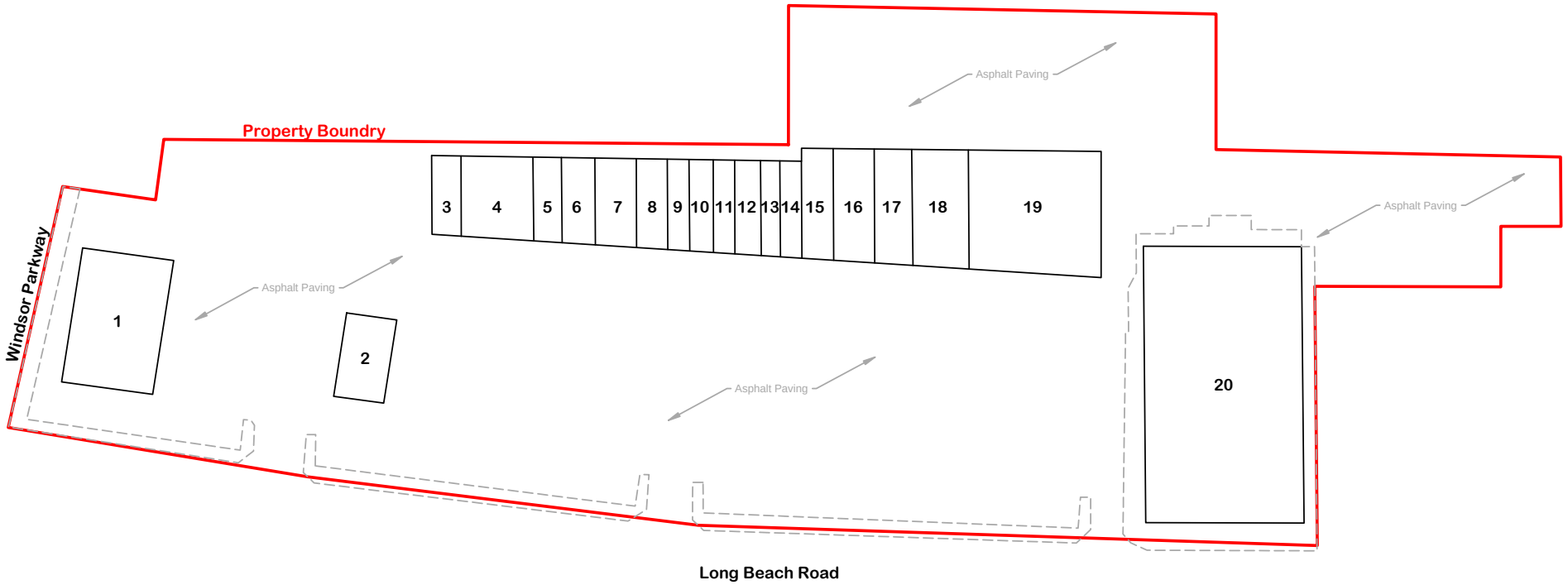
Google Earth (June 17, 2010)

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 350'



1 : Buffalo Wild Wings/Corner Bakery
2 : Capital One Bank
3 : Massage Envy
4 : Capri Nail & Spa
5 : Chipotle Mexican Grill
6 : Chipotle Mexican Grill
7 : Gamestop
8 : AT&T Wireless
9 : Protass
10 : Temptations Boutique
11 : Nassau Vision
12 : Vino 100
13 : Vacant (Former Jef-El Dry Cleaners)
14 : Swirls & Twirls Yogurt
15 : Kravit Jewlers
16 : Italian Restaurant
17 : Jos. A Bank
18 : Citibank
19 : Rite Aid
20 : TJ Maxx

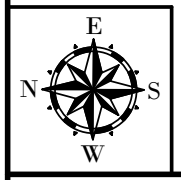


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Figure 2:
Retail Spaces and Site Boundaries

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Not to Scale

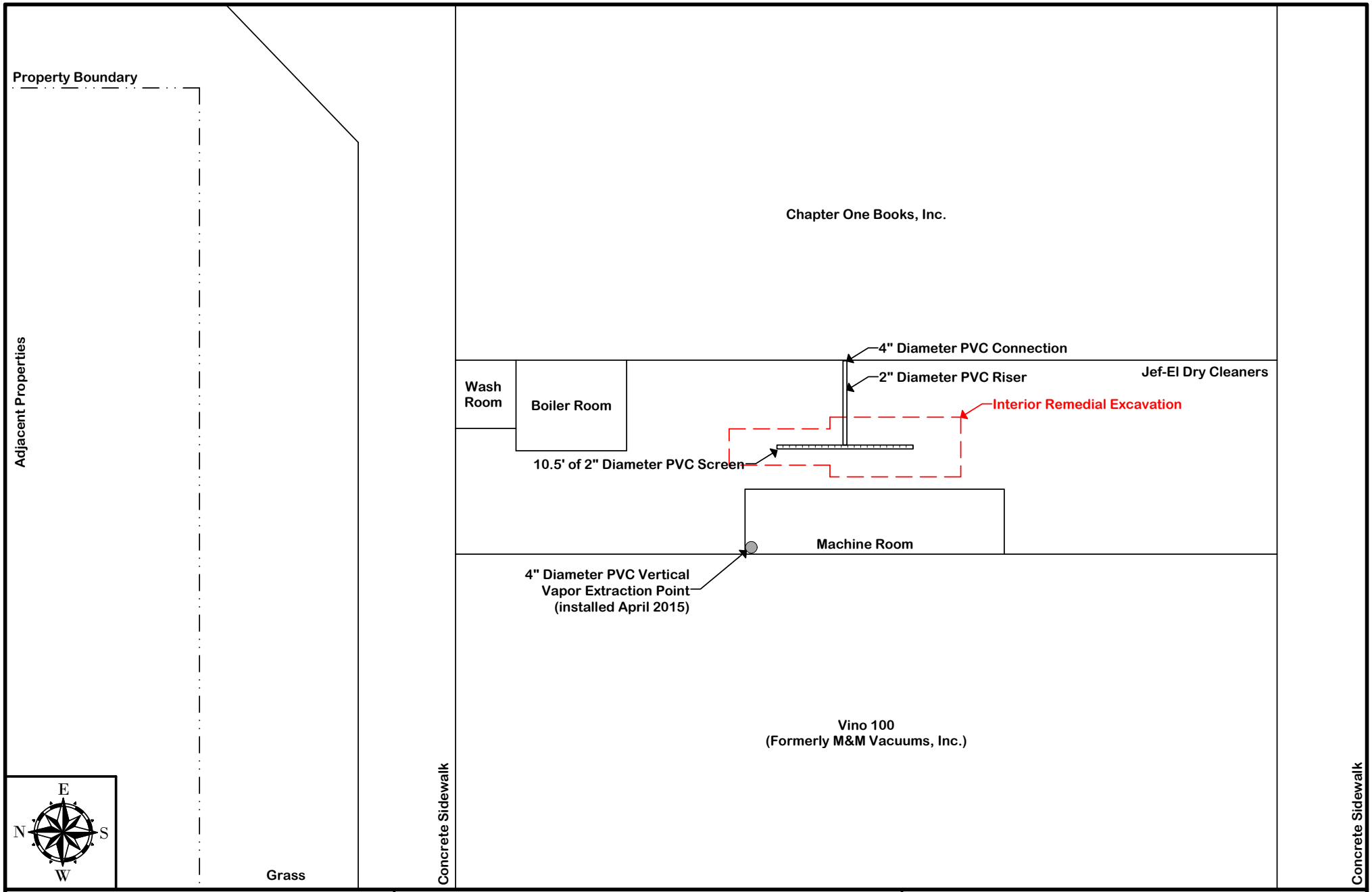

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Figure 3: Location of Remedial Treatment Systems

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale : 1" = 10'

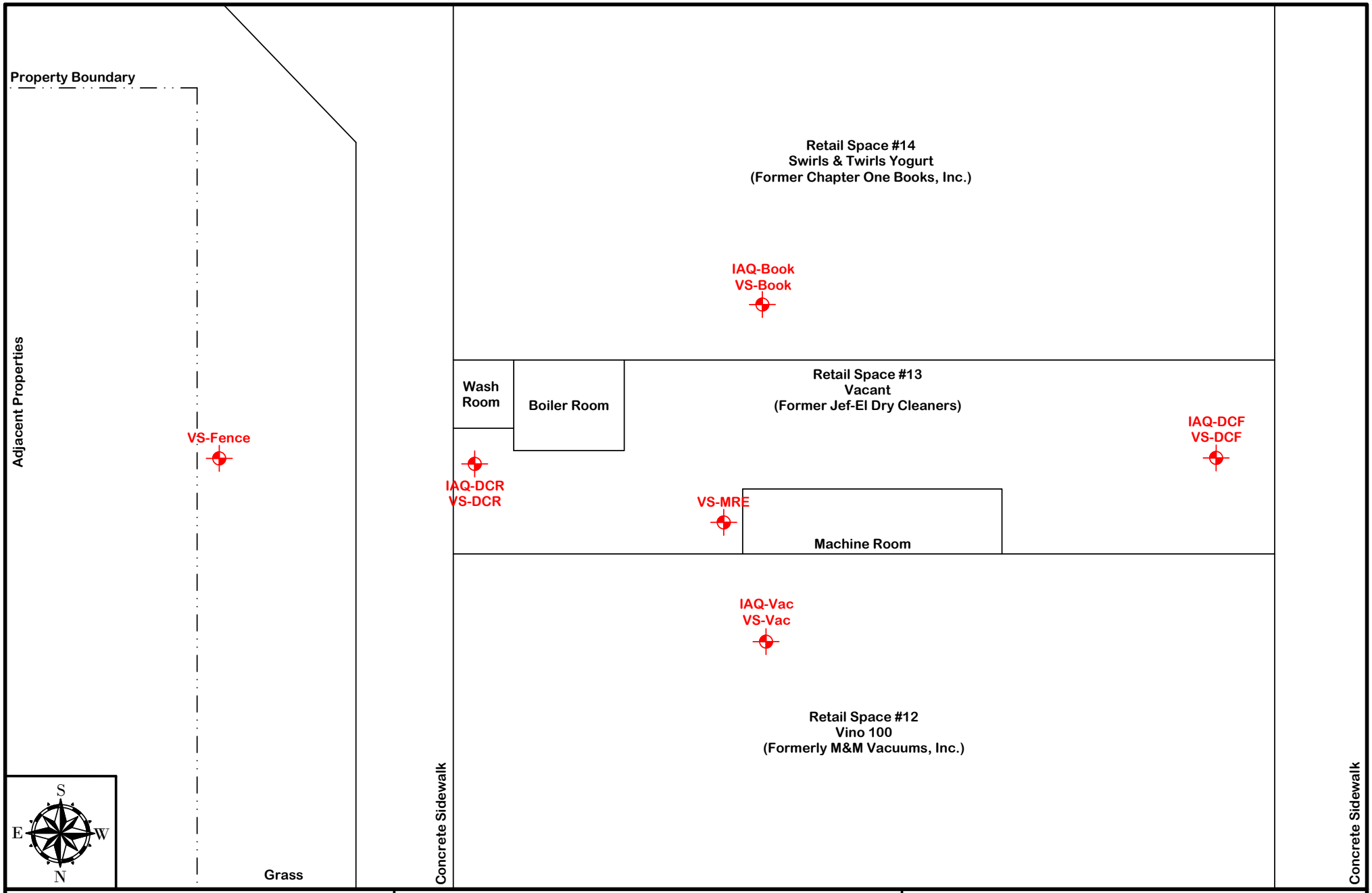

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Figure 4:
Sub-Slab Vapor and Indoor Air Quality Sample Location Map

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 10'

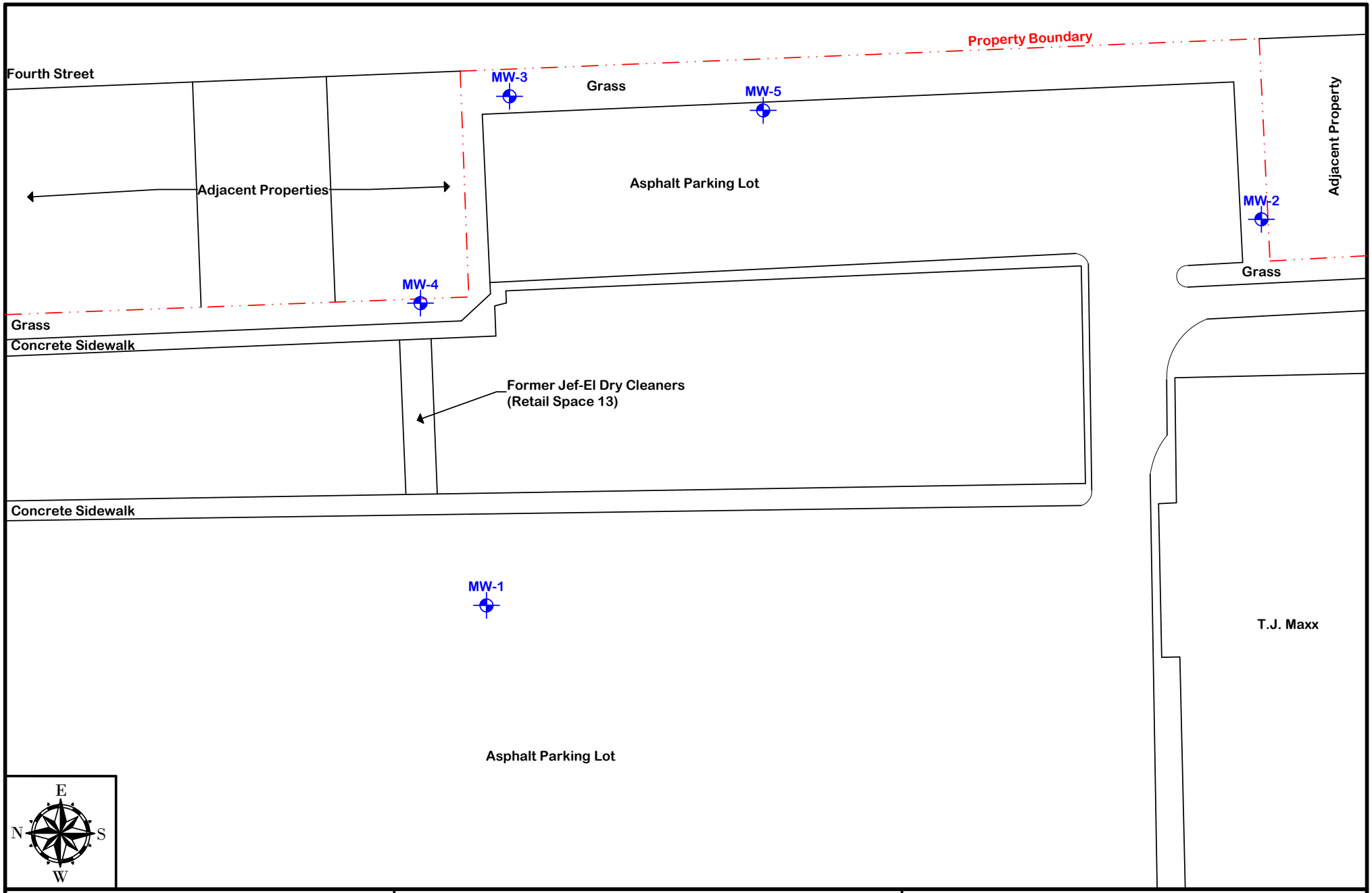

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Figure 5: Groundwater Monitoring Well Location Map

Oceanside Plaza

3131-3221 Long Beach Road, Oceanside, NY

Town of Hempstead, Nassau County

Scale: 1" = 60'

TABLES

TABLE 1
Remedial Investigation Soil Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample ID	Sample Date	Sample Depth (feet)	1,1-Dichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Tetrachloroethene (mg/kg)	Toluene (mg/kg)	Trichloroethene (mg/kg)	Vinyl Chloride (mg/kg)
SCO[a]	na	na	0.33	0.25	1.3	0.70	0.47	0.02
BK-Ocean-1	7/13/2004	8	ND	ND	ND	ND	ND	ND
BK-Ocean-2	7/13/2004	6	ND	ND	0.51	ND	ND	ND
BK-Ocean-3	7/13/2004	6	ND	ND	0.67	ND	ND	ND
BK-Ocean-4	7/13/2004	2	ND	ND	**85**	ND	0.11	ND
BKO-1	2/23/2005	1	ND	ND	0.41	ND	ND	ND
		3	ND	ND	0.075	ND	ND	ND
BKO-2	2/23/2005	1	ND	ND	0.20	ND	ND	ND
		3	ND	ND	0.14	ND	ND	ND
BKO-3	2/23/2005	1	ND	ND	**1.6**	ND	0.0017	ND
		3	ND	ND	0.057	ND	ND	ND
		7	ND	ND	0.016	ND	ND	ND
BKO-SB1[b]	10/1/2007	3	ND	ND	ND	**4.1**	ND	ND
BKO-SB2	10/1/2007	18	ND	ND	0.52	ND	ND	ND
BKO-SB3	10/1/2007	12	ND	ND	**740**	ND	ND	ND
BKO-SB4	10/1/2007	18	ND	ND	**1,200**	ND	ND	ND
E1	12/20/10	39	ND	ND	ND	ND	ND	ND
		80[c]	ND	ND	ND	ND	ND	ND
E2	12/20/10	51	ND	ND	0.031	ND	ND	ND
		80c	ND	ND	ND	ND	ND	ND
E3	12/20/10	42	ND	ND	0.005	ND	ND	ND
		80c	ND	ND	ND	ND	ND	ND
E4	7/21/09	42	ND	ND	1.1	ND	ND	ND
E5	7/21/09	18	ND	ND	1.3	ND	ND	ND
E6	12/20/10	24	ND	ND	0.022	ND	ND	ND
		80c	ND	ND	0.019	ND	ND	ND

[a]Track 1 - Unrestricted Use Soil Cleanup Objectives (Chapter 4, Subpart 375-6, Table 375-6.8(a))
[b]Collected from strom water dry well located in the eastern parking lot.
[c]Sample collected at the soil/water interface.

na = Not Applicable.
ND = Non Detect.
BOLD = Exceeds the Track 1 Soil Cleanup Objectives.

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TABLE 2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Monitoring Well	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	MTBE
		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
MW-1	11/16/2005	5.54	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	5.77	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	5.79	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	6.51	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-2	11/16/2005	6.06	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**12**
	2/22/2006	6.28	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.23	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**13**
	10/1/2007	6.99	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-3	11/16/2005	6.53	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.74	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.78	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.48	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

NA = Not Analyzed.
All concentrations are reported in µg/l.
[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)
BOLD = Exceeds the Ground Water Quality Standard.

TABLE 2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Monitoring Well	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	MTBE
		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
MW-4	11/16/2005	6.60	<2.0	<2.0	**360**	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.82	<2.0	<2.0	**230**	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.84	<2.0	<2.0	**100**	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.57	<5.0	<5.0	**110**	<5.0	<5.0	<5.0	NA
	7/21/2009	6.90	<0.8	<0.8	**77**	<0.8	<1.0	<1.0	NA
	10/7/2009	7.33	<5.0	<5.0	**21**	<5.0	<5.0	<5.0	NA
	1/21/2010	7.09	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	5.95	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	7.53	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	7.05	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	7/19/2011	7.49	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011	7.00	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012	7.13	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	4/25/2012	7.23	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012	7.21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	7.46	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	11/13/2013	7.94	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	3/10/2015	7.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	12/9/2015	7.60	<0.5	<0.5	3	<0.5	<0.5	<0.5	NA

NA = Not Analyzed.
All concentrations are reported in µg/l.
[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)
BOLD = Exceeds the Ground Water Quality Standard.

TABLE 2
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Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Monitoring Well	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	MTBE
		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
MW-5	7/21/2009	6.44	<0.8	<0.8	**160**	<0.8	1.00	<1.0	NA
	10/7/2009	6.88	<5.0	**54**	**74**	<5.0	<5.0	**17**	NA
	1/21/2010	6.64	<5.0	<5.0	**80**	<5.0	<5.0	<5.0	NA
	4/7/2010	5.49	<5.0	<5.0	**37**	<5.0	<5.0	<5.0	NA
	7/22/2010	7.06	<5.0	**74**	**69**	<5.0	<5.0	<5.0	NA
	1/26/2011	6.56	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	7.03	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	6.55	<5.0	**57**	**8**	<5.0	<5.0	**13**	NA
	1/24/2012	6.67	<5.0	**80**	**7**	<5.0	<5.0	**10**	NA
	4/25/2012	6.76	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA
	7/20/2012	6.75	<5.0	**9**	**14**	<5.0	<5.0	<5.0	NA
	10/18/2012	6.99	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA
	11/13/2013	7.46	<5.0	**13**	<5.0	<5.0	<5.0	<5.0	NA
	3/10/2015	6.90	<0.5	**18**	2	<0.5	<0.5	0.8	NA
	12/9/2015	7.16	<0.5	<0.5	3	<0.5	<0.5	<0.5	NA

NA = Not Analyzed.
All concentrations are reported in µg/l.
[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)
BOLD = Exceeds the Ground Water Quality Standard.

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		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
Duplicate (MW-4)	10/1/2007	na	<5.0	<5.0	**160**	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	**75**	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	**20**	<5.0	<5.0	<5.0	NA
	1/21/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	**13**	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	**12**	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	11/13/2013	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	3/10/2015	na	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	12/9/2015	na	<0.5	<0.5	3	<0.5	<0.5	<0.5	NA

NA = Not Analyzed.

All concentrations are reported in µg/l.

[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

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		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
Field Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	11/13/2013	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	3/10/2015	na	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	12/9/2015	na	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA

NA = Not Analyzed.

All concentrations are reported in µg/l.

[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

235 North Duke Street, Lancaster, PA 17602
Phone: (717) 735-9508 / Fax: (717) 735-9509
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TABLE 2
Remedial Investigation Ground Water Contamination Summary
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Monitoring Well	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	MTBE
		CAS Registry Number	75-35-4	156-59-2	127-18-4	156-60-5	79-01-6	75-01-4	1634-04-4
		NYSDEC GWQS[a]	5.0	5.0	5.0	5.0	5.0	2.0	10
Trip Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2020	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	11/13/2013	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	3/10/2015	na	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	12/9/2015	na	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA

NA = Not Analyzed.

All concentrations are reported in µg/l.

[a]Ground Water Quality Standards (Chapter X, Part 703, §703.5, Table 1)

BOLD = Exceeds the Ground Water Quality Standard.

235 North Duke Street, Lancaster, PA 17602
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TABLE 3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Indoor Air Quality								
Air Guideline Value[a]		DNE	DNE	DNE	30	DNE	2	DNE
Chapter One Books, Inc. (Retail Space 14)	12/6/2007	0.63U	0.63U	0.63U	**88**	0.63U	**5.9**	0.41U
	9/2/2009	2U	2U	2U	**500**	2U	2.7U	1.3U
	10/28/2009	0.63U	0.63U	0.63U	11	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	2.3	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	**32**	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	8.1	0.79U	0.33	0.51U
	3/20/2014	0.079U	0.099	0.079U	2.62	0.099	0.134	0.051U
	3/25/2015	0.079U	0.167	0.079U	**39.8**	0.167	0.231	0.051U
	9/21/2015	0.079U	0.079U	0.079U	9.9	0.079U	0.296	0.051U
Vino 100 (Retail Space 12)	12/6/2007	0.63U	0.63U	0.63U	2.6	0.63U	0.86U	0.41U
	9/2/2009	4U	4U	4U	**880**	4U	5.4U	2.6U
	10/28/2009	0.63U	0.63U	0.63U	7.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	5.2	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	28	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	13	0.79U	0.21U	0.51U
	3/20/2014	0.079U	0.079U	0.079U	3.4	0.079U	0.107U	0.051U
	3/25/2015	0.079U	0.079U	0.079U	3.31	0.079U	0.107U	0.051U
	9/21/2015	0.079 U	0.079U	0.079U	16.7	0.079U	0.107U	0.051U
Jef-El Dry Cleaners (DCR) (Retail Space 13)	9/21/2015	0.079 U	0.079 U	0.079 U	**117**	0.079 U	0.403	0.051 U
Jef-El Dry Cleaners (DCF) (Retail Space 13)	9/21/2015	0.079 U	0.079 U	0.079 U	**60.5**	0.079 U	0.242	0.051 U

All concentrations are reported in micrograms per cubic meter ($\mu g/m^3$).
[a]NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (Indoor Air Quality Only).
[b]Ambient air quality sample.
BOLD = Exceeds the Air Guideline Value.
DNE = Does Not Exist.

TABLE 3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Sub-Slab Vapor								
Chapter One Books, Inc. (Retail Space 14)	12/6/2007	48U	48U	48U	8,100	48U	64U	31U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	467	0.79U	7	0.51U
	3/1/2012	3.2U	3.1U	3.2U	232	3.2U	1.2	2U
	12/18/2012	3.2U	3.1U	3.2U	131	3.2U	0.86U	2U
	3/20/2014	0.793U	0.793U	0.793U	187	0.793U	1.07U	0.511U
	3/25/2015	0.793U	0.793U	0.793U	4.92	0.793U	1.07U	0.511U
	9/21/2015	0.159 U	0.159 U	0.159 U	**363**	0.159 U	1.76	0.102 U
Vino 100 (Retail Space 12)	12/6/2007	120U	120U	120U	18,000	120U	160U	77U
	10/28/2009	0.63U	0.63U	0.63U	2.4	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	4,180	0.79U	78.5	0.51U
	3/1/2012	44U	43U	44U	21,100	44U	97.8	28U
	12/18/2012	13U	13U	13U	9,830	13U	36U	8.2U
	3/20/2014	3.96U	3.96U	3.96U	2,070	3.96U	11.8	2.56U
	3/25/2015	0.793 U	0.793 U	0.793 U	66.3	0.793 U	1.07 U	0.511 U
	9/21/2015	0.396 U	0.396 U	0.396 U	**1,660**	0.396 U	**10.5**	0.256 U
Jef-El Dry Cleaners (DCF) (Retail Space 13)	12/6/2007	1.2U	1.2U	1.2U	350	1.2U	2.5	0.77U
	10/28/2009	0.63U	0.63U	0.63U	2.2	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	150	0.79U	2.6	0.51U
	3/1/2012	3.2U	3.1U	3.2U	766	3.2U	3.7	2U
	12/18/2012	3.2U	3.1U	3.2U	11	3.2U	0.86U	2U
	3/20/2014	0.793U	0.793U	0.793U	4.62	0.793U	1.07U	0.511U
	3/25/2015	0.793 U	0.793U	0.793U	21.9	0.793U	1.07U	0.511U
	9/21/2015	0.079 U	0.079 U	0.079 U	**78**	0.079 U	0.43	0.072

All concentrations are reported in micrograms per cubic meter ($\mu g/m^3$).
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BOLD = Exceeds the Air Guideline Value.
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TABLE 3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Sub-Slab Vapor								
Jef-El Dry Cleaners (DCR) (Retail Space 13)	12/6/2007	320U	320U	320U	81,000	320U	430U	200U
	10/28/2009	0.63U	0.63U	0.63U	2.9	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	3,480	0.79U	21	0.51U
	3/1/2012	3.2U	3.1U	3.2U	1,990	3.2U	2.2	2U
	12/18/2012	3.2U	3.1U	3.2U	164	3.2U	0.86U	2U
	3/20/2014	0.793U	0.793U	0.793U	148	0.793U	1.07U	0.511U
	3/25/2015	0.793U	0.793U	0.793U	8.88	0.793U	1.07U	0.511U
	9/21/2015	0.396 U	0.396 U	0.396 U	**1,520**	0.396 U	**5.59**	0.256 U
Jef-El Dry Cleaners (MRE) (Retail Space 13)	12/6/2007	280U	280U	280U	50,000	280U	380	180U
	9/4/2009	3.2U	3.2U	3.2U	37	3.2U	51	2U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	15	0.41U
	1/13/2012	0.79U	0.79U	0.79U	1,080	0.79U	56.4	0.51U
	3/1/2012	3.2U	3.1U	3.2U	902	3.2U	3.5	2U
	12/18/2012	3.2U	3.1U	3.2U	205	3.2U	0.86U	2U
	3/20/2014	1.98U	1.98U	1.98U	963	1.98U	9.14	1.28U
	3/25/2015	0.793 U	0.793 U	0.793 U	23.2	0.793 U	1.07 U	0.511 U
	9/21/2015	0.793 U	0.793 U	0.793 U	**2,820**	0.793 U	**15.2**	0.511 U
Jef-El Dry Cleaners (Fence) (Retail Space 13)	12/6/2007	1.2U	1.2U	1.2U	240	1.2U	1.6U	0.77U
	1/13/2012	0.79U	0.79U	0.79U	46	0.79U	0.39	0.51U
	3/1/2012	3.2U	3.1U	3.2U	224	3.2U	0.86U	2U
	12/18/2012	3.2U	3.1U	3.2U	1.1U	3.2U	0.86U	2U
	3/20/2014	0.793U	0.793U	0.793U	1.36U	0.793U	1.07U	0.511U
	3/25/2015	0.793U	0.793U	0.793U	10.7	0.793U	1.07U	0.511U
	9/21/2015	0.079 U	0.079 U	0.079 U	**102**	0.079 U	0.113	0.102

All concentrations are reported in micrograms per cubic meter ($\mu g/m^3$).
[a]NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (Indoor Air Quality Only).
[b]Ambient air quality sample.
BOLD = Exceeds the Air Guideline Value.
DNE = Does Not Exist.

TABLE 3
Remedial Investigation Soil Vapor Data
Oceanside Plaza (NYSDEC Site Number: C130158)
3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York

Sample Location	Sample Date	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Sub-Slab Vapor								
Pizzaiola (Retail Space 13)	6/14/2010	0.63U	0.63U	0.63U	5	0.63U	0.86U	0.41U
Protass (Retail Space 9)	6/14/2010	0.63U	0.63U	0.63U	17	0.63U	0.86U	0.41U
Ambient								
AMB[b]	12/6/2007	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	9/2/2009	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	6/14/2010	0.63U	0.63U	0.63U	13	0.63U	1.40	0.41U
	1/13/2012	0.79U	0.79U	0.79U	0.6	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	0.57	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	1.2	0.79U	0.21U	0.51U
	9/21/2015	0.079 U	0.079 U	0.079 U	0.197	0.079 U	0.107 U	0.051 U

All concentrations are reported in micrograms per cubic meter ($\mu g/m^3$).
[a]NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (Indoor Air Quality Only).
[b]Ambient air quality sample.
BOLD = Exceeds the Air Guideline Value.
DNE = Does Not Exist.

APPENDIX A
VAPOR INTRUSION SAMPLING LABORATORY ANALYTICAL DATA SHEETS

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Alpha Analytical

Laboratory Code: 11148

SDG Number: L1523462

Table of Contents

Table of Contents

Project Name: OCEANSIDE PLAZA
Project Number: 1802.0001Y000

Lab Number: L1523462
Report Date: 09/28/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1523462-01	VS-FENCE	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 16:52	09/21/15
L1523462-02	AMBIENT	AIR	OCEANSIDE,NY	09/21/15 16:56	09/21/15
L1523462-03	VS-DCR	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:06	09/21/15
L1523462-04	IA-DCR	AIR	OCEANSIDE,NY	09/21/15 17:15	09/21/15
L1523462-05	VS-MRE	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:12	09/21/15
L1523462-06	VS-DCF	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:19	09/21/15
L1523462-07	IA-DCF	AIR	OCEANSIDE,NY	09/21/15 17:22	09/21/15
L1523462-08	VS-VAC	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:41	09/21/15
L1523462-09	IA-WINE	AIR	OCEANSIDE,NY	09/21/15 17:47	09/21/15
L1523462-10	VS-BOOK	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:51	09/21/15
L1523462-11	IA-YOGURT	AIR	OCEANSIDE,NY	09/21/15 17:53	09/21/15

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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 free of charge for 30 days from the date the project is completed. After 30 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.

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 September 18, 2015. The canister certification results are provided as an addendum.

Sample L1523462-03, -05, -08, and -10: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

Sample Receipt

The sample designated VS-MRE (L1523462-05) had a RPD for the pre- and post-flow controller calibration check (188% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 10.0 mL/minute; the final flow rate was 0.3 mL/minute. The final pressure recorded by the laboratory of the associated canister was -5.0 inches of mercury. No further action was required.

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: 09/28/15

Title: Technical Director/Representative

List of Organic Method Qualifiers

Table 1

Qualifier (Q)	Description
B	Entered if the analyte is found in the associated blank as well as the sample.
C	Applied to pesticide results when the identification has been confirmed by GC/MS.
D	Included when the all identified compounds in the analysis are at the secondary dilution factor.
E	Identified compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
J	Indicates an estimated value, may indicate one of the following, depending on the situation: (1) The reported value is estimated and below the MDL. (2) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero. (3) QC associated with this analyte is within warning limits.
N	Included for TIC that indicate presumptive evidence of a compound.
U	Entered if the analyte was analyzed for, but not detected.
P	Used for a pesticide/Aroclor target analyte when the concentration difference between 2 GC columns is greater than 25%; the lower value is flagged with a “P”.
EMPC	“Estimated Maximum Possible Concentration” – The amount of analyte cannot be accurately quantified, so a maximum concentration has been estimated for the compound.
“XYZ”	“Wildcard” or Laboratory defined qualifier.

Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable, please assess qualifier priority in the following order: U, E, J, B, D, C, P, N. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 64)

List of Inorganic Method Qualifiers

Table 2

Qualifier	Column (1)	Description
Concentration qualifiers		
B	C	Entered if the reported value was less than the CRDL, but greater than the IDL.
U	C	Entered if the analyte was analyzed for, but not detected.
J	C	Entered if the reported value is estimated and below the MDL.
*	C	Duplicate precision exceeds RPD limit.
M	C	Replicate precision exceeds RPD limit.
"XYZ"	C	"Wildcard" or Laboratory defined qualifier.
Qualifier specific entries		
E	Q	Entered if the reported value is estimated because of the presence of interferences.
Method qualifiers		
A	M	Flame atomic absorption
AS	M	Semi-automated spectrophotometric
AV	M	Automated cold vapor atomic absorption
C	M	Manual spectrophotometric
F	M	Furnace atomic absorption
MS	M	Mass spectrometry (ICP-MS)
NR	M	Analyte is not required to be analyzed
P	M	Inductively coupled plasma (ICP)
" "	M	No data have been entered

(1) The term "Column" is used to indicate under which column heading in the reporting forms that the qualifier will be found under.
Note: Form I allows only one character in each qualifier column. If multiple qualifiers are applicable to column C, please assess qualifier priority in the following order: U, J, B. Reporting done in the EDD may include multiple qualifiers when applicable, separated by a single space.

(Information obtained from NYSDEC ASP Exhibit B, 7/2005, page 65)

Volatile Organics Instruments

Volatile Organics: Jack

Instrument: Agilent 5975MSD	Column Type: RTX-VMS
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 20 Meters
Concentrator: EST Encon	df: 1.00um
Autosampler: EST Centurion	ID: 0.18mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: Quimby

Instrument: Agilent 5973MSD	Column Type: RTX-VMS
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 20 Meters
Concentrator: EST Encon	df: 1.00um
Autosampler: EST Centurion	ID: 0.18mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: Curly

Instrument: Agilent 5972 MSD	Column Type: Restek RTX-502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 40 Meters
Concentrator: Tekmar 3000	df: 1.00 um
Autosampler: Archon	ID: 0.18 mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: Elaine

Instrument: Agilent 5973 MSD	Column Type: Restek RTX-502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 40 Meters
Concentrator: Teledyne Velocity	df: 1.00 um
Autosampler: Teledyne Solatek	ID: 0.18 mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: Gonzo

Instrument: Agilent 5973 MSD	Column Type: Restek RTX-502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 40 Meters
Concentrator: Teledyne Velocity	df: 1.00 um
Autosampler: Teledyne Solatek	ID: 0.18 mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: VOA101

Instrument: Agilent 5975C inert XL MSD	Column Type: Restek RTX-VMS
Trap: EST K Trap (VOACARB 3000)	Column Length: 30 Meters
Concentrator: Encon Evolution	df: 1.40 um
Autosampler: EST Centurion	ID: 0.25 mm
Purge time: 11 min	Desorb: 1 min

Volatile Organics: Charlie/Voa100/Voa104

Instrument: Agilent 5975C MSD	Column Type: Agilent DB-624
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 25 Meters
Concentrator: Encon Evolution	df: 1.12 um
Autosampler: EST Centurion	ID: 0.20 mm
Purge time: 11 min	Desorb: 2 min

Volatile Organics: M

Instrument: Agilent 6890	Column Type: Restek RTX 502.2
	Column Length: 105 Meters
Concentrator: Tekmar 2016	df: 3.00 um
Autosampler: Tekmar 3100	ID: 0.53 mm

Volatile Organics: L/N

Instrument: Agilent 6890	Column Type: Restek RTX 502.2
	Column Length: 105 Meters
Concentrator: Encon Evolution	df: 3.00 um
Autosampler: EST Centurion	ID: 0.53 mm

Volatile Organics: O/P

Instrument: Agilent 7890A	Column Type: Restek RTX 502.2
	Column Length: 105 Meters
Concentrator: Encon Evolution	df: 3.00 um
Autosampler: EST Centurion	ID: 0.53 mm

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instrument: Agilent 6890 GC / 5975 MSD	Column Type: Restek RTX-1
	Column Length: 60 Meters
Concentrator: Entech 7100A	df: 1.00 um
Autosampler: Entech 7016CA	ID: 0.52 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments

Semivolatile Organics (Acid/Base/Neutral Extractables): Buffy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (Acid/Base/Neutral Extractables): Juliet/GCMS5/GCMS7

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Dakota/Mork

Instrument: Agilent 5973 MSD	Injection volume: 1 ul
Column Type: Restek RTX-5MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM: Mindy

Instrument: Agilent 5973N MSD	Injection volume: 1 ul
Column Type: Restek RXI-5SIL MS	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

Pesticides/PCB : Pest 11/Pest2/Pest7/Pest12

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek RTX-CLP (Channel A)	df: 0.32 um
Column: Restek RTX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Pesticides/PCB: Pest 10/ Pest9

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek STX-CLP (Channel A)	df: 0.32 um
Column: Restek STX-CLPPesticide II (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Herbicides

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column Type: Restek RTX-1701 (Channel A)	df: 0.25 um
Column Type: Restek RTX-5 (Channel B)	df: 0.25 um
Column Length: 30 Meters (Both)	ID: 0.32 mm (Both)

Petro9

Instrument: Agilent 6890 w/FID	Injection Volume: 1uL
Column: Restek RTX-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.32 mm

EPH Petro10/ Petro11

Instrument: Agilent 6890N w/FID	Injection Volume: 1uL
Column: Restek RTX-5-MS	df: 0.25um
Column Length: 30 Meters	ID: 0.32 mm

Explosives

Instrument: Dionex ICS-3000, AS50 Autosampler and PDA-100 detectors.
Injection Volume: 100uL
Column: Phenomenex Synergi 4u Hydro-RP and Luna 5u Phenyl-Hexyl.

GC/MS Forensic Semivolatile Organic Instruments

Semivolatile Organics (ALK-PAH extractables): PAH1/PAH2/PAH3/PAH4

Instrument: Agilent 5973C MSD	Injection volume: 1 ul
Column Type: Phenomenex ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH8/PAH9/PAH10/PAH11/PAH12/PAH13/PAH14

Instrument: Agilent 5975C MSD	Injection volume: 1 ul
Column Type: Phenomenex ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (ALK-PAH extractables): PAH17/PAH18/PAH19

Instrument: Agilent 5975C MSD	Injection volume: 1 ul
Column Type: Phenomenex ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

GC/FID Forensic Semivolatile Organic Instruments

Semivolatile Organics (SHC extractables):PAH1/PAH2/PAH3/PAH4/PAH8

Instrument: Agilent 6890N w/FID	Injection Volume: 1uL
Column: Restek RTX-5	df: 0.25um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (SHC extractables): FID6 (dual column)/ FID9 (dual column)/ FID17 (dual column)

Instrument: Agilent 6890N w/FID	Injection Volume: 1uL
Column: Restek RTX-5	df: 0.25um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (SHC extractables):FID7 (dual column)

Instrument: Agilent 7890N w/FID	Injection Volume: 1uL
Column: Restek RTX-5	df: 0.25um
Column Length: 60 Meters	ID: 0.25 mm

Sample Delivery Group Form

Laboratory Job number: L1523462
Project Manager: Chris Anderson **Review Date:** 09/23/2015
Project Number: 1802.0001Y000
Project Name: OCEANSIDE PLAZA **Received:** 09/21/2015 18:00
Client Account: Roux Associates, Inc. **Received by:** BB/KB

Samples Delivered by: COURIER **Call Tracker #**
Bill Of Laden N/A **Trackingnum**
Coc Present Present

Container Status Intact **Sample IDs**

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt N/A **Are samples Properly Preserved?** Yes
Initial pH **preserved in house with** **Final pH**
Other Issues
Chlorine Check N/A

Are VOA/VPH Vials Present? No
Aqueous: Do Vials Contain Head Space? N/A
Soils: Is MeOHCovering the Soil? N/A
Reagent H2O Preserved vials Frozen on N/A
Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
N/A	Absent	No	No	-	No	No

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 28 2015, 02:30 pm

Login Number: L1523462
Account: ROUX-NY Roux Associates, Inc.Project: 1802.0001Y000
Received: 21SEP15 Due Date: 28SEP15

Sample #	Client ID	Mat	PR	Collected	Container
L1523462-01	VS-FENCE	11	S0	21SEP15 16:52	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. ASP-B Package Due Date: 09/28/15

ASP-B,CAN-RENT,FLOW-RENT,TO15-SIM

L1523462-02	AMBIENT	10	S0	21SEP15 16:56	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15

CAN-RENT,FLOW-RENT,TO15-SIM

L1523462-03	VS-DCR	11	S0	21SEP15 17:06	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15

CAN-RENT,FLOW-RENT,TO15-SIM

L1523462-04	IA-DCR	10	S0	21SEP15 17:15	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15

CAN-RENT,FLOW-RENT,TO15-SIM

L1523462-05	VS-MRE	11	S0	21SEP15 17:12	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15

CAN-RENT,FLOW-RENT,TO15-SIM

L1523462-06	VS-DCF	11	S0	21SEP15 17:19	1-Can-6

Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 28 2015, 02:30 pm

Login Number: L1523462
Account: ROUX-NY Roux Associates, Inc.Project: 1802.0001Y000
Received: 21SEP15 Due Date: 28SEP15

Sample #	Client ID	Mat	PR	Collected	Container
CAN-RENT,FLOW-RENT,TO15-SIM					
L1523462-07	IA-DCF		10	S0 21SEP15 17:22	1-Can-6
Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15					
CAN-RENT,FLOW-RENT,TO15-SIM					
L1523462-08	VS-VAC		11	S0 21SEP15 17:41	1-Can-6
Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15					
CAN-RENT,FLOW-RENT,TO15-SIM					
L1523462-09	IA-WINE		10	S0 21SEP15 17:47	1-Can-6
Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15					
CAN-RENT,FLOW-RENT,TO15-SIM					
L1523462-10	VS-BOOK		11	S0 21SEP15 17:51	1-Can-6
Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15					
CAN-RENT,FLOW-RENT,TO15-SIM					
L1523462-11	IA-YOGURT		10	S0 21SEP15 17:53	1-Can-6
Please report: 1,1-DCE, cis and trans-1,2-DCE, Total 1,2-DCE, PCE, TCE and VC. Package Due Date: 09/28/15					
CAN-RENT,FLOW-RENT,TO15-SIM					

Logged By: Chris Anderson

AIR ANALYSIS

PAGE 1 OF 2

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 9/22/15

ALPHA Job #: L 1523462

Client Information

Client: Roux Associates
Address: 209 Shafter St.
Islandia, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RKovacs@RouxInc.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Oceanside Plaza
Project Location: Oceanside, NY
Project #: 1802.0001Y000
Project Manager: Rob Kovacs
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: NYSDEC ASP Category B
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
DETECTION LIMIT: 1 µg/m³ OR LESS

ANALYZE FOR:
1,1-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
1,2-DICHLOROETHENE (TOTAL)
TETRACHLOROETHENE
TRICHLOROETHENE
VINYL CHLORIDE

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
23462-01	VS-FENCE	9-21-15	0842	1652	-30.26	-7.73	SV	VS/AF	6L	2117	0555		X						
-02	AMBIENT	9-21-15	0846	1656	-30.32	-6.51	AA	VS/AF	6L	1610	0018		X						
-03	VS-DCR	9-21-15	0857	1706	-30.16	-6.70	SV	VS/AF	6L	967	0093		X						
-04	IA-DCR	9-21-15	0901	1715	-30.52	-7.38	IA	VS/AF	6L	1644	0401		X						
-05	VS-MRE	9-21-15	0909	1712	-30.43	-5.16	SV	VS/AF	6L	2119	0386		X						
-06	VS-DCF	9-21-15	0916	1719	-30.53	-7.64	SV	VS/AF	6L	940	0551		X						
-07	IA-DCF	9-21-15	0919	1722	-30.19	-8.63	IA	VS/AF	6L	1573	0546		X						
-08	VS-VAC	9-21-15	0931	1741	-30.07	-5.12	SV	VS/AF	6L	1673	0244		X						
-09	IA-WINE	9-21-15	0933	1747	-30.66	-6.32	IA	VS/AF	6L	1611	0377		X						
-10	VS-BOOK	9-21-15	0944	1751	-30.92	-5.95	SV	VS/AF	6L	2055	0639		X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type — SUMA

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:
Valerie Sofianos	9/21/15 18:00		
Paul Hilliger (GAI)	9/21/15 2000	Tom Tobin	9-21-15 2000
Tom Tobin	9-22-15 0115	Stu Sadoff	9/22/15 0115

Form No: 101-02 (19-Jun-09)

AIR ANALYSIS

PAGE 2 OF 2

CHAIN OF CUSTODY

Date Rec'd in Lab: 9/22/15

ALPHA Job #: L1523462

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ROUX ASSOCIATES
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RKOVACS@ROUXINC.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: OCEANSIDE PLAZA
Project Location: OCEANSIDE, NY
Project #: 1802.0001Y000
Project Manager: ROB KOVACS
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: NYSDEC ASP CATEGORY B
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
DETECTION LIMIT: 1 µg/m³ OR LESS

ANALYZE FOR:
TETRACHLOROETHENE
TRICHLOROETHENE
VINYL CHLORIDE
1,1-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
1,2-DICHLOROETHENE (TOTAL)

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
-11	IA-YOGURT	9-21-15	0946	1753	-30.14	-6.71	IA	VS/AF	6L	1053	0432		X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type			SUMMA					

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:
Valerie Salvatore	9/21/15 18:06		
Dan Kelly (AAL)	9/21/15 2000	Tom Tobin (AAL)	9-21-15 2000
Tom Tobin	9-22-15 0115	Bob Bedard	9/22/15 0115

Form No: 101-02 (19-Jun-09)

Organics

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Volatiles QC Summary

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1523462 Matrix: Air

Lab Sample ID : WG824625-5 Injected: 09/24/15 21:05 Lab File ID: R236542

Client Sample ID : VS-FENCE

COMPOUND	SAMPLE CONCENTRATION (ppbV)	DUP CONCENTRATION (ppbV)	DUP % RPD	DUP RPD LIMIT
Vinyl chloride	0.040	0.041	2	25
1,1-Dichloroethene	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
cis-1,2-Dichloroethene	ND	ND	NC	25
Trichloroethene	0.021	0.021	0	25
Tetrachloroethene	15.1	15.5	3	25
1,2-Dichloroethene (tota	ND	ND	NC	25

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

LAB CONTROL SAMPLE RECOVERY
AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1523462 Matrix: Air
Lab Control Sample: WG824625-3LCS Injected: 09/24/15 12:31 Lab File ID: R236529

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	5	NA	5.72	114	-	-	-	25	70-130
Chloromethane	5	NA	4.39	88	-	-	-	25	70-130
Freon-114	5	NA	4.89	98	-	-	-	25	70-130
Vinyl chloride	5	NA	4.84	97	-	-	-	25	70-130
1,3-Butadiene	5	NA	5.05	101	-	-	-	25	70-130
Bromomethane	5	NA	5.06	101	-	-	-	25	70-130
Chloroethane	5	NA	4.12	82	-	-	-	25	70-130
Acetone	25	NA	22.2	89	-	-	-	25	70-130
Trichlorofluoromethane	5	NA	4.68	94	-	-	-	25	70-130
Acrylonitrile	5	NA	4.06	81	-	-	-	25	70-130
1,1-Dichloroethene	5	NA	4.86	97	-	-	-	25	70-130
Methylene chloride	5	NA	4.57	91	-	-	-	25	70-130
Freon-113	5	NA	5.13	103	-	-	-	25	70-130
Halothane	5	NA	4.79	96	-	-	-	25	70-130
trans-1,2-Dichloroethene	5	NA	4.59	92	-	-	-	25	70-130
1,1-Dichloroethane	5	NA	5.09	102	-	-	-	25	70-130
Methyl tert butyl ether	5	NA	5.10	102	-	-	-	25	70-130
2-Butanone	5	NA	4.89	98	-	-	-	25	70-130
cis-1,2-Dichloroethene	5	NA	5.45	109	-	-	-	25	70-130
Chloroform	5	NA	5.05	101	-	-	-	25	70-130
1,2-Dichloroethane	5	NA	4.51	90	-	-	-	25	70-130
1,1,1-Trichloroethane	5	NA	4.32	86	-	-	-	25	70-130
Benzene	5	NA	4.70	94	-	-	-	25	70-130
Carbon tetrachloride	5	NA	4.43	89	-	-	-	25	70-130
1,2-Dichloropropane	5	NA	4.76	95	-	-	-	25	70-130
Bromodichloromethane	5	NA	4.36	87	-	-	-	25	70-130
1,4-Dioxane	5	NA	4.81	96	-	-	-	25	70-130
Trichloroethene	5	NA	4.88	98	-	-	-	25	70-130
cis-1,3-Dichloropropene	5	NA	5.03	101	-	-	-	25	70-130
4-Methyl-2-pentanone	5	NA	4.59	92	-	-	-	25	70-130
trans-1,3-Dichloropropen	5	NA	4.19	84	-	-	-	25	70-130
1,1,2-Trichloroethane	5	NA	5.00	100	-	-	-	25	70-130
Toluene	5	NA	5.57	111	-	-	-	25	70-130
Dibromochloromethane	5	NA	5.46	109	-	-	-	25	70-130
1,2-Dibromoethane	5	NA	5.64	113	-	-	-	25	70-130
Tetrachloroethene	5	NA	5.40	108	-	-	-	25	70-130
1,1,1,2-Tetrachloroethan	5	NA	5.15	103	-	-	-	25	70-130
Chlorobenzene	5	NA	5.79	116	-	-	-	25	70-130
Ethylbenzene	5	NA	5.80	116	-	-	-	25	70-130
p/m-Xylene	10	NA	11.6	116	-	-	-	25	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

LAB CONTROL SAMPLE RECOVERY
AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1523462 Matrix: Air
Lab Control Sample: WG824625-3LCS Injected: 09/24/15 12:31 Lab File ID: R236529

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Bromoform	5	NA	5.75	115	-	-	-	25	70-130
Styrene	5	NA	6.04	121	-	-	-	25	70-130
1,1,2,2-Tetrachloroethan	5	NA	5.93	119	-	-	-	25	70-130
o-Xylene	5	NA	5.84	117	-	-	-	25	70-130
Isopropylbenzene	5	NA	5.65	113	-	-	-	25	70-130
4-Ethyltoluene	5	NA	5.90	118	-	-	-	25	70-130
1,3,5-Trimethybenzene	5	NA	5.83	117	-	-	-	25	70-130
1,2,4-Trimethylbenzene	5	NA	6.20	124	-	-	-	25	70-130
1,3-Dichlorobenzene	5	NA	6.79	136 *	-	-	-	25	70-130
1,4-Dichlorobenzene	5	NA	6.14	123	-	-	-	25	70-130
sec-Butylbenzene	5	NA	5.64	113	-	-	-	25	70-130
p-Isopropyltoluene	5	NA	5.61	112	-	-	-	25	70-130
1,2-Dichlorobenzene	5	NA	6.42	128	-	-	-	25	70-130
n-Butylbenzene	5	NA	6.22	124	-	-	-	25	70-130
1,2,4-Trichlorobenzene	5	NA	7.31	146 *	-	-	-	25	70-130
Naphthalene	5	NA	6.82	136 *	-	-	-	25	70-130
1,2,3-Trichlorobenzene	5	NA	6.87	137 *	-	-	-	25	70-130
Hexachlorobutadiene	5	NA	6.86	137 *	-	-	-	25	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG824625-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Lab File ID: R236531 Lab Sample ID: WG824625-4

Date Analyzed: 09/24/15 Time Analyzed: 14:09

Instrument ID: AIRPIANO2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WG824625-3LCS	WG824625-3	R236529	09/24/15 12:31
02	AMBIENT	L1523462-02	R236536	09/24/15 17:38
03	IA-DCR	L1523462-04	R236537	09/24/15 18:13
04	IA-DCF	L1523462-07	R236538	09/24/15 18:48
05	IA-WINE	L1523462-09	R236539	09/24/15 19:22
06	IA-YOGURT	L1523462-11	R236540	09/24/15 19:56
07	VS-FENCE	L1523462-01	R236541	09/24/15 20:31
08	VS-FENCEDUP	WG824625-5	R236542	09/24/15 21:05
09	VS-DCR	L1523462-03D	R236543	09/24/15 21:37
10	VS-MRE	L1523462-05D	R236544	09/24/15 22:08
11	VS-DCF	L1523462-06	R236545	09/24/15 22:42
12	VS-VAC	L1523462-08D	R236546	09/24/15 23:14
13	VS-BOOK	L1523462-10D	R236547	09/24/15 23:46

COMMENTS: _____

_____

FORM IV TO15-SIM LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Lab File ID: R236173_tune BFB Injection Date: 09/01/15

Instrument ID: AIRPIANO2 BFB Injection Time: 22:47

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	20.4
75	30.0 - 66.0% of mass 95	50.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	73.7
175	4.0 - 9.0% of mass 174	5.6 (7.6)1
176	93.0 - 101% of mass 174	71.9 (97.6)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)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 NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0.02	0.02	R236174	09/01/15	23:20
02	0.04	0.04	R236175	09/01/15	23:53
03	0.1	0.1	R236176	09/02/15	00:28
04	0.2	0.2	R236177	09/02/15	01:01
05	0.5	0.5	R236178	09/02/15	01:34
06	1.0	1.0	R236179	09/02/15	02:10
07	5.0	5.0	R236180	09/02/15	02:44
08	10.0	10.0	R236181	09/02/15	03:19
09	20.0	20.0	R236182	09/02/15	03:51
10	50.0	50.0	R236183	09/02/15	04:25
11	ICV QUANT REPORT	ICV QUANT REPO	R236188	09/02/15	12:26

FORM V TO15-SIM

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Lab File ID: R236527_tune BFB Injection Date: 09/24/15

Instrument ID: AIRPIANO2 BFB Injection Time: 11:22

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	17.6
75	30.0 - 66.0% of mass 95	46
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	83
175	4.0 - 9.0% of mass 174	6.2 (7.5)1
176	93.0 - 101% of mass 174	79.6 (95.9)1
177	5.0 - 9.0% of mass 176	5.3 (6.7)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 NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	WG824625-2	R236529	09/24/15	12:31
02	WG824625-3LCS	WG824625-3	R236529	09/24/15	12:31
03	WG824625-4BLANK	WG824625-4	R236531	09/24/15	14:09
04	AMBIENT	L1523462-02	R236536	09/24/15	17:38
05	IA-DCR	L1523462-04	R236537	09/24/15	18:13
06	IA-DCF	L1523462-07	R236538	09/24/15	18:48
07	IA-WINE	L1523462-09	R236539	09/24/15	19:22
08	IA-YOGURT	L1523462-11	R236540	09/24/15	19:56
09	VS-FENCE	L1523462-01	R236541	09/24/15	20:31
10	VS-FENCEDUP	WG824625-5	R236542	09/24/15	21:05
11	VS-DCR	L1523462-03D	R236543	09/24/15	21:37
12	VS-MRE	L1523462-05D	R236544	09/24/15	22:08
13	VS-DCF	L1523462-06	R236545	09/24/15	22:42
14	VS-VAC	L1523462-08D	R236546	09/24/15	23:14
15	VS-BOOK	L1523462-10D	R236547	09/24/15	23:46

FORM V TO15-SIM

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Lab File ID (Standard): R236529 Date Analyzed: 09/24/15

Instrument ID : AIRPIANO2 Time Analyzed: 12:31

		IS1		IS2		IS3	
		AREA	RT	AREA	RT	AREA	RT
	24 HOUR STD	150935	10.38	437351	12.54	82771	16.89
	UPPER LIMIT	211309	10.71	612291	12.87	115879	17.22
	LOWER LIMIT	90561	10.05	262411	12.21	49663	16.56
	EPA SAMPLE NO.						
01	WG824625-3LCS	150935	10.38	437351	12.54	82771	16.89
02	WG824625-4BLANK	145608	10.38	417358	12.54	73809	16.89
03	AMBIENT	147662	10.37	409420	12.54	78113	16.89
04	IA-DCR	140752	10.38	392907	12.54	74419	16.89
05	IA-DCF	141284	10.38	391273	12.54	74639	16.89
06	IA-WINE	143235	10.38	398193	12.54	74637	16.89
07	IA-YOGURT	141810	10.38	395286	12.54	74442	16.89
08	VS-FENCE	141103	10.38	391499	12.54	73174	16.89
09	WG824625-5DUP	139401	10.38	389987	12.54	71784	16.89
10	VS-DCR	135886	10.38	380912	12.55	73734	16.89
11	VS-MRE	138341	10.38	390585	12.55	75401	16.89
12	VS-DCF	137868	10.38	390031	12.54	71915	16.89
13	VS-VAC	135783	10.38	387748	12.55	75223	16.89
14	VS-BOOK	138591	10.38	391180	12.55	74834	16.89

IS1 = BROMOCHLOROMETHANE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

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.

Determination of Method Detection Limits

Alpha Analytical, Inc.
Mansfield, MA

Approved

Page 1 of 2	
Analyst:	AJ
Date:	5/7/2009
Instrument	Airpiano 2
Column ID:	RTX-1

Method: TO-15SIM 2009

GC/MS Toxic Organic Air Pollutants

	MDL Table	Data file	MDL1	MDL2	MDL3	MDL4	MDL5	MDL6	MDL7	T-value used to calculate MDL value: 3.143					
		Date	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009						
	Analyte	Spike Conc.	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Mean	Mean Accuracy	Std Dev	MDL	RL	Comments
		ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv			ppbv	ppbv	
1	dichlorodifluoromethane	0.02	0.022	0.02	0.023	0.023	0.023	0.02	0.021	0.022	109%	0.001	0.004	0.50	
2	chloromethane	0.0522	0.048	0.047	0.048	0.049	0.049	0.046	0.047	0.048	91%	0.001	0.003	0.05	
3	Freon-114	0.02	0.023	0.021	0.024	0.023	0.024	0.021	0.024	0.023	114%	0.001	0.004	0.02	
4	vinyl chloride	0.02	0.022	0.021	0.022	0.023	0.023	0.019	0.023	0.022	109%	0.001	0.005	0.02	
5	1,3-butadiene	0.02	0.023	0.022	0.023	0.024	0.023	0.02	0.022	0.022	112%	0.001	0.004	0.02	
6	bromomethane	0.02	0.026	0.023	0.023	0.024	0.025	0.021	0.023	0.024	118%	0.002	0.005	0.02	
7	chloroethane	0.02	0.023	0.025	0.024	0.022	0.024	0.022	0.023	0.023	116%	0.001	0.003	0.02	
8	acetone	0.6446	0.545	0.559	0.517	0.537	0.542	0.552	0.566	0.545	85%	0.016	0.050	2.00	
9	acrylonitrile	0.02	0.023	0.024	0.02	0.022	0.022	0.034	0.02	0.024	118%	0.005	0.015	0.50	
10	1,1-dichloroethene	0.02	0.02	0.019	0.021	0.022	0.021	0.019	0.02	0.020	101%	0.001	0.003	0.02	
11	methylene chloride	0.2	0.237	0.243	0.233	0.233	0.25	0.266	0.299	0.252	126%	0.024	0.075	0.50	
12	Freon 113	0.02	0.021	0.021	0.023	0.022	0.022	0.019	0.021	0.021	106%	0.001	0.004	0.05	
13	Halothane	0.02	0.019	0.019	0.016	0.016	0.017	0.017	0.019	0.018	88%	0.001	0.004	0.05	
14	trans-1,2-dichloroethene	0.02	0.018	0.017	0.019	0.019	0.019	0.017	0.017	0.018	90%	0.001	0.003	0.02	
15	1,1-dichloroethane	0.02	0.019	0.019	0.018	0.017	0.019	0.018	0.018	0.018	91%	0.001	0.002	0.02	
16	MTBE	0.02	0.016	0.017	0.017	0.018	0.018	0.017	0.015	0.017	84%	0.001	0.003	0.02	
17	2-butanone	0.02	0.024	0.025	0.025	0.024	0.025	0.025	0.023	0.024	122%	0.001	0.002	0.50	
18	cis-1,2-dichloroethene	0.02	0.017	0.017	0.017	0.018	0.018	0.016	0.017	0.017	86%	0.001	0.002	0.02	
19	chloroform	0.02	0.019	0.018	0.018	0.018	0.019	0.017	0.018	0.018	91%	0.001	0.002	0.02	
20	1,2-dichloroethane	0.02	0.016	0.015	0.016	0.017	0.017	0.014	0.016	0.016	79%	0.001	0.003	0.02	
21	1,1,1-trichloroethane	0.02	0.017	0.018	0.018	0.017	0.018	0.016	0.018	0.017	87%	0.001	0.002	0.02	
22	benzene	0.0989	0.08	0.069	0.082	0.073	0.084	0.069	0.076	0.076	77%	0.006	0.019	0.07	
23	carbon tetrachloride	0.02	0.015	0.014	0.016	0.016	0.016	0.014	0.015	0.015	76%	0.001	0.003	0.02	
24	1,2-dichloropropane	0.02	0.015	0.016	0.015	0.015	0.016	0.016	0.016	0.016	78%	0.001	0.002	0.02	
25	bromodichloromethane	0.02	0.016	0.016	0.016	0.015	0.016	0.014	0.016	0.016	78%	0.001	0.002	0.02	
26	trichloroethene	0.02	0.019	0.019	0.02	0.02	0.02	0.018	0.019	0.019	96%	0.001	0.002	0.02	
27	cis-1,3-dichloropropene	0.02	0.015	0.014	0.014	0.015	0.016	0.013	0.014	0.014	72%	0.001	0.003	0.50	
28	4-methyl-2-pentanone	0.02	0.015	0.017	0.017	0.015	0.016	0.014	0.015	0.016	78%	0.001	0.004	0.50	
29	trans-1,3-dichloropropene	0.02	0.014	0.014	0.013	0.014	0.015	0.014	0.014	0.014	70%	0.001	0.002	0.02	
30	1,1,2-trichloroethane	0.02	0.018	0.017	0.016	0.017	0.018	0.015	0.016	0.017	84%	0.001	0.003	0.02	
31	toluene	0.0454	0.035	0.036	0.035	0.035	0.032	0.032	0.032	0.034	75%	0.002	0.006	0.02	
32	dibromochloromethane	0.02	0.017	0.017	0.016	0.016	0.017	0.016	0.016	0.016	82%	0.001	0.002	0.02	
33	1,2-dibromoethane	0.02	0.018	0.018	0.017	0.018	0.019	0.017	0.017	0.018	89%	0.001	0.002	0.02	
34	tetrachloroethene	0.02	0.019	0.019	0.02	0.02	0.02	0.019	0.019	0.019	97%	0.001	0.002	0.02	
35	1,1,1,2-tetrachloroethane	0.02	0.018	0.017	0.019	0.018	0.018	0.017	0.016	0.018	88%	0.001	0.003	0.02	
36	chlorobenzene	0.02	0.018	0.018	0.02	0.019	0.019	0.018	0.018	0.019	93%	0.001	0.002	0.02	
37	ethylbenzene	0.02	0.019	0.019	0.019	0.019	0.019	0.018	0.017	0.019	93%	0.001	0.002	0.02	
38	m+p-xylene	0.04	0.033	0.034	0.033	0.034	0.034	0.033	0.031	0.033	83%	0.001	0.003	0.04	
39	bromoform	0.02	0.016	0.016	0.015	0.016	0.016	0.015	0.015	0.016	78%	0.001	0.002	0.02	
40	styrene	0.04	0.039	0.037	0.039	0.04	0.043	0.039	0.039	0.039	99%	0.002	0.006	0.02	
41	1,1,2,2-tetrachloroethane	0.02	0.018	0.019	0.018	0.018	0.019	0.019	0.018	0.018	92%	0.001	0.002	0.02	
42	o-xylene	0.02	0.016	0.017	0.016	0.017	0.017	0.017	0.015	0.016	82%	0.001	0.002	0.02	
43	isopropylbenzene	0.02	0.016	0.017	0.016	0.016	0.017	0.016	0.015	0.016	81%	0.001	0.002	0.02	

Determination of Method Detection Limits

Alpha Analytical, Inc.
Mansfield, MA

Approved

Page 2 of 2	
Analyst:	AJ
Date:	5/7/2009
Instrument	Airpiano 2
Column ID:	RTX-1

Method: TO-15SIM

2009

GC/MS

Toxic Organic Air Pollutants

	MDL Table	Data file	MDL1	MDL2	MDL3	MDL4	MDL5	MDL6	MDL7	T-value used to calculate MDL value: 3.143					
		Date	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009	5/7/2009						
	Analyte	Spike Conc.	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Mean	Mean Accuracy	Std Dev	MDL	RL	Comments
		ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv			ppbv	ppbv	
44	4-ethyl toluene	0.02	0.016	0.016	0.016	0.017	0.017	0.017	0.015	0.016	81%	0.001	0.002	0.02	
45	1,3,5-trimethylbenzene	0.02	0.016	0.017	0.016	0.017	0.017	0.017	0.015	0.016	82%	0.001	0.002	0.02	
46	1,2,4-trimethylbenzene	0.02	0.017	0.017	0.017	0.018	0.018	0.017	0.016	0.017	86%	0.001	0.002	0.02	
47	1,3-dichlorobenzene	0.02	0.02	0.02	0.02	0.021	0.021	0.02	0.019	0.020	101%	0.001	0.002	0.02	
48	1,4-dichlorobenzene	0.02	0.019	0.02	0.02	0.021	0.021	0.02	0.02	0.020	101%	0.001	0.002	0.02	
49	sec-butylbenzene	0.02	0.013	0.015	0.013	0.014	0.014	0.014	0.013	0.014	69%	0.001	0.002	0.5	
50	p-isopropyltoluene	0.02	0.013	0.014	0.014	0.014	0.014	0.014	0.013	0.014	69%	0.000	0.002	0.5	
51	1,2-dichlorobenzene	0.02	0.019	0.019	0.02	0.021	0.02	0.02	0.018	0.020	98%	0.001	0.003	0.02	
52	n-butylbenzene	0.02	0.014	0.014	0.014	0.016	0.015	0.014	0.013	0.014	71%	0.001	0.003	0.5	
53	1,2,4-trichlorobenzene	0.0377	0.026	0.027	0.027	0.027	0.027	0.029	0.026	0.027	72%	0.001	0.003	0.05	
54	naphthalene	0.02	0.019	0.019	0.019	0.02	0.018	0.018	0.017	0.019	93%	0.001	0.003	0.05	
55	1,2,3-Trichlorobenzene	0.02	0.017	0.017	0.018	0.018	0.017	0.016	0.015	0.017	84%	0.001	0.003	0.05	
56	hexachlorobutadiene	0.02	0.02	0.021	0.022	0.022	0.021	0.022	0.021	0.021	106%	0.001	0.002	0.02	
	Surrogates														
1	1,2-dichloroethane-D4	10	9.735	10.013	8.91	8.508	9.249	9.857	10.249	9.503	95%				
2	toluene-D8	10	10.737	11.118	9.698	9.603	9.935	10.831	10.892	10.402	104%				
3	bromofluorobenzene	10	9.58	10.042	8.583	8.764	9.176	9.876	9.917	9.420	94%				

Comments: NO- Trichlorofluoromethane

Volatiles Sample Data

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	**Lab Number**	: L1523462
Project Name	: OCEANSIDE PLAZA	**Project Number:**	1802.0001Y000
Lab ID	: L1523462-01	**Date Collected**	: 09/21/15 16:52
Client ID	: VS-FENCE	**Date Received**	: 09/21/15
Sample Location	: OCEANSIDE,NY	**Date Analyzed**	: 09/24/15 20:31
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R236541	**Instrument ID**	: AIRPIANO2
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	0.040	0.020	--	0.102	0.051	--	
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.021	0.020	--	0.113	0.107	--	
127-18-4	Tetrachloroethene	15.1	0.020	--	102	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-02	Date Collected :	09/21/15 16:56
Client ID	: AMBIENT	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 17:38
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236536	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.029	0.020	--	0.197	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-03D	Date Collected :	09/21/15 17:06
Client ID	: VS-DCR	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 21:37
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	5
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236543	Instrument ID	: AIRPIANO2
Sample Amount	: 50.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.100	--	ND	0.256	--	U
75-35-4	1,1-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
79-01-6	Trichloroethene	1.04	0.100	--	5.59	0.537	--	
127-18-4	Tetrachloroethene	224	0.100	--	1520	0.678	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.100	--	ND	0.396	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-04	Date Collected :	09/21/15 17:15
Client ID	: IA-DCR	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 18:13
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236537	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.075	0.020	--	0.403	0.107	--	
127-18-4	Tetrachloroethene	17.2	0.020	--	117	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	**Lab Number**	: L1523462
Project Name	: OCEANSIDE PLAZA	**Project Number:**	1802.0001Y000
Lab ID	: L1523462-05D	**Date Collected**	: 09/21/15 17:12
Client ID	: VS-MRE	**Date Received**	: 09/21/15
Sample Location	: OCEANSIDE,NY	**Date Analyzed**	: 09/24/15 22:08
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 10
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R236544	**Instrument ID**	: AIRPIANO2
Sample Amount	: 25.0 ml	**GC Column**	: RTX-1

		ppbV			ug/m3			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
79-01-6	Trichloroethene	2.82	0.200	--	15.2	1.07	--	
127-18-4	Tetrachloroethene	416	0.200	--	2820	1.36	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	**Lab Number**	: L1523462
Project Name	: OCEANSIDE PLAZA	**Project Number:**	1802.0001Y000
Lab ID	: L1523462-06	**Date Collected**	: 09/21/15 17:19
Client ID	: VS-DCF	**Date Received**	: 09/21/15
Sample Location	: OCEANSIDE,NY	**Date Analyzed**	: 09/24/15 22:42
Sample Matrix	: SOIL_VAPOR	**Dilution Factor**	: 1
Analytical Method	: 48,TO-15-SIM	**Analyst**	: RY
Lab File ID	: R236545	**Instrument ID**	: AIRPIANO2
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	0.028	0.020	--	0.072	0.051	--	
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.080	0.020	--	0.430	0.107	--	
127-18-4	Tetrachloroethene	11.5	0.020	--	78.0	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-07	Date Collected :	09/21/15 17:22
Client ID	: IA-DCF	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 18:48
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236538	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.045	0.020	--	0.242	0.107	--	
127-18-4	Tetrachloroethene	8.92	0.020	--	60.5	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-08D	Date Collected :	09/21/15 17:41
Client ID	: VS-VAC	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 23:14
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	5
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236546	Instrument ID	: AIRPIANO2
Sample Amount	: 50.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.100	--	ND	0.256	--	U
75-35-4	1,1-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
79-01-6	Trichloroethene	1.95	0.100	--	10.5	0.537	--	
127-18-4	Tetrachloroethene	245	0.100	--	1660	0.678	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.100	--	ND	0.396	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-09	Date Collected :	09/21/15 17:47
Client ID	: IA-WINE	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 19:22
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236539	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	2.46	0.020	--	16.7	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-10D	Date Collected :	09/21/15 17:51
Client ID	: VS-BOOK	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 23:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	2
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236547	Instrument ID	: AIRPIANO2
Sample Amount	: 125 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.040	--	ND	0.102	--	U
75-35-4	1,1-Dichloroethene	ND	0.040	--	ND	0.159	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.040	--	ND	0.159	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.040	--	ND	0.159	--	U
79-01-6	Trichloroethene	0.328	0.040	--	1.76	0.215	--	
127-18-4	Tetrachloroethene	53.6	0.040	--	363	0.271	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.040	--	ND	0.159	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-11	Date Collected :	09/21/15 17:53
Client ID	: IA-YOGURT	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 19:56
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236540	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.055	0.020	--	0.296	0.107	--	
127-18-4	Tetrachloroethene	1.46	0.020	--	9.90	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: WG824625-4	Date Collected	: NA
Client ID	: WG824625-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/24/15 14:09
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236531	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: WG824625-5	Date Collected	: 09/21/15 16:52
Client ID	: VS-FENCEDUP	Date Received	: 09/21/15
Sample Location	:	Date Analyzed	: 09/24/15 21:05
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236542	Instrument ID	: AIRPIANO2
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	0.041	0.020	--	0.105	0.051	--	
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.021	0.020	--	0.113	0.107	--	
127-18-4	Tetrachloroethene	15.5	0.020	--	105.	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236536.D
Acq On : 24 Sep 2015 5:38 pm
Operator : AIRPIANO2:RY
Sample : L1523462-02,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 10:29:09 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.37	49	147662	10.000	ppbV	0.00
Standard Area = 150935			Recovery = 97.83%			
33) 1,4-difluorobenzene	12.54	114	409420	10.000	ppbV	0.00
Standard Area = 437351			Recovery = 93.61%			
51) chlorobenzene-D5	16.89	54	78113	10.000	ppbV	0.00
Standard Area = 82771			Recovery = 94.37%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95		0	N.D.		
16) 1,1-dichloroethene	7.63		0	N.D.		
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.19		0	N.D.		
44) trichloroethene	13.34		0	N.D.		
57) tetrachloroethene	16.36	166	727	0.029	ppbV	95

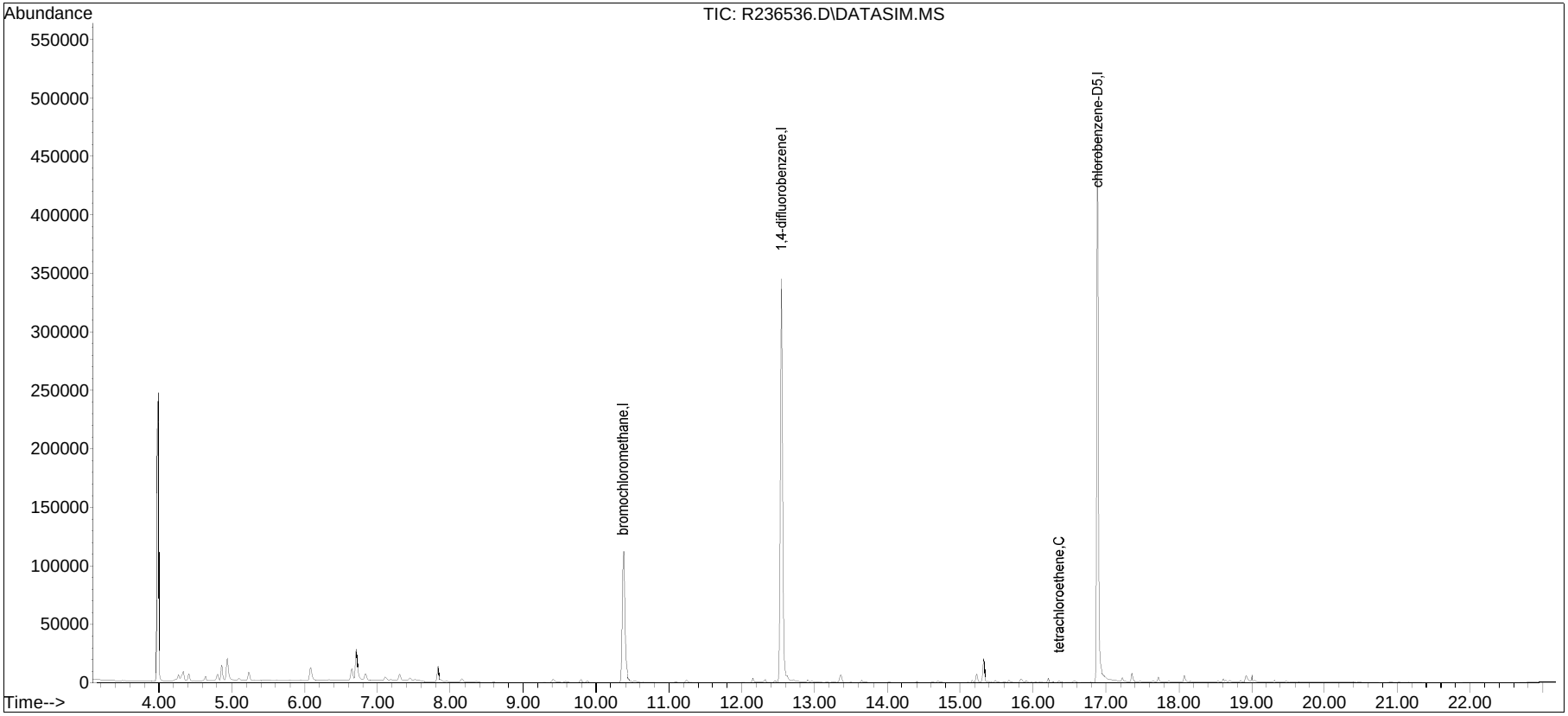
(#) = qualifier out of range (m) = manual integration (+) = signals summed

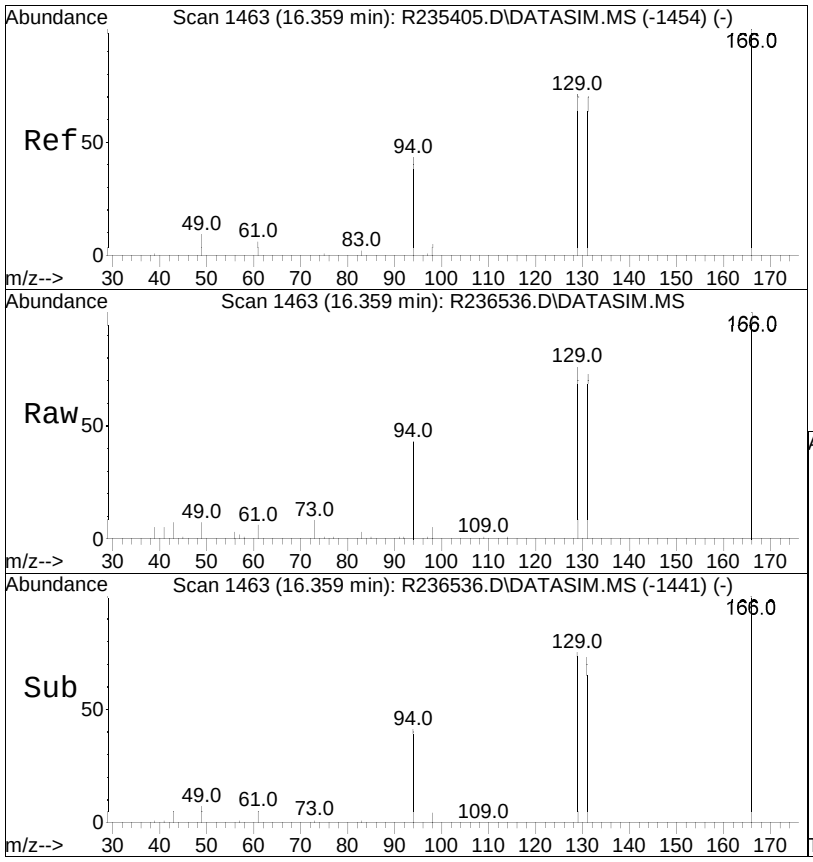
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236536.D
Acq On : 24 Sep 2015 5:38 pm
Operator : AIRPIANO2:RY
Sample : L1523462-02,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 10:29:09 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D

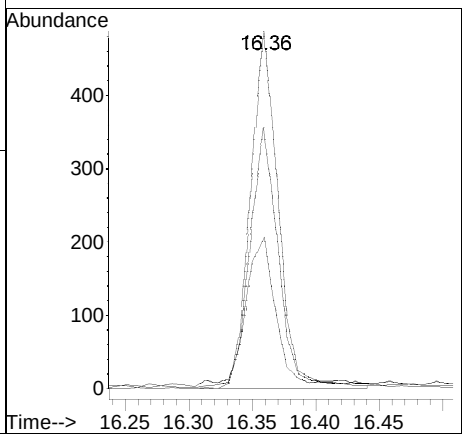




#57
tetrachloroethene
Concen: 0.03 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. -0.000 min
Lab File: R236536.D
Acq: 24 Sep 2015 5:38 pm

Tgt Ion:166 Resp: 727

Ion	Ratio	Lower	Upper
166	100		
131	73.3	60.6	90.8
94	42.5	39.0	58.6

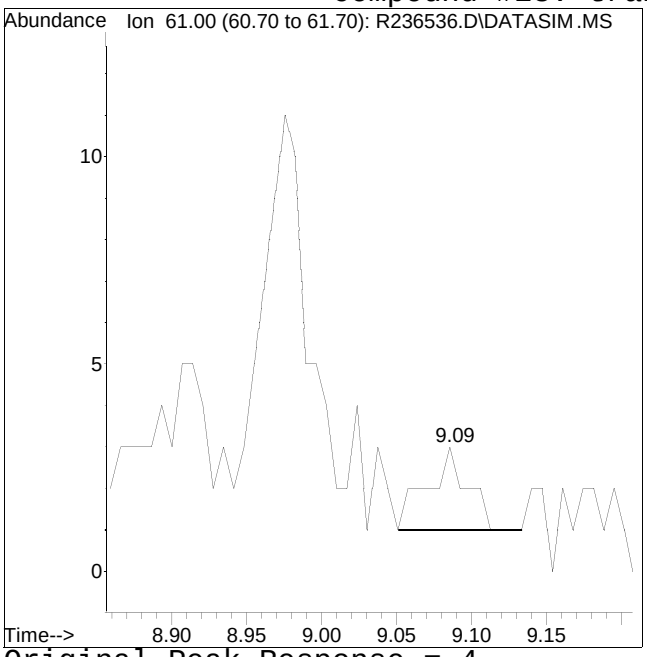


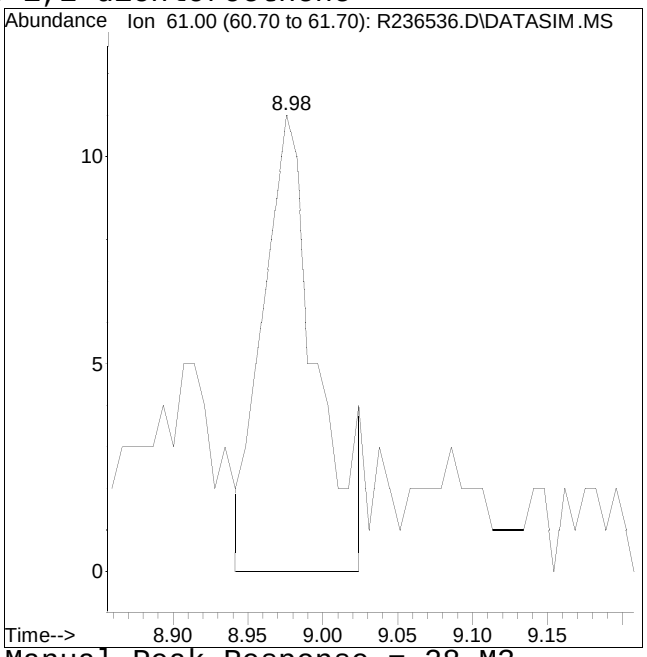
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236536.D
Date Inj'd : 9/24/2015 5:38 pm
Sample : L1523462-02,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 10:43 pm

Compound #23: trans-1,2-dichloroethene





Original Peak Response = 4 Manual Peak Response = 28 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\AIR2\2015\150924SIM\
Data File : R236537.D
Acq On : 24 Sep 2015 6:13 pm
Operator : AIRPIANO2:RY
Sample : L1523462-04,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 22:44:20 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	140752	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		93.25%	
33) 1,4-difluorobenzene	12.54	114	392907	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		89.84%	
51) chlorobenzene-D5	16.89	54	74419	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		89.91%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95		0	N.D.		
16) 1,1-dichloroethene	7.65		0	N.D.		
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.18		0	N.D.		
44) trichloroethene	13.33	130	1229	0.075	ppbV	98
57) tetrachloroethene	16.36	166	409518	17.241	ppbV	92

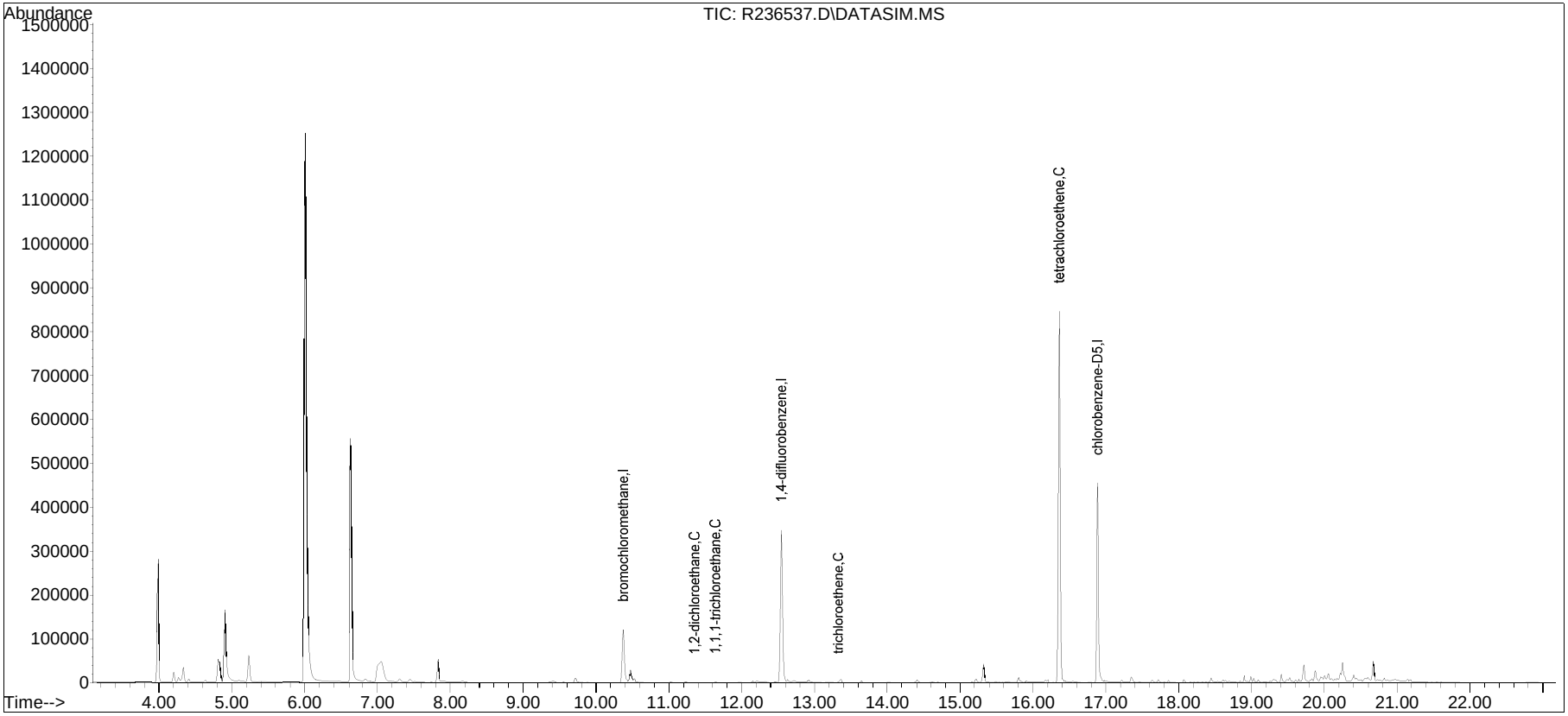
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236537.D
Acq On : 24 Sep 2015 6:13 pm
Operator : AIRPIANO2:RY
Sample : L1523462-04,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 22:44:20 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



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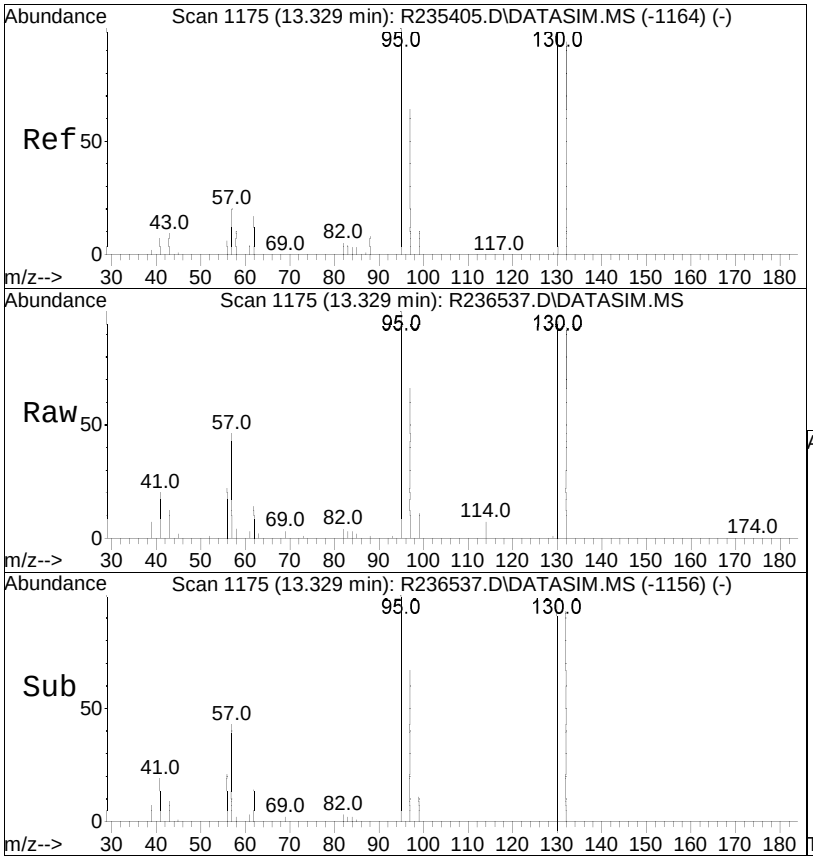
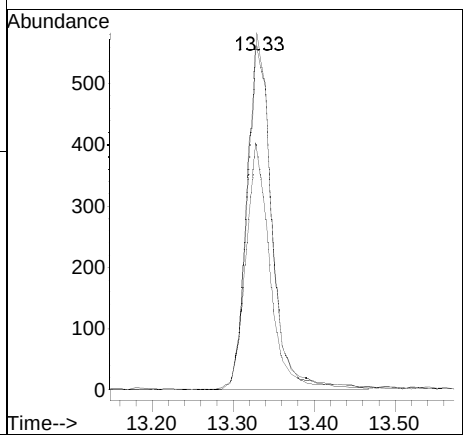
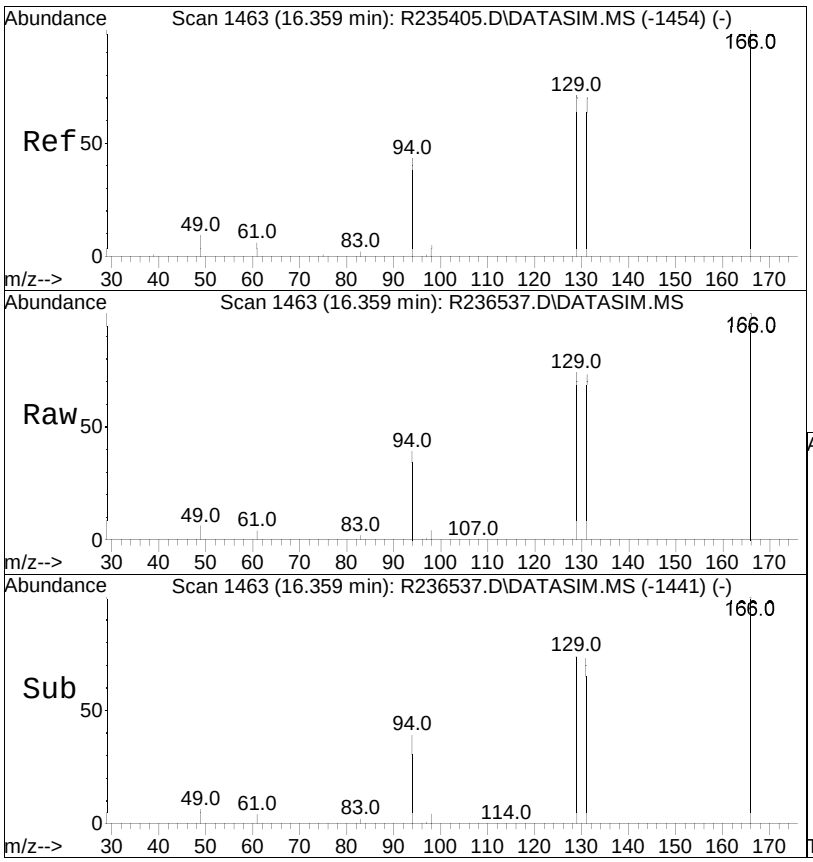


#44
trichloroethene
Concen: 0.08 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. -0.000 min
Lab File: R236537.D
Acq: 24 Sep 2015 6:13 pm

Tgt Ion:130 Resp: 1229

Ion	Ratio	Lower	Upper
130	100		
132	96.7	77.0	115.6
97	69.3	57.8	86.8

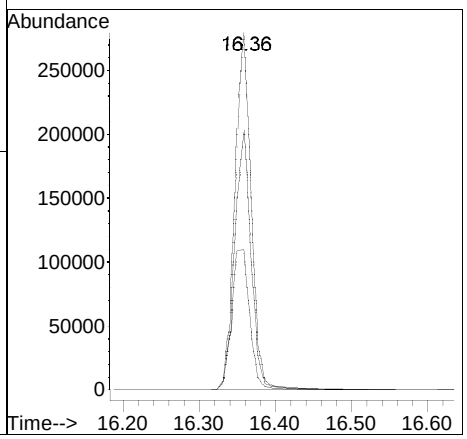




#57
tetrachloroethene
Concen: 17.24 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. -0.000 min
Lab File: R236537.D
Acq: 24 Sep 2015 6:13 pm

Tgt Ion:166 Resp: 409518

Ion	Ratio	Lower	Upper
166	100		
131	72.8	60.6	90.8
94	39.3	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236537.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 6:13 pm	Instrument	: Air Piano 2
Sample	: L1523462-04,3,250,250	Quant Date	: 9/24/2015 10:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236538.D
Acq On : 24 Sep 2015 6:48 pm
Operator : AIRPIANO2:RY
Sample : L1523462-07,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 24 22:44:32 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	141284	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		93.61%	
33) 1,4-difluorobenzene	12.54	114	391273	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		89.46%	
51) chlorobenzene-D5	16.89	54	74639	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		90.18%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95		0	N.D.		
16) 1,1-dichloroethene	7.66		0	N.D.		
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.19		0	N.D.		
44) trichloroethene	13.33	130	740	0.045	ppbV	97
57) tetrachloroethene	16.36	166	212619	8.925	ppbV	93

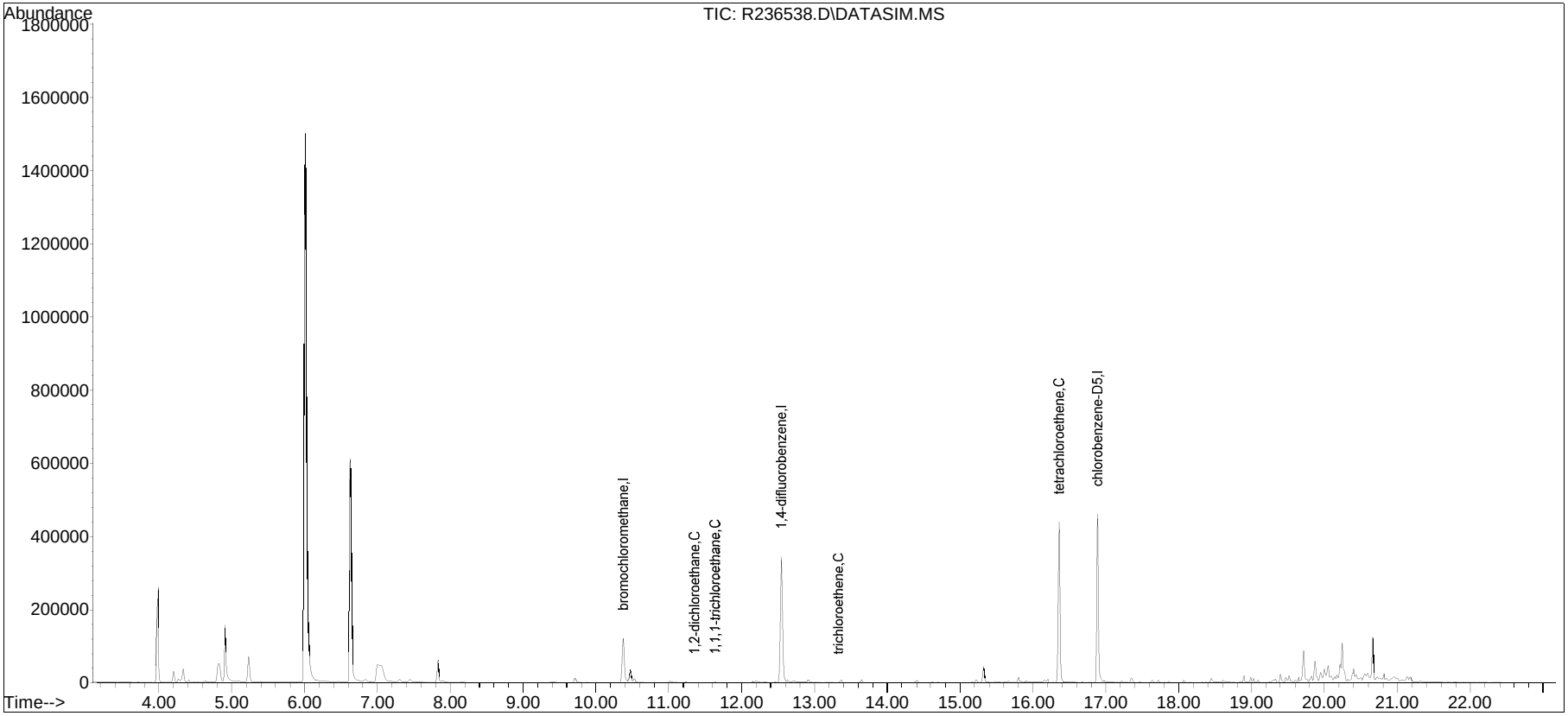
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236538.D
Acq On : 24 Sep 2015 6:48 pm
Operator : AIRPIANO2:RY
Sample : L1523462-07,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 24 22:44:32 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



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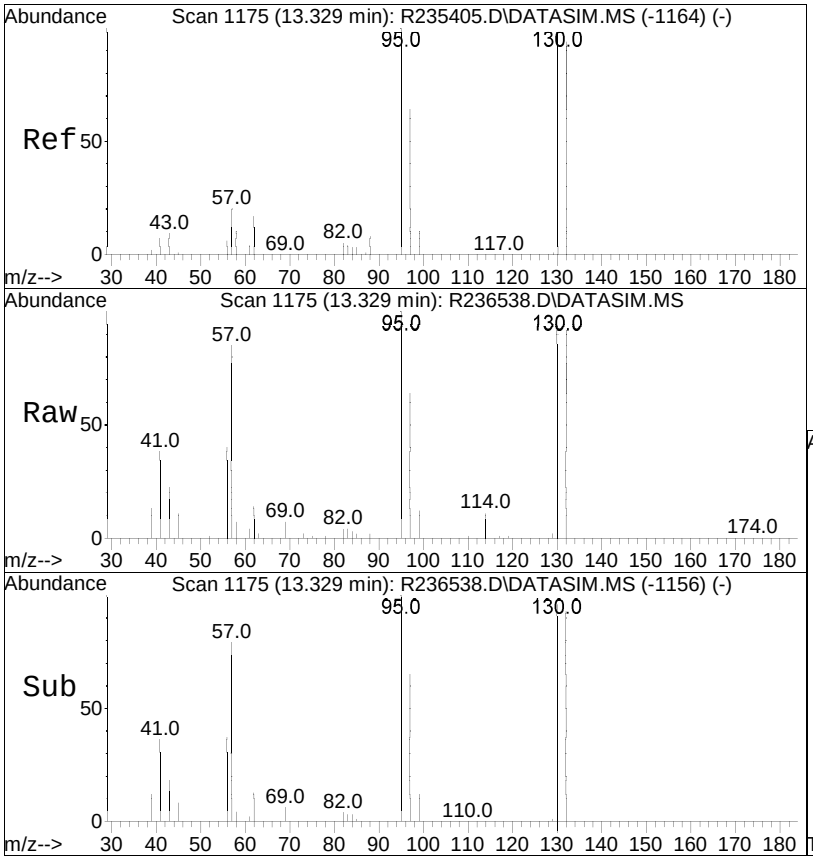
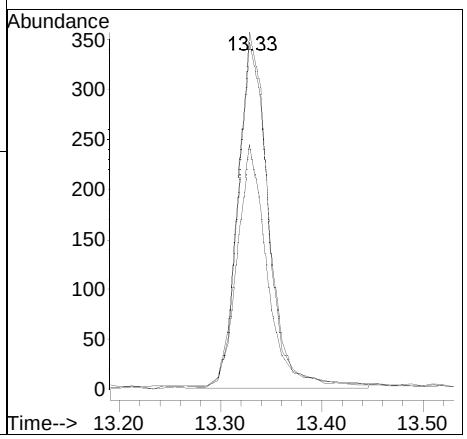
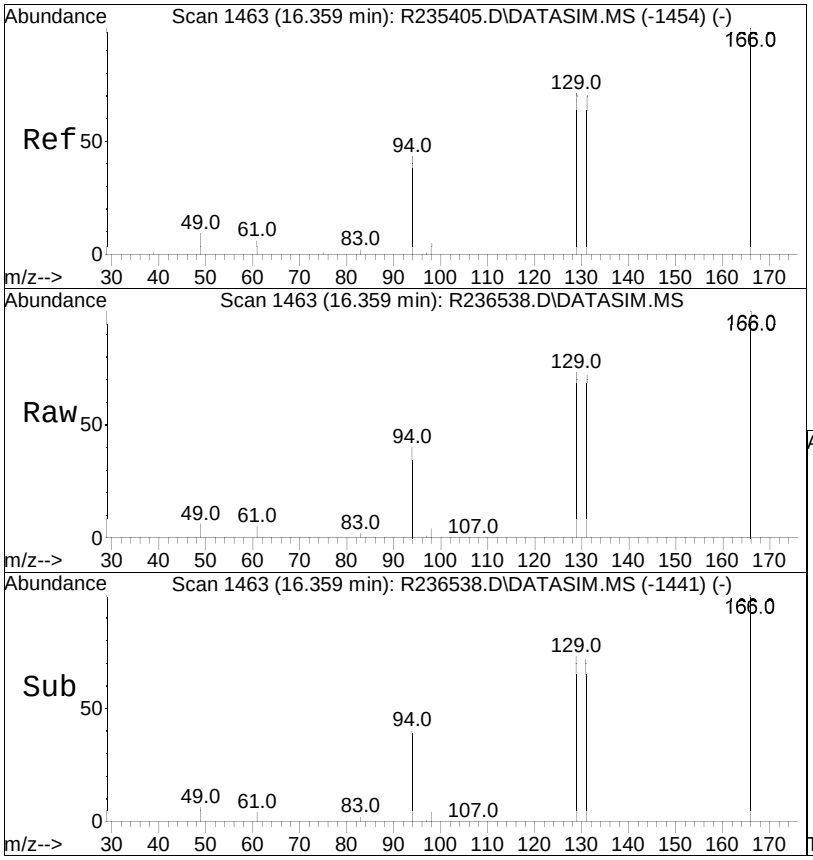


#44
trichloroethene
Concen: 0.05 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236538.D
Acq: 24 Sep 2015 6:48 pm

Tgt Ion:130 Resp: 740

Ion	Ratio	Lower	Upper
130	100		
132	97.5	77.0	115.6
97	68.6	57.8	86.8

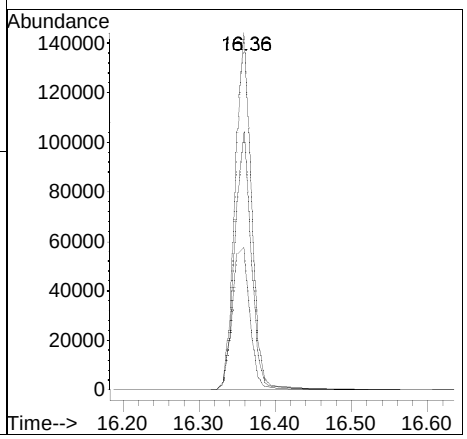




#57
tetrachloroethene
Concen: 8.93 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236538.D
Acq: 24 Sep 2015 6:48 pm

Tgt Ion:166 Resp: 212619

Ion	Ratio	Lower	Upper
166	100		
131	72.5	60.6	90.8
94	40.0	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236538.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 6:48 pm	Instrument	: Air Piano 2
Sample	: L1523462-07,3,250,250	Quant Date	: 9/24/2015 10:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236539.D
Acq On : 24 Sep 2015 7:22 pm
Operator : AIRPIANO2:RY
Sample : L1523462-09,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 10:30:46 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	143235	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		94.90%	
33) 1,4-difluorobenzene	12.54	114	398193	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		91.05%	
51) chlorobenzene-D5	16.89	54	74637	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		90.17%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95		0	N.D.		
16) 1,1-dichloroethene	0.00		0	N.D. d		
23) trans-1,2-dichloroethene	8.97		0	N.D.		
28) cis-1,2-dichloroethene	10.17		0	N.D.		
44) trichloroethene	13.33	130	254	0.015	ppbV	98
57) tetrachloroethene	16.36	166	58535	2.457	ppbV	93

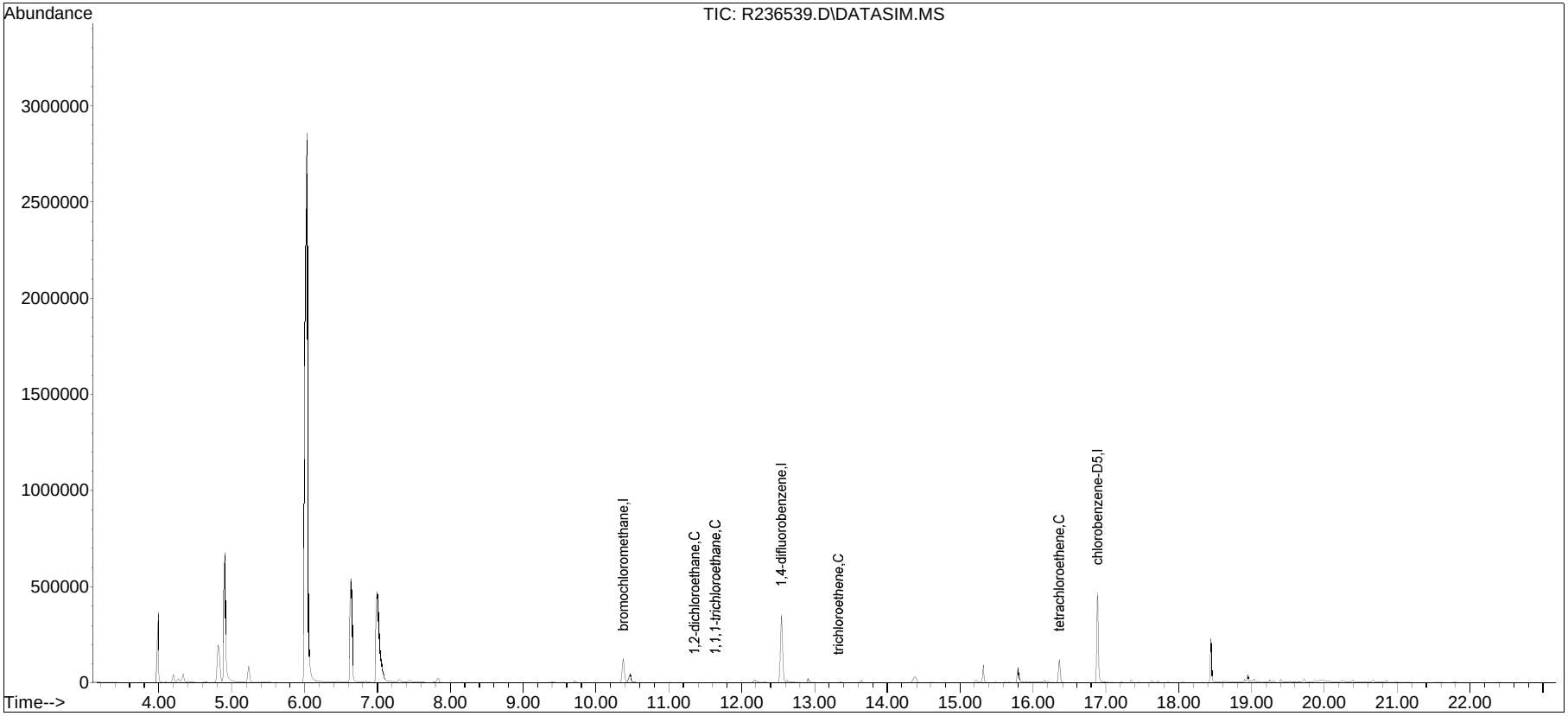
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236539.D
Acq On : 24 Sep 2015 7:22 pm
Operator : AIRPIANO2:RY
Sample : L1523462-09,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 10:30:46 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



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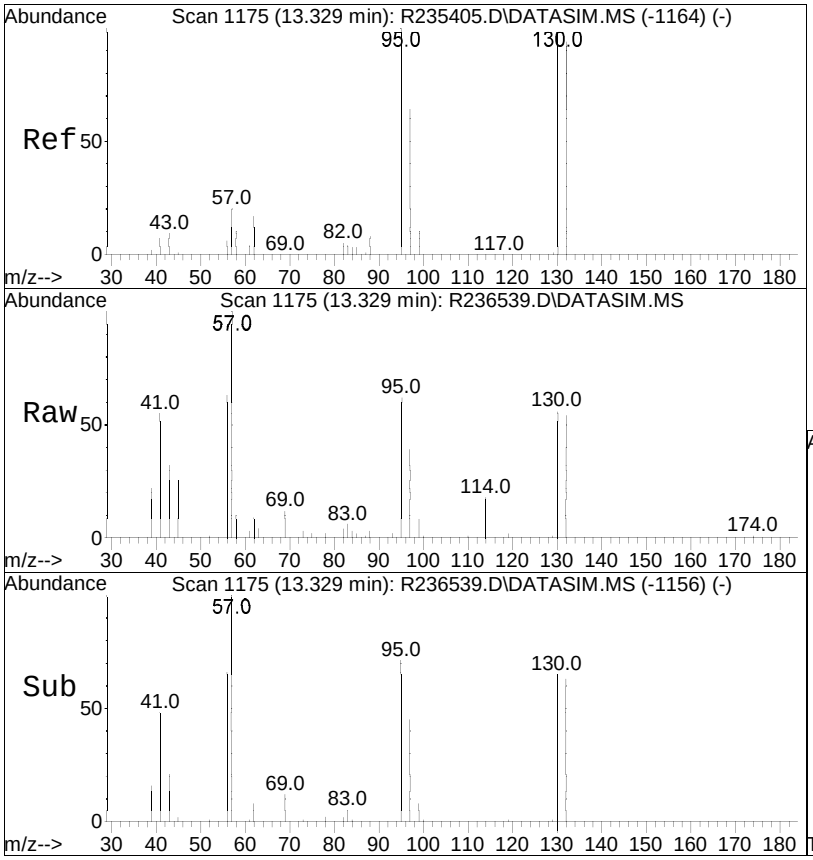
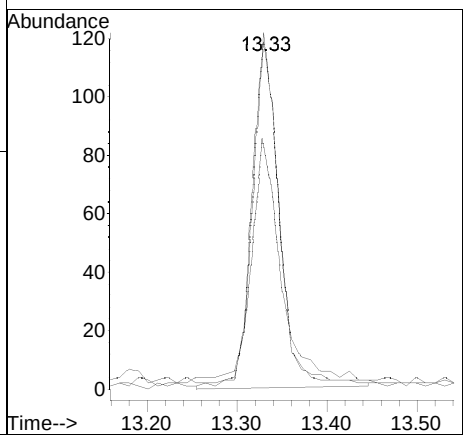
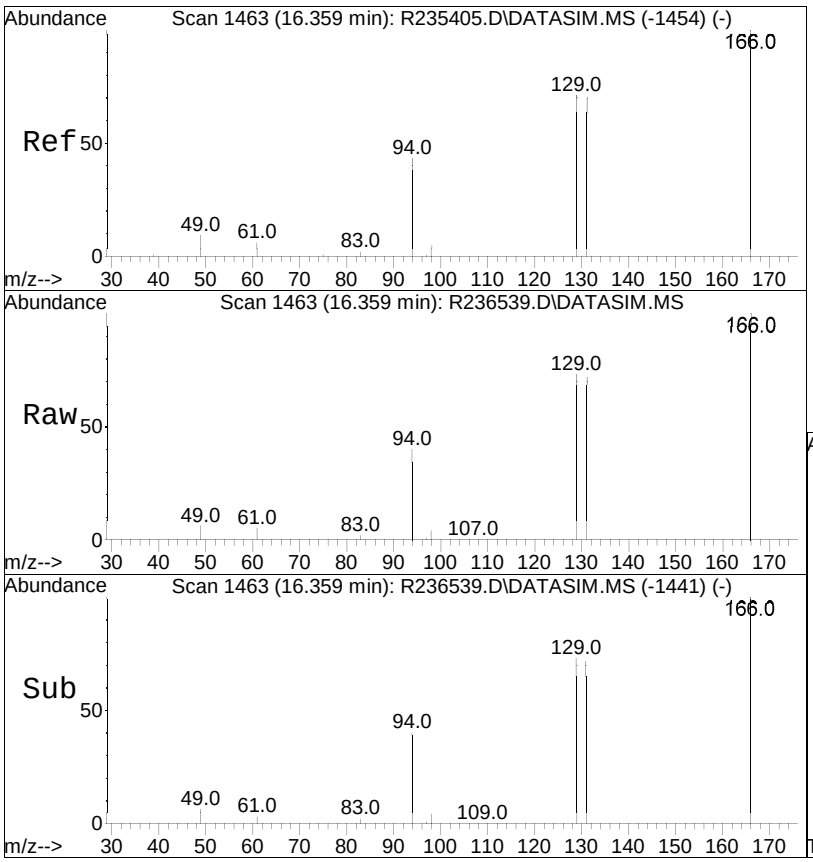


#44
trichloroethene
Concen: 0.02 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236539.D
Acq: 24 Sep 2015 7:22 pm

Tgt Ion:130 Resp: 254

Ion	Ratio	Lower	Upper
130	100		
132	97.5	77.0	115.6
97	70.5	57.8	86.8

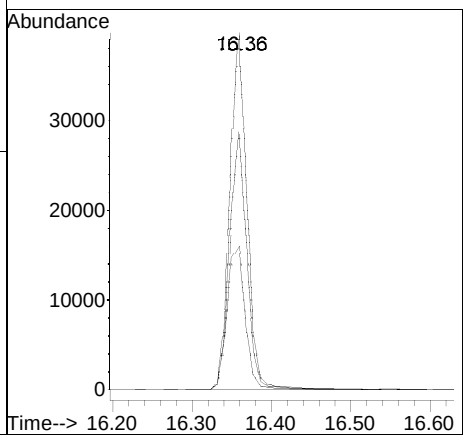




#57
tetrachloroethene
Concen: 2.46 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236539.D
Acq: 24 Sep 2015 7:22 pm

Tgt Ion:166 Resp: 58535

Ion	Ratio	Lower	Upper
166	100		
131	72.2	60.6	90.8
94	40.3	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236539.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 7:22 pm	Instrument	: Air Piano 2
Sample	: L1523462-09,3,250,250	Quant Date	: 9/24/2015 10:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236540.D
Acq On : 24 Sep 2015 7:56 pm
Operator : AIRPIANO2:RY
Sample : L1523462-11,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 10:31:27 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	141810	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		93.95%	
33) 1,4-difluorobenzene	12.54	114	395286	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		90.38%	
51) chlorobenzene-D5	16.89	54	74442	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		89.94%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95		0	N.D.		
16) 1,1-dichloroethene	7.66		0	N.D.		
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.18		0	N.D.		
44) trichloroethene	13.33	130	909	0.055	ppbV	95
57) tetrachloroethene	16.36	166	34733	1.462	ppbV	94

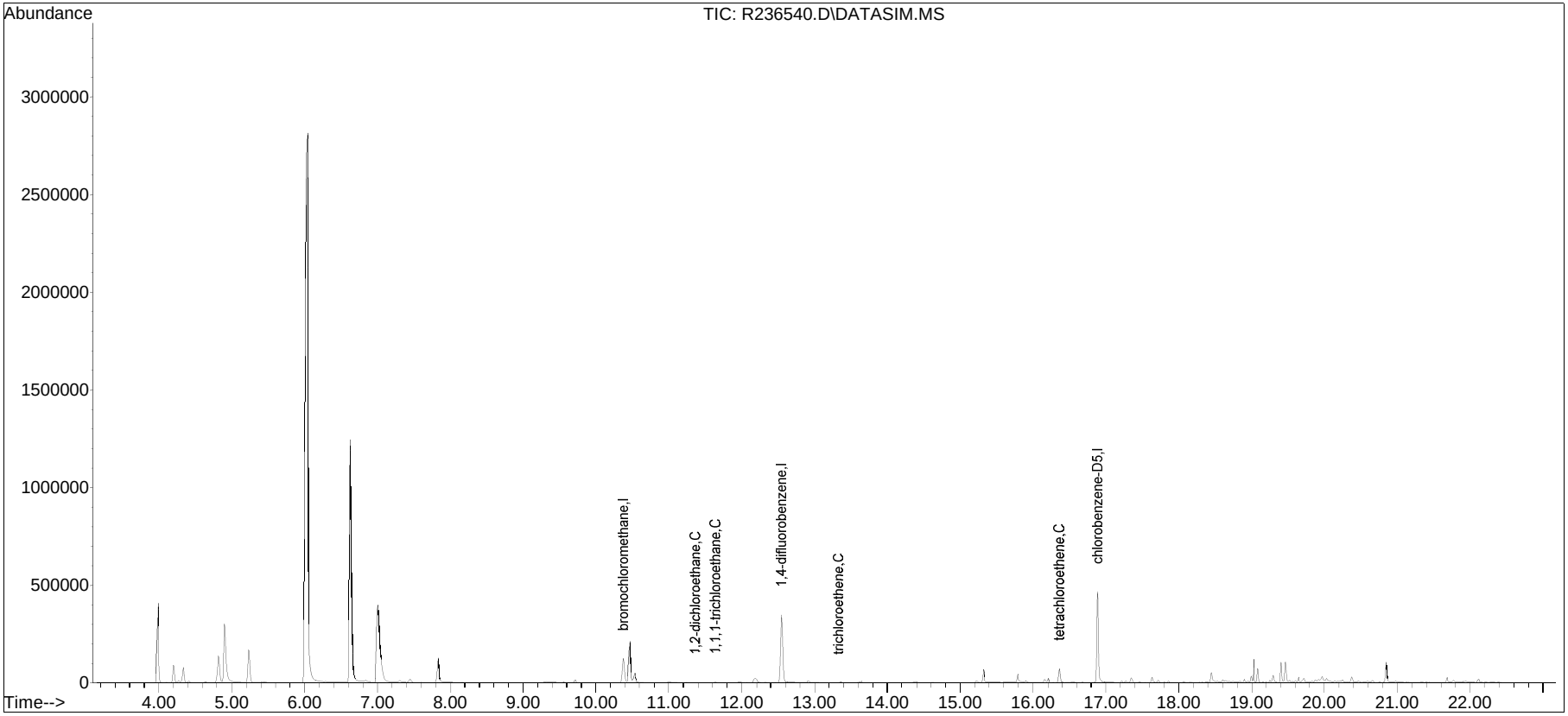
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

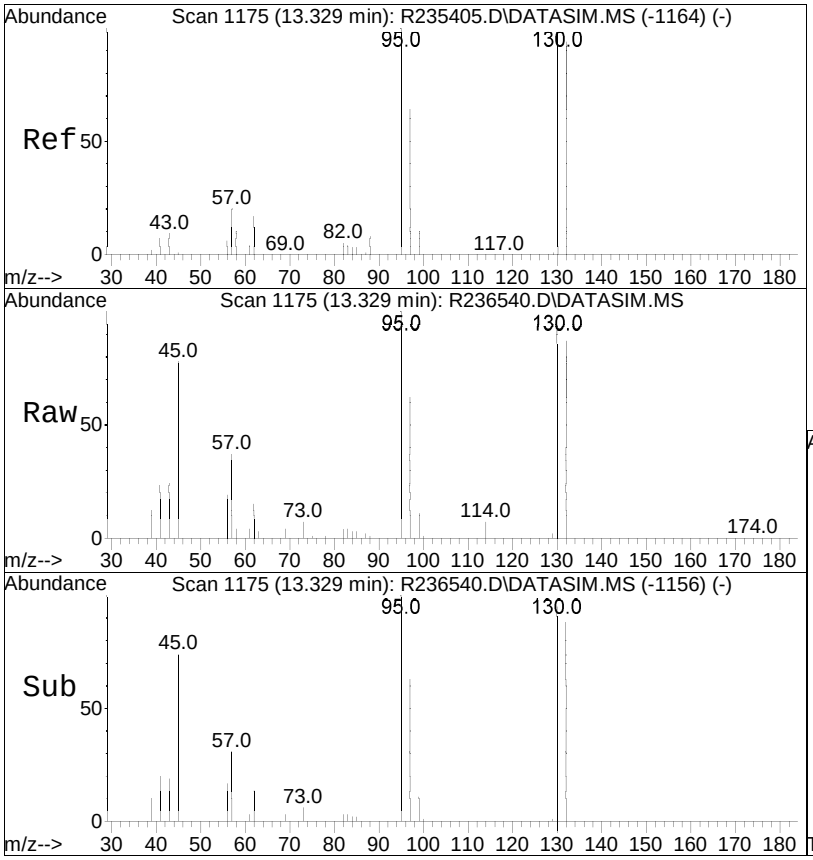
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236540.D
Acq On : 24 Sep 2015 7:56 pm
Operator : AIRPIANO2:RY
Sample : L1523462-11,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 10:31:27 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



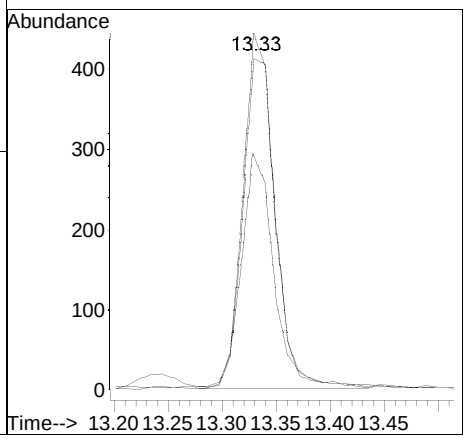
TSIM150901.M Fri Sep 25 10:31:39 2015 Page 2

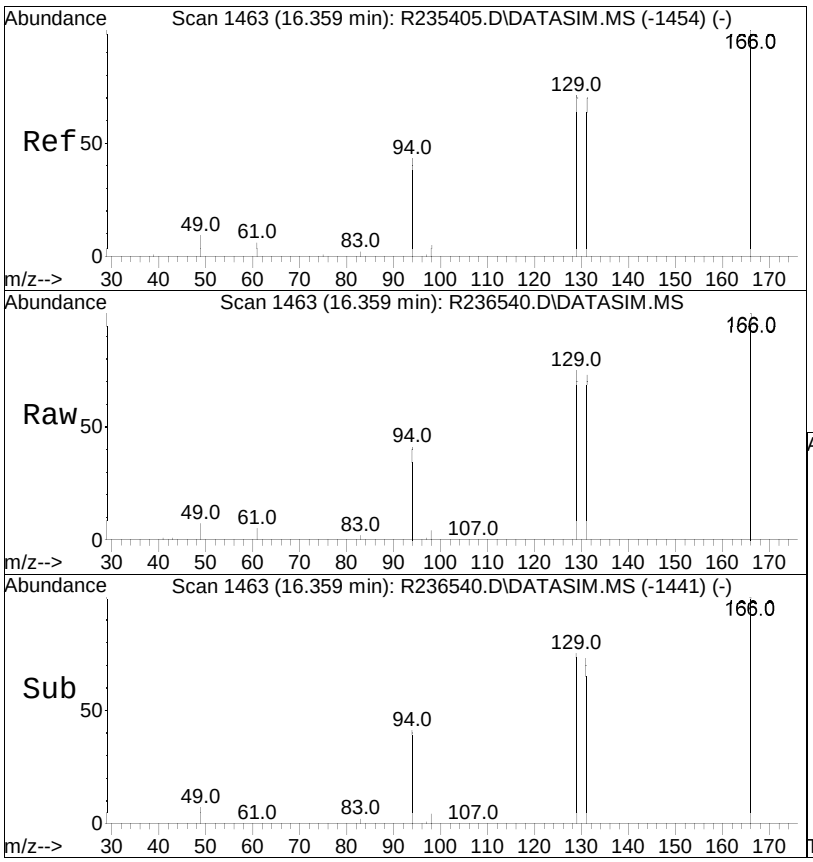


#44
trichloroethene
Concen: 0.06 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236540.D
Acq: 24 Sep 2015 7:56 pm

Tgt Ion:130 Resp: 909

Ion	Ratio	Lower	Upper
130	100		
132	92.8	77.0	115.6
97	66.4	57.8	86.8

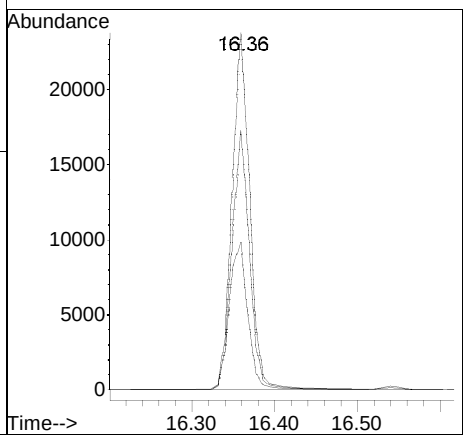




#57
tetrachloroethene
Concen: 1.46 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236540.D
Acq: 24 Sep 2015 7:56 pm

Tgt Ion:166 Resp: 34733

Ion	Ratio	Lower	Upper
166	100		
131	72.7	60.6	90.8
94	41.5	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236540.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 7:56 pm	Instrument	: Air Piano 2
Sample	: L1523462-11,3,250,250	Quant Date	: 9/24/2015 10:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236541.D
Acq On : 24 Sep 2015 8:31 pm
Operator : AIRPIANO2:RY
Sample : L1523462-01,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 10:32:03 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	141103	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		93.49%	
33) 1,4-difluorobenzene	12.54	114	391499	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		89.52%	
51) chlorobenzene-D5	16.89	54	73174	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		88.41%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95	62	462	0.040	ppbV	96
16) 1,1-dichloroethene	7.66		0	N.D.		
23) trans-1,2-dichloroethene	8.97		0	N.D.		
28) cis-1,2-dichloroethene	10.18		0	N.D.		
44) trichloroethene	13.33	130	340	0.021	ppbV	97
57) tetrachloroethene	16.36	166	352665	15.100	ppbV	93

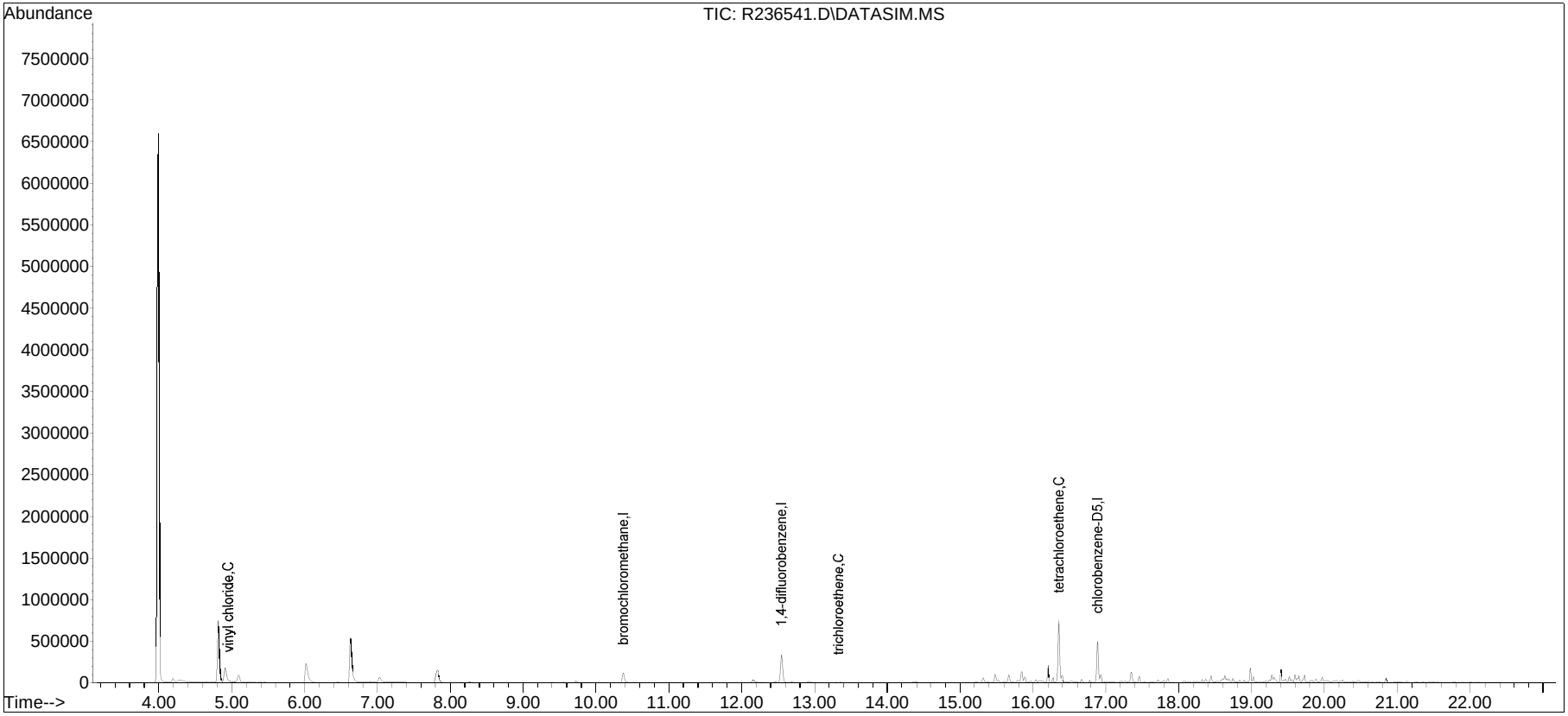
(#) = qualifier out of range (m) = manual integration (+) = signals summed

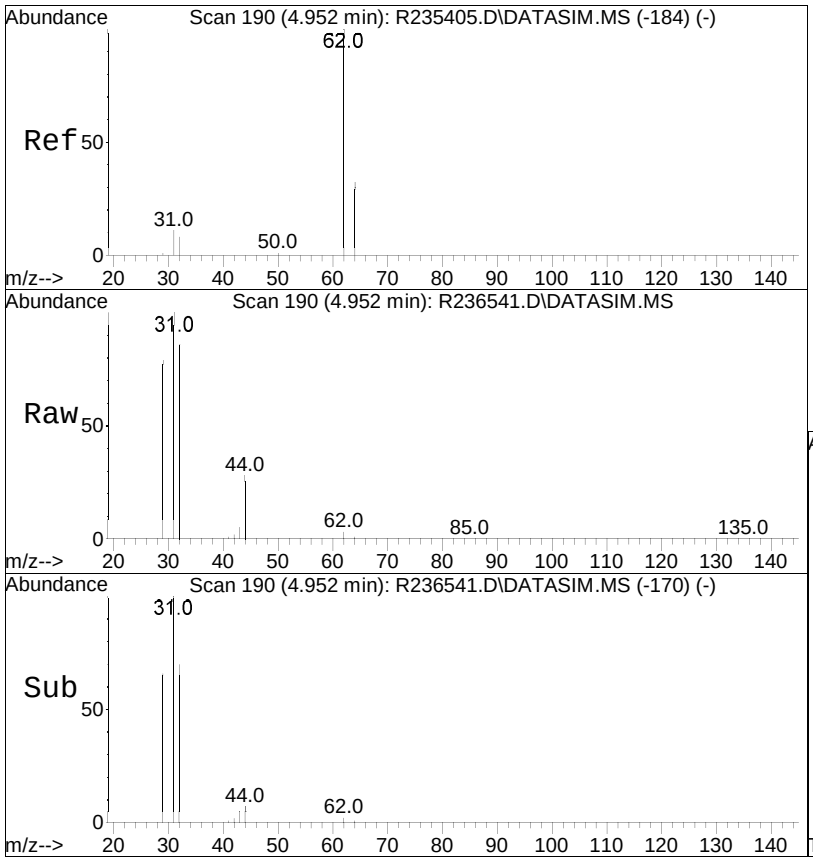
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236541.D
Acq On : 24 Sep 2015 8:31 pm
Operator : AIRPIANO2:RY
Sample : L1523462-01,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 10:32:03 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D

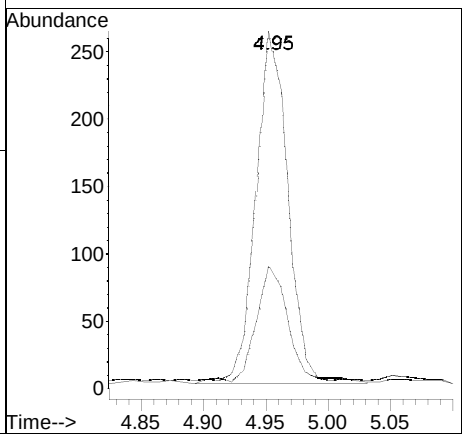


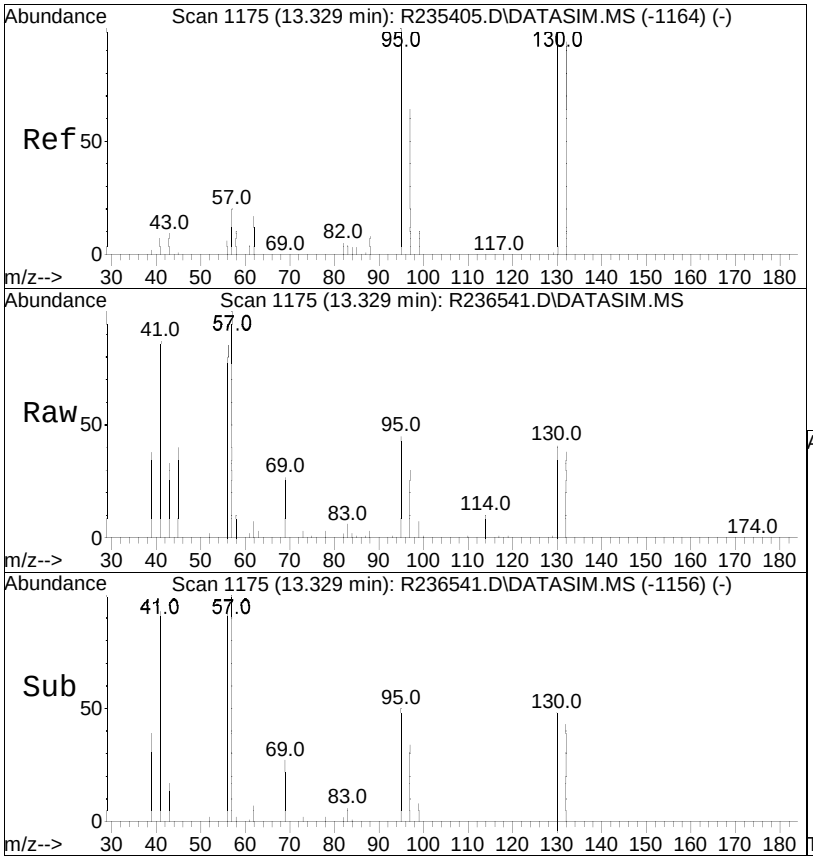


#6
vinyl chloride
Concen: 0.04 ppbV
RT: 4.95 min Scan# 190
Delta R.T. 0.000 min
Lab File: R236541.D
Acq: 24 Sep 2015 8:31 pm

Tgt Ion: 62 Resp: 462

Ion	Ratio	Lower	Upper
62	100		
64	34.3	25.5	38.3

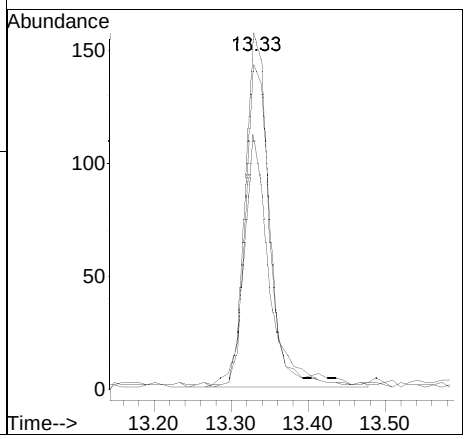


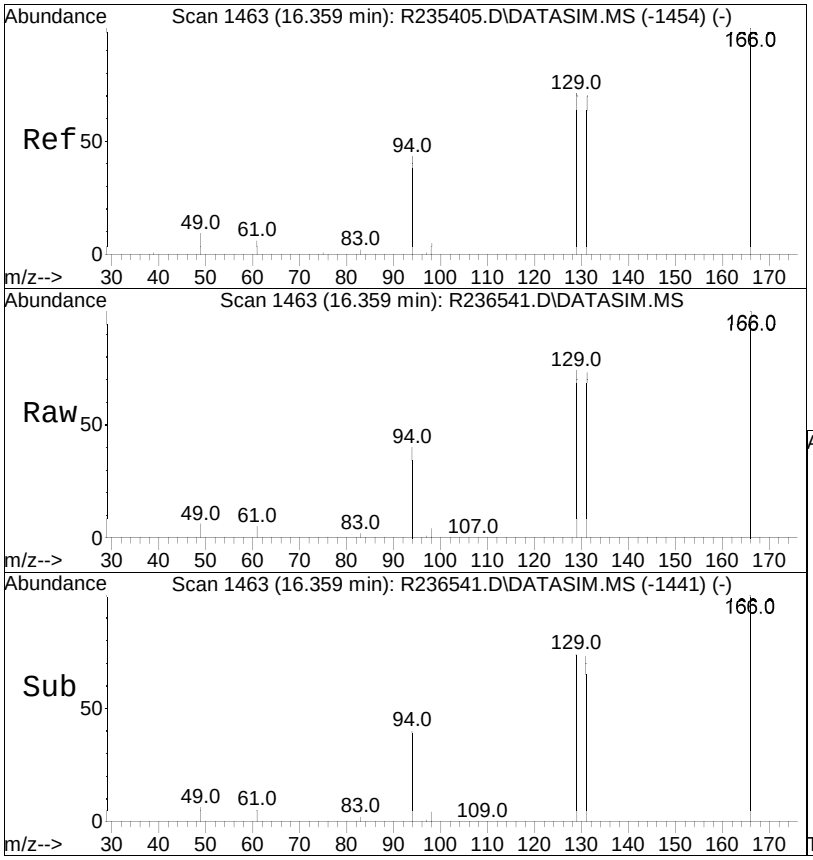


#44
trichloroethene
Concen: 0.02 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236541.D
Acq: 24 Sep 2015 8:31 pm

Tgt Ion:130 Resp: 340

Ion	Ratio	Lower	Upper
130	100		
132	91.1	77.0	115.6
97	71.5	57.8	86.8

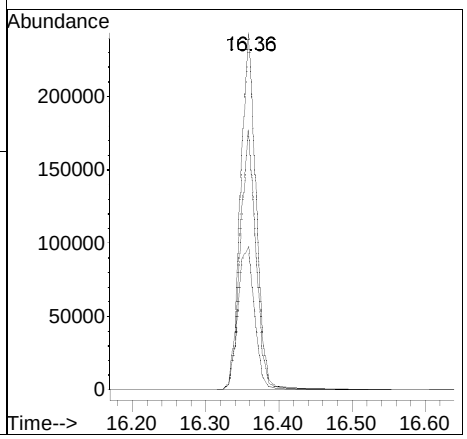




#57
tetrachloroethene
Concen: 15.10 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236541.D
Acq: 24 Sep 2015 8:31 pm

Tgt Ion:166 Resp: 352665

Ion	Ratio	Lower	Upper
166	100		
131	72.8	60.6	90.8
94	40.2	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236541.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 8:31 pm	Instrument	: Air Piano 2
Sample	: L1523462-01,3,250,250	Quant Date	: 9/24/2015 10:45 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236543.D
Acq On : 24 Sep 2015 9:37 pm
Operator : AIRPIANO2:RY
Sample : L1523462-03D,3,50,250
Misc : WG824625,ICAL11407
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 25 10:35:29 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	135886	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		90.03%	
33) 1,4-difluorobenzene	12.55	114	380912	10.000	ppbV	# 0.01
Standard Area = 437351			Recovery =		87.10%	
51) chlorobenzene-D5	16.89	54	73734	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		89.08%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.96		0	N.D.		
16) 1,1-dichloroethene	0.00		0	N.D.	d	
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.19		0	N.D.		
44) trichloroethene	13.34	130	3316	0.209	ppbV	94
57) tetrachloroethene	16.36	166	1055401	44.846	ppbV	95

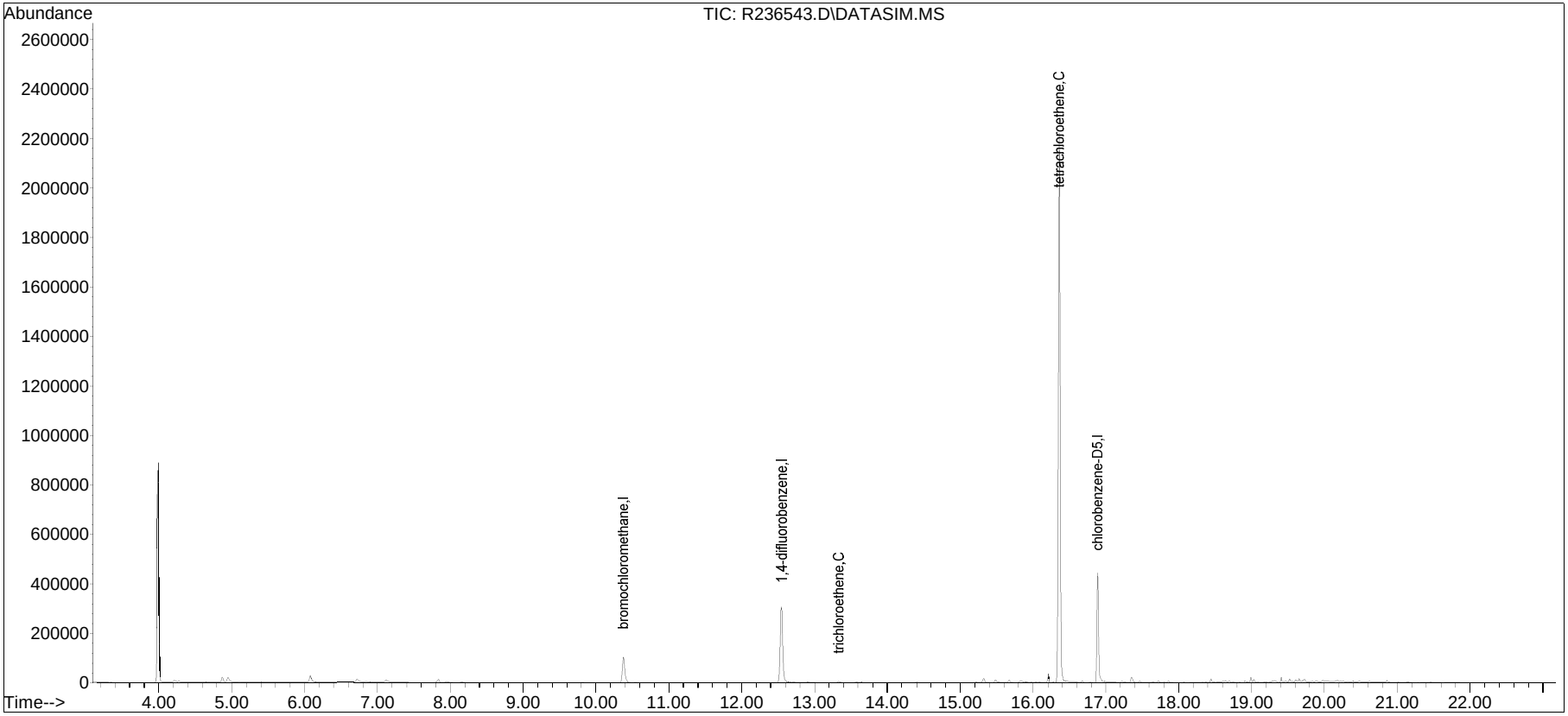
(#) = qualifier out of range (m) = manual integration (+) = signals summed

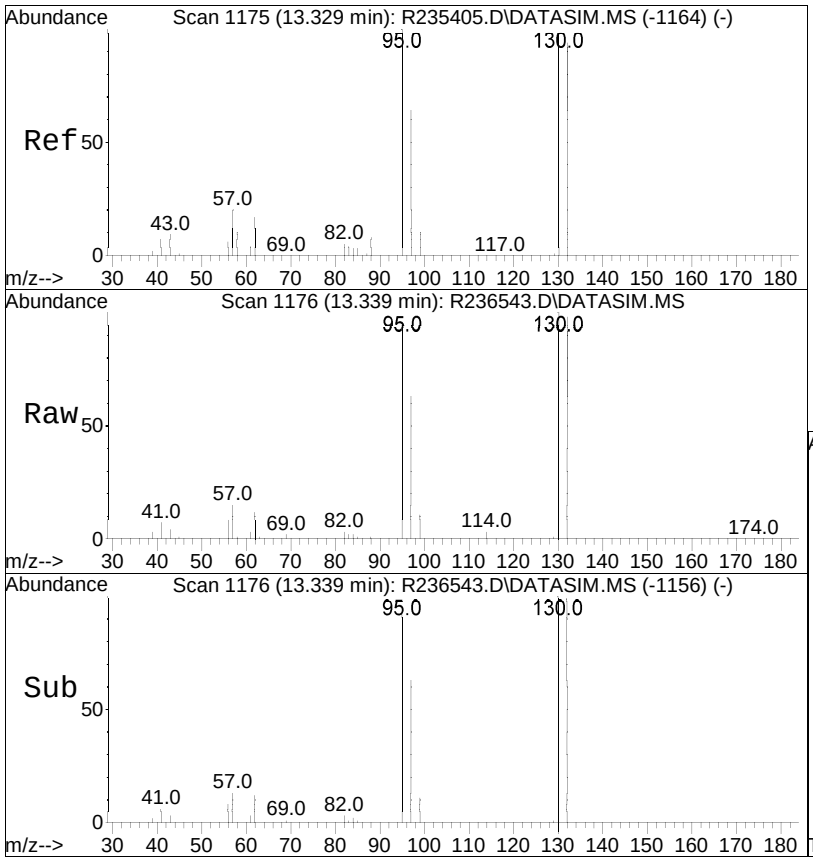
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236543.D
Acq On : 24 Sep 2015 9:37 pm
Operator : AIRPIANO2:RY
Sample : L1523462-03D,3,50,250
Misc : WG824625,ICAL11407
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 25 10:35:29 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D

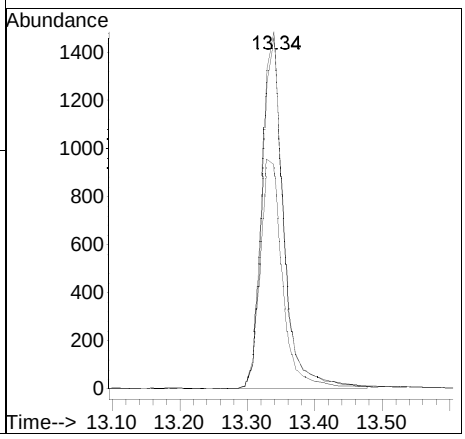


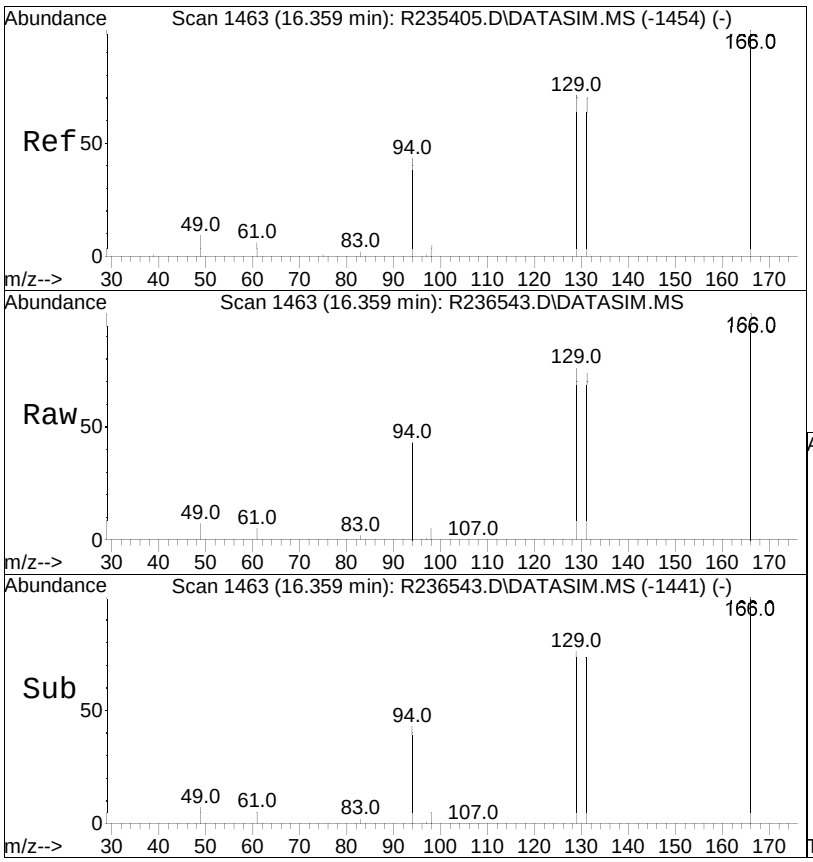


#44
trichloroethene
Concen: 0.21 ppbV
RT: 13.34 min Scan# 1176
Delta R.T. 0.011 min
Lab File: R236543.D
Acq: 24 Sep 2015 9:37 pm

Tgt Ion:130 Resp: 3316

Ion	Ratio	Lower	Upper
130	100		
132	98.5	77.0	115.6
97	62.9	57.8	86.8

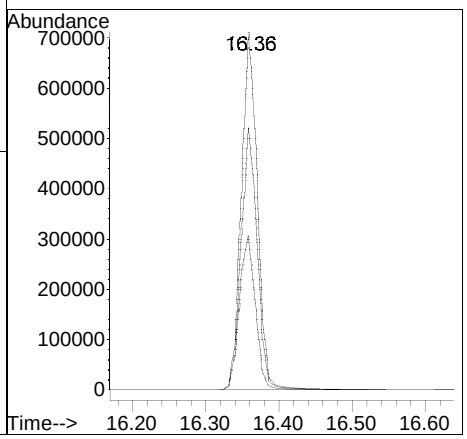




#57
tetrachloroethene
Concen: 44.85 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236543.D
Acq: 24 Sep 2015 9:37 pm

Tgt Ion:166 Resp: 1055401

Ion	Ratio	Lower	Upper
166	100		
131	73.6	60.6	90.8
94	43.4	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236543.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 9:37 pm	Instrument	: Air Piano 2
Sample	: L1523462-03D,3,50,250	Quant Date	: 9/24/2015 10:45 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236544.D
Acq On : 24 Sep 2015 10:08 pm
Operator : AIRPIANO2:RY
Sample : L1523462-05D,3,25,250
Misc : WG824625,ICAL11407
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 25 10:35:49 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	138341	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		91.66%	
33) 1,4-difluorobenzene	12.55	114	390585	10.000	ppbV	# 0.01
Standard Area = 437351			Recovery =		89.31%	
51) chlorobenzene-D5	16.89	54	75401	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		91.10%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.96		0	N.D.		
16) 1,1-dichloroethene	0.00		0	N.D.	d	
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.19		0	N.D.		
44) trichloroethene	13.34	130	4587	0.282	ppbV	95
57) tetrachloroethene	16.36	166	1001516	41.616	ppbV	95

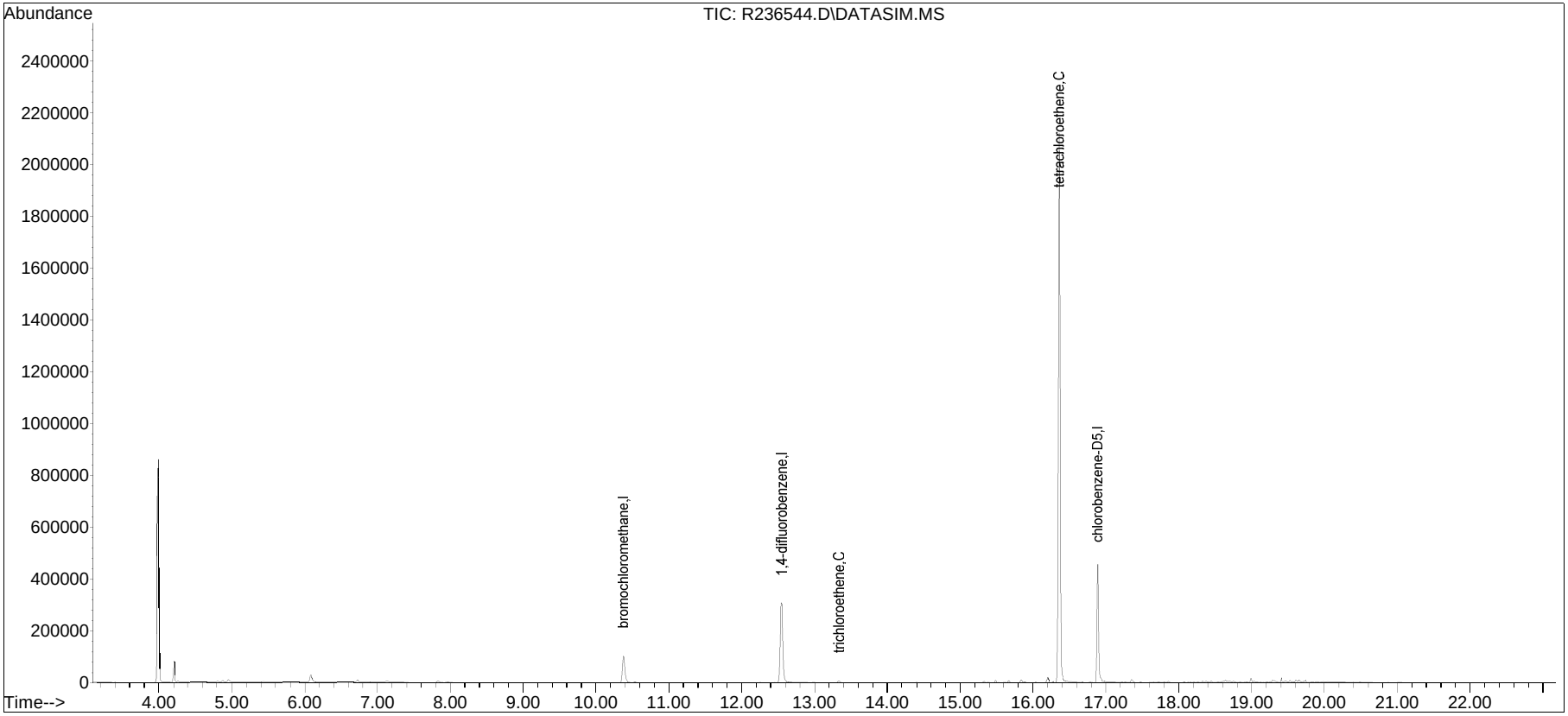
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

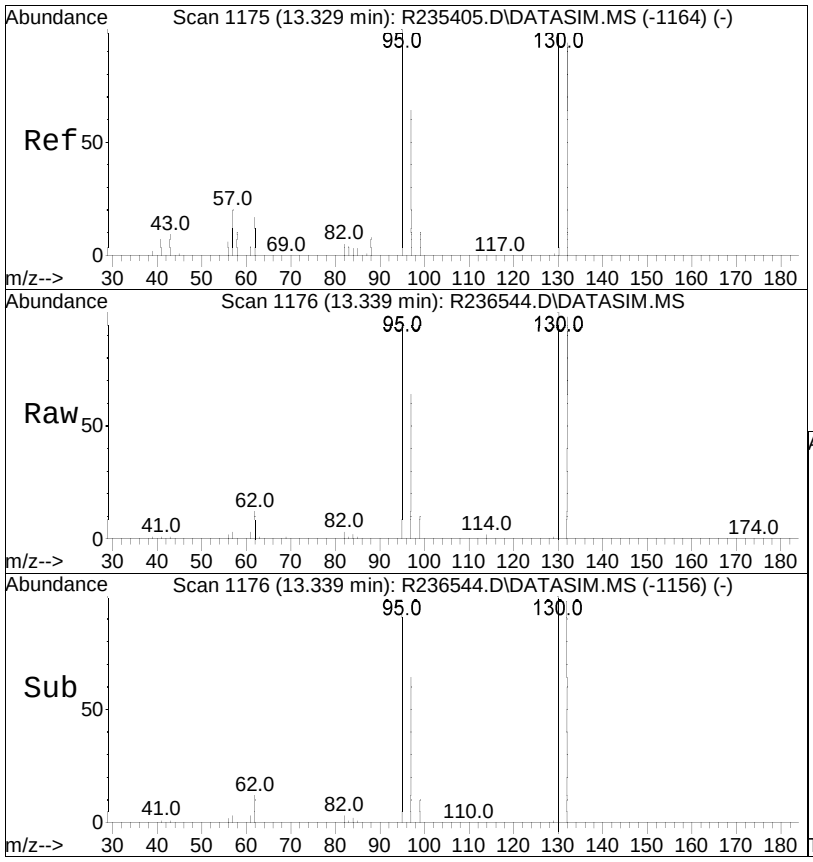
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236544.D
Acq On : 24 Sep 2015 10:08 pm
Operator : AIRPIANO2:RY
Sample : L1523462-05D,3,25,250
Misc : WG824625,ICAL11407
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 25 10:35:49 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



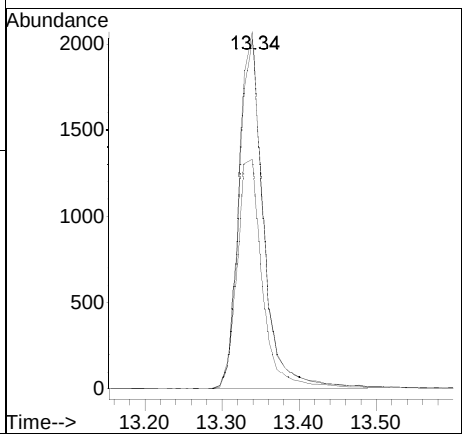
TSIM150901.M Fri Sep 25 10:36:01 2015 Page 2

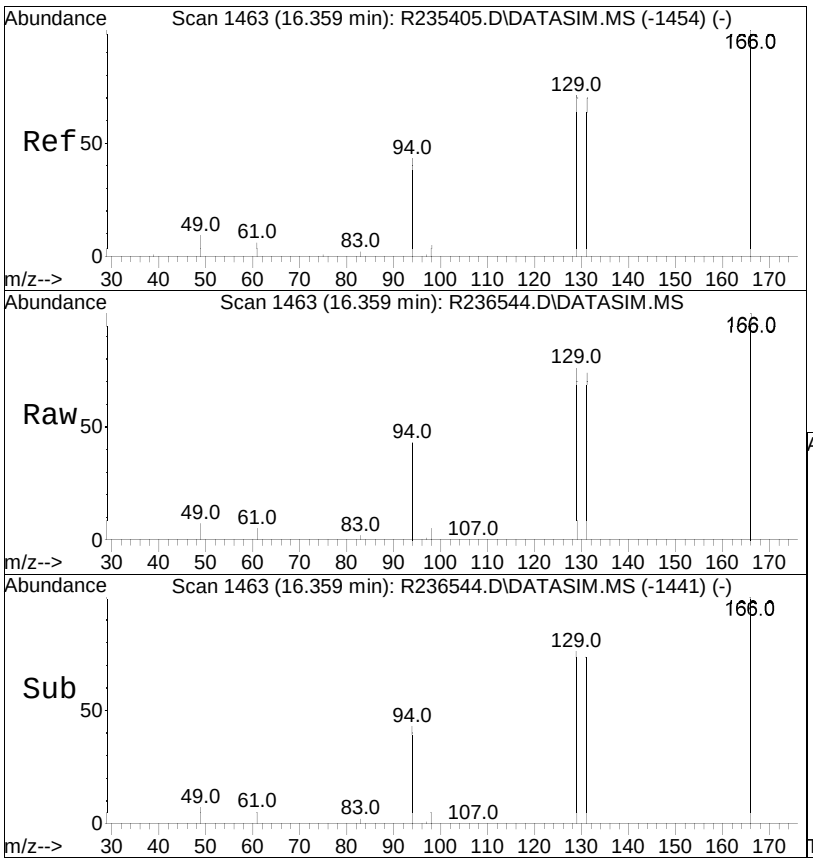


#44
trichloroethene
Concen: 0.28 ppbV
RT: 13.34 min Scan# 1176
Delta R.T. 0.011 min
Lab File: R236544.D
Acq: 24 Sep 2015 10:08 pm

Tgt Ion:130 Resp: 4587

Ion	Ratio	Lower	Upper
130	100		
132	98.1	77.0	115.6
97	64.5	57.8	86.8

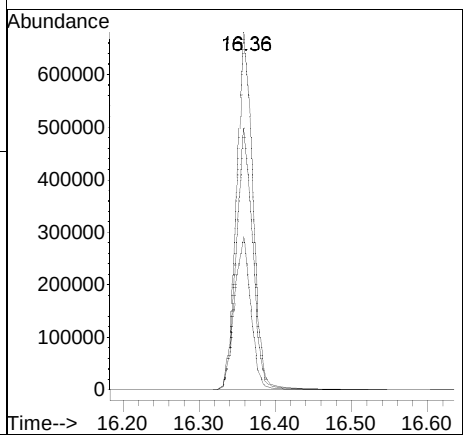




#57
tetrachloroethene
Concen: 41.62 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236544.D
Acq: 24 Sep 2015 10:08 pm

Tgt Ion:166 Resp: 1001516

Ion	Ratio	Lower	Upper
166	100		
131	73.6	60.6	90.8
94	43.0	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236544.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 10:08 pm	Instrument	: Air Piano 2
Sample	: L1523462-05D,3,25,250	Quant Date	: 9/24/2015 10:46 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236545.D
Acq On : 24 Sep 2015 10:42 pm
Operator : AIRPIANO2:RY
Sample : L1523462-06,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 10:36:21 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	137868	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		91.34%	
33) 1,4-difluorobenzene	12.54	114	390031	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		89.18%	
51) chlorobenzene-D5	16.89	54	71915	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		86.88%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95	62	322	0.028	ppbV	98
16) 1,1-dichloroethene	0.00		0	N.D.	d	
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.18		0	N.D.		
44) trichloroethene	13.33	130	1300	0.080	ppbV	97
57) tetrachloroethene	16.36	166	263068	11.461	ppbV	93

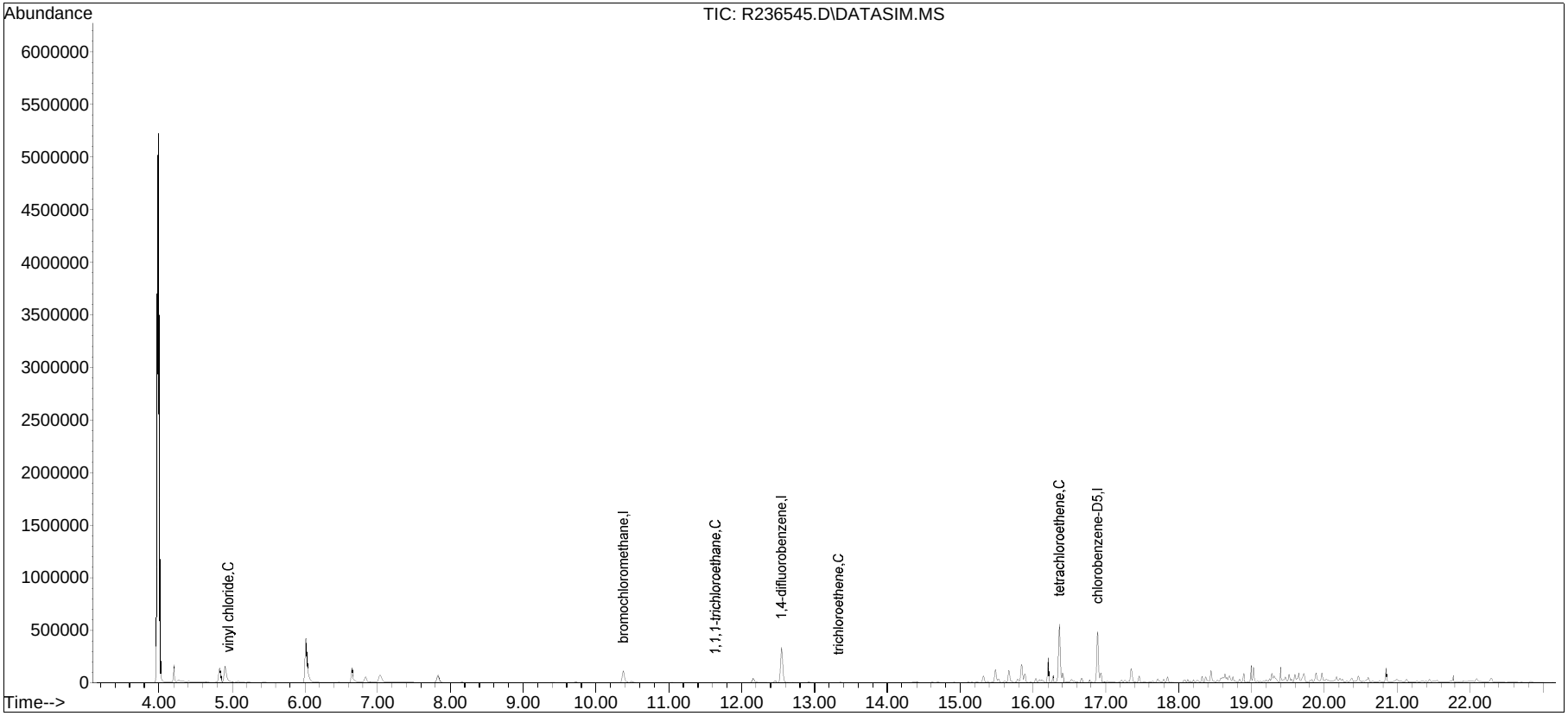
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

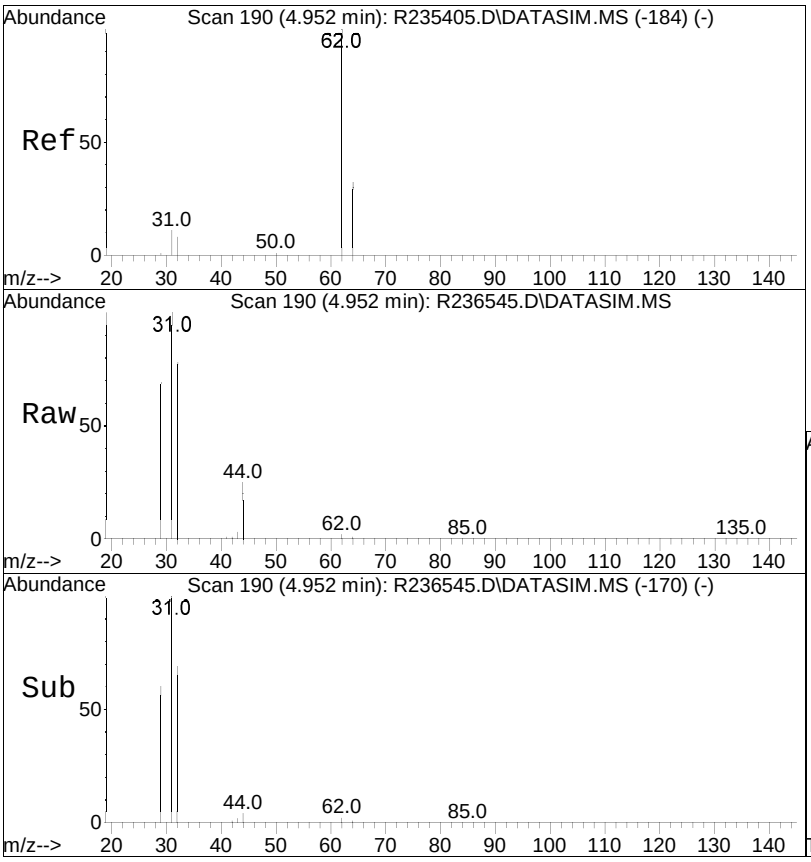
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236545.D
Acq On : 24 Sep 2015 10:42 pm
Operator : AIRPIANO2:RY
Sample : L1523462-06,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 10:36:21 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



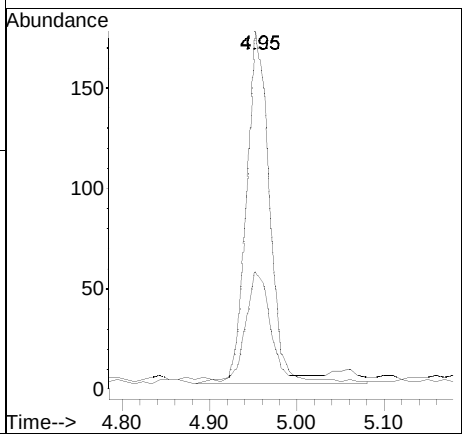
TSIM150901.M Fri Sep 25 10:48:33 2015 Page 2

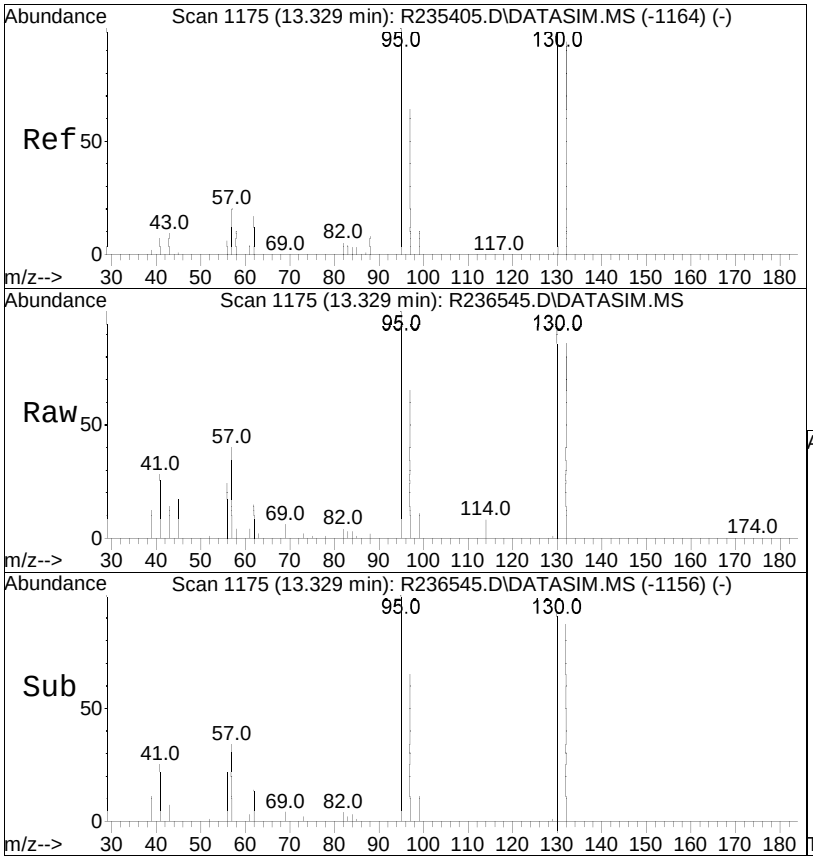


#6
vinyl chloride
Concen: 0.03 ppbV
RT: 4.95 min Scan# 190
Delta R.T. 0.000 min
Lab File: R236545.D
Acq: 24 Sep 2015 10:42 pm

Tgt Ion: 62 Resp: 322

Ion	Ratio	Lower	Upper
62	100		
64	33.1	25.5	38.3

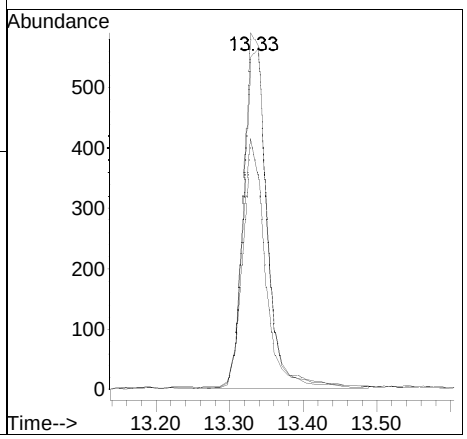


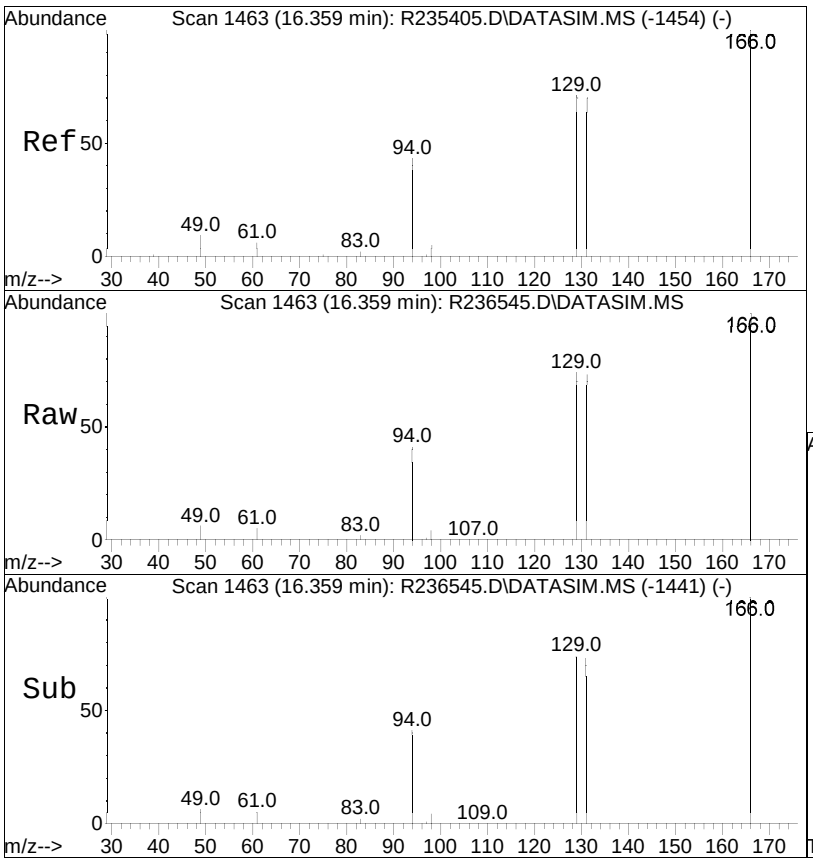


#44
trichloroethene
Concen: 0.08 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236545.D
Acq: 24 Sep 2015 10:42 pm

Tgt Ion:130 Resp: 1300

Ion	Ratio	Lower	Upper
130	100		
132	93.2	77.0	115.6
97	70.4	57.8	86.8

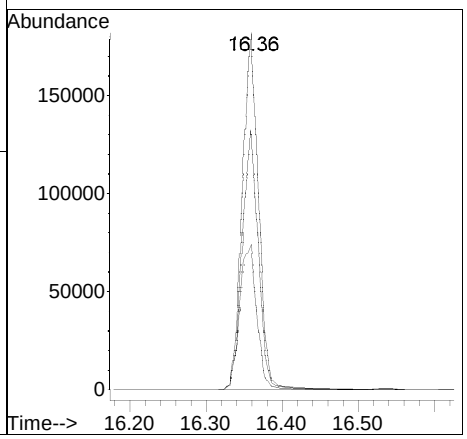




#57
tetrachloroethene
Concen: 11.46 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236545.D
Acq: 24 Sep 2015 10:42 pm

Tgt Ion:166 Resp: 263068

Ion	Ratio	Lower	Upper
166	100		
131	72.7	60.6	90.8
94	40.7	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236545.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 10:42 pm	Instrument	: Air Piano 2
Sample	: L1523462-06,3,250,250	Quant Date	: 9/24/2015 11:08 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236546.D
Acq On : 24 Sep 2015 11:14 pm
Operator : AIRPIANO2:RY
Sample : L1523462-08D,3,50,250
Misc : WG824625,ICAL11407
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 10:38:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	10.38	49	135783	10.000	ppbV		0.00
Standard Area = 150935			Recovery =	89.96%			
33) 1,4-difluorobenzene	12.55	114	387748	10.000	ppbV	#	0.01
Standard Area = 437351			Recovery =	88.66%			
51) chlorobenzene-D5	16.89	54	75223	10.000	ppbV		0.00
Standard Area = 82771			Recovery =	90.88%			
System Monitoring Compounds							
Target Compounds							Qvalue
6) vinyl chloride	4.96		0	N.D.			
16) 1,1-dichloroethene	0.00		0	N.D.	d		
23) trans-1,2-dichloroethene	8.98		0	N.D.			
28) cis-1,2-dichloroethene	0.00		0	N.D.	d		
44) trichloroethene	13.34	130	6301	0.390	ppbV		94
57) tetrachloroethene	16.36	166	1175888	48.977	ppbV		96

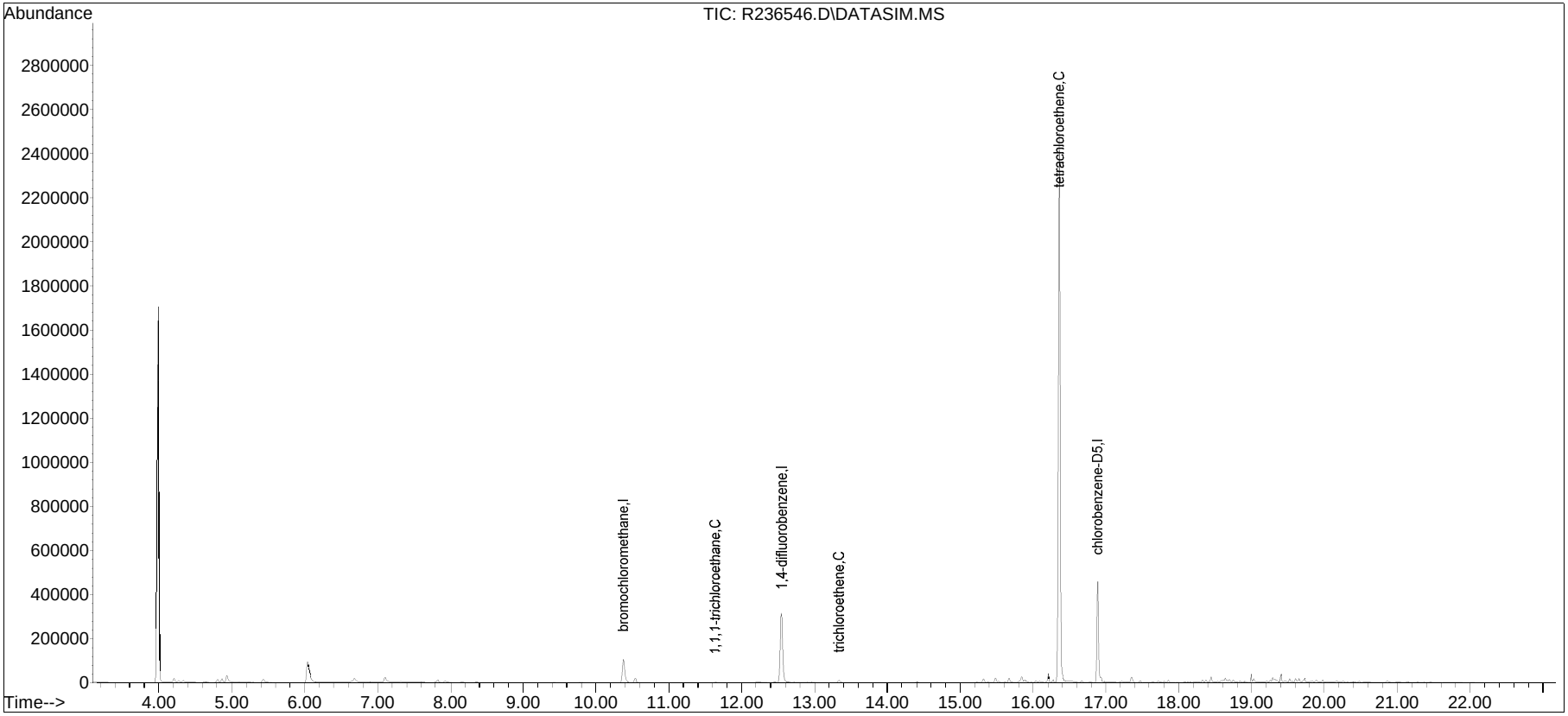
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

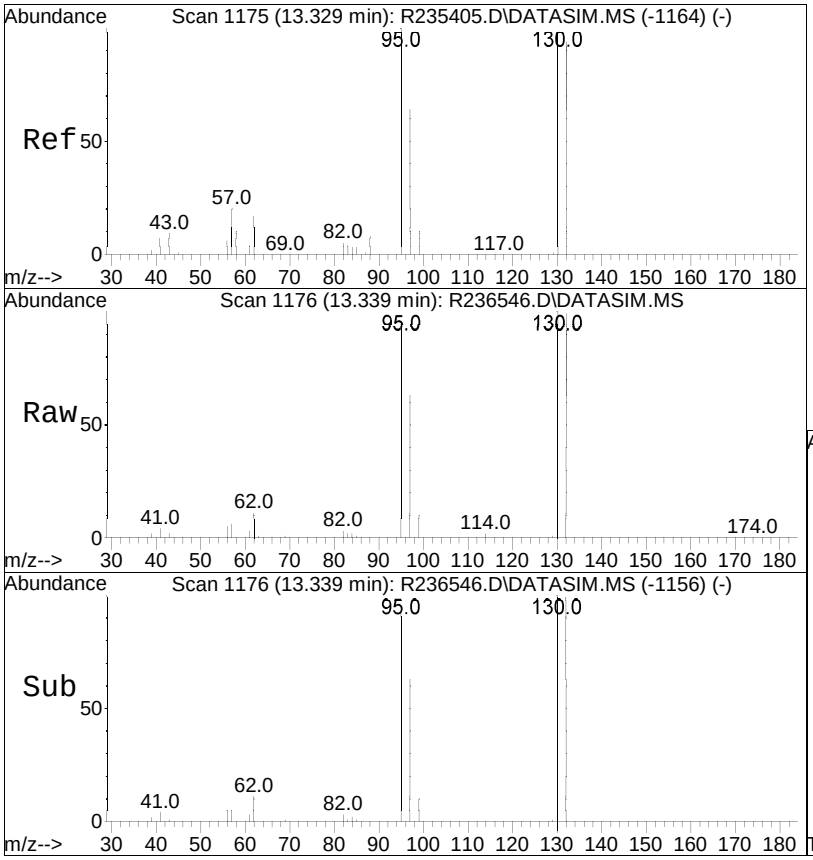
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236546.D
Acq On : 24 Sep 2015 11:14 pm
Operator : AIRPIANO2:RY
Sample : L1523462-08D,3,50,250
Misc : WG824625,ICAL11407
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 10:38:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



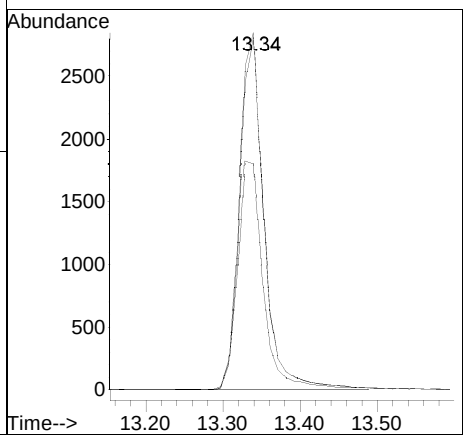
TSIM150901.M Fri Sep 25 10:52:17 2015 Page 2

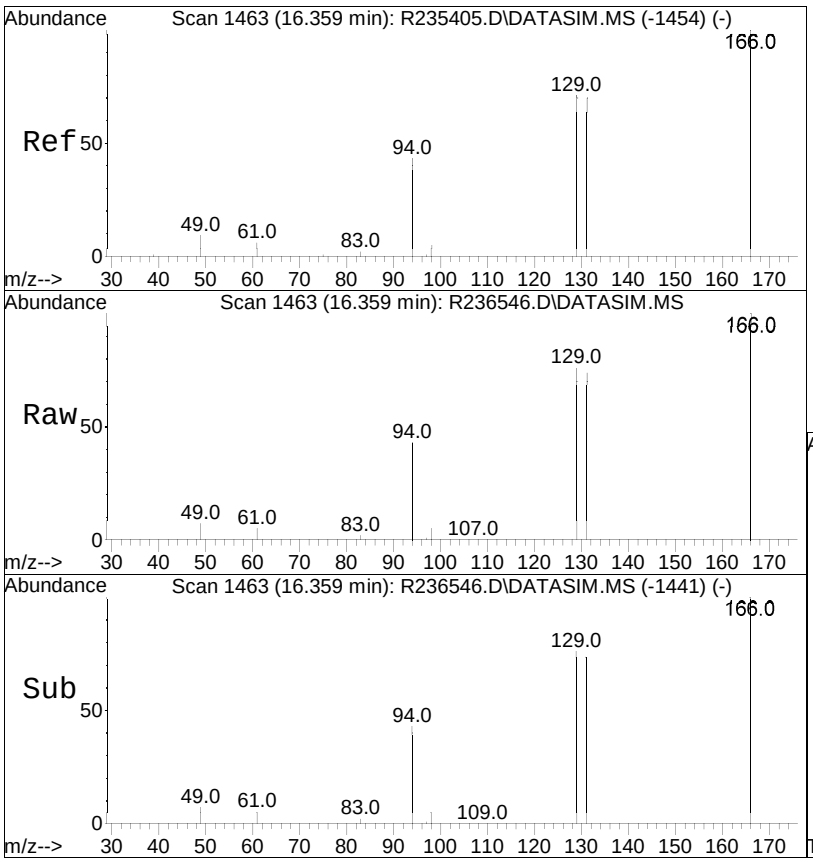


#44
trichloroethene
Concen: 0.39 ppbV
RT: 13.34 min Scan# 1176
Delta R.T. 0.011 min
Lab File: R236546.D
Acq: 24 Sep 2015 11:14 pm

Tgt Ion:130 Resp: 6301

Ion	Ratio	Lower	Upper
130	100		
132	98.7	77.0	115.6
97	63.3	57.8	86.8

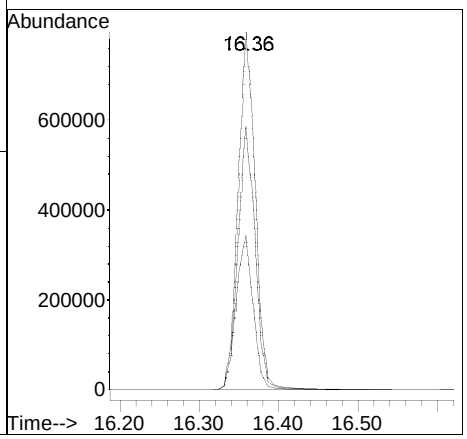




#57
tetrachloroethene
Concen: 48.98 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236546.D
Acq: 24 Sep 2015 11:14 pm

Tgt Ion:166 Resp: 1175888

Ion	Ratio	Lower	Upper
166	100		
131	74.0	60.6	90.8
94	43.3	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236546.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 11:14 pm	Instrument	: Air Piano 2
Sample	: L1523462-08D,3,50,250	Quant Date	: 9/25/2015 6:55 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236547.D
Acq On : 24 Sep 2015 11:46 pm
Operator : AIRPIANO2:RY
Sample : L1523462-10D,3,125,250
Misc : WG824625,ICAL11407
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 25 10:41:55 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	10.38	49	138591	10.000	ppbV		0.00
Standard Area = 150935			Recovery =		91.82%		
33) 1,4-difluorobenzene	12.55	114	391180	10.000	ppbV	#	0.01
Standard Area = 437351			Recovery =		89.44%		
51) chlorobenzene-D5	16.89	54	74834	10.000	ppbV		0.00
Standard Area = 82771			Recovery =		90.41%		
System Monitoring Compounds							
Target Compounds							Qvalue
6) vinyl chloride	4.96		0	N.D.			
16) 1,1-dichloroethene	0.00		0	N.D.	d		
23) trans-1,2-dichloroethene	8.98		0	N.D.			
28) cis-1,2-dichloroethene	10.20		0	N.D.			
44) trichloroethene	13.34	130	2672	0.164	ppbV		93
57) tetrachloroethene	16.36	166	639894	26.791	ppbV		95

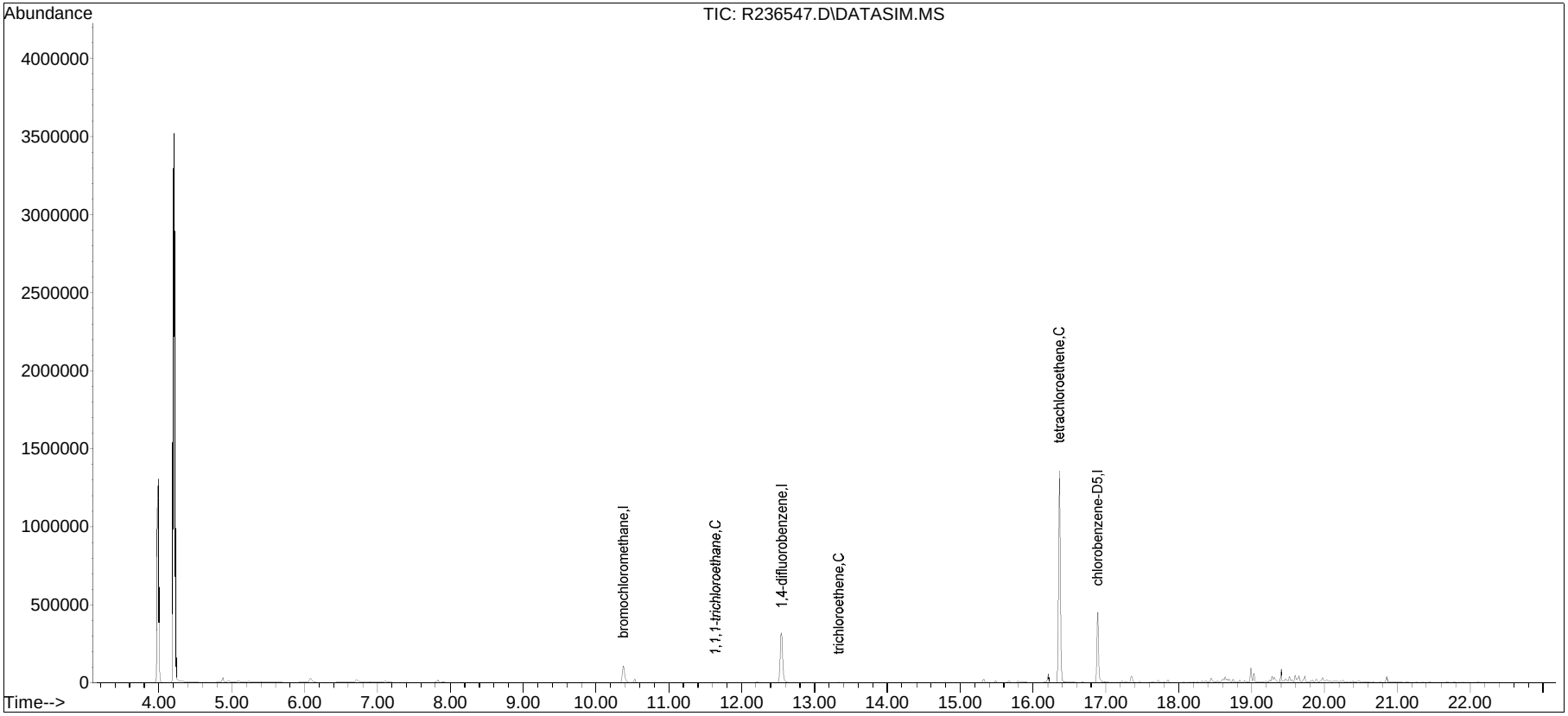
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

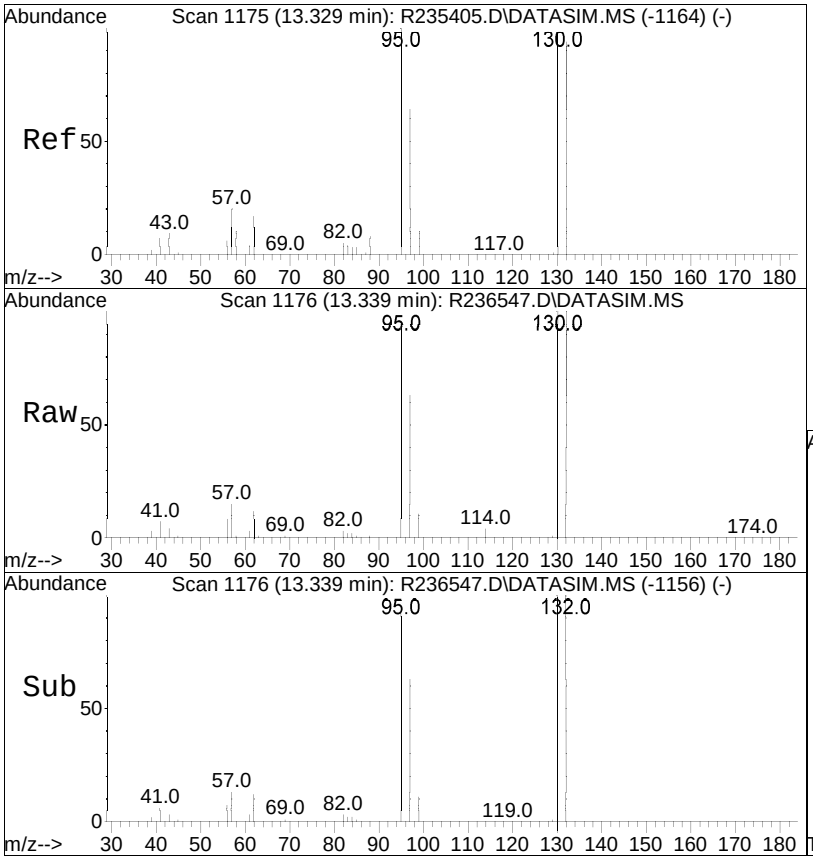
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236547.D
Acq On : 24 Sep 2015 11:46 pm
Operator : AIRPIANO2:RY
Sample : L1523462-10D,3,125,250
Misc : WG824625,ICAL11407
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 25 10:41:55 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



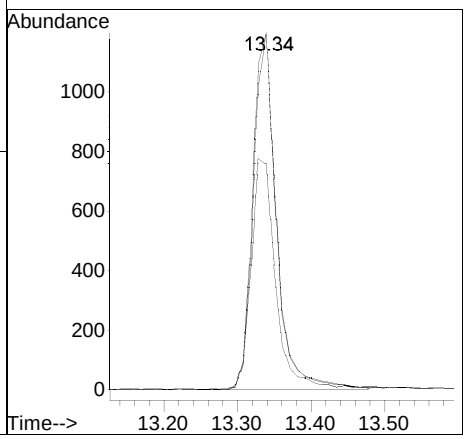
TSIM150901.M Fri Sep 25 10:52:24 2015 Page 2

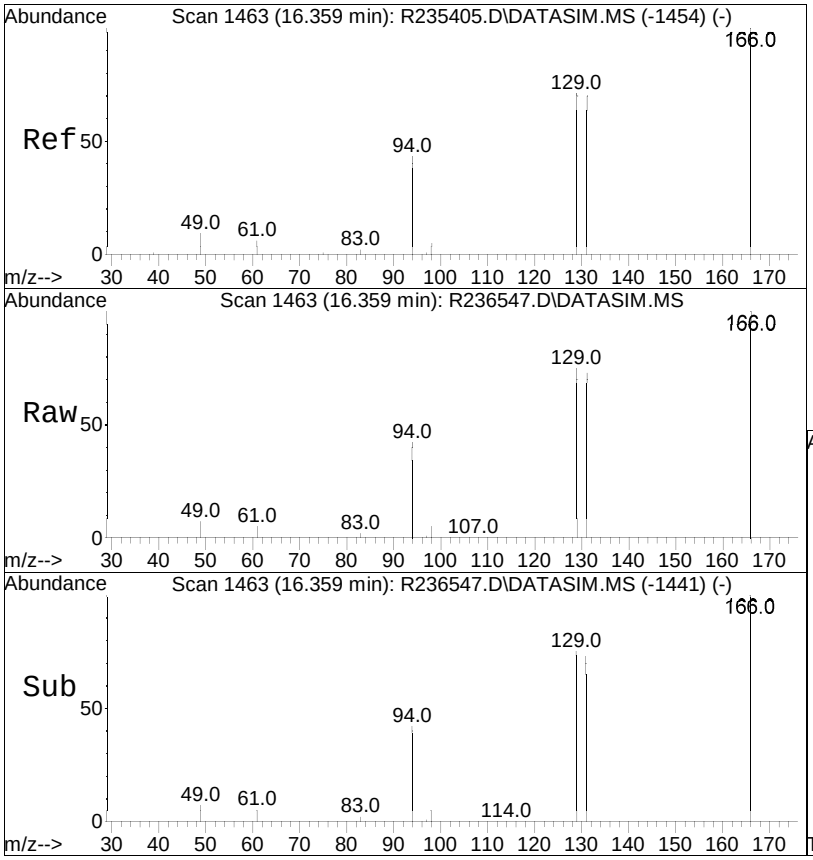


#44
trichloroethene
Concen: 0.16 ppbV
RT: 13.34 min Scan# 1176
Delta R.T. 0.011 min
Lab File: R236547.D
Acq: 24 Sep 2015 11:46 pm

Tgt Ion:130 Resp: 2672

Ion	Ratio	Lower	Upper
130	100		
132	100.2	77.0	115.6
97	63.4	57.8	86.8

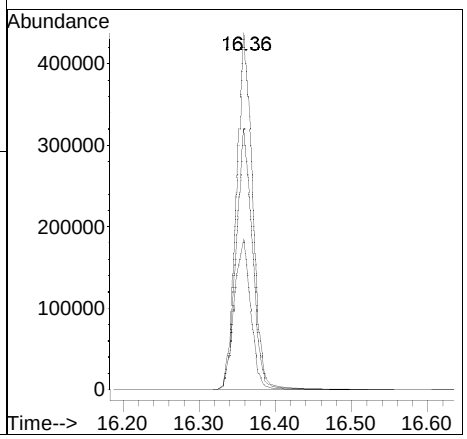




#57
tetrachloroethene
Concen: 26.79 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236547.D
Acq: 24 Sep 2015 11:46 pm

Tgt Ion:166 Resp: 639894

Ion	Ratio	Lower	Upper
166	100		
131	73.4	60.6	90.8
94	42.4	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236547.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 11:46 pm	Instrument	: Air Piano 2
Sample	: L1523462-10D,3,125,250	Quant Date	: 9/25/2015 6:56 am

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Instrument ID: AIRPIANO2 Calibration Date(s): 09/01/15 09/02/15

Calibration Times: 23:20 04:25

Calibration Files

0.02=R236174.D 0.04=R236175.D 0.1 =R236176.D 0.2 =R236177.D 0.5 =R236178.D 1.0 =R236179.D

5.0 =R236180.D 10.0=R236181.D 20.0=R236182.D 50.0=R236183.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	ISTD											
2)		propylene			0.626	0.614	0.645	0.627	0.616	0.546	0.578	0.531	0.488	0.5856	9.13
3)		dichlorodifluoromethane			1.015	1.322	1.172	1.209	1.864	1.292	1.366	1.440	1.404	1.3429	17.52
4)	C	chloromethane			1.063	0.883	0.886	0.834	0.786	0.740	0.712	0.704	0.651	0.8065	15.62
5)		Freon-114	2.299	2.245	2.236	2.438	2.338	2.263	2.178	2.102	2.045	1.833	2.1976	7.76
6)	C	vinyl chloride	0.838	0.852	0.818	0.906	0.867	0.848	0.815	0.792	0.784	0.727	0.8246	6.04
7)	C	1,3-butadiene	0.549	0.546	0.557	0.638	0.603	0.584	0.566	0.550	0.537	0.499	0.5630	6.80
8)	C	bromomethane	0.757	0.691	0.721	0.800	0.761	0.730	0.706	0.692	0.693	0.630	0.7180	6.58
9)	C	chloroethane	0.751	0.602	0.469	0.462	0.428	0.410	0.388	0.376	0.377	0.346	0.4609	27.11
10)		ethanol			0.509	0.561	0.512	0.474	0.478	0.463	0.464	0.423	0.4856	8.55
11)	C	vinyl bromide	0.894	0.735	0.712	0.800	0.772	0.756	0.727	0.699	0.693	0.629	0.7417	9.61
12)		acetone			1.272	1.280	1.211	1.185	1.135	1.098	1.062	0.919	1.1451	10.48
13)		trichlorofluoromethane	2.101	2.029	2.012	2.252	2.148	2.093	2.004	1.942	1.904	1.721	2.0205	7.22
14)		isopropyl alcohol					1.383	1.305	1.256	1.220	1.197	1.085	1.2409	8.17
15)	C	acrylonitrile	0.698	0.669	0.580	0.647	0.607	0.601	0.550	0.546	0.553	0.519	0.5970	9.85
16)	C	1,1-dichloroethene	1.356	1.349	1.373	1.566	1.479	1.457	1.380	1.341	1.326	1.229	1.3856	6.75
17)		tertiary butyl alcohol	2.182	2.132	2.012	1.882	1.825	1.788	1.688	1.637	1.641	1.539	1.8326	11.94
18)	C	methylene chloride					1.750	1.397	1.071	1.012	0.992	0.905	1.1878	27.23
19)	C	3-chloropropene	1.692	1.454	1.259	1.169	1.022	0.984	0.962	0.939	0.948	0.894	1.1321	23.28
20)	C	carbon disulfide			2.633	2.491	2.766	2.578	2.563	2.454	2.391	2.384	2.208	2.4964	6.51
21)		Freon 113	1.727	1.712	1.693	1.891	1.771	1.758	1.667	1.617	1.593	1.453	1.6882	6.97
22)		Halothane	1.341	1.287	1.262	1.442	1.356	1.345	1.287	1.259	1.229	1.130	1.2937	6.53
23)		trans-1,2-dichloroethene	1.329	1.316	1.274	1.468	1.395	1.377	1.320	1.295	1.289	1.200	1.3264	5.54
24)	C	1,1-dichloroethane	1.534	1.507	1.497	1.729	1.628	1.598	1.540	1.498	1.490	1.382	1.5401	6.08
25)	C	MTBE	2.159	2.163	2.078	2.401	2.261	2.238	2.144	2.095	2.071	1.927	2.1538	5.94
26)	C	vinyl acetate			1.238	1.256	1.129	1.001	1.085	1.198	1.419	1.520	1.2309	13.92
27)	C	2-butanone			1.821	1.609	1.799	1.747	1.733	1.710	1.691	1.689	1.579	1.7087	4.64
28)		cis-1,2-dichloroethene	1.204	1.175	1.187	1.338	1.262	1.242	1.188	1.154	1.147	1.063	1.1960	6.16
29)		Ethyl Acetate				0.325	0.230	0.271	0.262	0.266	0.271	0.256	0.2686	10.67
30)	C	chloroform	1.756	1.734	1.724	1.970	1.889	1.848	1.776	1.722	1.706	1.556	1.7680	6.42
31)		Tetrahydrofuran			1.042	0.899	1.064	1.031	1.012	0.890	0.874	0.900	0.844	0.9507	8.94
32)	C	1,2-dichloroethane	1.288	1.249	1.200	1.340	1.302	1.268	1.228	1.184	1.174	1.079	1.2312	6.14
33)	I	1,4-difluorobenzene	ISTD											
34)	C	hexane	0.511	0.459	0.428	0.487	0.464	0.458	0.437	0.430	0.438	0.412	0.4524	6.62
35)	s	1,2-dichloroethane-D4	0.338	0.341	0.345	0.342	0.349	0.349	0.346	0.345	0.346	0.343	0.3444	0.96
36)	C	1,1,1-trichloroethane	0.701	0.666	0.659	0.744	0.710	0.692	0.667	0.642	0.651	0.616	0.6748	5.53
37)	C	benzene			0.997	0.915	1.007	0.948	0.928	0.893	0.879	0.883	0.841	0.9213	6.01
38)	C	carbon tetrachloride	0.729	0.683	0.668	0.772	0.736	0.731	0.710	0.696	0.700	0.656	0.7081	4.94
39)		cyclohexane	0.516	0.464	0.457	0.515	0.480	0.477	0.461	0.453	0.462	0.443	0.4727	5.26
40)		dibromomethane	0.610	0.523	0.425	0.454	0.423	0.413	0.398	0.386	0.392	0.369	0.4393	16.82
41)	C	1,2-dichloropropane	0.402	0.364	0.358	0.395	0.376	0.374	0.361	0.355	0.364	0.348	0.3696	4.73
42)		bromodichloromethane	0.805	0.761	0.747	0.853	0.807	0.807	0.789	0.771	0.786	0.733	0.7860	4.42
43)	C	1,4-dioxane			0.208	0.222	0.209	0.204	0.208	0.210	0.216	0.208	0.2107	2.65

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Instrument ID: AIRPIANO2 Calibration Date(s): 09/01/15 09/02/15

Calibration Times: 23:20 04:25

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
44)	C	trichloroethene	0.421	0.415	0.414	0.452	0.432	0.429	0.414	0.408	0.407	0.375	0.4166	4.79
45)	C	2,2,4-trimethylpentane	1.476	1.413	1.381	1.543	1.529	1.529	1.467	1.445	1.471	1.382	1.4636	4.04
46)		heptane		0.565	0.511	0.583	0.551	0.549	0.536	0.530	0.541	0.519	0.5428	4.09
47)	C	cis-1,3-dichloropropene	1.953	1.911	1.869	2.149	2.060	2.073	2.080	2.089	2.154	2.067	2.0402	4.74
48)	C	4-methyl-2-pentanone	0.770	0.756	0.712	0.823	0.780	0.793	0.794	0.781	0.799	0.756	0.7765	3.91
49)		trans-1,3-dichloropropene	0.601	0.611	0.590	0.682	0.659	0.659	0.676	0.689	0.718	0.691	0.6575	6.55
50)	C	1,1,2-trichloroethane	0.478	0.468	0.463	0.531	0.500	0.499	0.487	0.480	0.487	0.459	0.4852	4.41
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene		7.414	6.911	7.647	7.116	7.017	6.810	6.595	6.628	6.210	6.9276	6.31
53)	s	toluene-D8	4.902	4.869	4.866	4.906	4.864	4.900	4.867	4.835	4.860	4.821	4.8689	0.57
54)		2-hexanone	3.781	4.190	3.976	4.216	4.440	4.669	5.029	4.912	4.975	4.677	4.4864	9.70
55)		dibromochloromethane	3.992	3.890	3.797	4.370	4.141	4.129	4.173	4.057	4.089	3.834	4.0472	4.30
56)	C	1,2-dibromoethane	3.594	3.420	3.352	3.824	3.651	3.642	3.618	3.538	3.577	3.373	3.5589	4.06
57)	C	tetrachloroethene	3.927	3.646	3.530	3.368	3.150	3.097	2.930	2.836	2.810	2.624	3.1917	13.07
58)		1,1,1,2-tetrachloroethane	2.314	2.288	2.234	2.567	2.460	2.425	2.332	2.267	2.261	2.059	2.3208	6.01
59)	C	chlorobenzene	4.234	4.160	3.892	4.549	4.315	4.293	4.146	4.024	4.000	3.668	4.1282	5.97
60)	C	ethylbenzene	6.442	6.275	6.083	7.073	6.757	6.689	6.569	6.424	6.345	5.804	6.4463	5.54
61)	C	m+p-xylene	4.948	4.738	4.699	5.455	5.222	5.216	5.178	5.080	5.016	4.487	5.0040	5.83
62)	C	bromoform	2.919	2.820	2.738	3.264	3.154	3.156	3.254	3.202	3.199	2.946	3.0652	6.26
63)	C	styrene	3.584	3.382	3.368	3.839	3.722	3.737	3.833	3.828	3.825	3.523	3.6640	5.10
64)	C	1,1,2,2-tetrachloroethane	3.892	3.758	3.738	4.382	4.240	4.225	4.224	4.071	4.043	3.686	4.0259	6.09
65)	C	o-xylene	5.142	5.045	4.935	5.722	5.474	5.379	5.332	5.209	5.102	4.376	5.1717	6.99
66)		1,2,3-trichloropropane	2.964	2.774	2.728	3.322	3.250	3.249	3.317	3.230	3.277	3.094	3.1204	7.15
67)	s	bromofluorobenzene	2.812	2.803	2.800	2.815	2.826	2.852	2.906	2.897	2.885	2.929	2.8525	1.68
68)	C	isopropylbenzene	7.138	6.636	6.489	7.374	7.176	7.079	6.991	6.755	6.663	5.849	6.8152	6.46
69)		bromobenzene	3.498	3.468	3.474	3.958	3.896	3.910	3.943	3.883	3.893	3.621	3.7543	5.62
70)		4-ethyl toluene	5.626	6.359	6.179	7.391	7.399	7.462	7.796	7.632	7.411	6.509	6.9766	10.62
71)		1,3,5-trimethylbenzene	6.382	6.341	6.032	6.800	6.474	6.372	6.283	6.149	5.972	5.305	6.2112	6.36
72)		tert-butylbenzene	6.160	5.891	5.872	6.676	6.395	6.322	6.400	5.996	5.724	4.722	6.0158	9.00
73)		1,2,4-trimethylbenzene	5.389	5.243	5.147	6.150	6.050	6.080	6.312	5.988	5.778	4.754	5.6891	9.15
74)	C	Benzyl Chloride				3.899	4.226	4.659	5.728	5.841	6.061	5.550	5.1377	16.78
75)		1,3-dichlorobenzene	2.964	3.074	3.107	3.825	3.976	4.148	4.552	4.454	4.373	3.967	3.8440	15.48
76)	C	1,4-dichlorobenzene	4.607	4.132	4.189	5.177	5.133	5.020	4.896	4.747	4.571	4.029	4.6502	9.05
77)		sec-butylbenzene	7.627	7.702	7.743	9.260	9.036	8.981	9.209	8.791	8.426	7.052	8.3827	9.42
78)		p-isopropyltoluene	5.737	6.194	6.543	7.715	7.624	7.655	7.976	7.587	7.268	6.070	7.0368	11.61
79)		1,2-dichlorobenzene	3.352	3.514	3.685	4.356	4.337	4.352	4.574	4.431	4.264	3.930	4.0794	10.48
80)		n-butylbenzene	4.738	5.068	5.258	6.981	7.184	7.357	7.915	7.703	7.422	6.460	6.6084	17.70
81)	C	1,2,4-trichlorobenzene		1.971	2.056	2.779	3.300	3.460	4.163	4.070	3.744	3.389	3.2146	24.81
82)		naphthalene		3.443	4.064	5.362	6.440	6.953	8.721	8.780	8.016	7.409	6.5764	29.44
83)		1,2,3-trichlorobenzene		1.536	2.050	2.549	3.042	3.202	4.002	3.979	3.606	3.479	3.0495	27.99
84)	C	hexachlorobutadiene	2.435	2.484	2.534	3.027	3.078	3.084	3.488	3.361	3.081	2.900	2.9472	12.25

FORM VI-TO15-SIM

Response Factor Report Air Piano 2

Method Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Method File : TSIM150901.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Sep 02 12:46:49 2015
Response Via : Initial Calibration

Calibration Files
0.02=R236174.D 0.04=R236175.D 0.1 =R236176.D 0.2 =R236177.D 0.5 =R236178.D 1.0 =R236179.D
5.0 =R236180.D 10.0=R236181.D 20.0=R236182.D 50.0=R236183.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	ISTD											
2)		propylene		0.626	0.614	0.645	0.627	0.616	0.546	0.578	0.531	0.488	0.5856	9.13
3)		dichlorodifluorome...		1.015	1.322	1.172	1.209	1.864	1.292	1.366	1.440	1.404	1.3429	17.52
4)	C	chloromethane		1.063	0.883	0.886	0.834	0.786	0.740	0.712	0.704	0.651	0.8065	15.62
5)		Freon-114	2.299	2.245	2.236	2.438	2.338	2.263	2.178	2.102	2.045	1.833	2.1976	7.76
6)	C	vinyl chloride	0.838	0.852	0.818	0.906	0.867	0.848	0.815	0.792	0.784	0.727	0.8246	6.04
7)	C	1,3-butadiene	0.549	0.546	0.557	0.638	0.603	0.584	0.566	0.550	0.537	0.499	0.5630	6.80
8)	C	bromomethane	0.757	0.691	0.721	0.800	0.761	0.730	0.706	0.692	0.693	0.630	0.7180	6.58
9)	C	chloroethane	0.751	0.602	0.469	0.462	0.428	0.410	0.388	0.376	0.377	0.346	0.4609	27.11
10)		ethanol			0.509	0.561	0.512	0.474	0.478	0.463	0.464	0.423	0.4856	8.55
11)	C	vinyl bromide	0.894	0.735	0.712	0.800	0.772	0.756	0.727	0.699	0.693	0.629	0.7417	9.61
12)		acetone			1.272	1.280	1.211	1.185	1.135	1.098	1.062	0.919	1.1451	10.48
13)		trichlorofluoromet...	2.101	2.029	2.012	2.252	2.148	2.093	2.004	1.942	1.904	1.721	2.0205	7.22
14)		isopropyl alcohol					1.383	1.305	1.256	1.220	1.197	1.085	1.2409	8.17
15)	C	acrylonitrile	0.698	0.669	0.580	0.647	0.607	0.601	0.550	0.546	0.553	0.519	0.5970	9.85
16)	C	1,1-dichloroethene	1.356	1.349	1.373	1.566	1.479	1.457	1.380	1.341	1.326	1.229	1.3856	6.75
17)		tertiary butyl alc...	2.182	2.132	2.012	1.882	1.825	1.788	1.688	1.637	1.641	1.539	1.8326	11.94
18)	C	methylene chloride					1.750	1.397	1.071	1.012	0.992	0.905	1.1878	27.23
19)	C	3-chloropropene	1.692	1.454	1.259	1.169	1.022	0.984	0.962	0.939	0.948	0.894	1.1321	23.28
20)	C	carbon disulfide		2.633	2.491	2.766	2.578	2.563	2.454	2.391	2.384	2.208	2.4964	6.51
21)		Freon 113	1.727	1.712	1.693	1.891	1.771	1.758	1.667	1.617	1.593	1.453	1.6882	6.97
22)		Halothane	1.341	1.287	1.262	1.442	1.356	1.345	1.287	1.259	1.229	1.130	1.2937	6.53
23)		trans-1,2-dichloro...	1.329	1.316	1.274	1.468	1.395	1.377	1.320	1.295	1.289	1.200	1.3264	5.54
24)	C	1,1-dichloroethane	1.534	1.507	1.497	1.729	1.628	1.598	1.540	1.498	1.490	1.382	1.5401	6.08
25)	C	MTBE	2.159	2.163	2.078	2.401	2.261	2.238	2.144	2.095	2.071	1.927	2.1538	5.94
26)	C	vinyl acetate			1.238	1.256	1.129	1.001	1.085	1.198	1.419	1.520	1.2309	13.92
27)	C	2-butanone		1.821	1.609	1.799	1.747	1.733	1.710	1.691	1.689	1.579	1.7087	4.64
28)		cis-1,2-dichloroet...	1.204	1.175	1.187	1.338	1.262	1.242	1.188	1.154	1.147	1.063	1.1960	6.16
29)		Ethyl Acetate				0.325	0.230	0.271	0.262	0.266	0.271	0.256	0.2686	10.67
30)	C	chloroform	1.756	1.734	1.724	1.970	1.889	1.848	1.776	1.722	1.706	1.556	1.7680	6.42
31)		Tetrahydrofuran		1.042	0.899	1.064	1.031	1.012	0.890	0.874	0.900	0.844	0.9507	8.94

Response Factor Report Air Piano 2

Method Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Method File : TSIM150901.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Sep 02 12:46:49 2015
Response Via : Initial Calibration

Calibration Files
0.02=R236174.D 0.04=R236175.D 0.1 =R236176.D 0.2 =R236177.D 0.5 =R236178.D 1.0 =R236179.D
5.0 =R236180.D 10.0=R236181.D 20.0=R236182.D 50.0=R236183.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32)	C	1,2-dichloroethane	1.288	1.249	1.200	1.340	1.302	1.268	1.228	1.184	1.174	1.079	1.2312	6.14
33)	I	1,4-difluorobenzene	ISTD											
34)	C	hexane	0.511	0.459	0.428	0.487	0.464	0.458	0.437	0.430	0.438	0.412	0.4524	6.62
35)	s	1,2-dichloroethane-D4	0.338	0.341	0.345	0.342	0.349	0.349	0.346	0.345	0.346	0.343	0.3444	0.96
36)	C	1,1,1-trichloroethane	0.701	0.666	0.659	0.744	0.710	0.692	0.667	0.642	0.651	0.616	0.6748	5.53
37)	C	benzene		0.997	0.915	1.007	0.948	0.928	0.893	0.879	0.883	0.841	0.9213	6.01
38)	C	carbon tetrachloride	0.729	0.683	0.668	0.772	0.736	0.731	0.710	0.696	0.700	0.656	0.7081	4.94
39)		cyclohexane	0.516	0.464	0.457	0.515	0.480	0.477	0.461	0.453	0.462	0.443	0.4727	5.26
40)		dibromomethane	0.610	0.523	0.425	0.454	0.423	0.413	0.398	0.386	0.392	0.369	0.4393	16.82
41)	C	1,2-dichloropropane	0.402	0.364	0.358	0.395	0.376	0.374	0.361	0.355	0.364	0.348	0.3696	4.73
42)		bromodichloromethane	0.805	0.761	0.747	0.853	0.807	0.807	0.789	0.771	0.786	0.733	0.7860	4.42
43)	C	1,4-dioxane			0.208	0.222	0.209	0.204	0.208	0.210	0.216	0.208	0.2107	2.65
44)	C	trichloroethene	0.421	0.415	0.414	0.452	0.432	0.429	0.414	0.408	0.407	0.375	0.4166	4.79
45)	C	2,2,4-trimethylpen...	1.476	1.413	1.381	1.543	1.529	1.529	1.467	1.445	1.471	1.382	1.4636	4.04
46)		heptane		0.565	0.511	0.583	0.551	0.549	0.536	0.530	0.541	0.519	0.5428	4.09
47)	C	cis-1,3-dichloropr...	1.953	1.911	1.869	2.149	2.060	2.073	2.080	2.089	2.154	2.067	2.0402	4.74
48)	C	4-methyl-2-pentanone	0.770	0.756	0.712	0.823	0.780	0.793	0.794	0.781	0.799	0.756	0.7765	3.91
49)		trans-1,3-dichloro...	0.601	0.611	0.590	0.682	0.659	0.659	0.676	0.689	0.718	0.691	0.6575	6.55
50)	C	1,1,2-trichloroethane	0.478	0.468	0.463	0.531	0.500	0.499	0.487	0.480	0.487	0.459	0.4852	4.41
51)	I	chlorobenzene-D5	ISTD											
52)	C	toluene		7.414	6.911	7.647	7.116	7.017	6.810	6.595	6.628	6.210	6.9276	6.31
53)	s	toluene-D8	4.902	4.869	4.866	4.906	4.864	4.900	4.867	4.835	4.860	4.821	4.8689	0.57
54)		2-hexanone	3.781	4.190	3.976	4.216	4.440	4.669	5.029	4.912	4.975	4.677	4.4864	9.70
55)		dibromochloromethane	3.992	3.890	3.797	4.370	4.141	4.129	4.173	4.057	4.089	3.834	4.0472	4.30
56)	C	1,2-dibromoethane	3.594	3.420	3.352	3.824	3.651	3.642	3.618	3.538	3.577	3.373	3.5589	4.06
57)	C	tetrachloroethene	3.927	3.646	3.530	3.368	3.150	3.097	2.930	2.836	2.810	2.624	3.1917	13.07
58)		1,1,1,2-tetrachlor...	2.314	2.288	2.234	2.567	2.460	2.425	2.332	2.267	2.261	2.059	2.3208	6.01
59)	C	chlorobenzene	4.234	4.160	3.892	4.549	4.315	4.293	4.146	4.024	4.000	3.668	4.1282	5.97
60)	C	ethylbenzene	6.442	6.275	6.083	7.073	6.757	6.689	6.569	6.424	6.345	5.804	6.4463	5.54
61)	C	m+p-xylene	4.948	4.738	4.699	5.455	5.222	5.216	5.178	5.080	5.016	4.487	5.0040	5.83

Method Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Method File : TSIM150901.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Sep 02 12:46:49 2015
Response Via : Initial Calibration

Calibration Files
0.02=R236174.D 0.04=R236175.D 0.1 =R236176.D 0.2 =R236177.D 0.5 =R236178.D 1.0 =R236179.D
5.0 =R236180.D 10.0=R236181.D 20.0=R236182.D 50.0=R236183.D

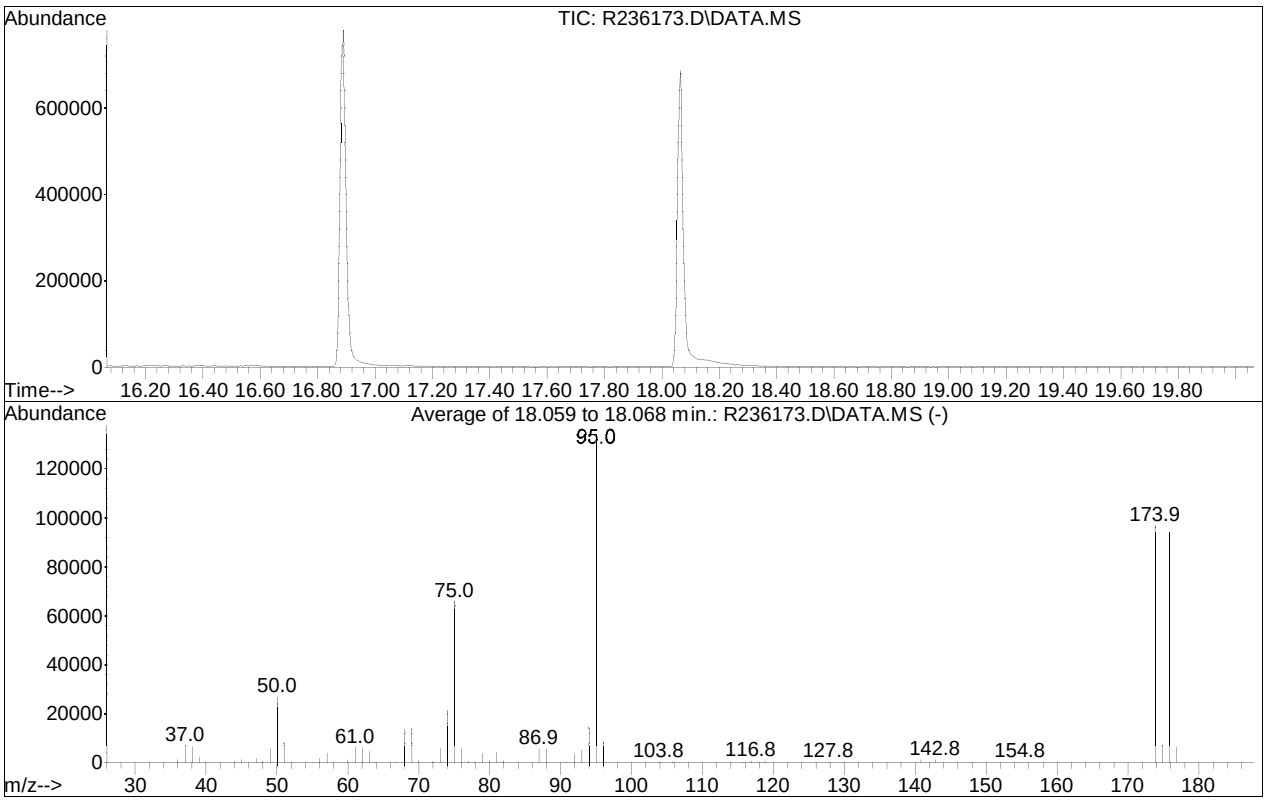
		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C	bromoform	2.919	2.820	2.738	3.264	3.154	3.156	3.254	3.202	3.199	2.946	3.0652	6.26
63)	C	styrene	3.584	3.382	3.368	3.839	3.722	3.737	3.833	3.828	3.825	3.523	3.6640	5.10
64)	C	1,1,2,2-tetrachlor...	3.892	3.758	3.738	4.382	4.240	4.225	4.224	4.071	4.043	3.686	4.0259	6.09
65)	C	o-xylene	5.142	5.045	4.935	5.722	5.474	5.379	5.332	5.209	5.102	4.376	5.1717	6.99
66)		1,2,3-trichloropro...	2.964	2.774	2.728	3.322	3.250	3.249	3.317	3.230	3.277	3.094	3.1204	7.15
67)	s	bromofluorobenzene	2.812	2.803	2.800	2.815	2.826	2.852	2.906	2.897	2.885	2.929	2.8525	1.68
68)	C	isopropylbenzene	7.138	6.636	6.489	7.374	7.176	7.079	6.991	6.755	6.663	5.849	6.8152	6.46
69)		bromobenzene	3.498	3.468	3.474	3.958	3.896	3.910	3.943	3.883	3.893	3.621	3.7543	5.62
70)		4-ethyl toluene	5.626	6.359	6.179	7.391	7.399	7.462	7.796	7.632	7.411	6.509	6.9766	10.62
71)		1,3,5-trimethylben...	6.382	6.341	6.032	6.800	6.474	6.372	6.283	6.149	5.972	5.305	6.2112	6.36
72)		tert-butylbenzene	6.160	5.891	5.872	6.676	6.395	6.322	6.400	5.996	5.724	4.722	6.0158	9.00
73)		1,2,4-trimethylben...	5.389	5.243	5.147	6.150	6.050	6.080	6.312	5.988	5.778	4.754	5.6891	9.15
74)	C	Benzyl Chloride				3.899	4.226	4.659	5.728	5.841	6.061	5.550	5.1377	16.78
75)		1,3-dichlorobenzene	2.964	3.074	3.107	3.825	3.976	4.148	4.552	4.454	4.373	3.967	3.8440	15.48
76)	C	1,4-dichlorobenzene	4.607	4.132	4.189	5.177	5.133	5.020	4.896	4.747	4.571	4.029	4.6502	9.05
77)		sec-butylbenzene	7.627	7.702	7.743	9.260	9.036	8.981	9.209	8.791	8.426	7.052	8.3827	9.42
78)		p-isopropyltoluene	5.737	6.194	6.543	7.715	7.624	7.655	7.976	7.587	7.268	6.070	7.0368	11.61
79)		1,2-dichlorobenzene	3.352	3.514	3.685	4.356	4.337	4.352	4.574	4.431	4.264	3.930	4.0794	10.48
80)		n-butylbenzene	4.738	5.068	5.258	6.981	7.184	7.357	7.915	7.703	7.422	6.460	6.6084	17.70
81)	C	1,2,4-trichloroben...		1.971	2.056	2.779	3.300	3.460	4.163	4.070	3.744	3.389	3.2146	24.81
82)		naphthalene		3.443	4.064	5.362	6.440	6.953	8.721	8.780	8.016	7.409	6.5764	29.44
83)		1,2,3-trichloroben...		1.536	2.050	2.549	3.042	3.202	4.002	3.979	3.606	3.479	3.0495	27.99
84)	C	hexachlorobutadiene	2.435	2.484	2.534	3.027	3.078	3.084	3.488	3.361	3.081	2.900	2.9472	12.25

(#) = Out of Range

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236173.D
Acq On : 1 Sep 2015 10:47 pm
Operator : AIRPIANO2:RY
Sample : WG817908-1,3,250,250
Misc : WG817908
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Sep 02 12:46:49 2015



AutoFind: Scans 1778, 1779, 1780; Background Corrected with Scan 1770

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.4	26747	PASS
75	95	30	66	50.1	65736	PASS
95	95	100	100	100.0	131259	PASS
96	95	5	9	6.9	9027	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	73.7	96720	PASS
175	174	4	9	7.6	7327	PASS
176	174	93	101	97.6	94424	PASS
177	176	5	9	6.4	6055	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236174.D
Acq On : 1 Sep 2015 11:20 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.02
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:31 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	171149	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 102.33%			
33) 1,4-difluorobenzene	12.54	114	457516	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 103.00%			
51) chlorobenzene-D5	16.89	54	99188	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 102.00%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154804	9.784	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.84%			
53) toluene-D8	15.23	98	486184	10.071	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.71%			
67) bromofluorobenzene	18.06	95	278905	9.676	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.76%			
Target Compounds						Qvalue
2) propylene	4.32	41	253M6	0.027	ppbV	
3) dichlorodifluoromethane	4.42	85	344	0.016	ppbV	95
4) chloromethane	4.65	50	491	0.039	ppbV #	88
5) Freon-114	4.79	85	787	0.021	ppbV	97
6) vinyl chloride	4.96	62	287	0.021	ppbV #	66
7) 1,3-butadiene	5.17	54	188M4	0.019	ppbV	
8) bromomethane	5.54	94	259	0.021	ppbV	87
9) chloroethane	5.79	64	257	0.039	ppbV	98
10) ethanol	6.09	31	1330M3	0.162	ppbV	
11) vinyl bromide	6.28	106	306	0.025	ppbV	97
12) acetone	6.74	43	2965	0.153	ppbV #	96
13) trichlorofluoromethane	6.84	101	719	0.021	ppbV	89
14) isopropyl alcohol	7.13	45	1912M3	0.089	ppbV	
15) acrylonitrile	7.32	53	239M3	0.025	ppbV	
16) 1,1-dichloroethene	7.66	61	464	0.020	ppbV #	86
17) tertiary butyl alcohol	7.97	59	747M3	0.026	ppbV	
18) methylene chloride	7.83	49	6359	0.347	ppbV	96
19) 3-chloropropene	7.98	41	579	0.035	ppbV #	89
20) carbon disulfide	8.16	76	999	0.024	ppbV #	36
21) Freon 113	8.17	101	591	0.021	ppbV	98
22) Halothane	8.74	117	459	0.021	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	455	0.020	ppbV	93
24) 1,1-dichloroethane	9.21	63	525	0.020	ppbV	95

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236174.D
Acq On : 1 Sep 2015 11:20 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.02
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:31 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.42	73	739	0.020	ppbV	#	86
26) vinyl acetate	9.46	43	555M6	0.030	ppbV		
27) 2-butanone	9.81	43	636M3	0.022	ppbV		
28) cis-1,2-dichloroethene	10.19	61	412	0.020	ppbV		98
29) Ethyl Acetate	10.56	61	113M6	0.025	ppbV		
30) chloroform	10.53	83	601	0.020	ppbV	#	93
31) Tetrahydrofuran	11.11	42	393M4	0.026	ppbV		
32) 1,2-dichloroethane	11.36	62	441	0.021	ppbV	#	71
34) hexane	10.43	57	468	0.023	ppbV	#	57
36) 1,1,1-trichloroethane	11.64	97	641	0.021	ppbV		98
37) benzene	12.15	78	982	0.024	ppbV		95
38) carbon tetrachloride	12.32	117	667	0.021	ppbV		100
39) cyclohexane	12.46	56	472	0.022	ppbV		93
40) dibromomethane	13.04	93	558	0.031	ppbV		96
41) 1,2-dichloropropane	13.07	63	368	0.022	ppbV		96
42) bromodichloromethane	13.29	83	737	0.020	ppbV	#	99
43) 1,4-dioxane	13.50	88	203M3	0.021	ppbV		
44) trichloroethene	13.33	130	385	0.020	ppbV		98
45) 2,2,4-trimethylpentane	13.36	57	1351	0.020	ppbV		93
46) heptane	13.65	43	534	0.022	ppbV		97
47) cis-1,3-dichloropropene	14.29	75	1787	0.019	ppbV	#	94
48) 4-methyl-2-pentanone	14.47	43	705M3	0.019	ppbV		
49) trans-1,3-dichloropropene	14.87	75	550	0.018	ppbV	#	59
50) 1,1,2-trichloroethane	15.05	97	437M2	0.020	ppbV		
52) toluene	15.32	91	1654	0.024	ppbV		100
54) 2-hexanone	15.69	43	750M3	0.015	ppbV		
55) dibromochloromethane	15.74	129	792	0.019	ppbV		99
56) 1,2-dibromoethane	15.96	107	713	0.020	ppbV		99
57) tetrachloroethene	16.36	166	779	0.027	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.92	131	459	0.020	ppbV		95
59) chlorobenzene	16.93	112	840	0.020	ppbV	#	84
60) ethylbenzene	17.22	91	1278	0.020	ppbV		96
61) m+p-xylene	17.36	91	1963	0.038	ppbV		96
62) bromoform	17.44	173	579	0.018	ppbV		93
63) styrene	17.64	104	711	0.019	ppbV		93
64) 1,1,2,2-tetrachloroethane	17.73	83	772	0.018	ppbV		100
65) o-xylene	17.72	91	1020	0.019	ppbV		99
66) 1,2,3-trichloropropane	17.83	75	588M2	0.018	ppbV		
68) isopropylbenzene	18.16	105	1416	0.020	ppbV		100
69) bromobenzene	18.24	77	694	0.018	ppbV		100

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236174.D
Acq On : 1 Sep 2015 11:20 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.02
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:31 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.65	105	1116	0.014	ppbV #	97
71) 1,3,5-trimethylbenzene	18.70	105	1266	0.020	ppbV #	94
72) tert-butylbenzene	19.00	119	1222	0.019	ppbV	99
73) 1,2,4-trimethylbenzene	19.00	105	1069	0.017	ppbV #	91
74) Benzyl Chloride	19.12	91	609	0.011	ppbV	90
75) 1,3-dichlorobenzene	19.14	146	588	0.013	ppbV	95
76) 1,4-dichlorobenzene	19.18	146	914	0.019	ppbV	97
77) sec-butylbenzene	19.20	105	1513	0.017	ppbV #	90
78) p-isopropyltoluene	19.32	119	1138	0.014	ppbV	99
79) 1,2-dichlorobenzene	19.44	146	665	0.015	ppbV	94
80) n-butylbenzene	19.65	91	940M4	0.012	ppbV	
81) 1,2,4-trichlorobenzene	20.93		0	N.D.		
82) naphthalene	21.11		0	N.D.		
83) 1,2,3-trichlorobenzene	21.28		0	N.D.		
84) hexachlorobutadiene	21.29	225	483	0.014	ppbV	95

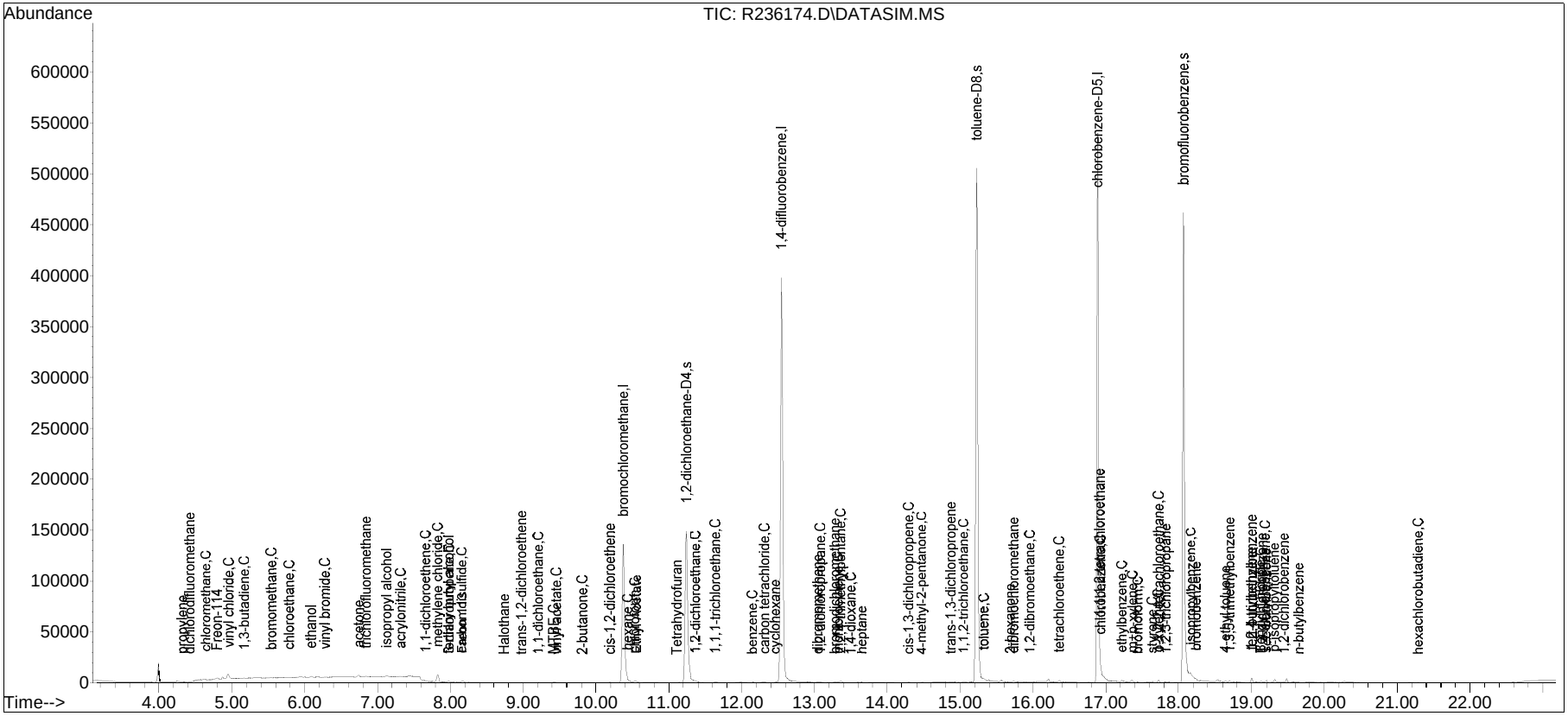
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236174.D
Acq On : 1 Sep 2015 11:20 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.02
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:31 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

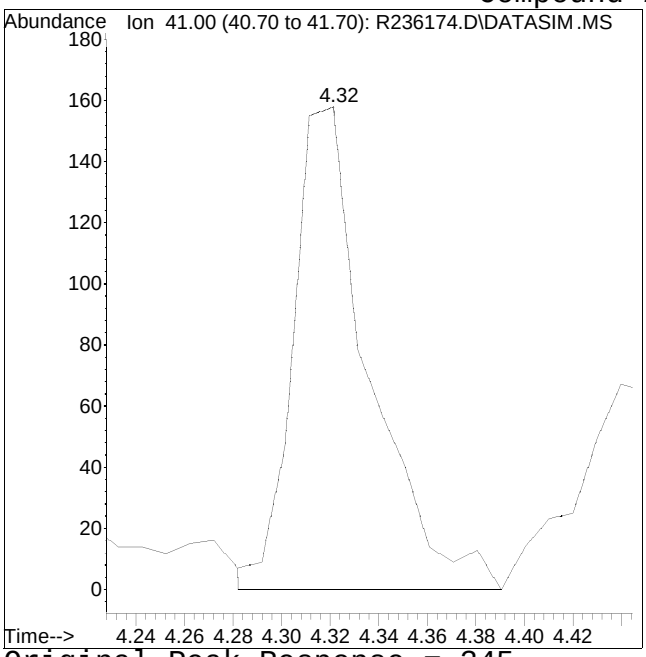
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



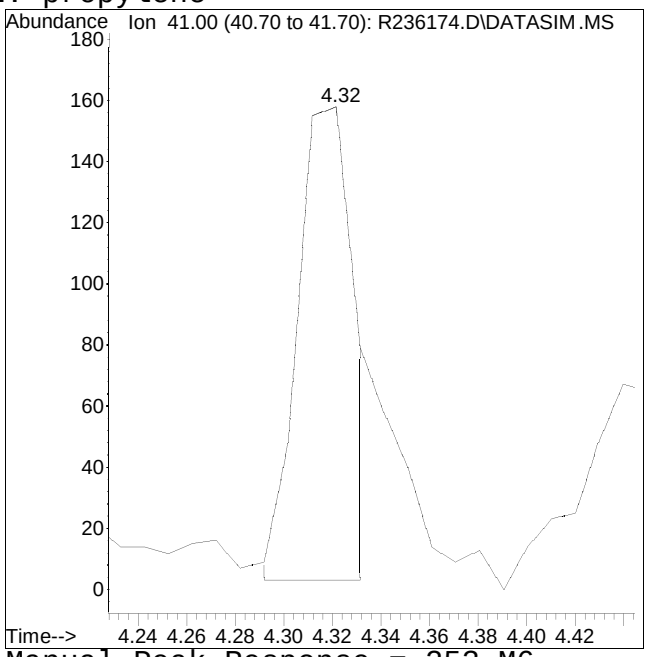
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 345



Manual Peak Response = 253 M6

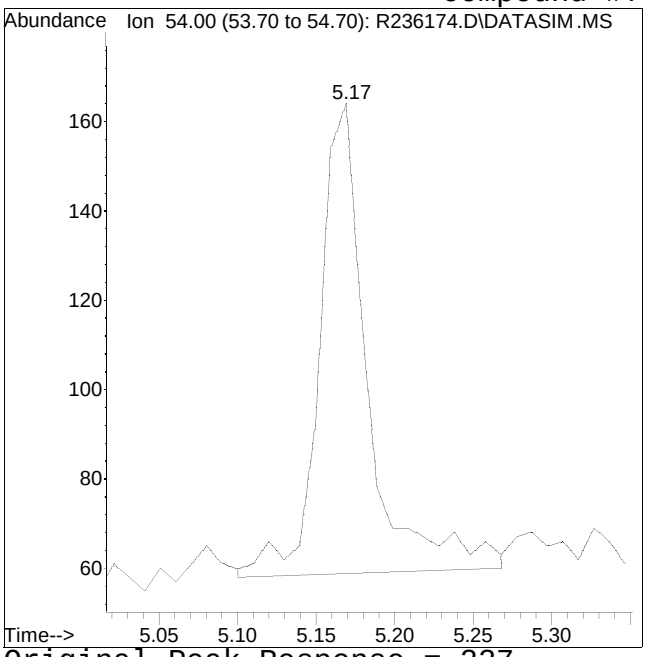
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

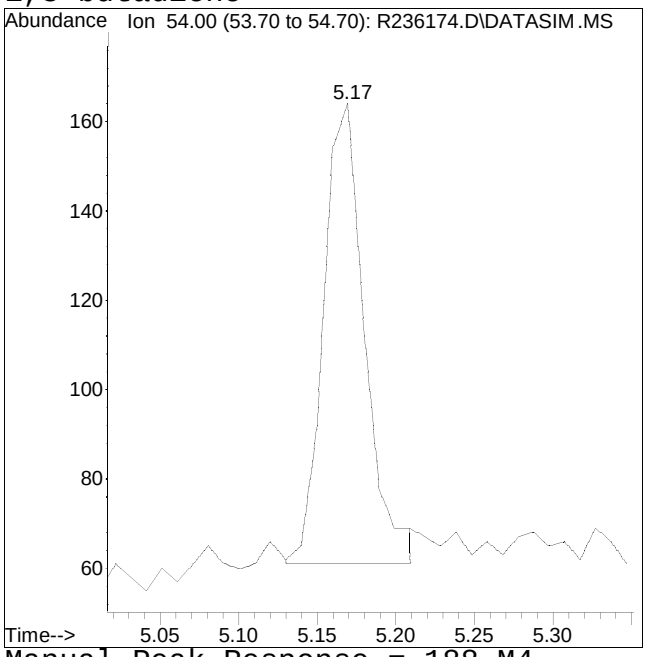
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #7: 1,3-butadiene



Original Peak Response = 227



Manual Peak Response = 188 M4

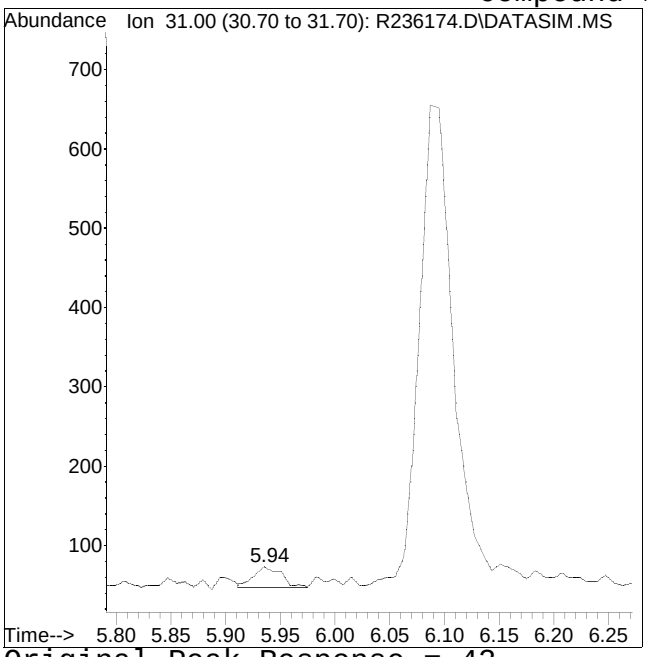
M4 = Poor automated baseline construction.

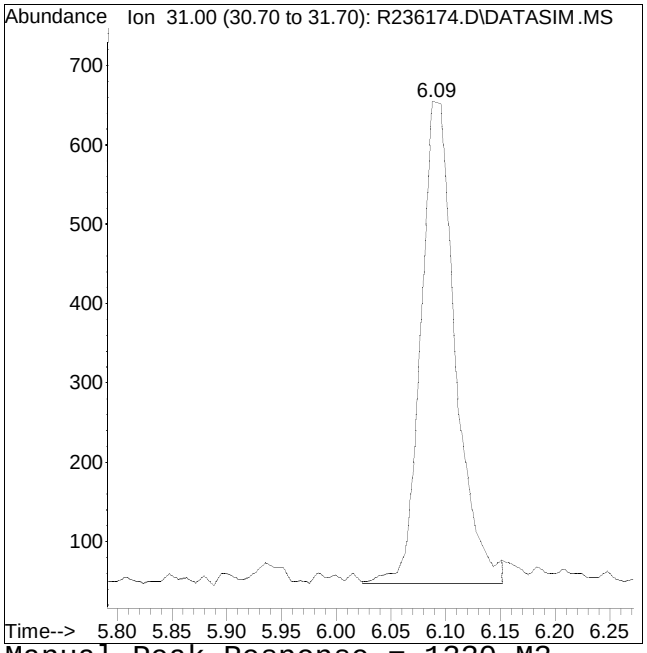
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #10: ethanol





Original Peak Response = 42 Manual Peak Response = 1330 M3

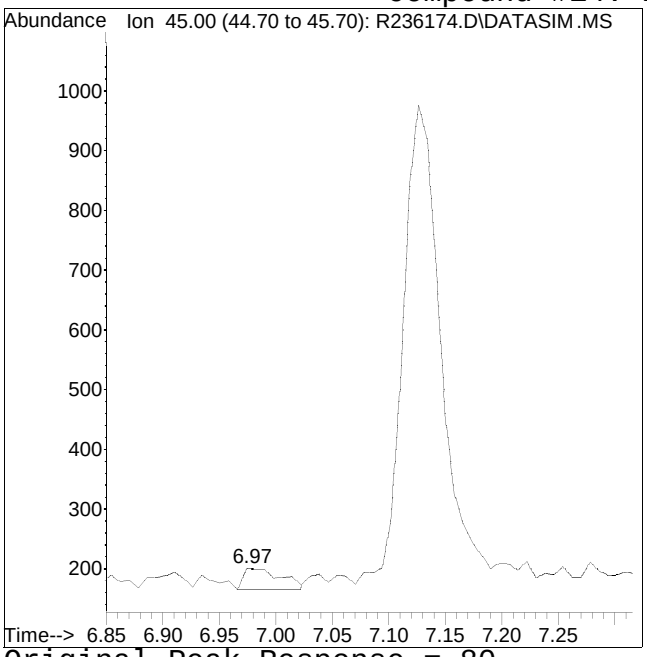
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

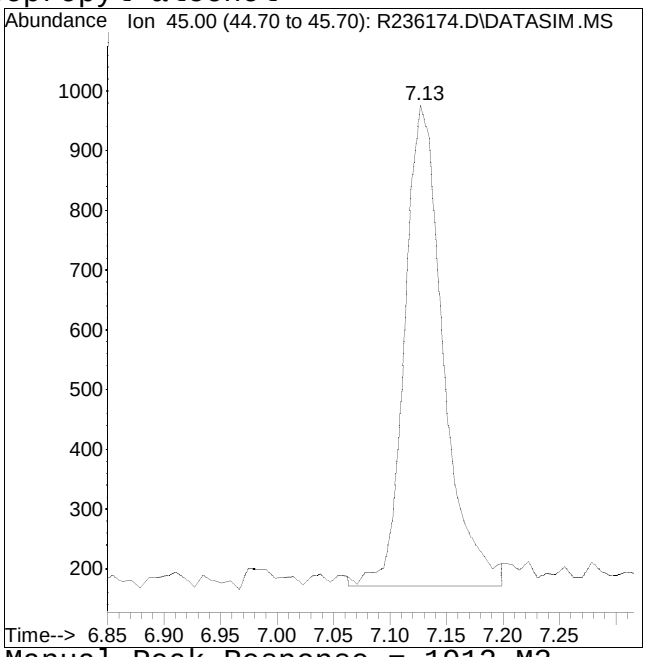
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #14: isopropyl alcohol





Original Peak Response = 80 Manual Peak Response = 1912 M3

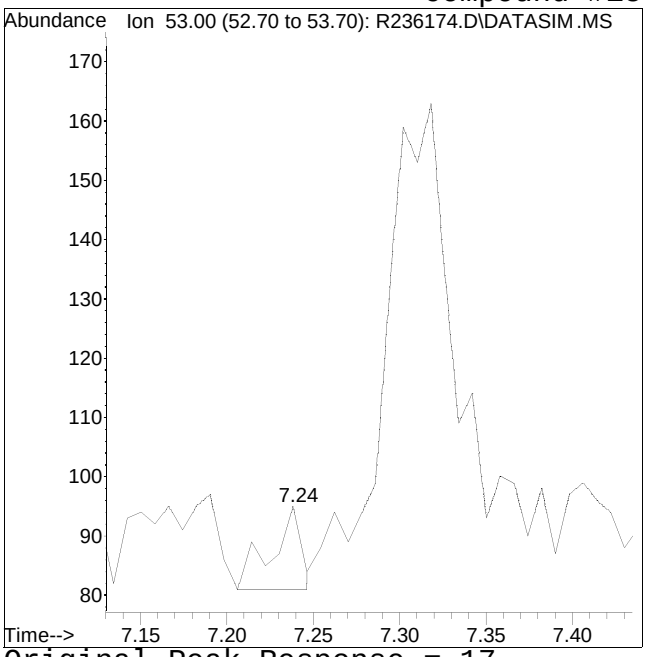
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

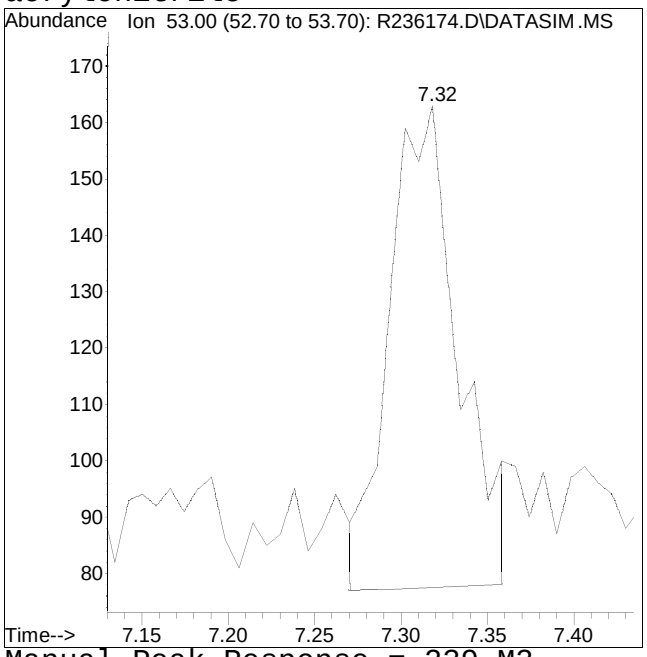
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile





Original Peak Response = 17 Manual Peak Response = 239 M3

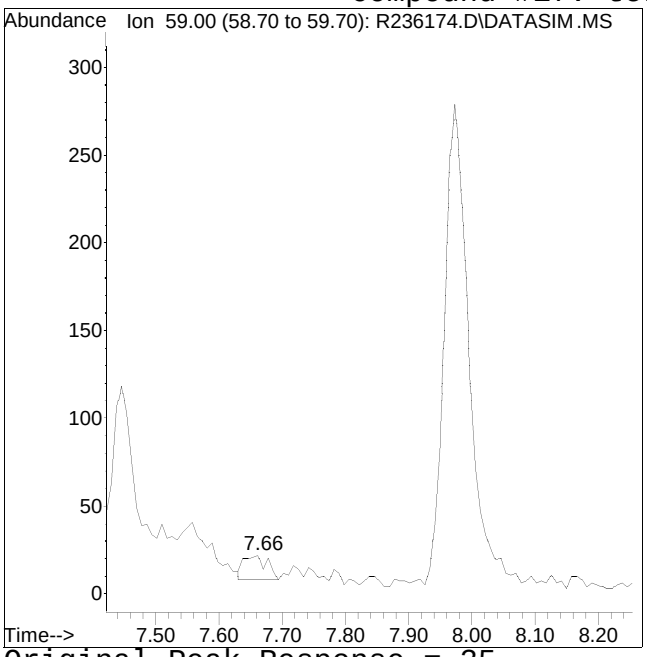
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

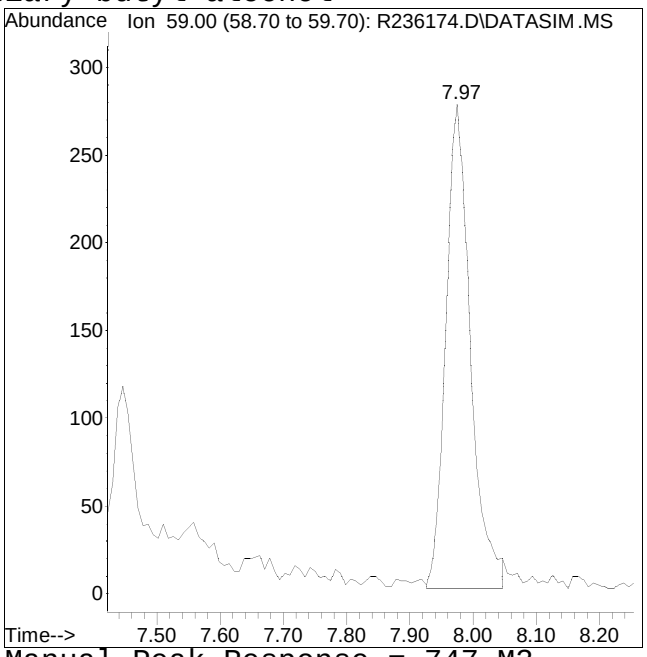
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #17: tertiary butyl alcohol



Original Peak Response = 35



Manual Peak Response = 747 M3

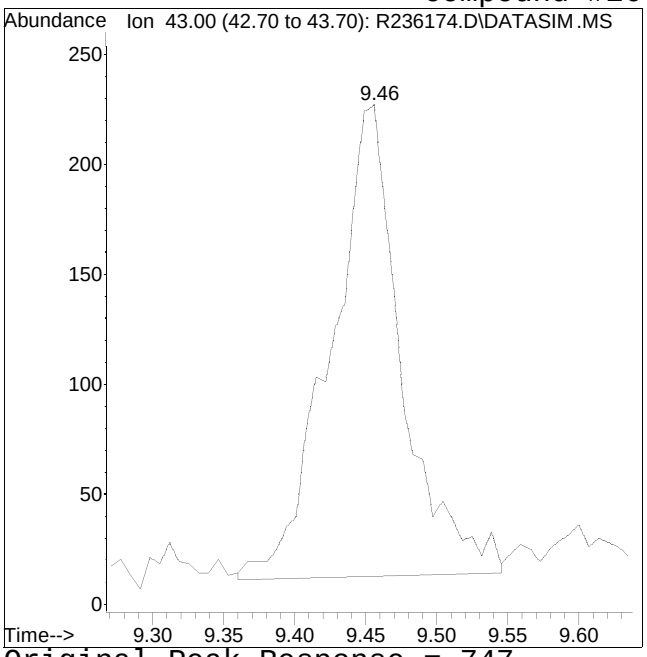
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

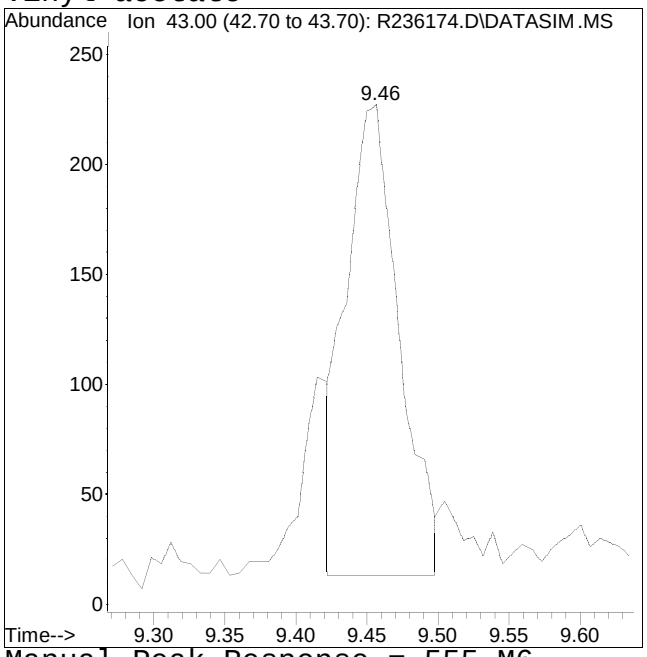
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 747



Manual Peak Response = 555 M6

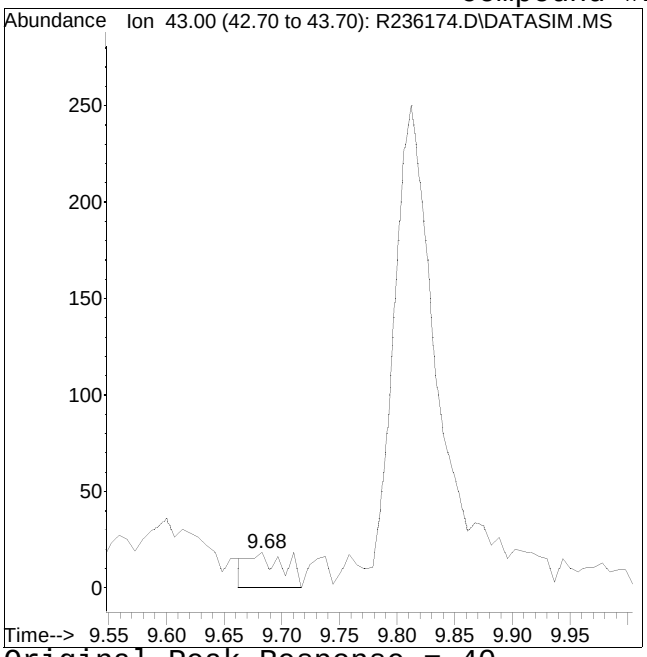
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

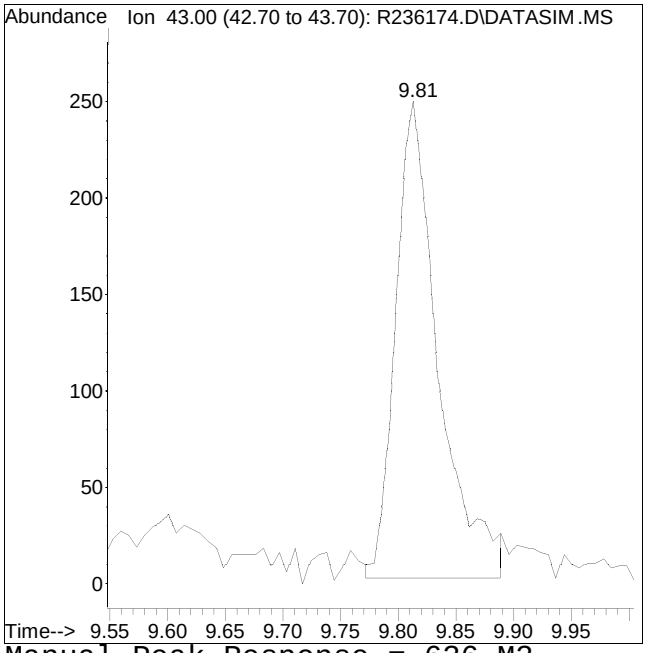
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #27: 2-butanone





Original Peak Response = 40 Manual Peak Response = 636 M3

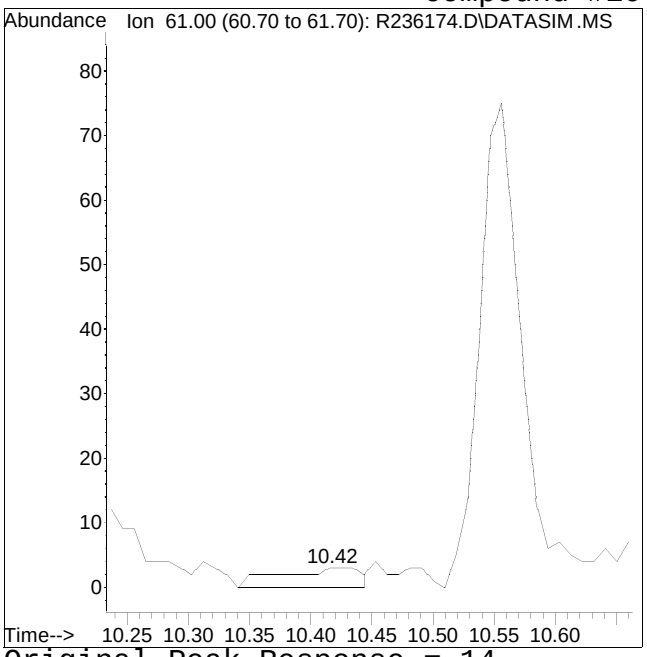
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

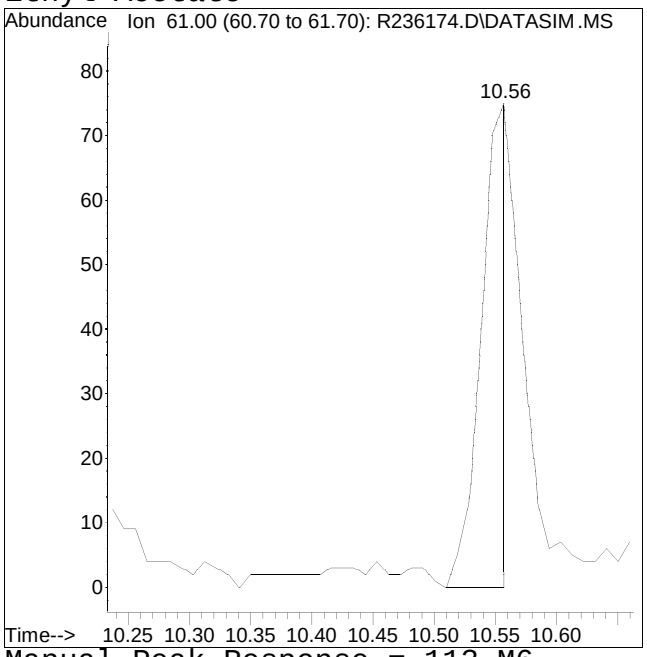
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #29: Ethyl Acetate



Original Peak Response = 14



Manual Peak Response = 113 M6

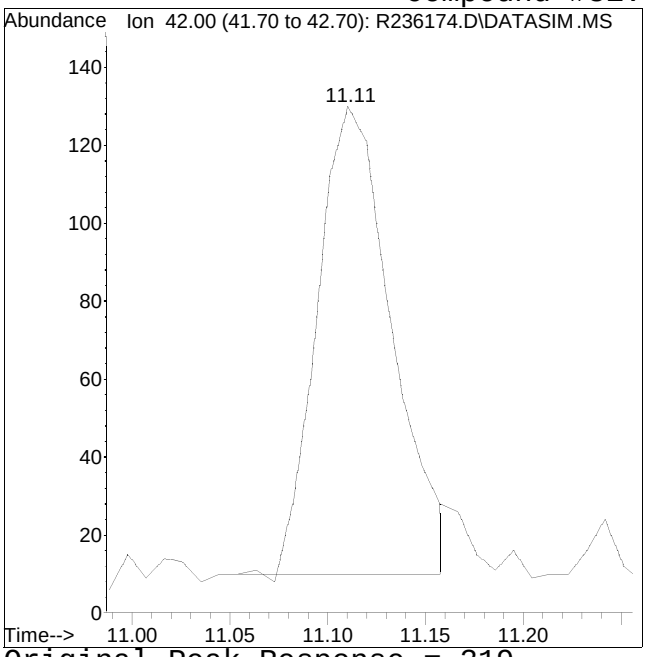
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

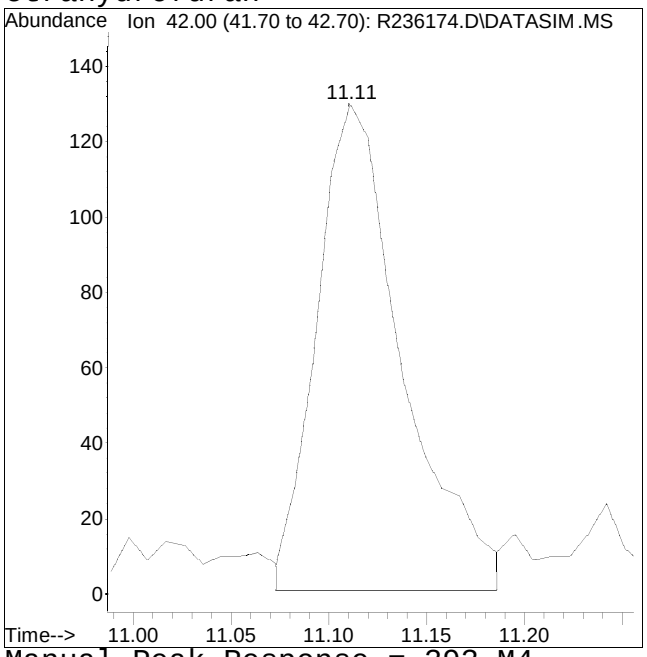
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 319



Manual Peak Response = 393 M4

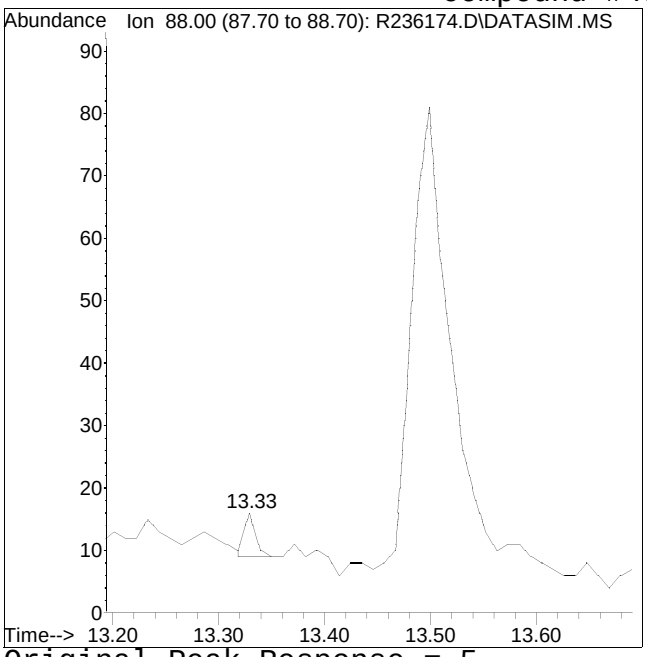
M4 = Poor automated baseline construction.

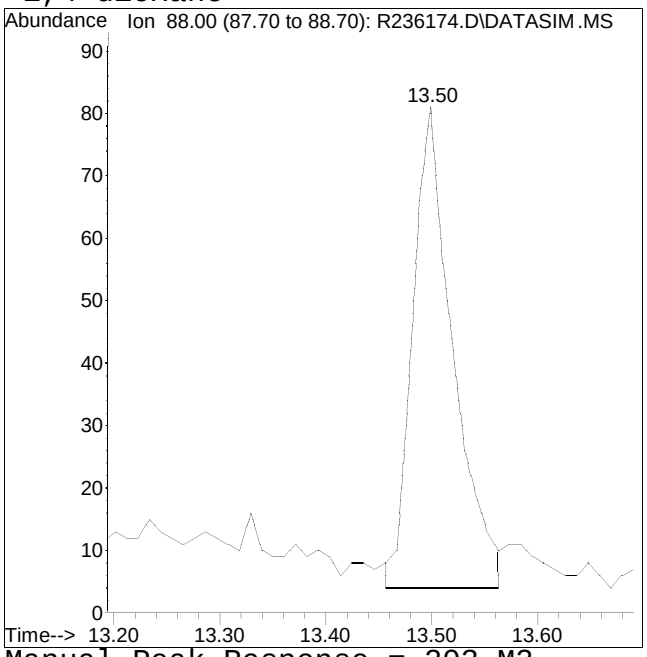
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #43: 1,4-dioxane





Original Peak Response = 5 Manual Peak Response = 203 M3

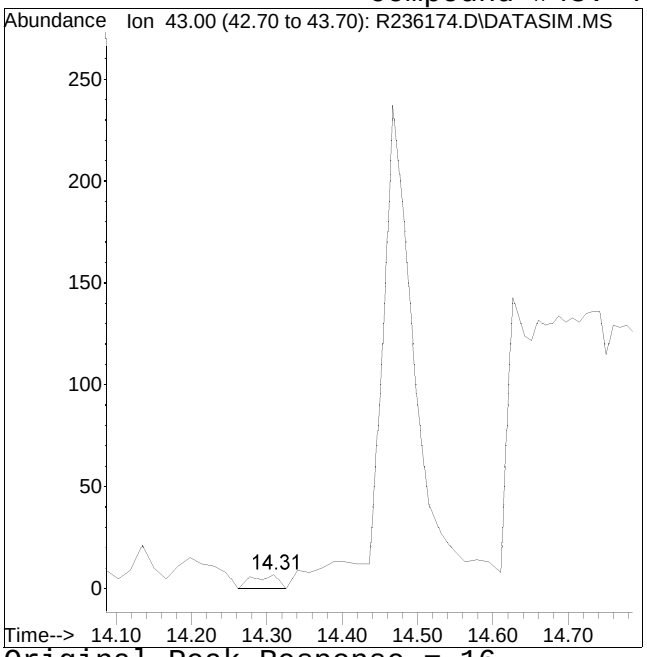
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

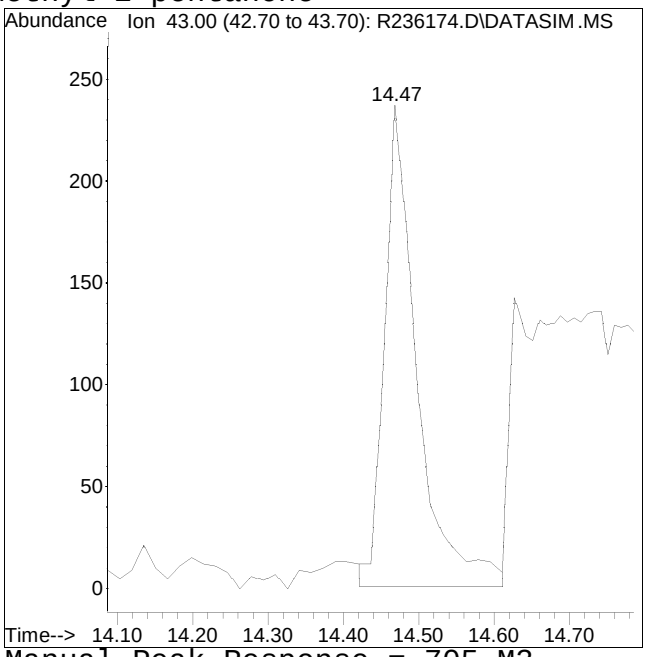
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #48: 4-methyl-2-pentanone





Original Peak Response = 16 Manual Peak Response = 705 M3

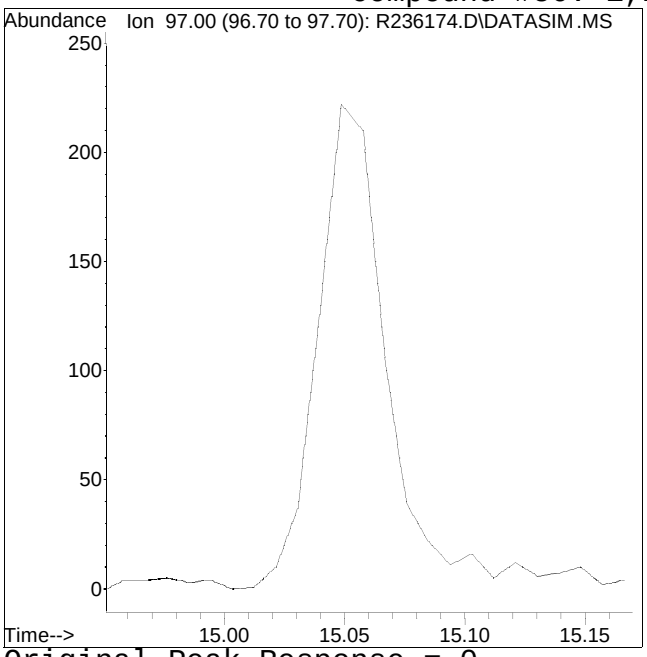
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

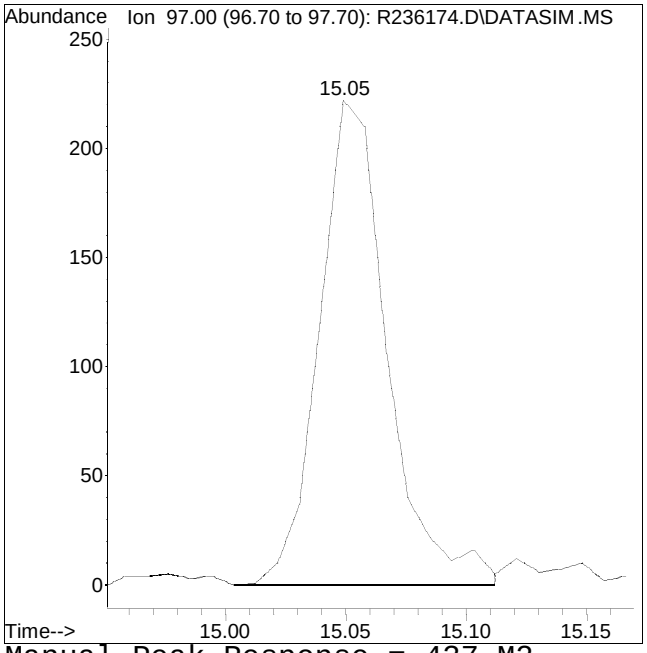
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #50: 1,1,2-trichloroethane



Original Peak Response = 0



Manual Peak Response = 437 M2

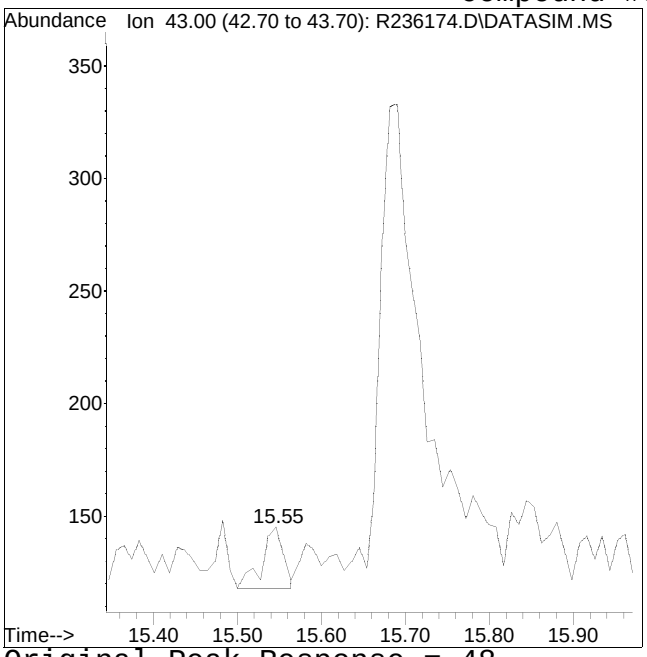
M2 = Peak not found by automatic integration algorithm.

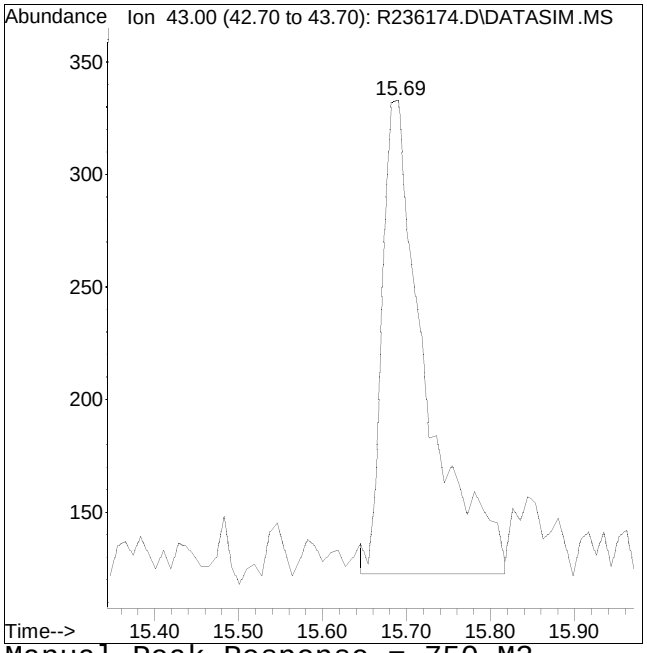
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #54: 2-hexanone





Original Peak Response = 48 Manual Peak Response = 750 M3

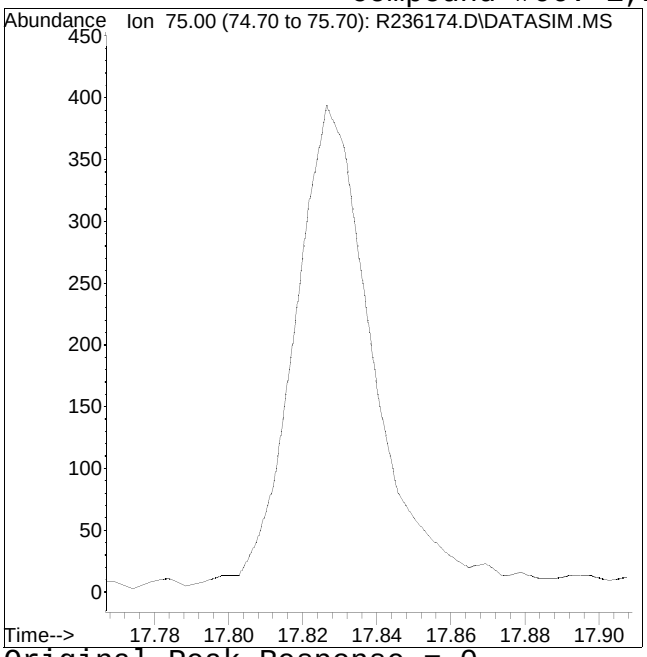
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

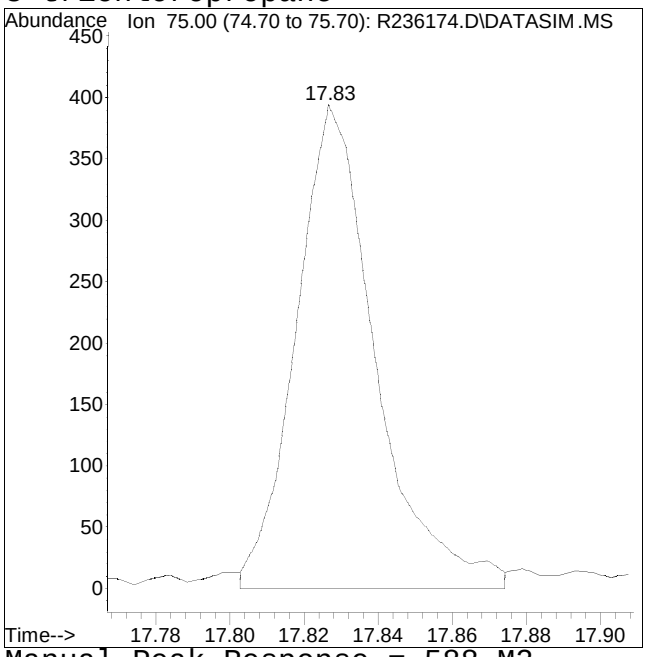
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #66: 1,2,3-trichloropropane



Original Peak Response = 0



Manual Peak Response = 588 M2

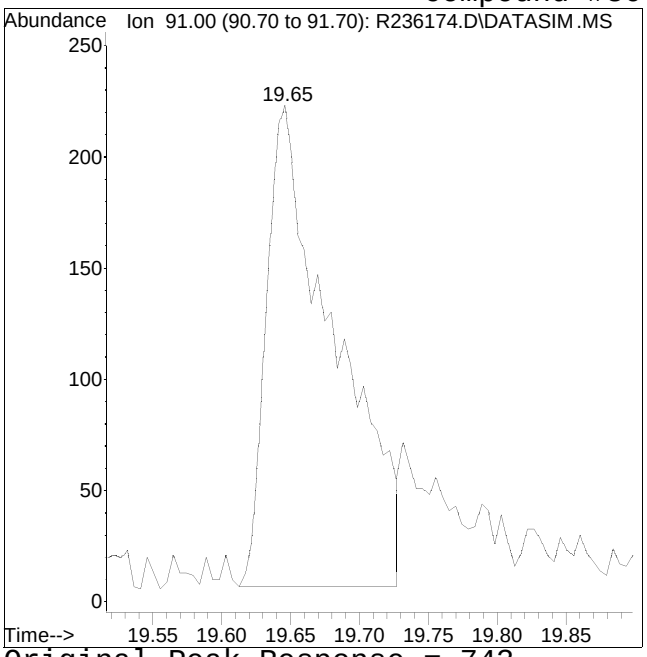
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

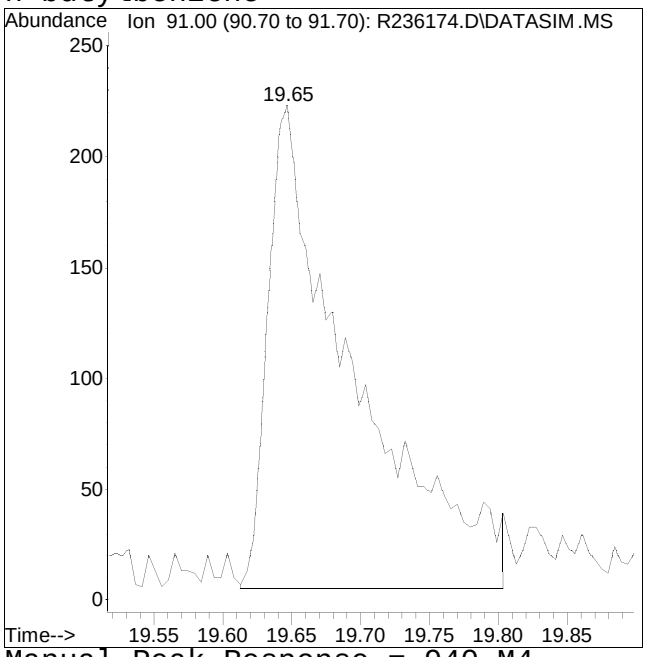
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #80: n-butylbenzene



Original Peak Response = 743



Manual Peak Response = 940 M4

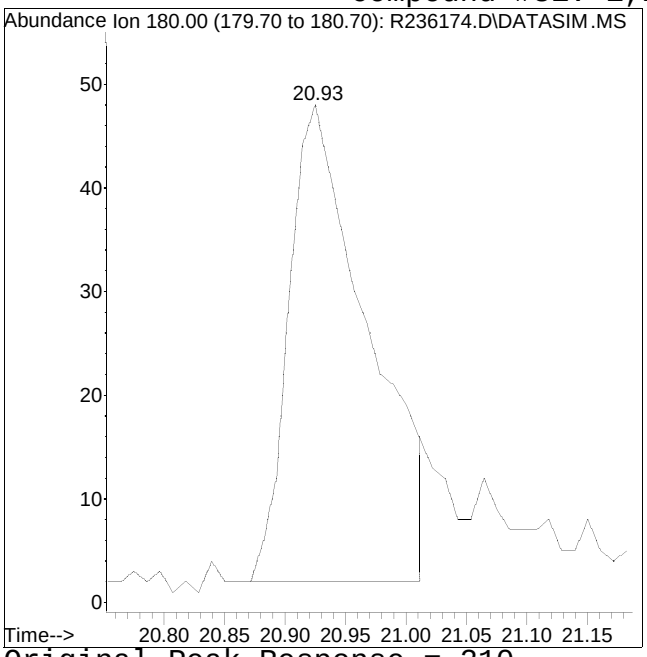
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

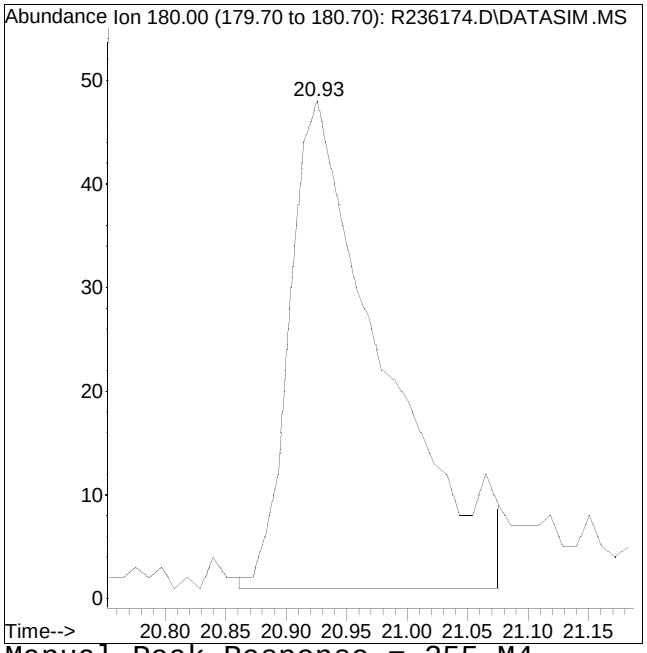
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #81: 1,2,4-trichlorobenzene



Original Peak Response = 210



Manual Peak Response = 255 M4

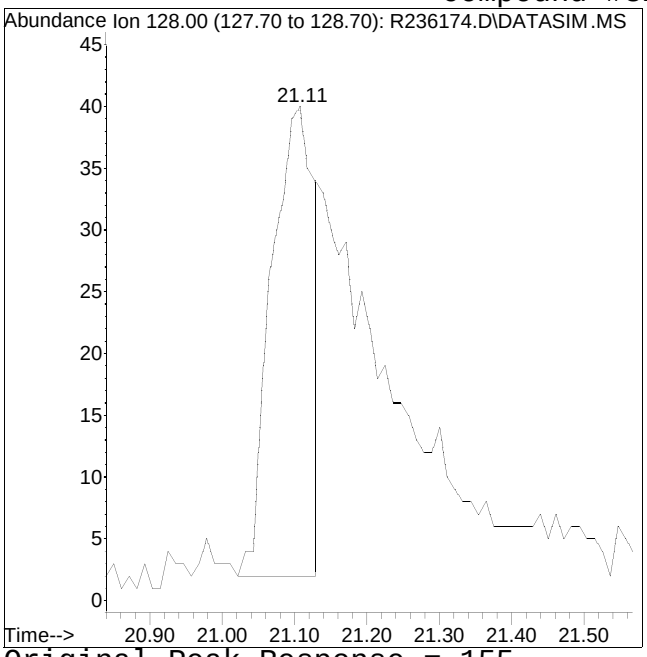
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

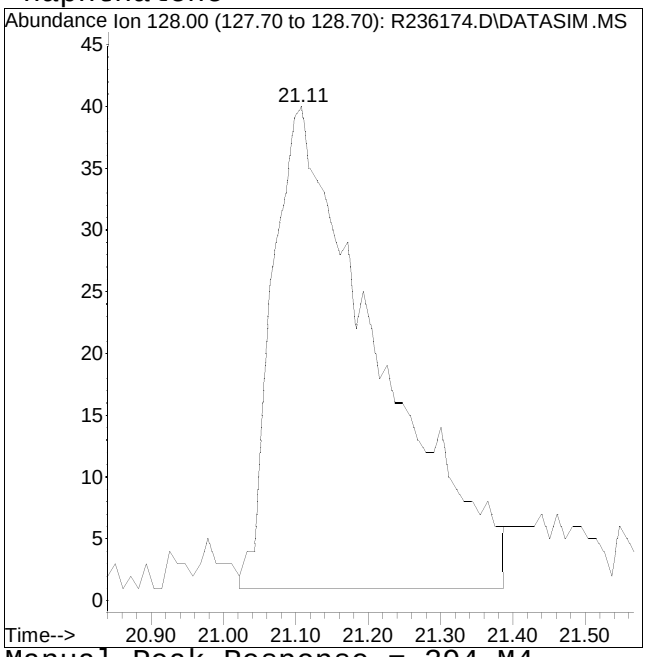
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #82: naphthalene



Original Peak Response = 155



Manual Peak Response = 394 M4

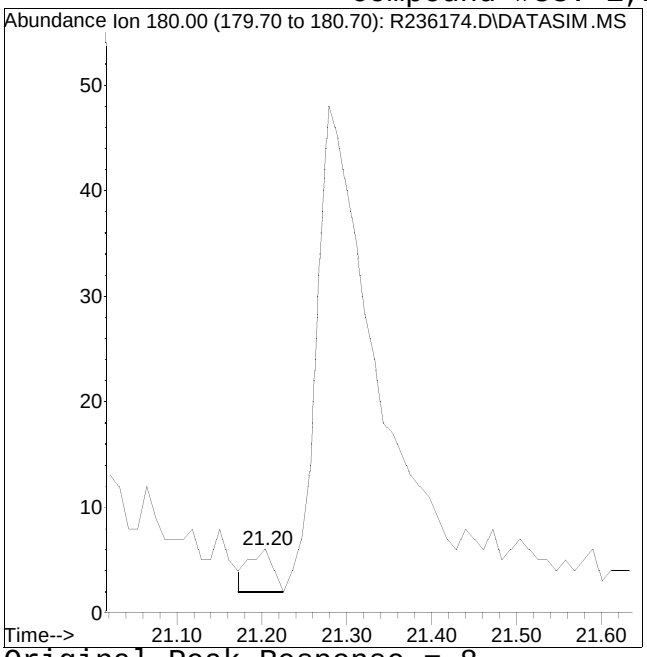
M4 = Poor automated baseline construction.

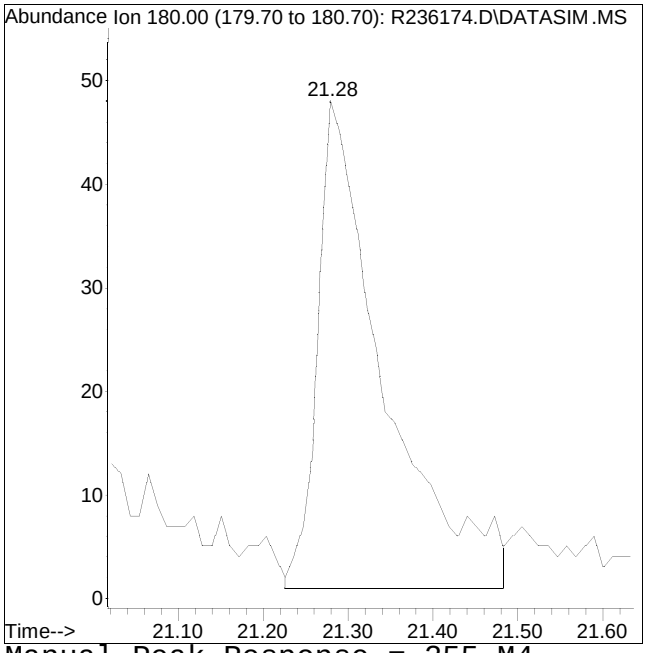
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236174.D
Date Inj'd : 9/1/2015 11:20 pm
Sample : ITO15-SIMSTD0.02

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #83: 1,2,3-trichlorobenzene





Original Peak Response = 8 Manual Peak Response = 255 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236175.D
Acq On : 1 Sep 2015 11:53 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.04
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	169403	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 101.29%			
33) 1,4-difluorobenzene	12.54	114	451630	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 101.67%			
51) chlorobenzene-D5	16.89	54	98321	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 101.11%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154116	9.867	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.67%			
53) toluene-D8	15.23	98	478712	10.004	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.04%			
67) bromofluorobenzene	18.06	95	275629	9.647	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.47%			
Target Compounds						Qvalue
2) propylene	4.31	41	424M6	0.046	ppbV	
3) dichlorodifluoromethane	4.42	85	688	0.031	ppbV	97
4) chloromethane	4.65	50	720	0.057	ppbV	93
5) Freon-114	4.79	85	1521	0.041	ppbV	97
6) vinyl chloride	4.96	62	577	0.042	ppbV #	87
7) 1,3-butadiene	5.16	54	370M4	0.039	ppbV	
8) bromomethane	5.54	94	468M4	0.039	ppbV	
9) chloroethane	5.79	64	408	0.062	ppbV	94
10) ethanol	6.09	31	2068M3	0.255	ppbV	
11) vinyl bromide	6.28	106	498	0.040	ppbV	99
12) acetone	6.73	43	4710	0.245	ppbV #	96
13) trichlorofluoromethane	6.84	101	1375	0.041	ppbV	97
14) isopropyl alcohol	7.13	45	2997	0.141	ppbV #	96
15) acrylonitrile	7.31	53	453M3	0.049	ppbV	
16) 1,1-dichloroethene	7.66	61	914	0.039	ppbV	91
17) tertiary butyl alcohol	7.97	59	1445	0.051	ppbV #	38
18) methylene chloride	7.83	49	6524	0.360	ppbV	95
19) 3-chloropropene	7.97	41	985	0.060	ppbV #	95
20) carbon disulfide	8.16	76	1784	0.043	ppbV #	69
21) Freon 113	8.17	101	1160	0.041	ppbV	98
22) Halothane	8.74	117	872	0.040	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	892	0.040	ppbV	96
24) 1,1-dichloroethane	9.22	63	1021	0.039	ppbV	96

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236175.D
Acq On : 1 Sep 2015 11:53 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.04
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.41	73	1466	0.040	ppbV	#	94
26) vinyl acetate	9.46	43	945M6	0.051	ppbV		
27) 2-butanone	9.81	43	1234M4	0.043	ppbV		
28) cis-1,2-dichloroethene	10.19	61	796	0.040	ppbV		99
29) Ethyl Acetate	10.56	61	219M6	0.049	ppbV		
30) chloroform	10.53	83	1175	0.039	ppbV	#	97
31) Tetrahydrofuran	11.10	42	706M4	0.047	ppbV		
32) 1,2-dichloroethane	11.36	62	846	0.041	ppbV	#	82
34) hexane	10.43	57	830	0.042	ppbV	#	51
36) 1,1,1-trichloroethane	11.64	97	1204	0.040	ppbV		95
37) benzene	12.15	78	1802	0.045	ppbV		98
38) carbon tetrachloride	12.32	117	1233	0.038	ppbV		98
39) cyclohexane	12.46	56	838	0.040	ppbV		96
40) dibromomethane	13.04	93	944	0.053	ppbV		99
41) 1,2-dichloropropane	13.07	63	657	0.040	ppbV		96
42) bromodichloromethane	13.29	83	1375	0.039	ppbV		98
43) 1,4-dioxane	13.49	88	430M4	0.046	ppbV		
44) trichloroethene	13.34	130	749	0.040	ppbV		96
45) 2,2,4-trimethylpentane	13.36	57	2552	0.039	ppbV		99
46) heptane	13.65	43	1020	0.042	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	3452	0.037	ppbV	#	95
48) 4-methyl-2-pentanone	14.47	43	1366M3	0.038	ppbV		
49) trans-1,3-dichloropropene	14.87	75	1103	0.036	ppbV	#	78
50) 1,1,2-trichloroethane	15.05	97	845	0.038	ppbV		88
52) toluene	15.33	91	2916	0.044	ppbV		99
54) 2-hexanone	15.67	43	1648M3	0.033	ppbV		
55) dibromochloromethane	15.74	129	1530	0.037	ppbV		100
56) 1,2-dibromoethane	15.96	107	1345	0.038	ppbV		100
57) tetrachloroethene	16.36	166	1434	0.050	ppbV		97
58) 1,1,1,2-tetrachloroethane	16.92	131	900	0.039	ppbV		97
59) chlorobenzene	16.93	112	1636	0.040	ppbV	#	90
60) ethylbenzene	17.22	91	2468	0.038	ppbV		98
61) m+p-xylene	17.36	91	3727	0.073	ppbV		100
62) bromoform	17.44	173	1109	0.035	ppbV		96
63) styrene	17.64	104	1330	0.035	ppbV		98
64) 1,1,2,2-tetrachloroethane	17.73	83	1478	0.036	ppbV		95
65) o-xylene	17.72	91	1984	0.038	ppbV		99
66) 1,2,3-trichloropropane	17.83	75	1091M3	0.033	ppbV		
68) isopropylbenzene	18.16	105	2610	0.038	ppbV		97
69) bromobenzene	18.24	77	1364	0.035	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236175.D
Acq On : 1 Sep 2015 11:53 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.04
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.65	105	2501	0.033	ppbV #	94
71) 1,3,5-trimethylbenzene	18.70	105	2494	0.040	ppbV #	97
72) tert-butylbenzene	19.00	119	2317	0.037	ppbV	96
73) 1,2,4-trimethylbenzene	19.00	105	2062	0.033	ppbV #	84
74) Benzyl Chloride	19.12	91	1260	0.022	ppbV	99
75) 1,3-dichlorobenzene	19.14	146	1209	0.027	ppbV	95
76) 1,4-dichlorobenzene	19.18	146	1625M4	0.034	ppbV	
77) sec-butylbenzene	19.20	105	3029	0.033	ppbV	99
78) p-isopropyltoluene	19.31	119	2436	0.031	ppbV	99
79) 1,2-dichlorobenzene	19.44	146	1382	0.031	ppbV	95
80) n-butylbenzene	19.64	91	1993	0.026	ppbV	92
81) 1,2,4-trichlorobenzene	20.89	180	775M4	0.019	ppbV	
82) naphthalene	21.05	128	1354M4	0.016	ppbV	
83) 1,2,3-trichlorobenzene	21.27	180	604	0.015	ppbV #	90
84) hexachlorobutadiene	21.29	225	977	0.028	ppbV	92

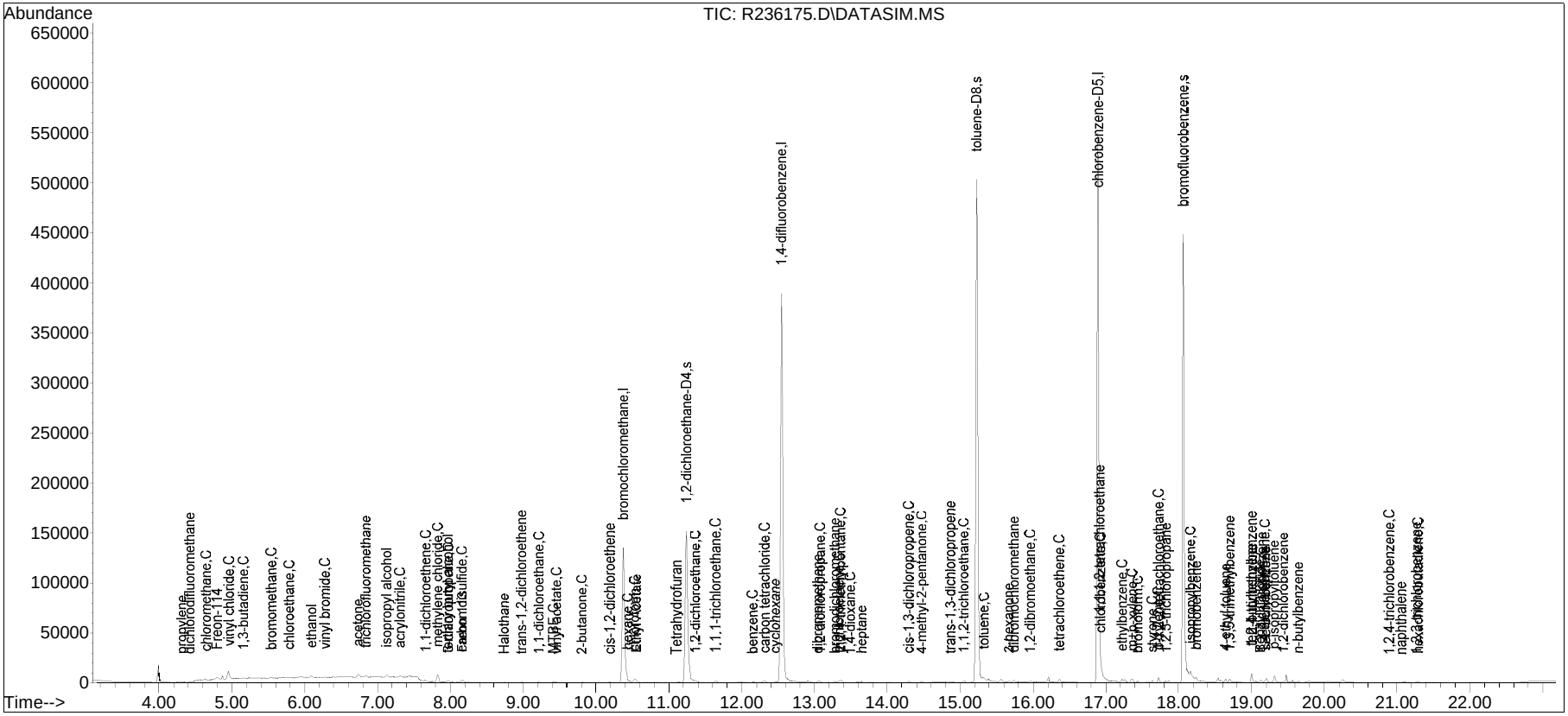
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236175.D
Acq On : 1 Sep 2015 11:53 pm
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.04
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

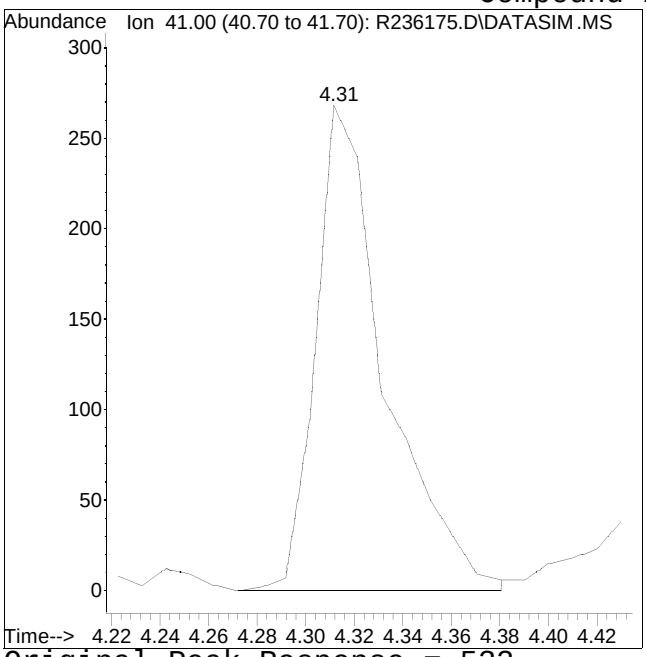
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



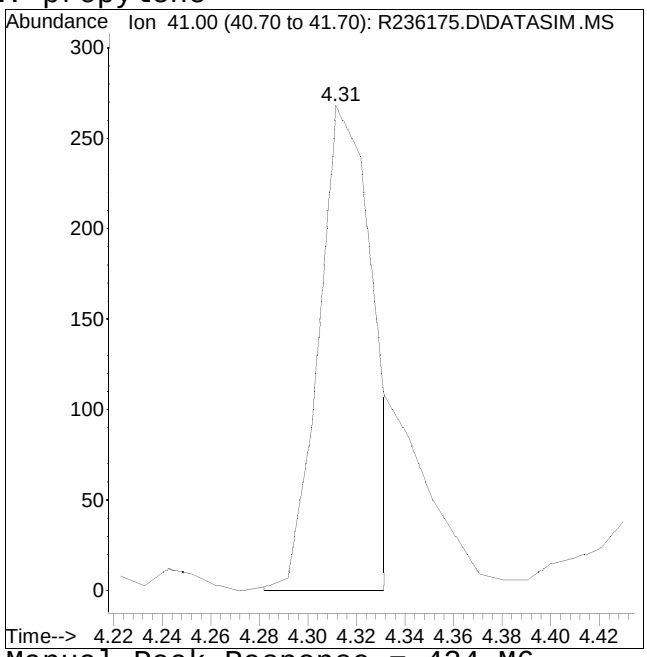
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 532



Manual Peak Response = 424 M6

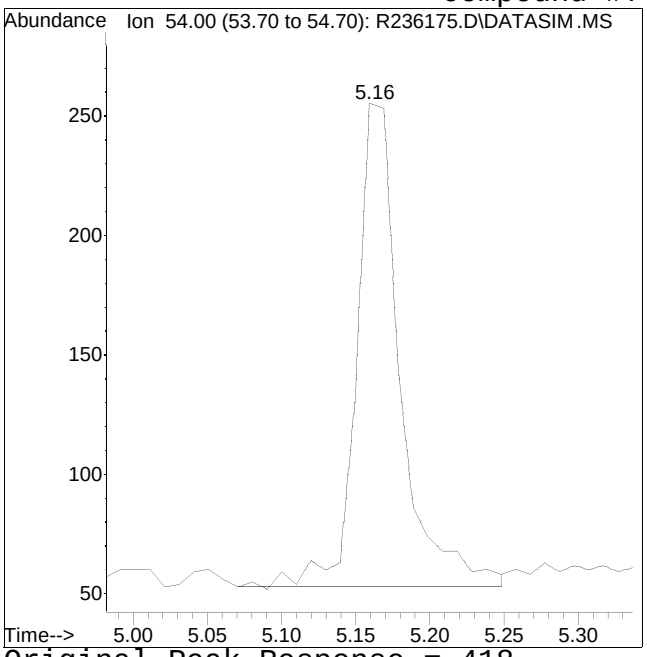
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

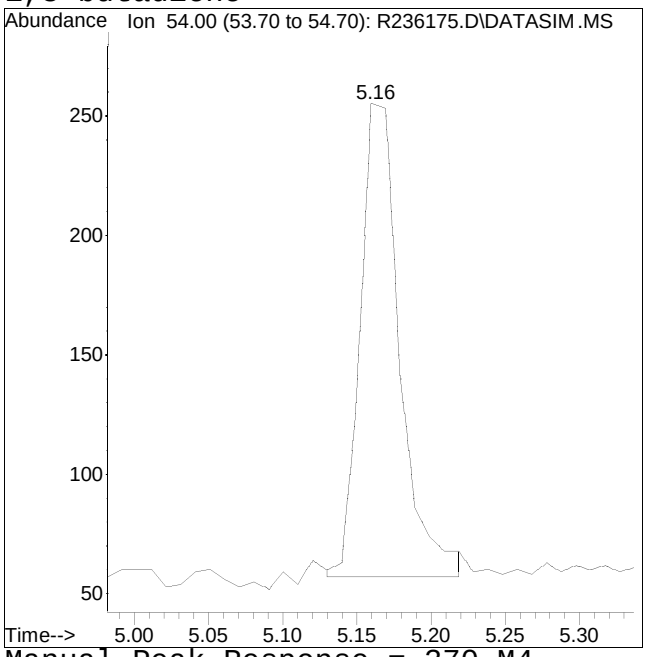
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #7: 1,3-butadiene



Original Peak Response = 418



Manual Peak Response = 370 M4

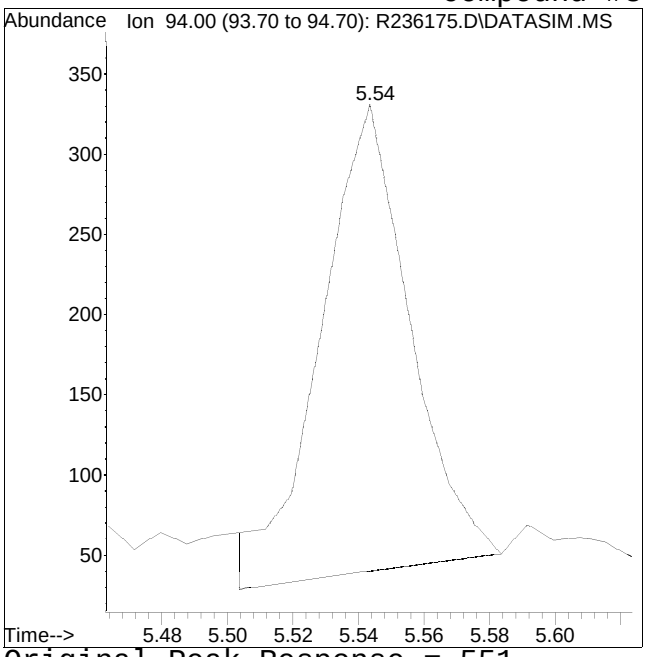
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

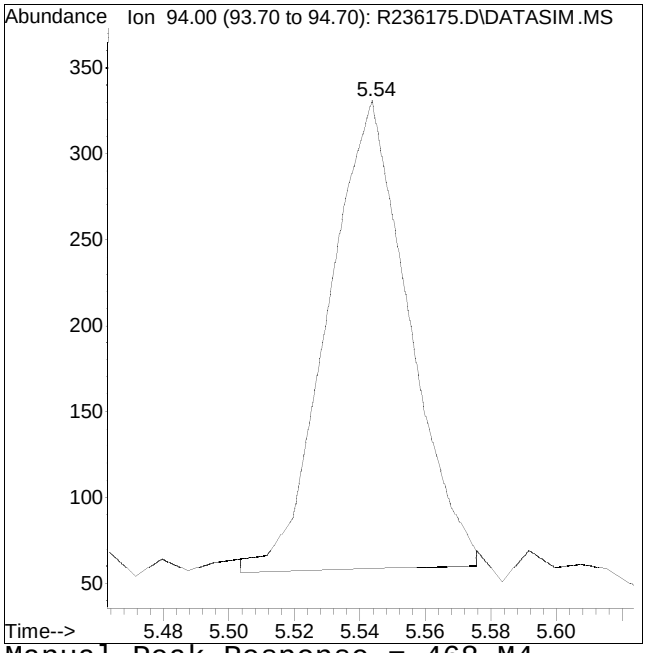
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #8: bromomethane



Original Peak Response = 551



Manual Peak Response = 468 M4

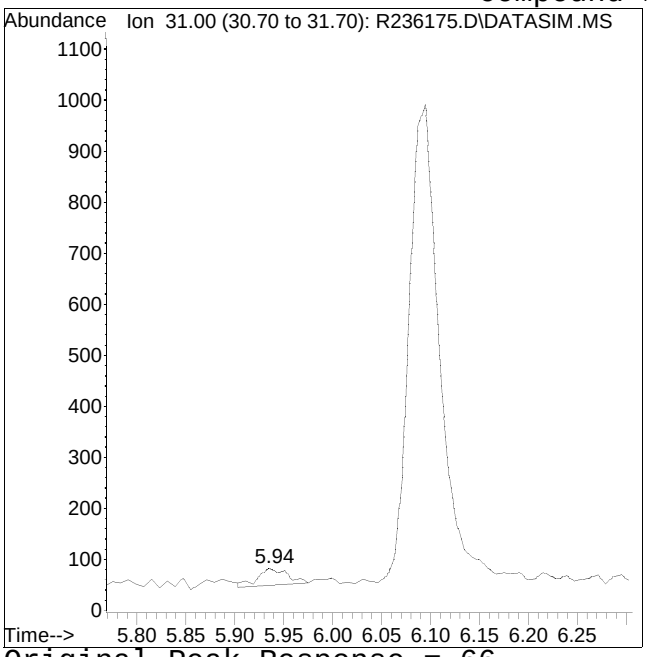
M4 = Poor automated baseline construction.

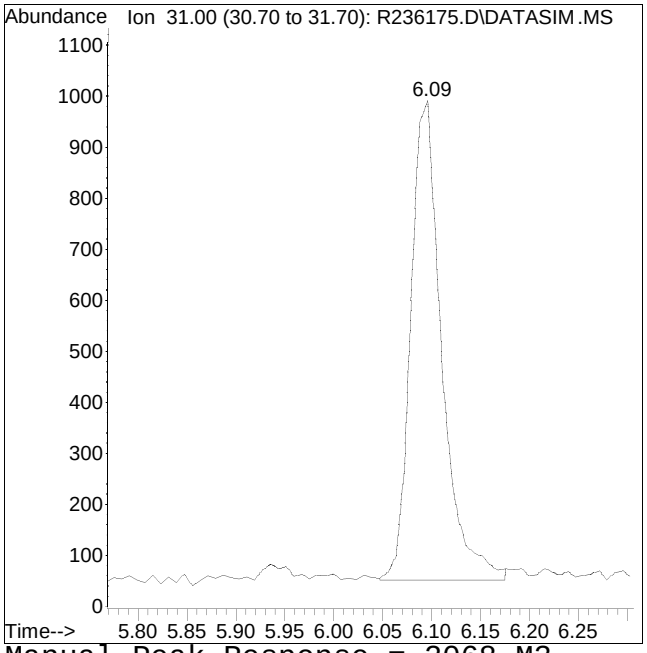
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #10: ethanol





Original Peak Response = 66 Manual Peak Response = 2068 M3

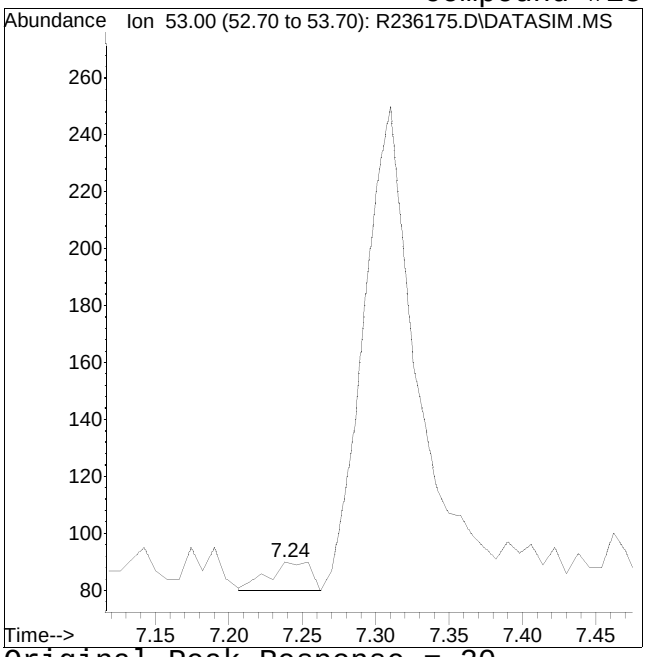
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

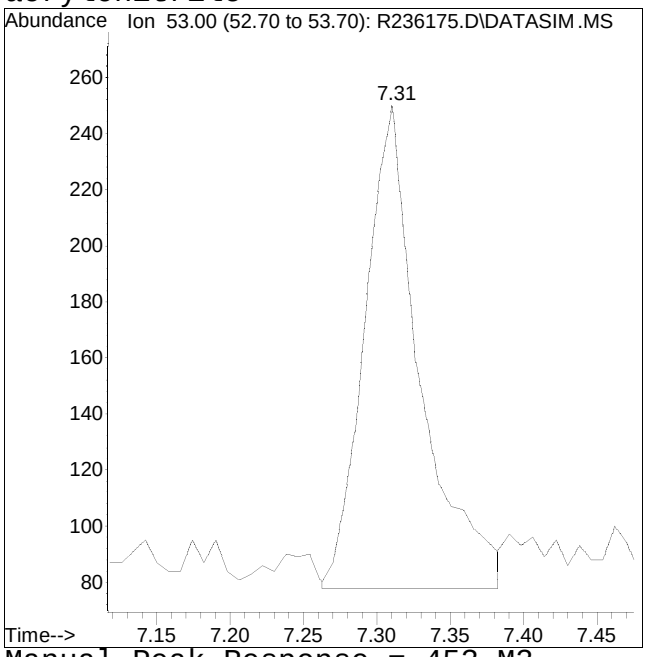
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile





Original Peak Response = 20 Manual Peak Response = 453 M3

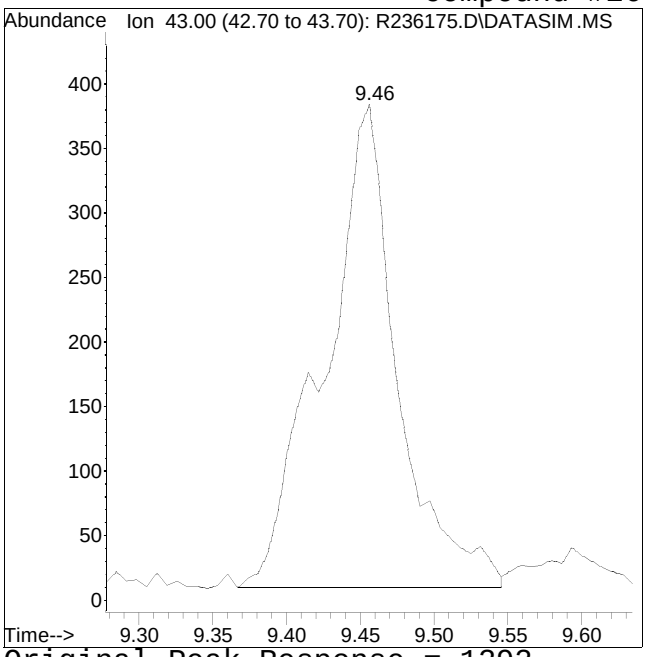
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

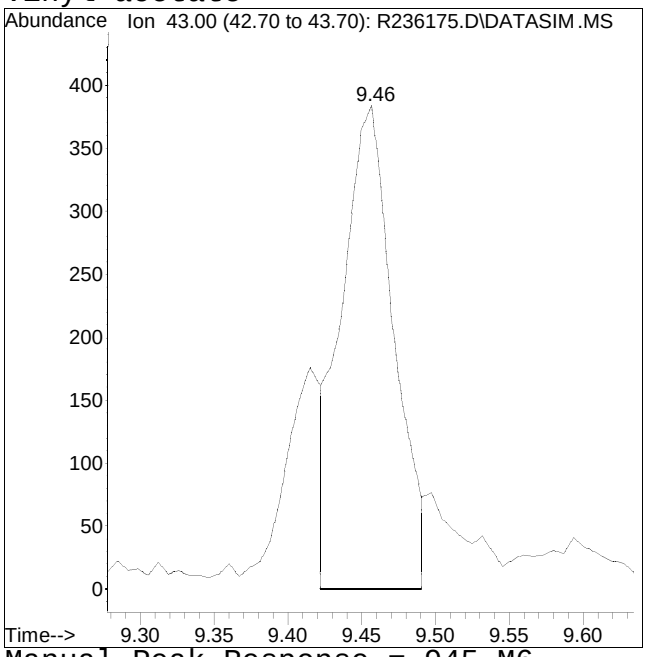
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 1292



Manual Peak Response = 945 M6

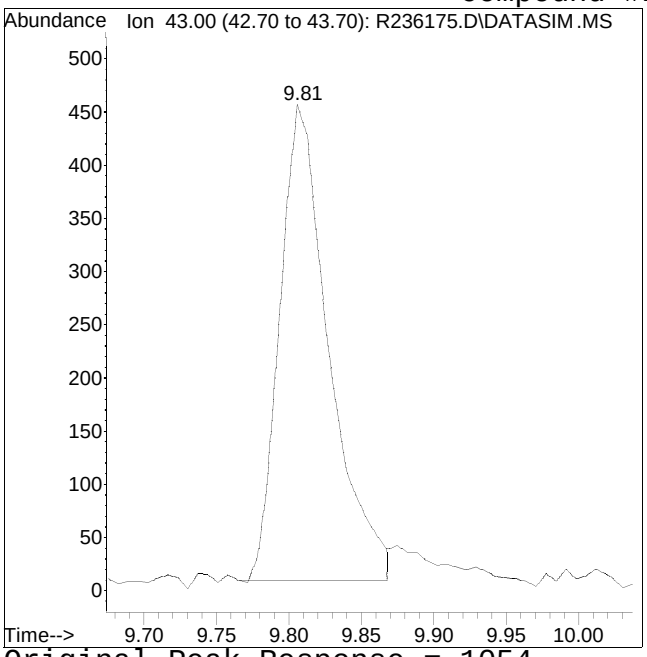
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

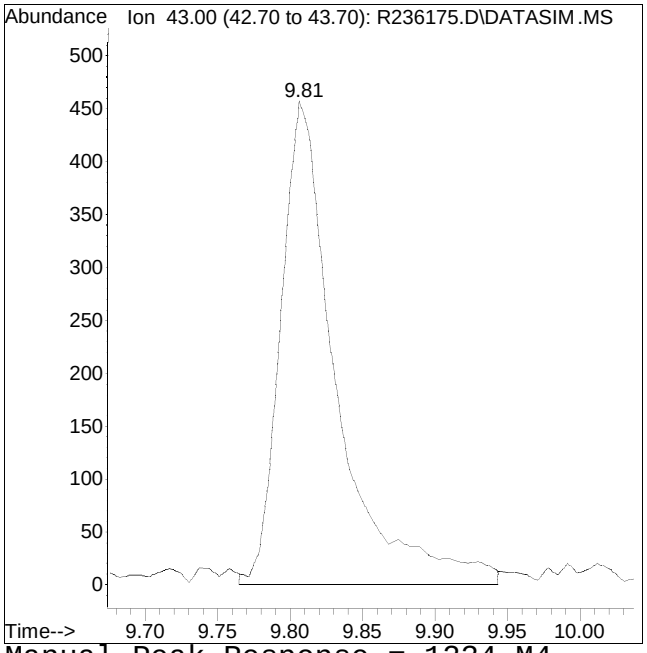
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #27: 2-butanone



Original Peak Response = 1054



Manual Peak Response = 1234 M4

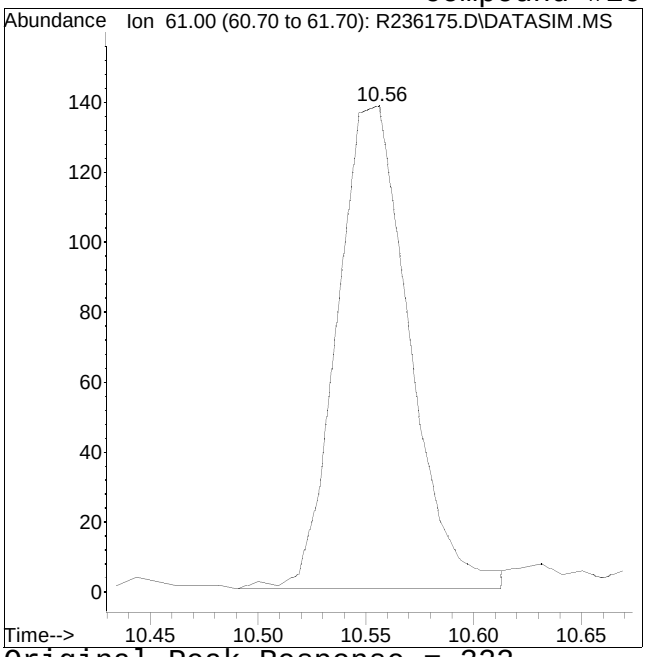
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

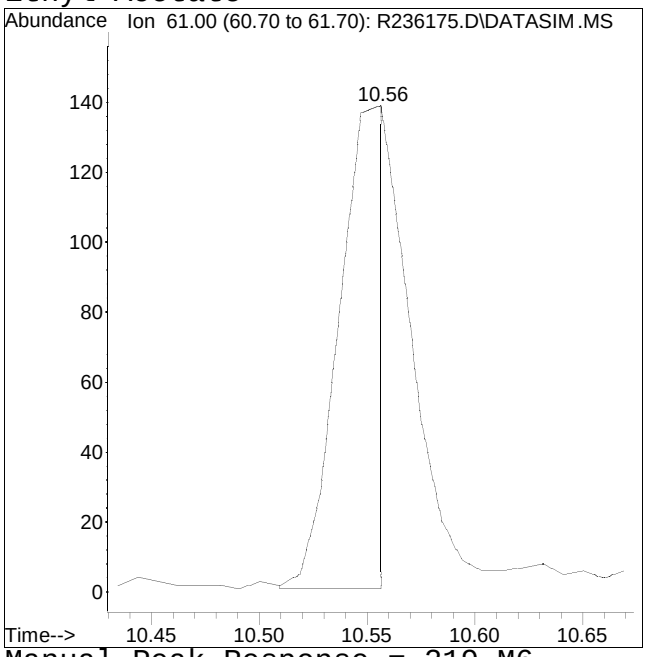
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #29: Ethyl Acetate



Original Peak Response = 322



Manual Peak Response = 219 M6

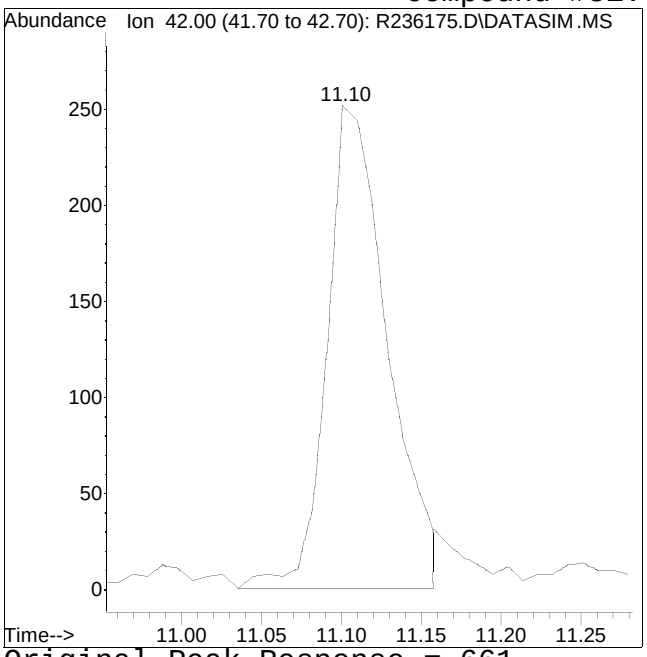
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

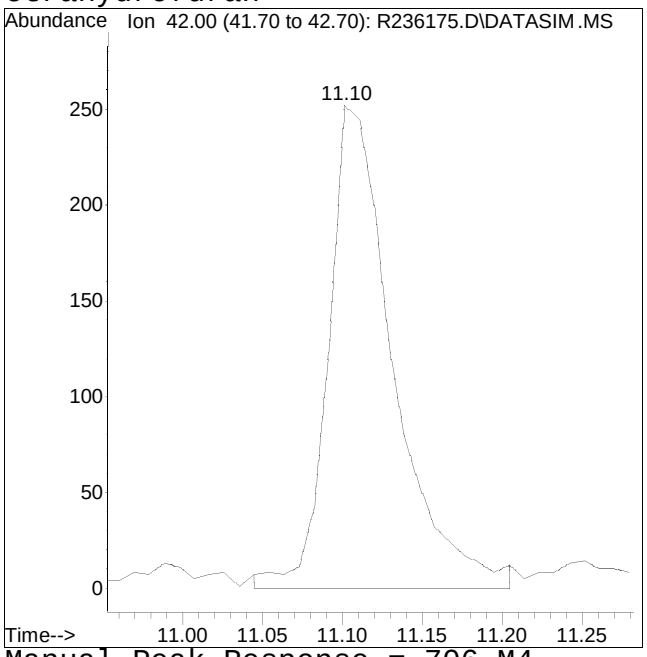
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 661



Manual Peak Response = 706 M4

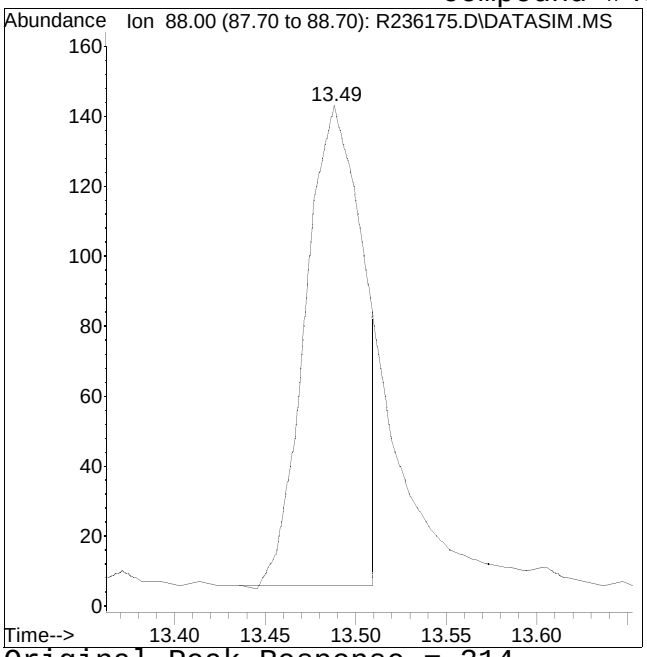
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

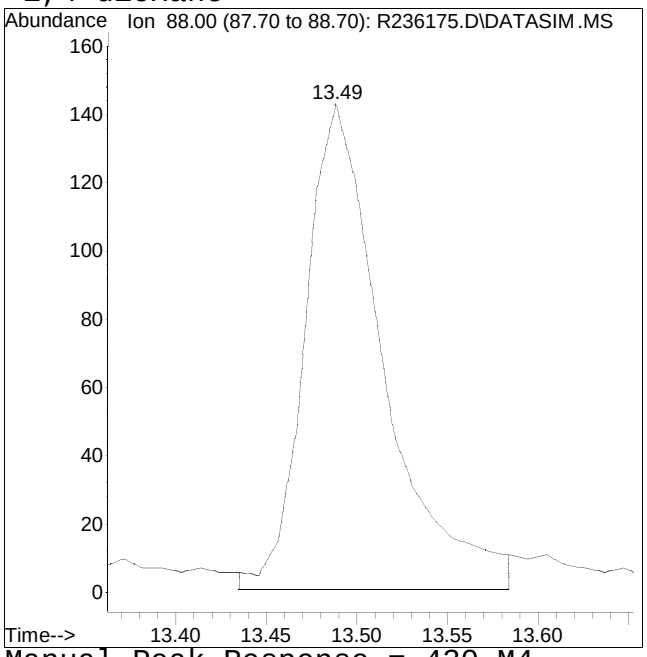
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #43: 1,4-dioxane



Original Peak Response = 314



Manual Peak Response = 430 M4

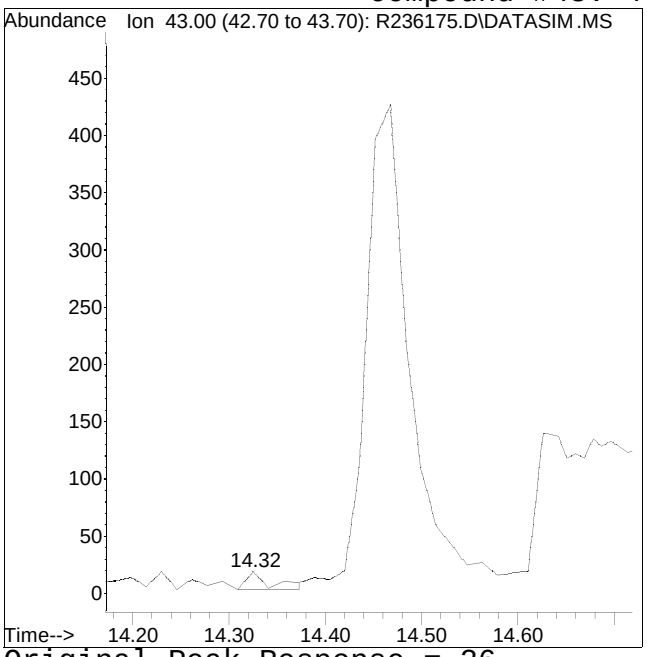
M4 = Poor automated baseline construction.

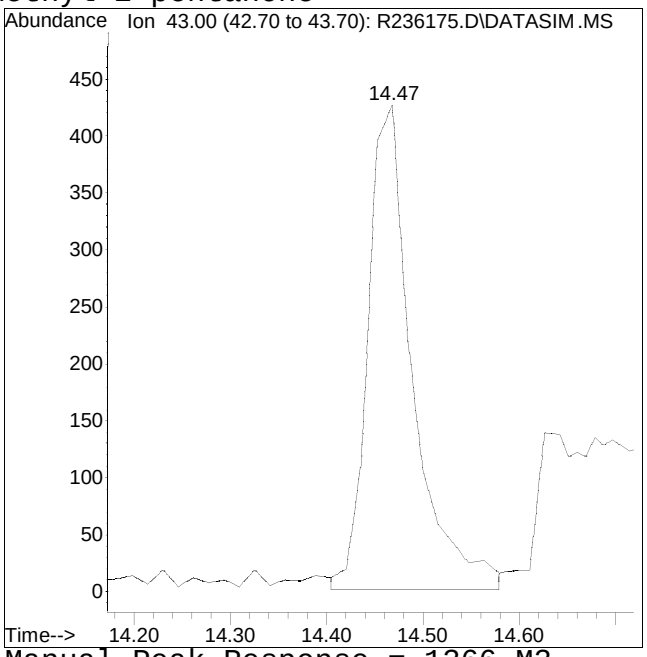
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #48: 4-methyl-2-pentanone





Original Peak Response = 26 Manual Peak Response = 1366 M3

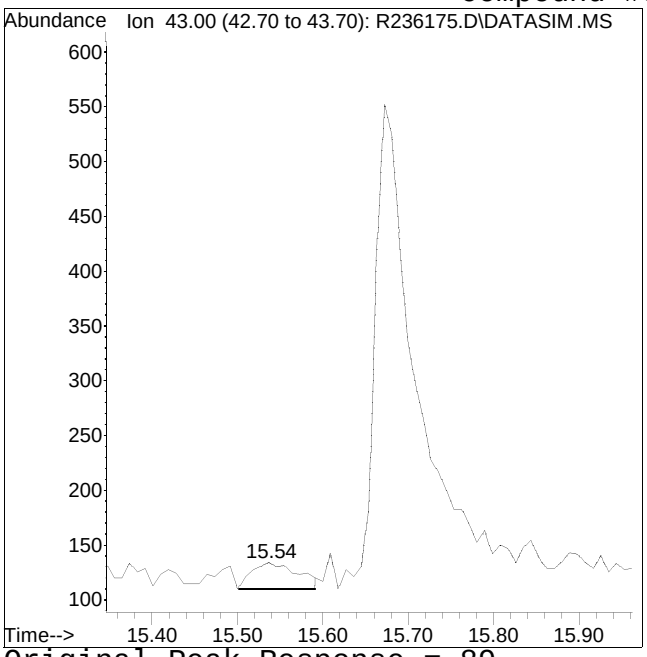
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

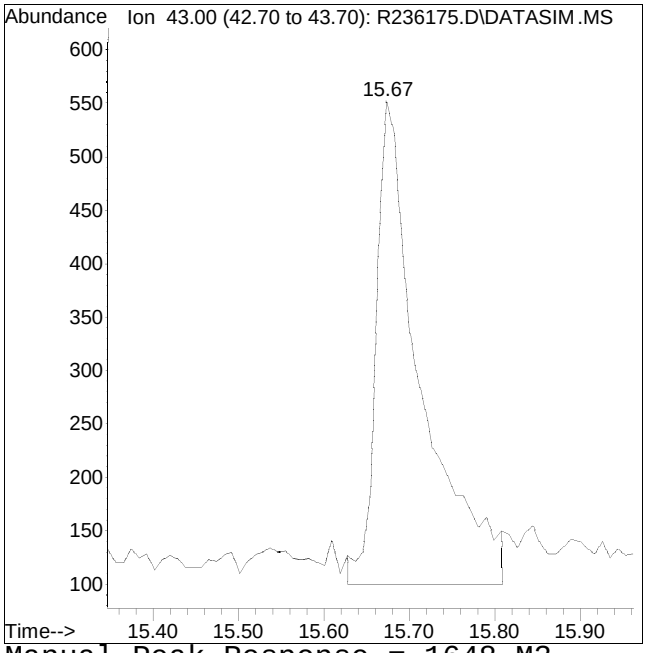
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #54: 2-hexanone





Original Peak Response = 89 Manual Peak Response = 1648 M3

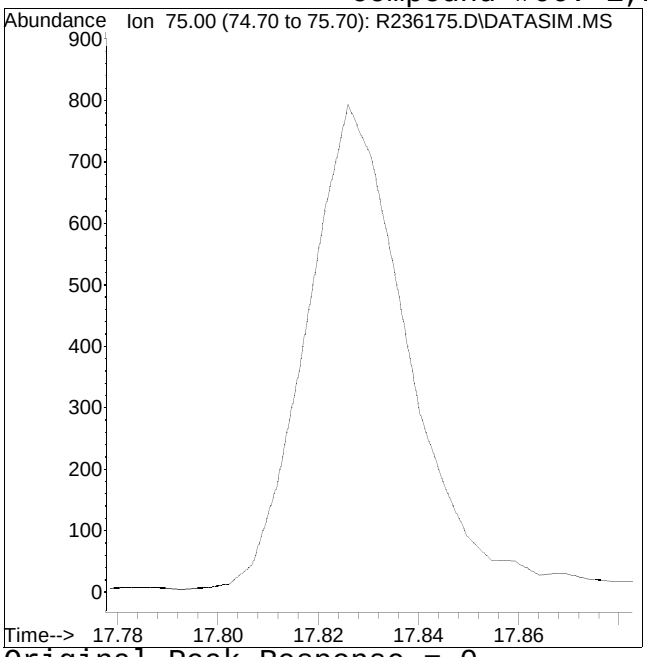
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

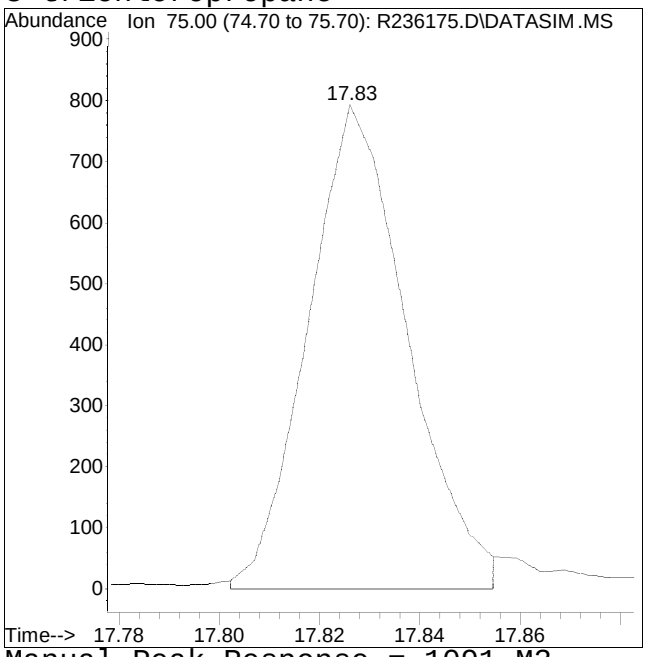
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #66: 1,2,3-trichloropropane





Original Peak Response = 0 Manual Peak Response = 1091 M3

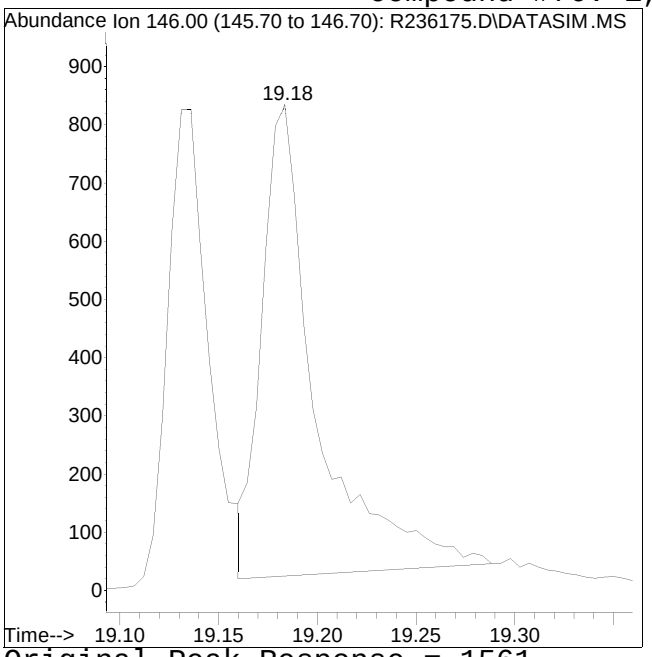
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

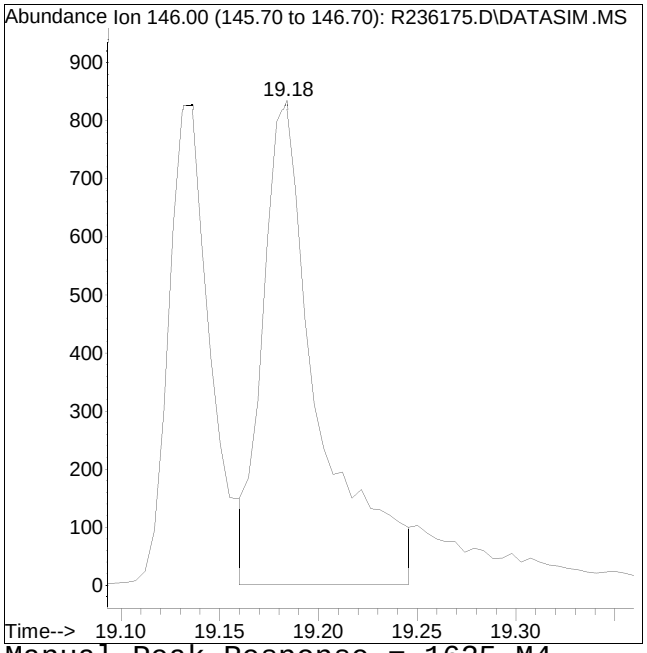
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 1561



Manual Peak Response = 1625 M4

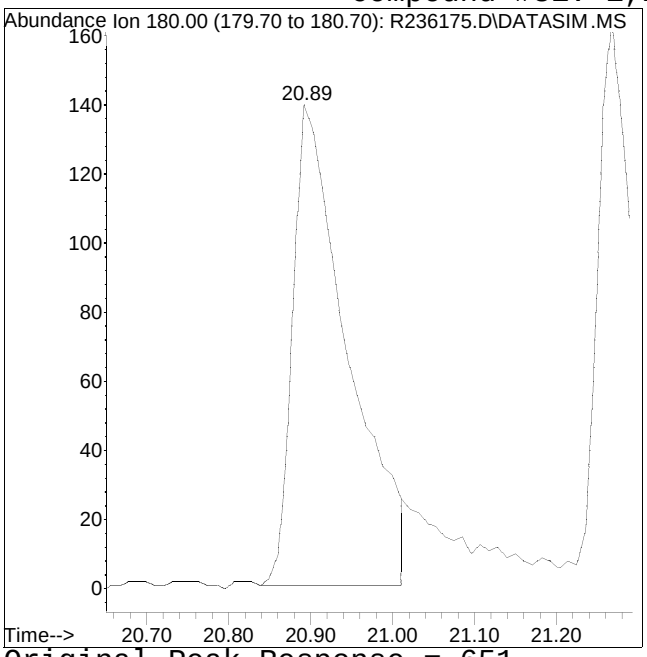
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

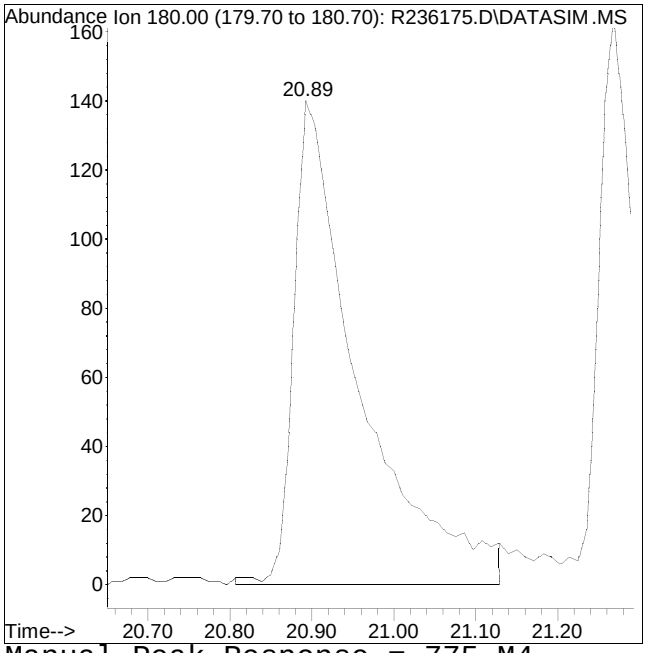
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #81: 1,2,4-trichlorobenzene



Original Peak Response = 651



Manual Peak Response = 775 M4

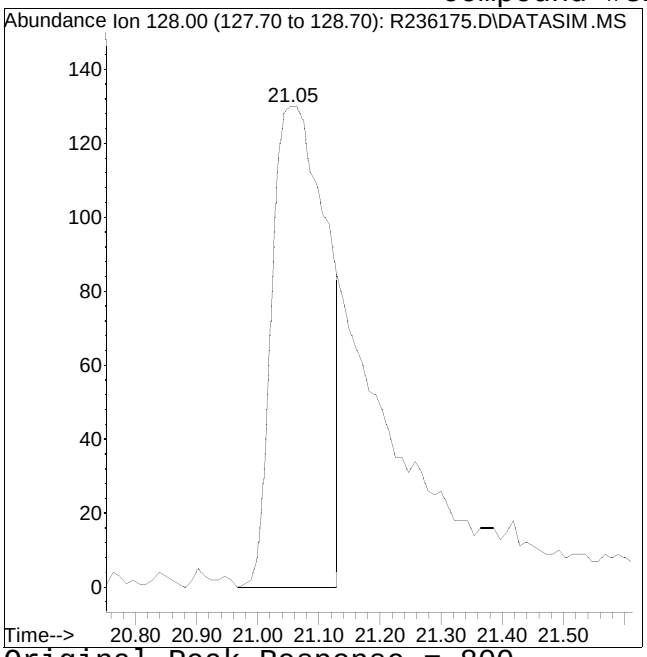
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

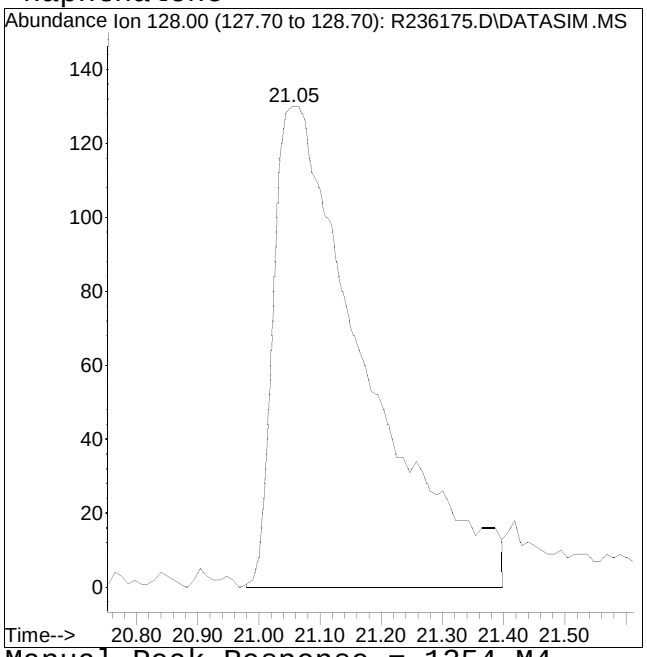
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236175.D
Date Inj'd : 9/1/2015 11:53 pm
Sample : ITO15-SIMSTD0.04

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #82: naphthalene



Original Peak Response = 800



Manual Peak Response = 1354 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236176.D
Acq On : 2 Sep 2015 12:28 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.1
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:54 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	168199	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 100.57%			
33) 1,4-difluorobenzene	12.54	114	447517	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 100.75%			
51) chlorobenzene-D5	16.89	54	97992	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 100.77%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154304	9.970	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.70%			
53) toluene-D8	15.23	98	476791	9.997	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.97%			
67) bromofluorobenzene	18.06	95	274362	9.635	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.35%			
Target Compounds						Qvalue
2) propylene	4.31	41	1032M6	0.112	ppbV	
3) dichlorodifluoromethane	4.42	85	2224	0.102	ppbV	99
4) chloromethane	4.64	50	1485	0.119	ppbV	98
5) Freon-114	4.79	85	3761	0.103	ppbV	96
6) vinyl chloride	4.96	62	1376	0.100	ppbV	92
7) 1,3-butadiene	5.16	54	937	0.098	ppbV #	77
8) bromomethane	5.54	94	1213	0.102	ppbV	96
9) chloroethane	5.79	64	789	0.121	ppbV	94
10) ethanol	6.09	31	4282	0.532	ppbV	91
11) vinyl bromide	6.27	106	1197	0.098	ppbV	100
12) acetone	6.73	43	10698	0.561	ppbV #	98
13) trichlorofluoromethane	6.84	101	3384	0.100	ppbV	98
14) isopropyl alcohol	7.12	45	6441	0.305	ppbV	98
15) acrylonitrile	7.30	53	976	0.106	ppbV #	88
16) 1,1-dichloroethene	7.66	61	2310	0.100	ppbV	100
17) tertiary butyl alcohol	7.95	59	3384	0.119	ppbV #	47
18) methylene chloride	7.83	49	7437	0.413	ppbV	95
19) 3-chloropropene	7.97	41	2118	0.131	ppbV	95
20) carbon disulfide	8.16	76	4190	0.102	ppbV #	89
21) Freon 113	8.17	101	2847	0.102	ppbV	97
22) Halothane	8.74	117	2122	0.098	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	2143	0.096	ppbV	97
24) 1,1-dichloroethane	9.21	63	2518	0.097	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236176.D
Acq On : 2 Sep 2015 12:28 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.1
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:54 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.40	73	3496	0.097	ppbV		98
26) vinyl acetate	9.45	43	2083M4	0.114	ppbV		
27) 2-butanone	9.80	43	2706	0.094	ppbV		99
28) cis-1,2-dichloroethene	10.19	61	1997	0.100	ppbV		97
29) Ethyl Acetate	10.55	61	421M6	0.096	ppbV		
30) chloroform	10.53	83	2900	0.097	ppbV		98
31) Tetrahydrofuran	11.10	42	1512	0.101	ppbV		94
32) 1,2-dichloroethane	11.36	62	2018	0.098	ppbV	#	93
34) hexane	10.43	57	1915	0.098	ppbV	#	52
36) 1,1,1-trichloroethane	11.64	97	2950	0.099	ppbV		97
37) benzene	12.15	78	4097	0.102	ppbV		99
38) carbon tetrachloride	12.32	117	2990	0.094	ppbV		99
39) cyclohexane	12.46	56	2046	0.099	ppbV		97
40) dibromomethane	13.04	93	1900	0.107	ppbV		98
41) 1,2-dichloropropane	13.07	63	1601	0.099	ppbV		96
42) bromodichloromethane	13.29	83	3345	0.095	ppbV		100
43) 1,4-dioxane	13.47	88	932M4	0.100	ppbV		
44) trichloroethene	13.33	130	1854	0.100	ppbV		98
45) 2,2,4-trimethylpentane	13.36	57	6181	0.094	ppbV		98
46) heptane	13.65	43	2287	0.095	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	8366	0.090	ppbV	#	97
48) 4-methyl-2-pentanone	14.44	43	3188M4	0.090	ppbV		
49) trans-1,3-dichloropropene	14.87	75	2639	0.087	ppbV		91
50) 1,1,2-trichloroethane	15.05	97	2070	0.095	ppbV		90
52) toluene	15.32	91	6772	0.101	ppbV		100
54) 2-hexanone	15.65	43	3896M4	0.079	ppbV		
55) dibromochloromethane	15.74	129	3721	0.091	ppbV		100
56) 1,2-dibromoethane	15.96	107	3285	0.093	ppbV		100
57) tetrachloroethene	16.36	166	3459	0.120	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.91	131	2189	0.096	ppbV		99
59) chlorobenzene	16.93	112	3814	0.094	ppbV		95
60) ethylbenzene	17.22	91	5961	0.093	ppbV		100
61) m+p-xylene	17.36	91	9210	0.182	ppbV		97
62) bromoform	17.44	173	2683	0.084	ppbV		99
63) styrene	17.64	104	3300	0.088	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.72	83	3663	0.089	ppbV		99
65) o-xylene	17.72	91	4836	0.093	ppbV		98
66) 1,2,3-trichloropropane	17.83	75	2673M2	0.082	ppbV		
68) isopropylbenzene	18.16	105	6359	0.093	ppbV		99
69) bromobenzene	18.24	77	3404	0.088	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236176.D
Acq On : 2 Sep 2015 12:28 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.1
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:54 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.64	105	6055	0.079	ppbV #	97
71) 1,3,5-trimethylbenzene	18.69	105	5911	0.096	ppbV #	97
72) tert-butylbenzene	19.00	119	5754	0.092	ppbV	97
73) 1,2,4-trimethylbenzene	19.00	105	5044	0.082	ppbV #	90
74) Benzyl Chloride	19.12	91	3052	0.054	ppbV	93
75) 1,3-dichlorobenzene	19.13	146	3045	0.068	ppbV	98
76) 1,4-dichlorobenzene	19.18	146	4105M4	0.086	ppbV	
77) sec-butylbenzene	19.20	105	7588	0.084	ppbV	96
78) p-isopropyltoluene	19.31	119	6412	0.082	ppbV	95
79) 1,2-dichlorobenzene	19.44	146	3611	0.081	ppbV	100
80) n-butylbenzene	19.63	91	5152	0.066	ppbV	96
81) 1,2,4-trichlorobenzene	20.87	180	2015	0.049	ppbV	96
82) naphthalene	21.00	128	3982M4	0.047	ppbV	
83) 1,2,3-trichlorobenzene	21.25	180	2009M4	0.051	ppbV	
84) hexachlorobutadiene	21.28	225	2483	0.073	ppbV	97

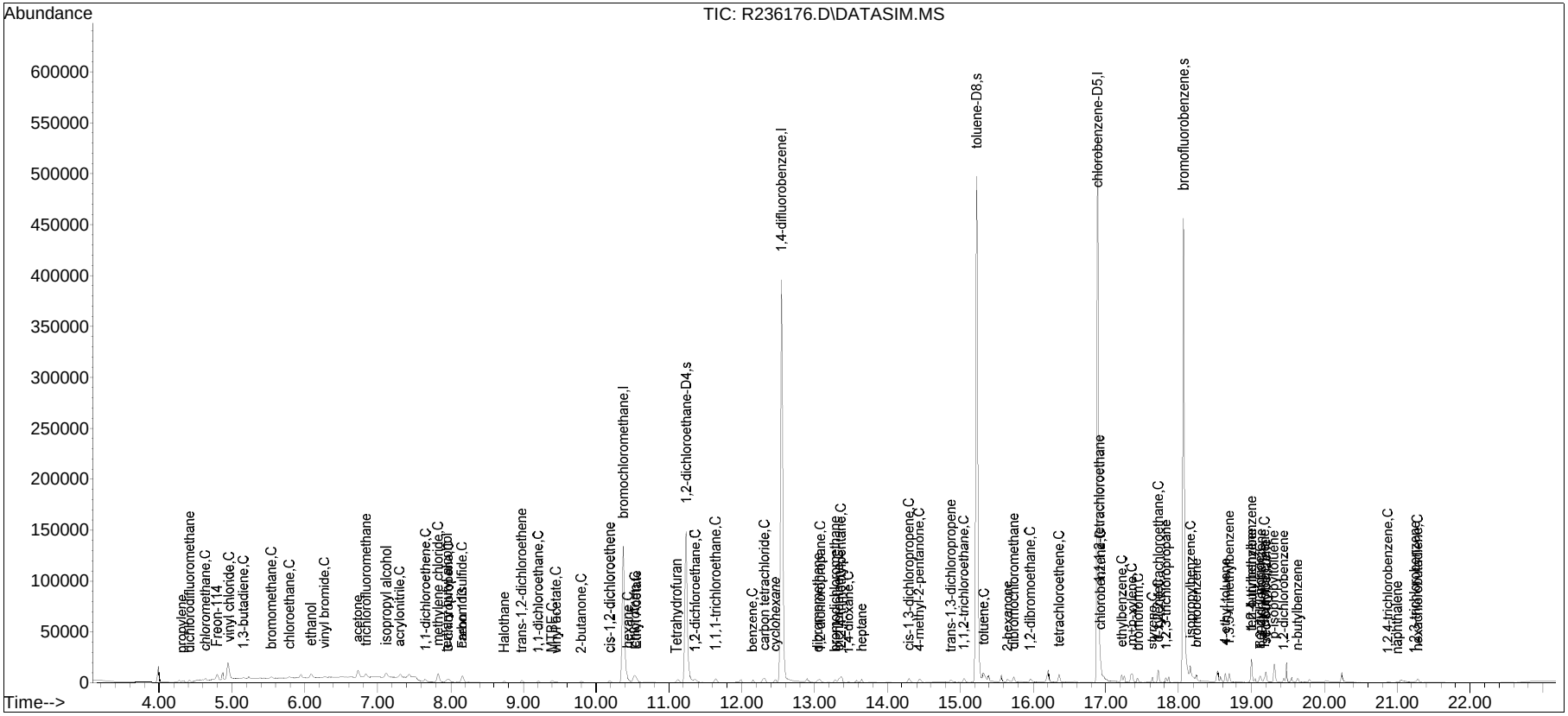
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236176.D
Acq On : 2 Sep 2015 12:28 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.1
Misc : WG817908
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 02 12:40:54 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

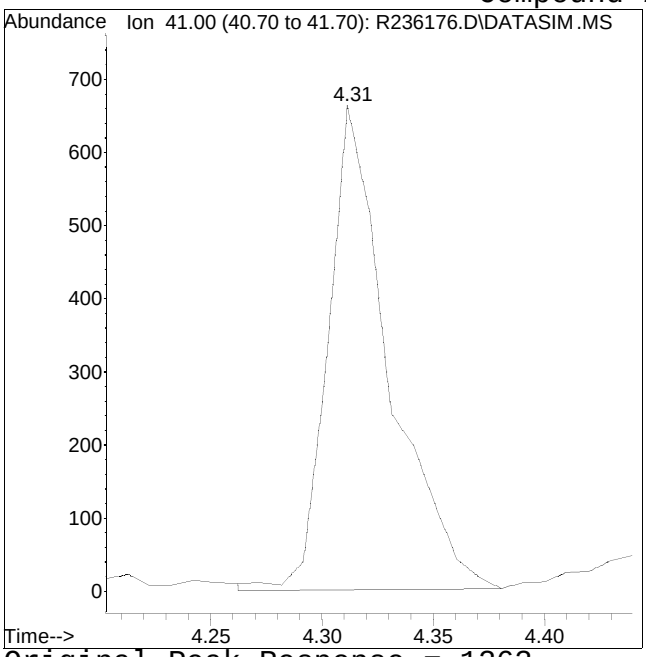
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



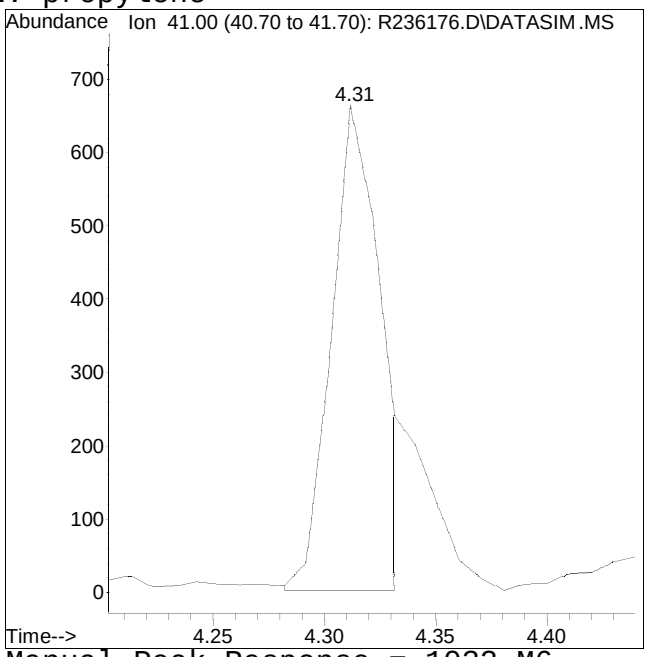
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 1263



Manual Peak Response = 1032 M6

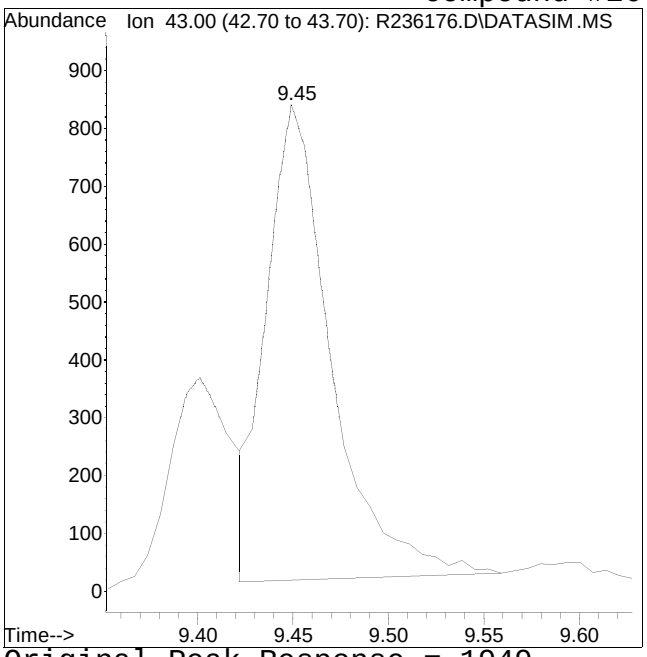
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

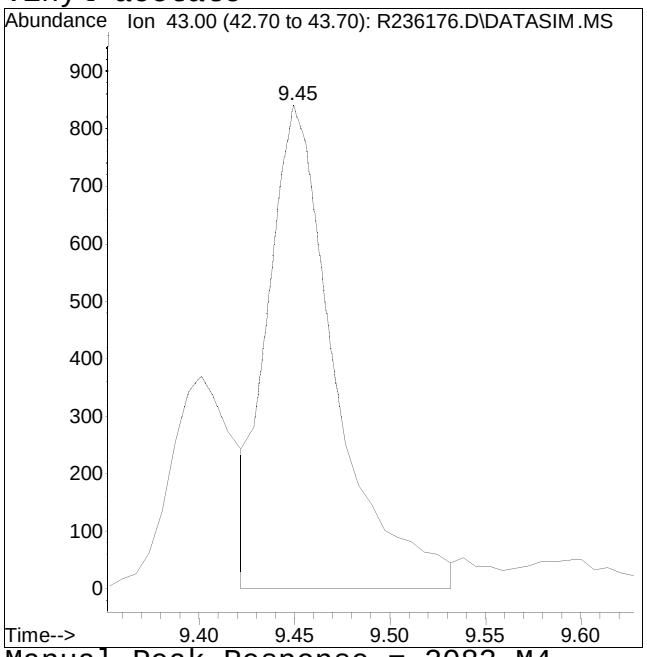
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 1949



Manual Peak Response = 2083 M4

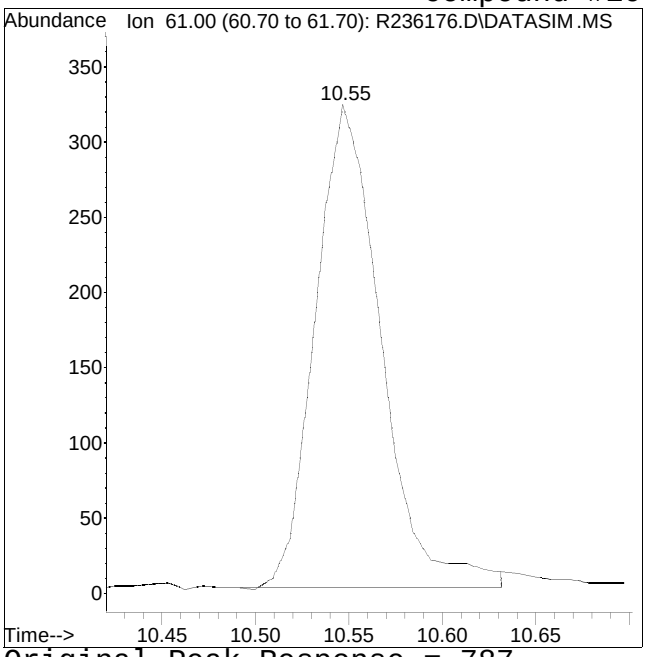
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

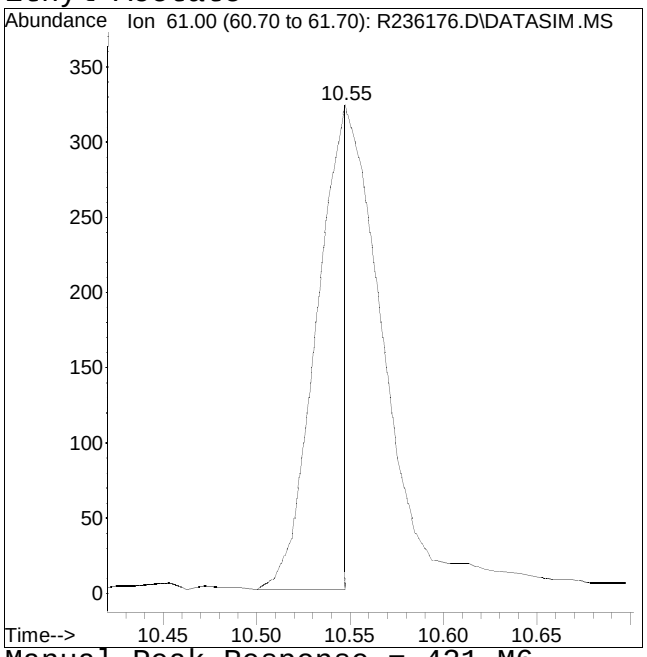
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #29: Ethyl Acetate



Original Peak Response = 787



Manual Peak Response = 421 M6

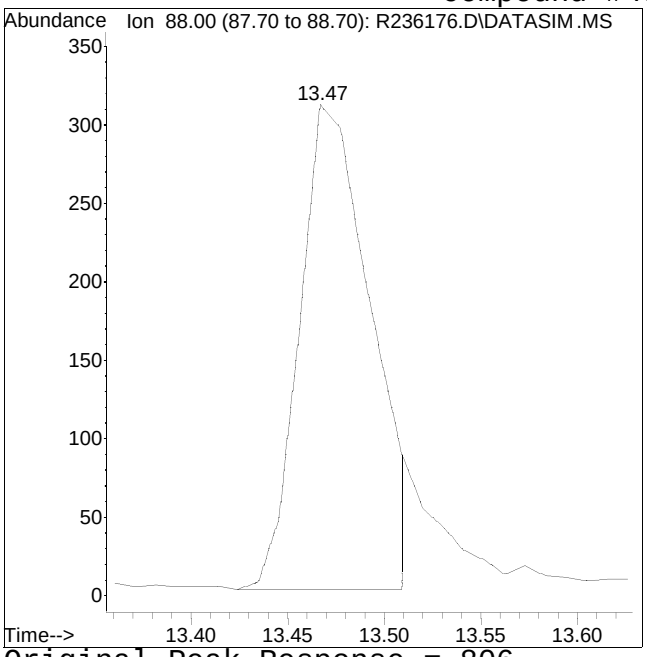
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

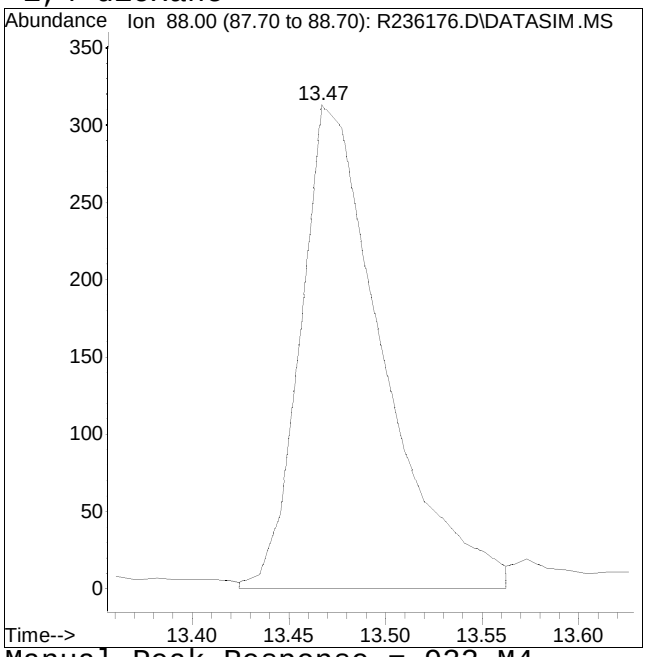
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #43: 1,4-dioxane



Original Peak Response = 806



Manual Peak Response = 932 M4

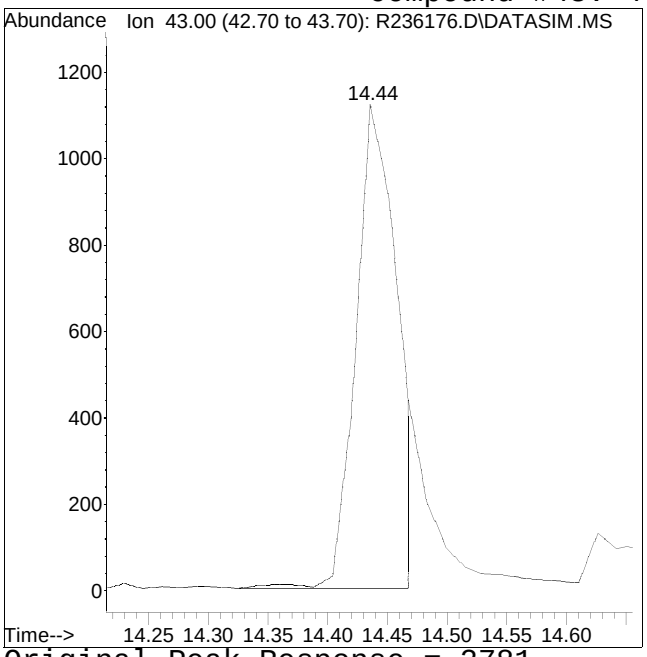
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

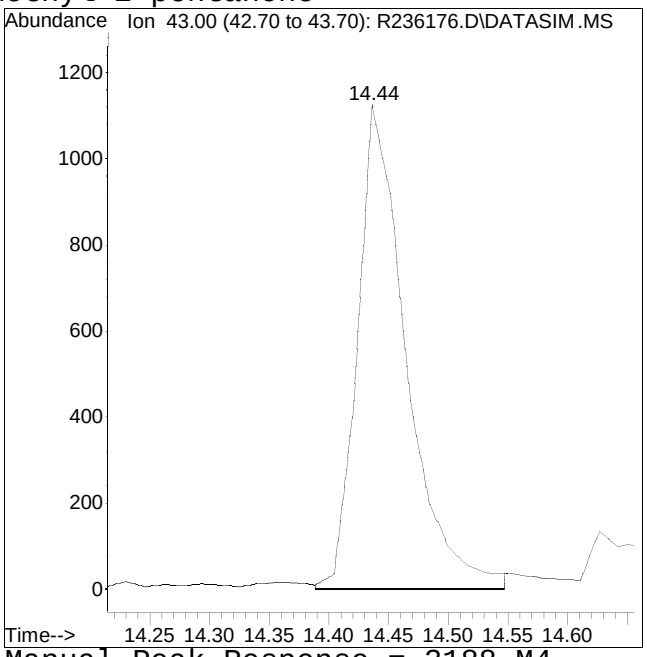
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #48: 4-methyl-2-pentanone



Original Peak Response = 2781



Manual Peak Response = 3188 M4

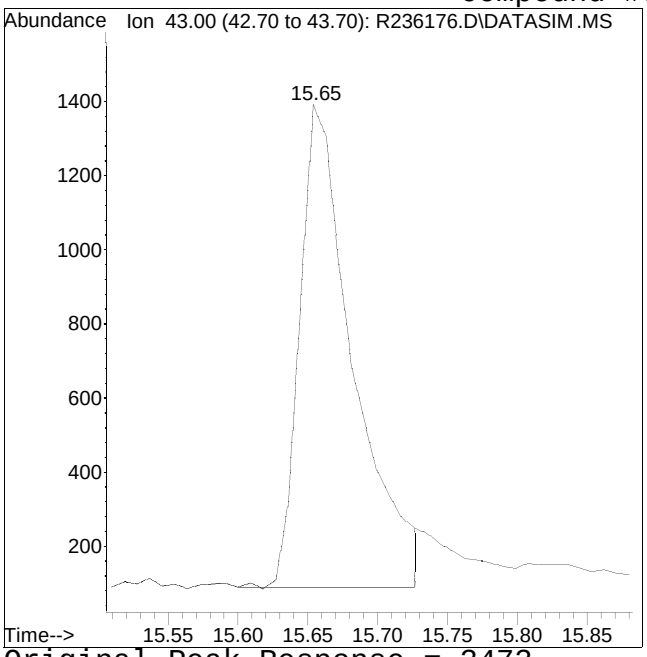
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

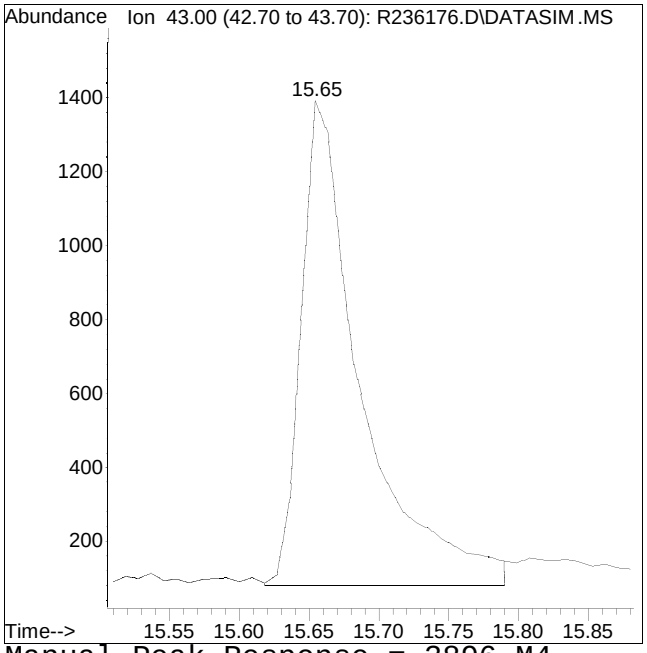
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #54: 2-hexanone



Original Peak Response = 3473



Manual Peak Response = 3896 M4

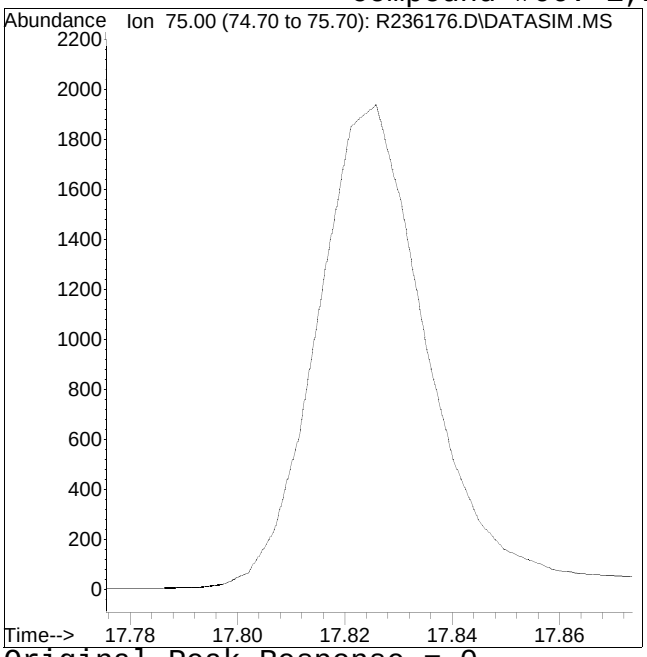
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

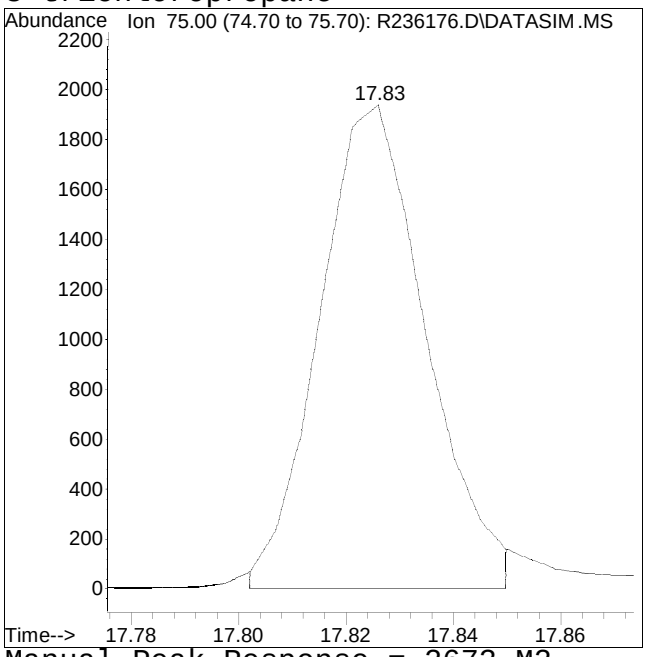
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #66: 1,2,3-trichloropropane



Original Peak Response = 0



Manual Peak Response = 2673 M2

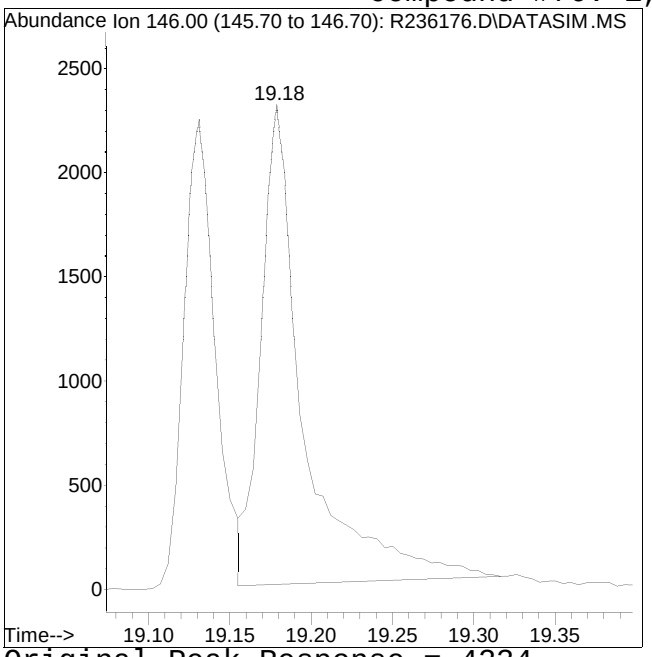
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

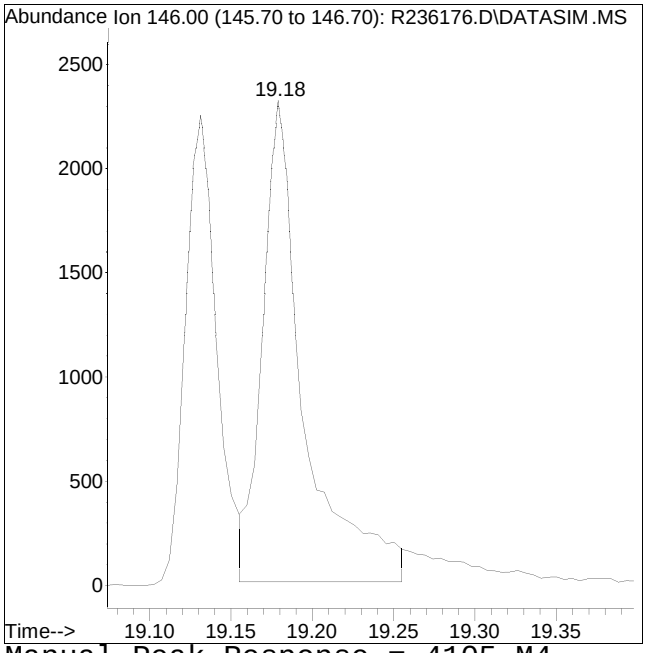
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 4234



Manual Peak Response = 4105 M4

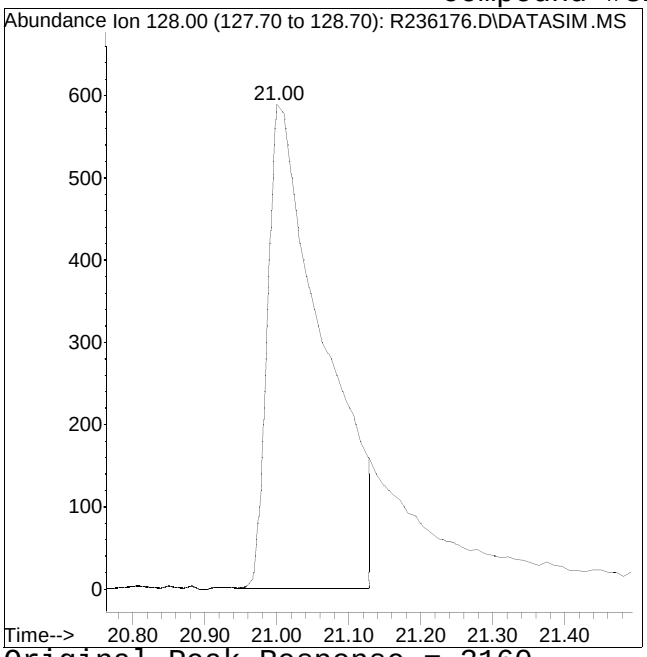
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

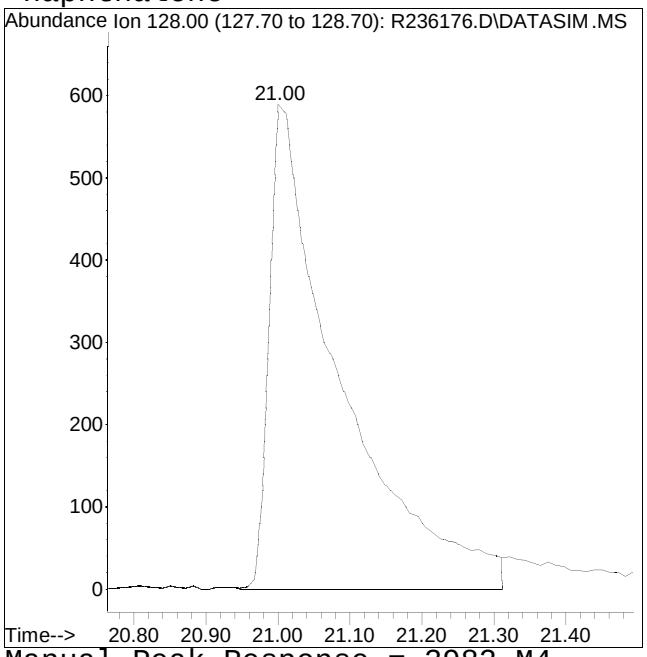
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #82: naphthalene



Original Peak Response = 3160



Manual Peak Response = 3982 M4

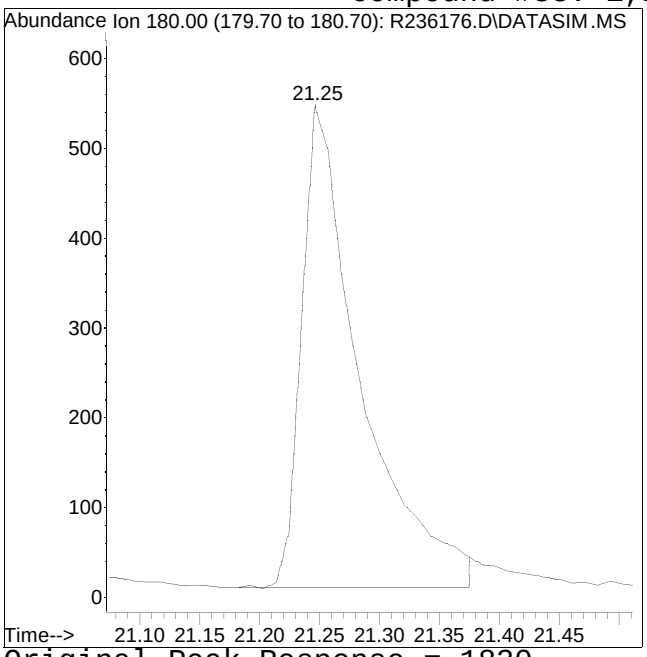
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

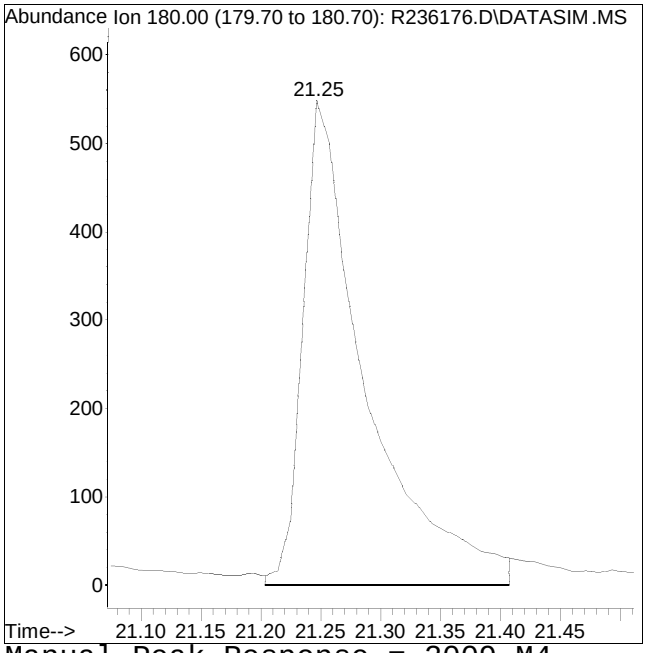
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236176.D
Date Inj'd : 9/2/2015 12:28 am
Sample : ITO15-SIMSTD0.1

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #83: 1,2,3-trichlorobenzene



Original Peak Response = 1830



Manual Peak Response = 2009 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236177.D
Acq On : 2 Sep 2015 1:01 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.2
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:39:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	166529	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 99.57%			
33) 1,4-difluorobenzene	12.55	114	447047	10.000	ppbV	# 0.01
Standard Area = 444205			Recovery = 100.64%			
51) chlorobenzene-D5	16.89	54	97433	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 100.20%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	152983	9.895	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.95%			
53) toluene-D8	15.23	98	477958	10.079	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.79%			
67) bromofluorobenzene	18.06	95	274284	9.688	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.88%			
Target Compounds						Qvalue
2) propylene	4.31	41	2149M6	0.236	ppbV	
3) dichlorodifluoromethane	4.41	85	3904	0.181	ppbV	98
4) chloromethane	4.64	50	2951	0.239	ppbV	98
5) Freon-114	4.79	85	8119	0.224	ppbV	98
6) vinyl chloride	4.96	62	3017	0.222	ppbV	96
7) 1,3-butadiene	5.16	54	2126	0.225	ppbV	94
8) bromomethane	5.54	94	2664M4	0.227	ppbV	
9) chloroethane	5.79	64	1538	0.238	ppbV	100
10) ethanol	6.08	31	9348M3	1.174	ppbV	
11) vinyl bromide	6.27	106	2666	0.220	ppbV	98
12) acetone	6.71	43	21311	1.128	ppbV #	98
13) trichlorofluoromethane	6.84	101	7502	0.225	ppbV	99
14) isopropyl alcohol	7.10	45	12062	0.577	ppbV	100
15) acrylonitrile	7.29	53	2155	0.235	ppbV	94
16) 1,1-dichloroethene	7.66	61	5216	0.227	ppbV	99
17) tertiary butyl alcohol	7.93	59	6267	0.223	ppbV #	34
18) methylene chloride	7.83	49	9382	0.526	ppbV	98
19) 3-chloropropene	7.97	41	3894M6	0.243	ppbV	
20) carbon disulfide	8.16	76	9214	0.225	ppbV	94
21) Freon 113	8.17	101	6297	0.227	ppbV	99
22) Halothane	8.74	117	4803	0.224	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	4889	0.222	ppbV	98
24) 1,1-dichloroethane	9.22	63	5757	0.224	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236177.D
Acq On : 2 Sep 2015 1:01 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.2
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:39:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.39	73	7996	0.224	ppbV		98
26) vinyl acetate	9.45	43	4182M4	0.231	ppbV		
27) 2-butanone	9.78	43	5992	0.210	ppbV		98
28) cis-1,2-dichloroethene	10.19	61	4455	0.225	ppbV		95
29) Ethyl Acetate	10.55	61	1083M6	0.249	ppbV		
30) chloroform	10.53	83	6561	0.222	ppbV		99
31) Tetrahydrofuran	11.08	42	3544	0.239	ppbV		98
32) 1,2-dichloroethane	11.36	62	4464	0.218	ppbV		97
34) hexane	10.43	57	4350	0.222	ppbV	#	52
36) 1,1,1-trichloroethane	11.64	97	6654	0.223	ppbV		96
37) benzene	12.15	78	9005	0.226	ppbV		98
38) carbon tetrachloride	12.32	117	6901	0.217	ppbV		99
39) cyclohexane	12.46	56	4602	0.223	ppbV		98
40) dibromomethane	13.04	93	4063	0.228	ppbV		98
41) 1,2-dichloropropane	13.07	63	3531	0.219	ppbV		98
42) bromodichloromethane	13.29	83	7626	0.216	ppbV		99
43) 1,4-dioxane	13.45	88	1982M4	0.213	ppbV		
44) trichloroethene	13.34	130	4041	0.218	ppbV		95
45) 2,2,4-trimethylpentane	13.36	57	13800	0.210	ppbV		97
46) heptane	13.65	43	5209	0.217	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	19210	0.207	ppbV	#	96
48) 4-methyl-2-pentanone	14.42	43	7361M4	0.207	ppbV		
49) trans-1,3-dichloropropene	14.87	75	6095	0.202	ppbV		98
50) 1,1,2-trichloroethane	15.05	97	4752	0.218	ppbV		89
52) toluene	15.33	91	14901	0.225	ppbV		100
54) 2-hexanone	15.64	43	8216	0.168	ppbV		94
55) dibromochloromethane	15.74	129	8515	0.209	ppbV		100
56) 1,2-dibromoethane	15.96	107	7451	0.211	ppbV		99
57) tetrachloroethene	16.36	166	6563	0.230	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.91	131	5003	0.220	ppbV		99
59) chlorobenzene	16.93	112	8865	0.219	ppbV		97
60) ethylbenzene	17.22	91	13783	0.215	ppbV		99
61) m+p-xylene	17.36	91	21261	0.421	ppbV		98
62) bromoform	17.44	173	6360	0.201	ppbV		98
63) styrene	17.64	104	7481	0.200	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.72	83	8540	0.208	ppbV		100
65) o-xylene	17.72	91	11150	0.215	ppbV		98
66) 1,2,3-trichloropropane	17.82	75	6474	0.200	ppbV		99
68) isopropylbenzene	18.16	105	14370	0.211	ppbV		98
69) bromobenzene	18.24	77	7713	0.201	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236177.D
Acq On : 2 Sep 2015 1:01 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.2
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:39:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.64	105	14403	0.190	ppbV #	97
71) 1,3,5-trimethylbenzene	18.69	105	13250	0.216	ppbV	97
72) tert-butylbenzene	19.00	119	13009	0.209	ppbV	98
73) 1,2,4-trimethylbenzene	19.00	105	11984	0.195	ppbV	94
74) Benzyl Chloride	19.11	91	7598	0.136	ppbV	100
75) 1,3-dichlorobenzene	19.13	146	7453	0.168	ppbV	96
76) 1,4-dichlorobenzene	19.18	146	10089	0.211	ppbV	96
77) sec-butylbenzene	19.19	105	18044	0.201	ppbV	98
78) p-isopropyltoluene	19.31	119	15034	0.193	ppbV	99
79) 1,2-dichlorobenzene	19.44	146	8488	0.190	ppbV	96
80) n-butylbenzene	19.63	91	13603	0.176	ppbV	96
81) 1,2,4-trichlorobenzene	20.86	180	5415	0.133	ppbV #	93
82) naphthalene	20.98	128	10448M4	0.123	ppbV	
83) 1,2,3-trichlorobenzene	21.24	180	4968	0.127	ppbV	94
84) hexachlorobutadiene	21.28	225	5898	0.174	ppbV	93

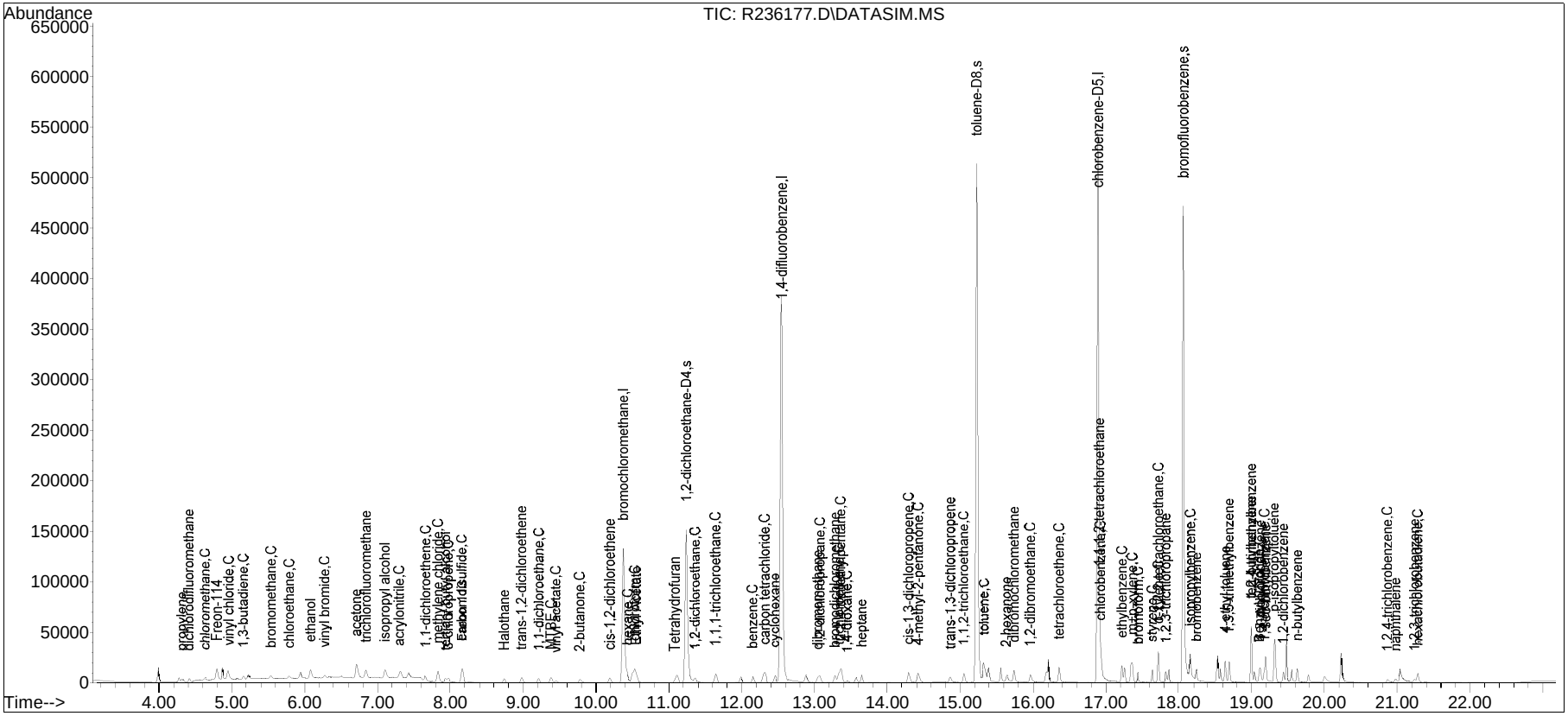
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236177.D
Acq On : 2 Sep 2015 1:01 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.2
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:39:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

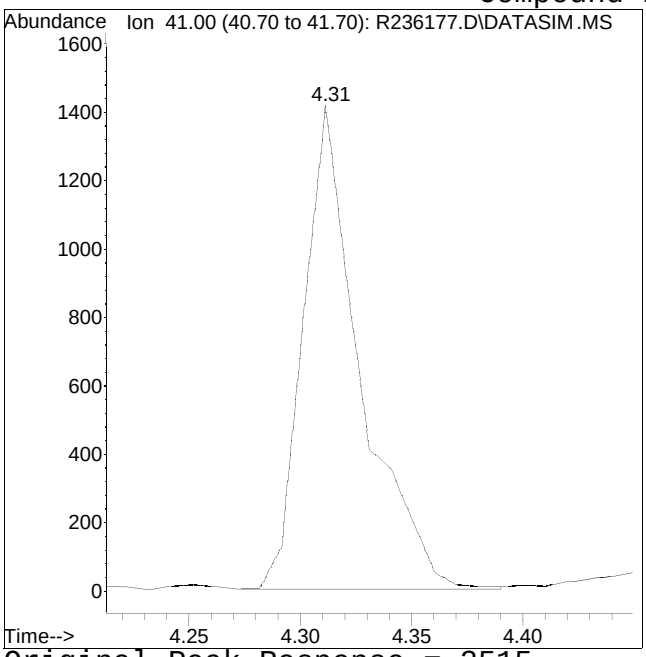
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



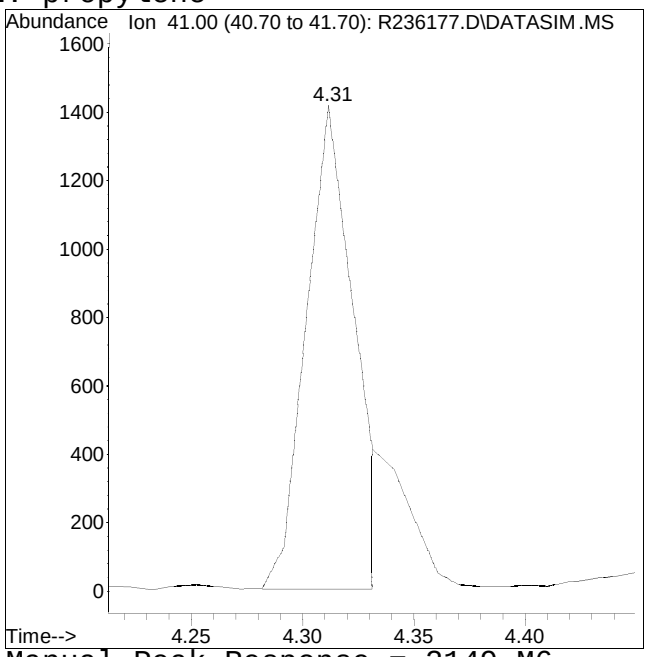
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 2515



Manual Peak Response = 2149 M6

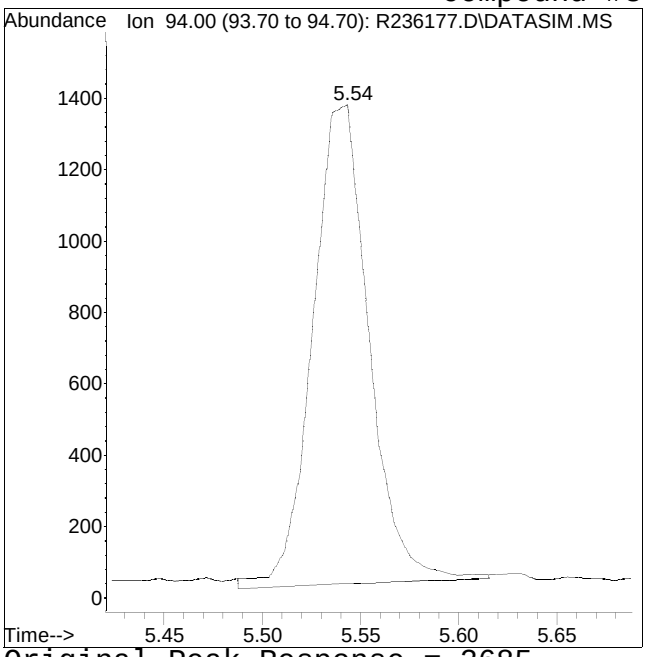
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

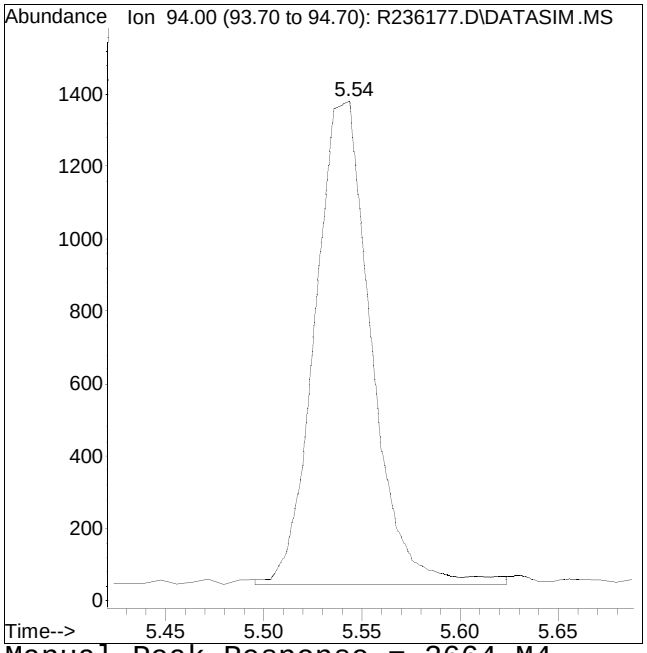
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #8: bromomethane



Original Peak Response = 2685



Manual Peak Response = 2664 M4

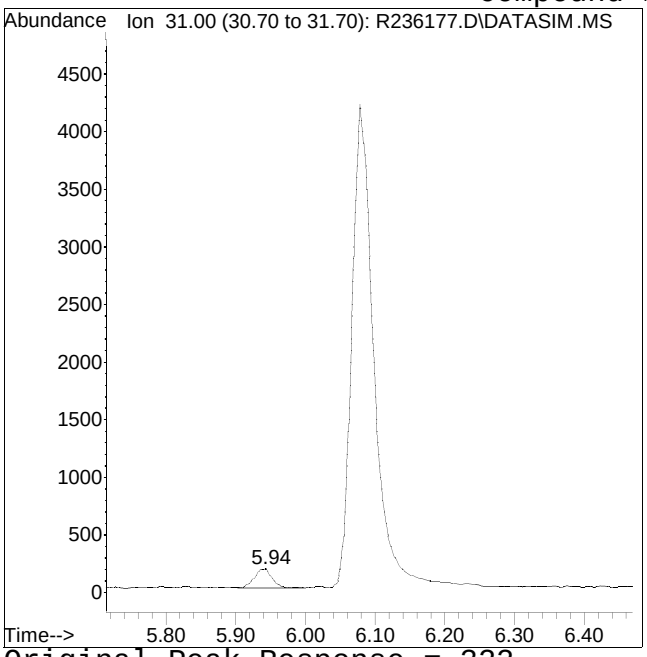
M4 = Poor automated baseline construction.

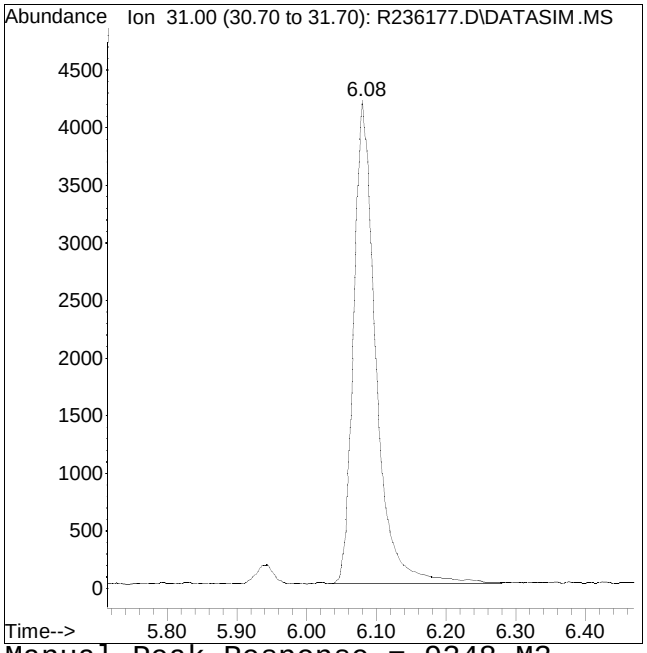
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #10: ethanol





Original Peak Response = 322 Manual Peak Response = 9348 M3

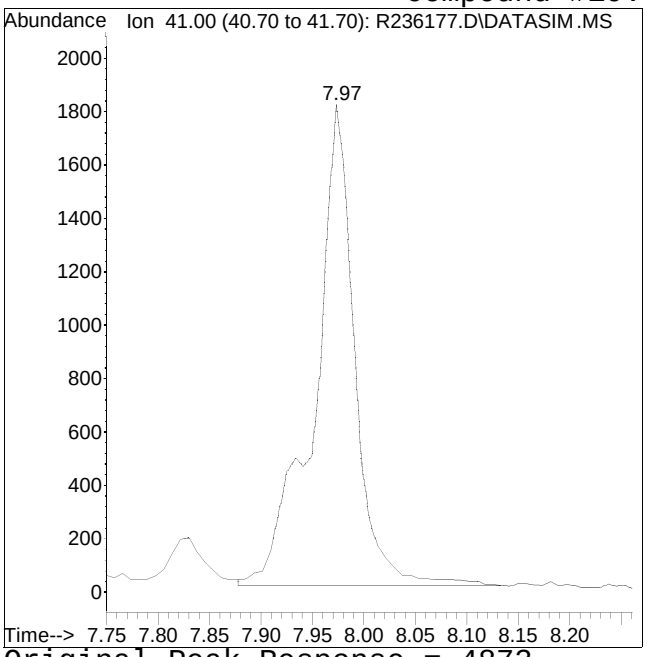
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

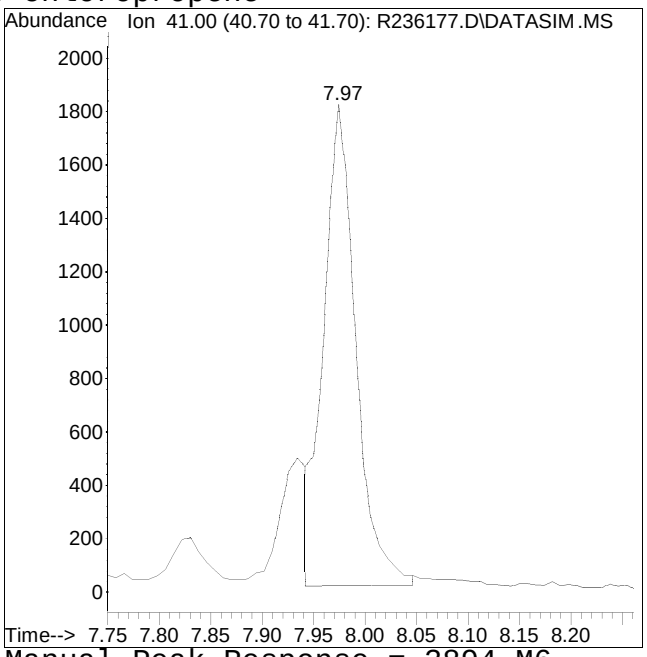
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #19: 3-chloropropene



Original Peak Response = 4873



Manual Peak Response = 3894 M6

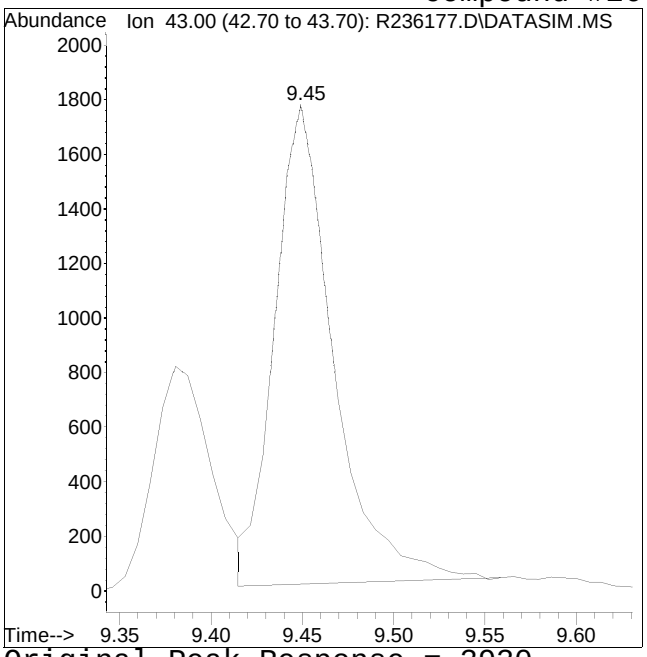
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

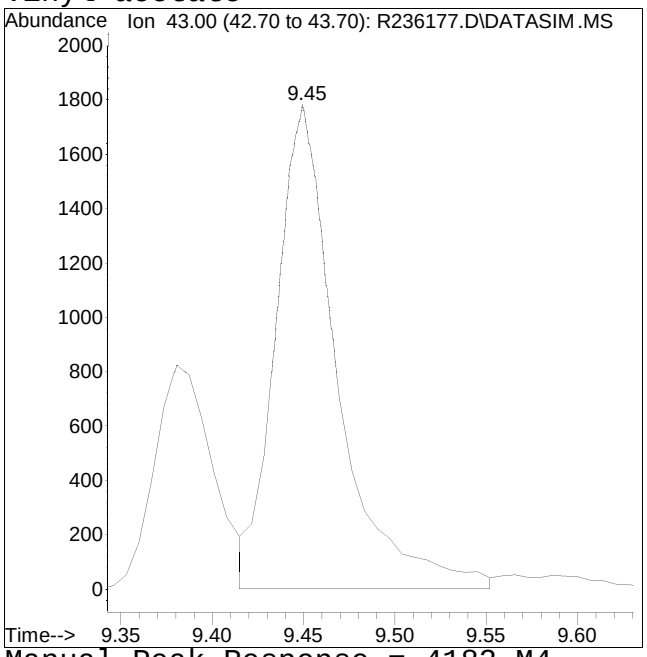
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 3930



Manual Peak Response = 4182 M4

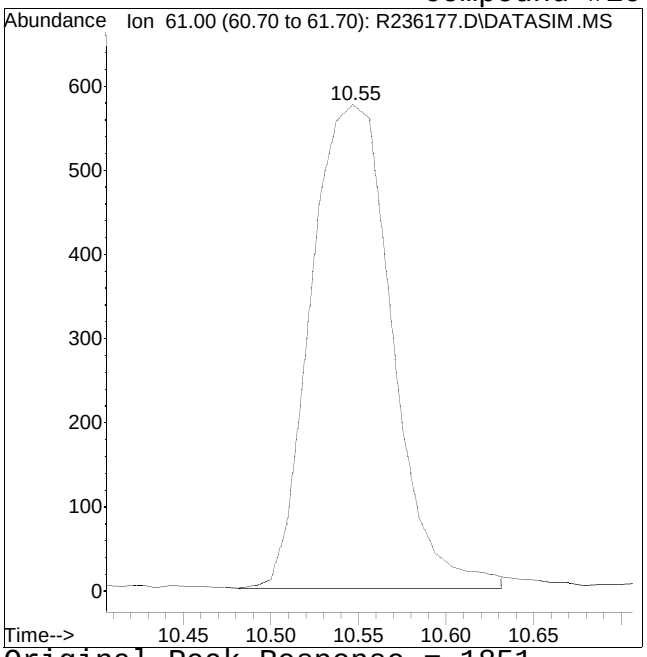
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

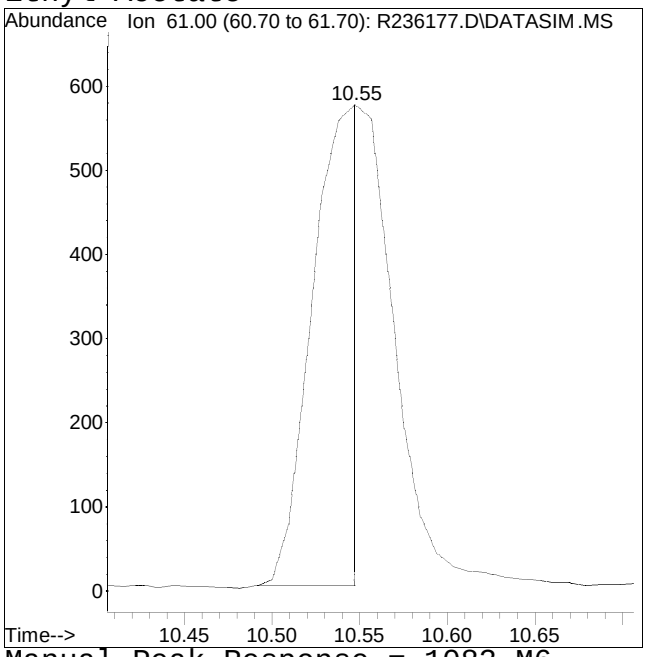
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #29: Ethyl Acetate



Original Peak Response = 1851



Manual Peak Response = 1083 M6

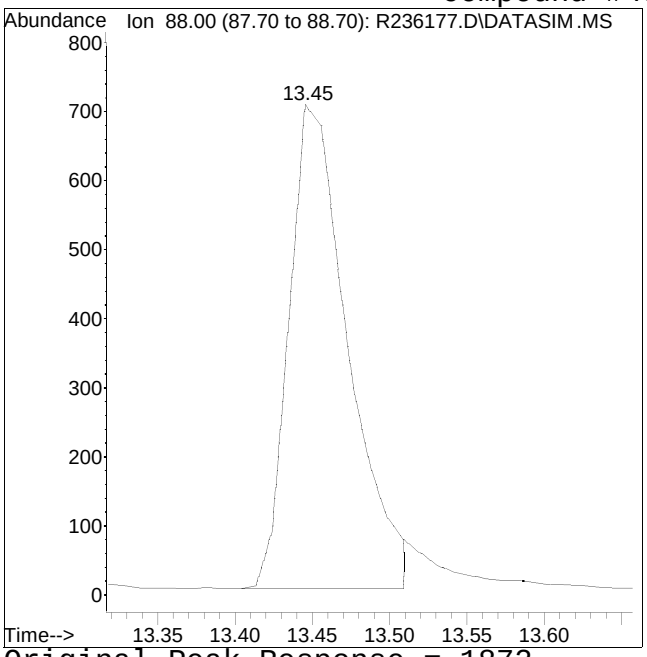
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

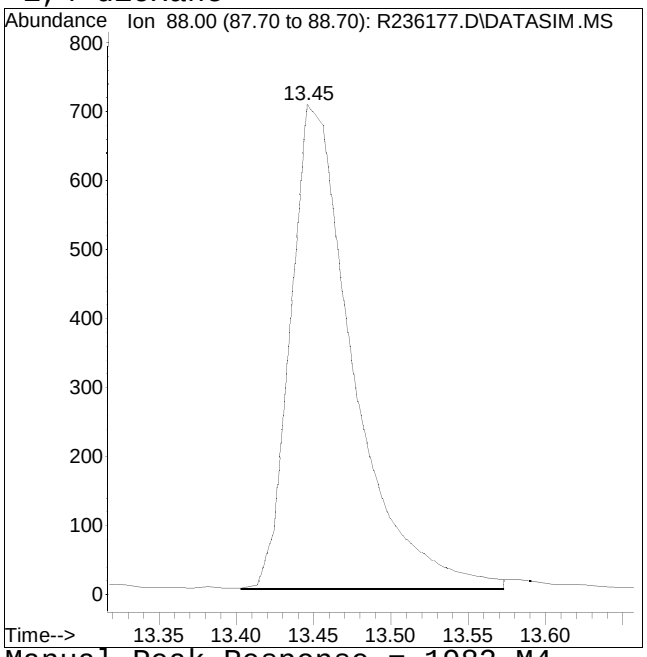
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #43: 1,4-dioxane



Original Peak Response = 1872



Manual Peak Response = 1982 M4

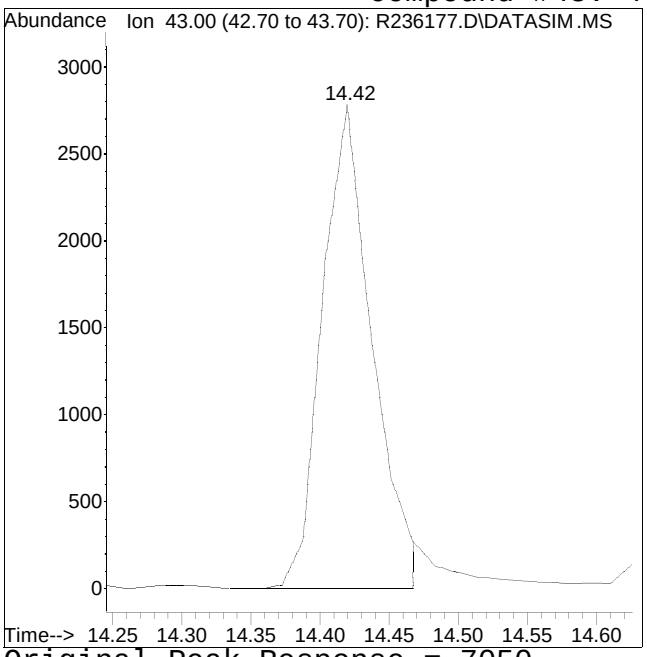
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

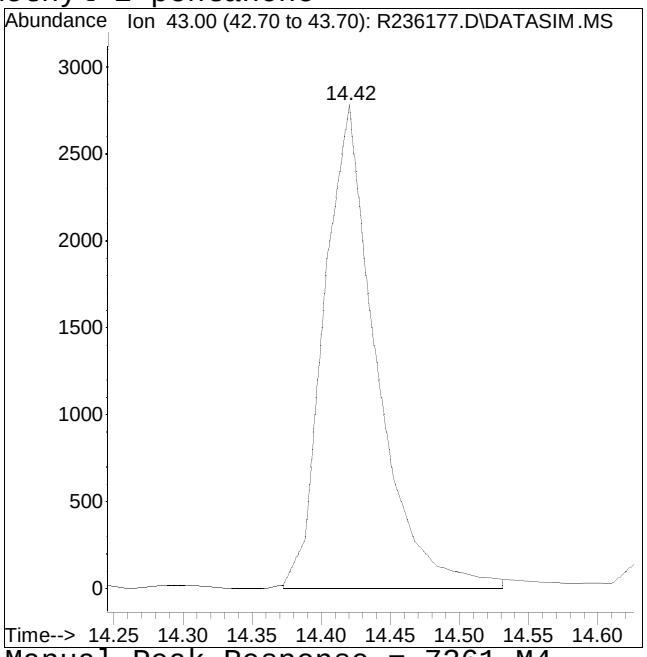
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #48: 4-methyl-2-pentanone



Original Peak Response = 7050



Manual Peak Response = 7361 M4

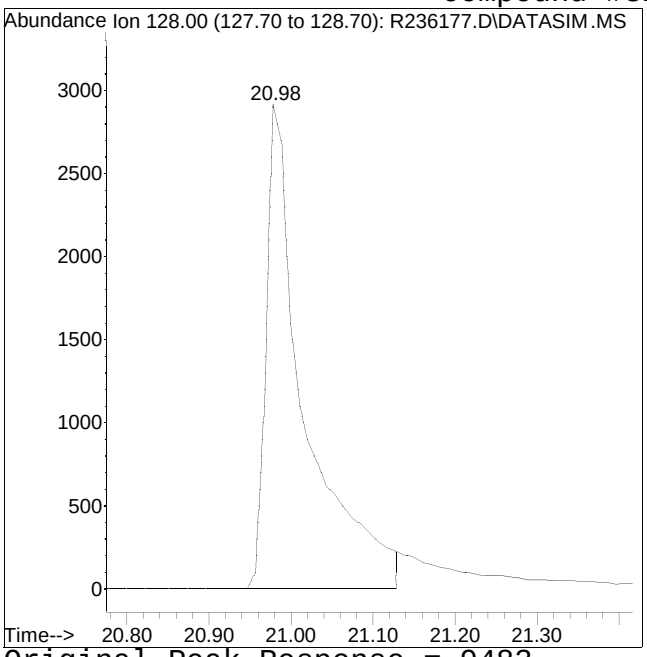
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

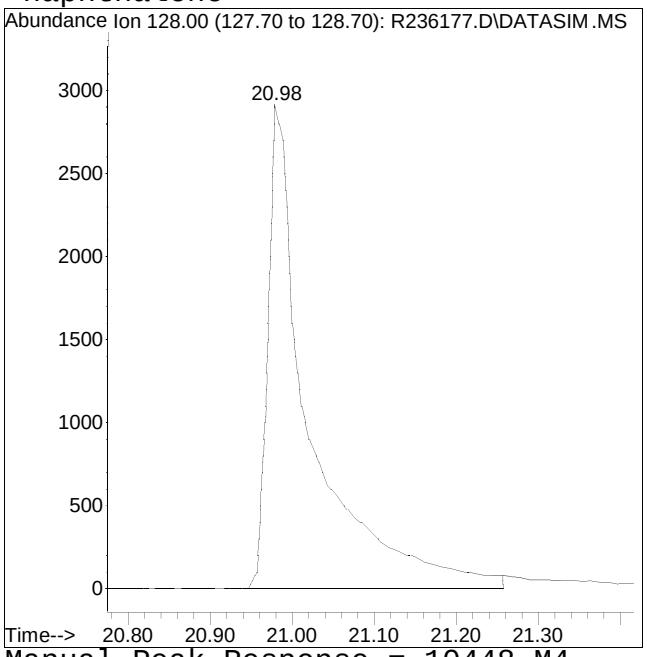
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236177.D
Date Inj'd : 9/2/2015 1:01 am
Sample : ITO15-SIMSTD0.2

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #82: naphthalene



Original Peak Response = 9483



Manual Peak Response = 10448 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236178.D
Acq On : 2 Sep 2015 1:34 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.5
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:42:04 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	166107	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 99.31%			
33) 1,4-difluorobenzene	12.54	114	443119	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 99.76%			
51) chlorobenzene-D5	16.89	54	97099	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 99.85%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154541	10.085	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.85%			
53) toluene-D8	15.23	98	472312	9.994	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.94%			
67) bromofluorobenzene	18.06	95	274385	9.724	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.24%			
Target Compounds						Qvalue
2) propylene	4.31	41	5209M6	0.574	ppbV	
3) dichlorodifluoromethane	4.41	85	10043	0.468	ppbV	99
4) chloromethane	4.64	50	6927	0.563	ppbV	98
5) Freon-114	4.79	85	19421	0.537	ppbV	98
6) vinyl chloride	4.95	62	7200	0.532	ppbV	99
7) 1,3-butadiene	5.16	54	5007	0.532	ppbV	91
8) bromomethane	5.54	94	6320M4	0.539	ppbV	
9) chloroethane	5.79	64	3558	0.553	ppbV	97
10) ethanol	6.06	31	21268	2.677	ppbV	98
11) vinyl bromide	6.27	106	6414	0.531	ppbV	99
12) acetone	6.69	43	50298	2.669	ppbV #	99
13) trichlorofluoromethane	6.84	101	17838	0.536	ppbV	99
14) isopropyl alcohol	7.08	45	28723	1.377	ppbV	100
15) acrylonitrile	7.29	53	5041	0.552	ppbV	96
16) 1,1-dichloroethene	7.66	61	12280	0.536	ppbV	98
17) tertiary butyl alcohol	7.90	59	15155	0.541	ppbV	95
18) methylene chloride	7.83	49	14535	0.817	ppbV	95
19) 3-chloropropene	7.97	41	8485	0.531	ppbV	98
20) carbon disulfide	8.16	76	21409	0.525	ppbV	99
21) Freon 113	8.17	101	14712	0.531	ppbV	98
22) Halothane	8.74	117	11264	0.527	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	11585	0.528	ppbV	96
24) 1,1-dichloroethane	9.21	63	13520	0.528	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236178.D
Acq On : 2 Sep 2015 1:34 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.5
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:42:04 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.36	73	18779	0.527	ppbV		100
26) vinyl acetate	9.44	43	9374M4	0.520	ppbV		
27) 2-butanone	9.76	43	14513	0.511	ppbV		99
28) cis-1,2-dichloroethene	10.19	61	10481	0.531	ppbV		97
29) Ethyl Acetate	10.52	61	1910	0.440	ppbV		88
30) chloroform	10.53	83	15690	0.532	ppbV		100
31) Tetrahydrofuran	11.06	42	8566	0.580	ppbV		99
32) 1,2-dichloroethane	11.36	62	10812	0.530	ppbV		98
34) hexane	10.43	57	10282	0.531	ppbV	#	51
36) 1,1,1-trichloroethane	11.64	97	15720	0.532	ppbV		98
37) benzene	12.15	78	21005	0.531	ppbV		99
38) carbon tetrachloride	12.32	117	16311	0.518	ppbV		99
39) cyclohexane	12.46	56	10632	0.521	ppbV		99
40) dibromomethane	13.04	93	9378	0.532	ppbV		99
41) 1,2-dichloropropane	13.07	63	8335	0.522	ppbV		97
42) bromodichloromethane	13.29	83	17881	0.511	ppbV		100
43) 1,4-dioxane	13.42	88	4634	0.502	ppbV	#	70
44) trichloroethene	13.33	130	9574	0.522	ppbV		99
45) 2,2,4-trimethylpentane	13.36	57	33866	0.521	ppbV		98
46) heptane	13.65	43	12211	0.514	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	45632	0.495	ppbV		98
48) 4-methyl-2-pentanone	14.39	43	17272	0.491	ppbV	#	94
49) trans-1,3-dichloropropene	14.87	75	14598	0.488	ppbV		98
50) 1,1,2-trichloroethane	15.05	97	11073	0.513	ppbV		92
52) toluene	15.33	91	34550	0.523	ppbV		99
54) 2-hexanone	15.62	43	21554	0.441	ppbV		97
55) dibromochloromethane	15.74	129	20102	0.496	ppbV		100
56) 1,2-dibromoethane	15.96	107	17726	0.505	ppbV		98
57) tetrachloroethene	16.36	166	15292	0.538	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.91	131	11944	0.527	ppbV		99
59) chlorobenzene	16.93	112	20950	0.520	ppbV		98
60) ethylbenzene	17.22	91	32805	0.514	ppbV		99
61) m+p-xylene	17.36	91	50704	1.009	ppbV		100
62) bromoform	17.44	173	15313	0.485	ppbV		99
63) styrene	17.64	104	18068	0.486	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.72	83	20583	0.502	ppbV		98
65) o-xylene	17.72	91	26576	0.513	ppbV		100
66) 1,2,3-trichloropropane	17.82	75	15777	0.490	ppbV		99
68) isopropylbenzene	18.16	105	34841	0.513	ppbV		99
69) bromobenzene	18.24	77	18914	0.494	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236178.D
Acq On : 2 Sep 2015 1:34 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.5
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:42:04 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.64	105	35923	0.475	ppbV		98
71) 1,3,5-trimethylbenzene	18.69	105	31433	0.515	ppbV		99
72) tert-butylbenzene	18.99	119	31048	0.500	ppbV		99
73) 1,2,4-trimethylbenzene	18.99	105	29374	0.479	ppbV		96
74) Benzyl Chloride	19.11	91	20515	0.369	ppbV		99
75) 1,3-dichlorobenzene	19.13	146	19301	0.437	ppbV		97
76) 1,4-dichlorobenzene	19.17	146	24922	0.524	ppbV		97
77) sec-butylbenzene	19.19	105	43868	0.491	ppbV		99
78) p-isopropyltoluene	19.30	119	37013	0.478	ppbV		100
79) 1,2-dichlorobenzene	19.44	146	21057	0.474	ppbV		97
80) n-butylbenzene	19.62	91	34879	0.454	ppbV		96
81) 1,2,4-trichlorobenzene	20.86	180	16023	0.396	ppbV		98
82) naphthalene	20.98	128	31265	0.369	ppbV		99
83) 1,2,3-trichlorobenzene	21.23	180	14768	0.380	ppbV		96
84) hexachlorobutadiene	21.28	225	14945	0.441	ppbV	#	87

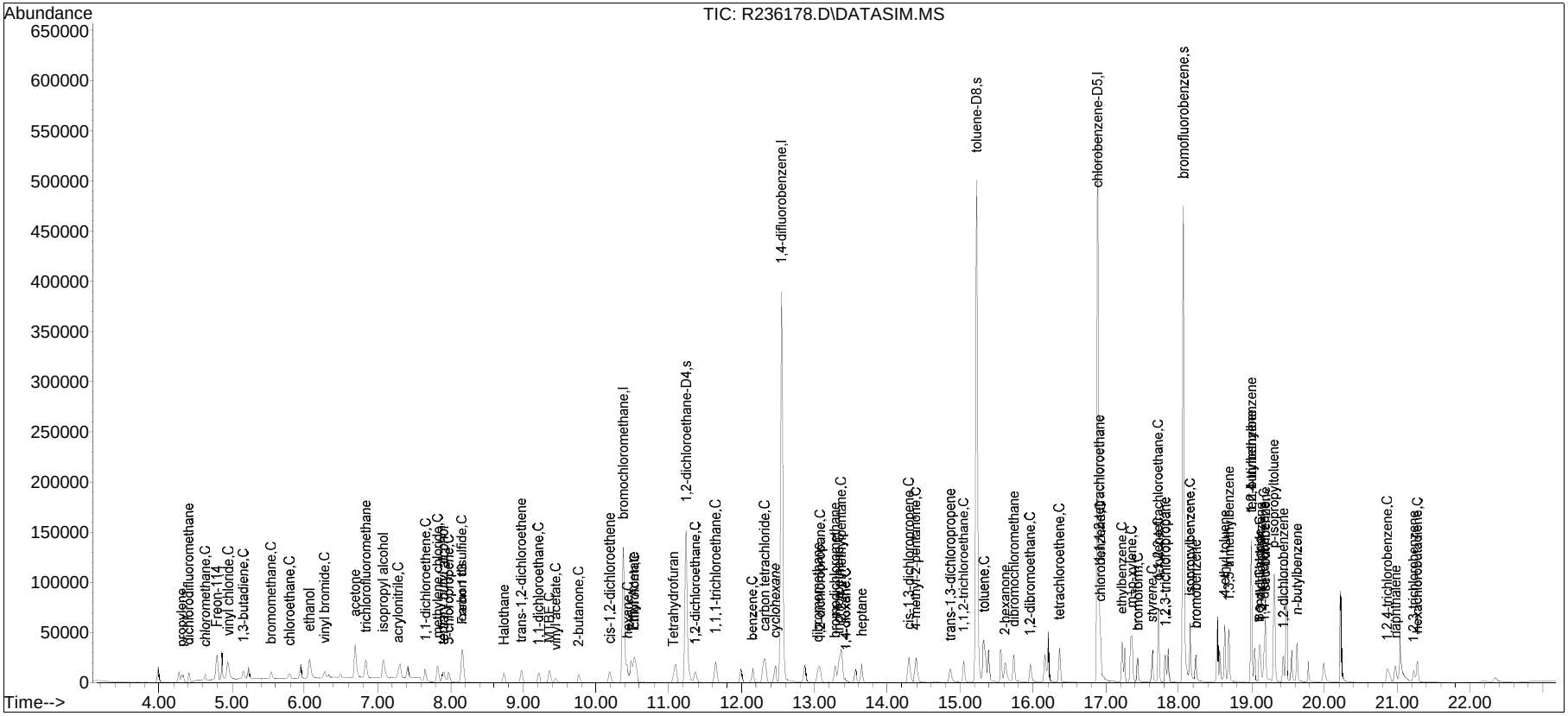
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236178.D
Acq On : 2 Sep 2015 1:34 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD0.5
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:42:04 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

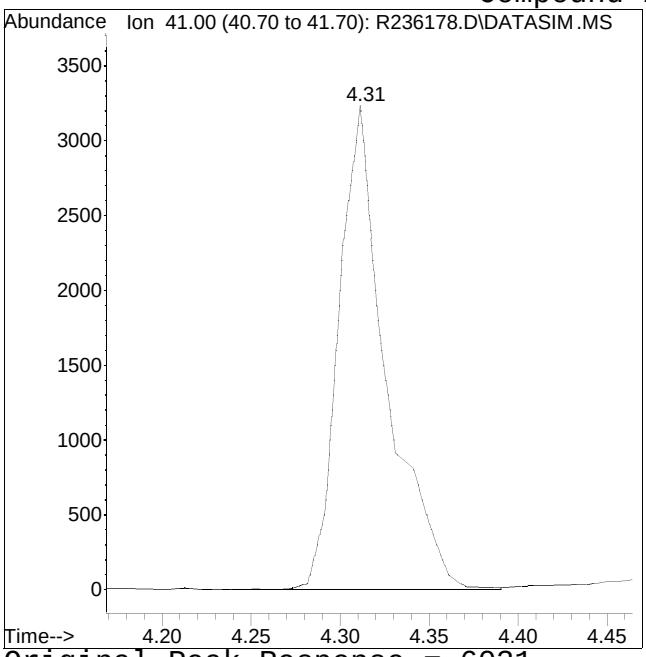
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



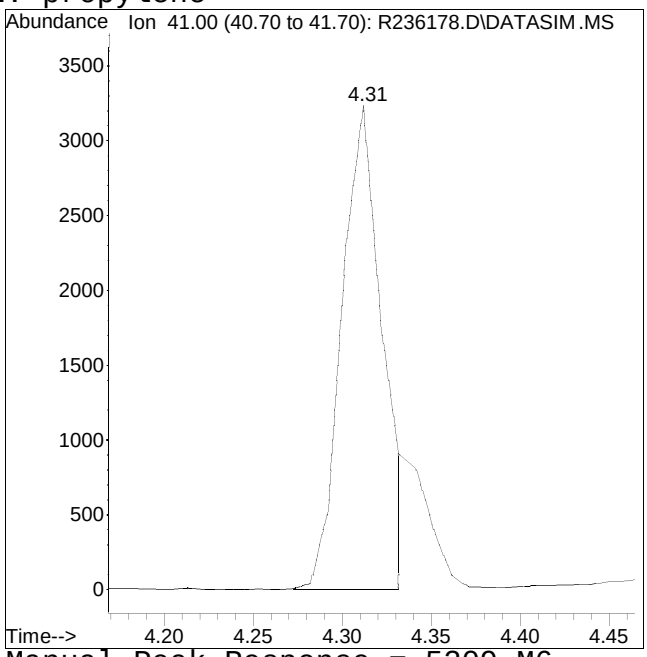
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236178.D
Date Inj'd : 9/2/2015 1:34 am
Sample : ITO15-SIMSTD0.5
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 6031



Manual Peak Response = 5209 M6

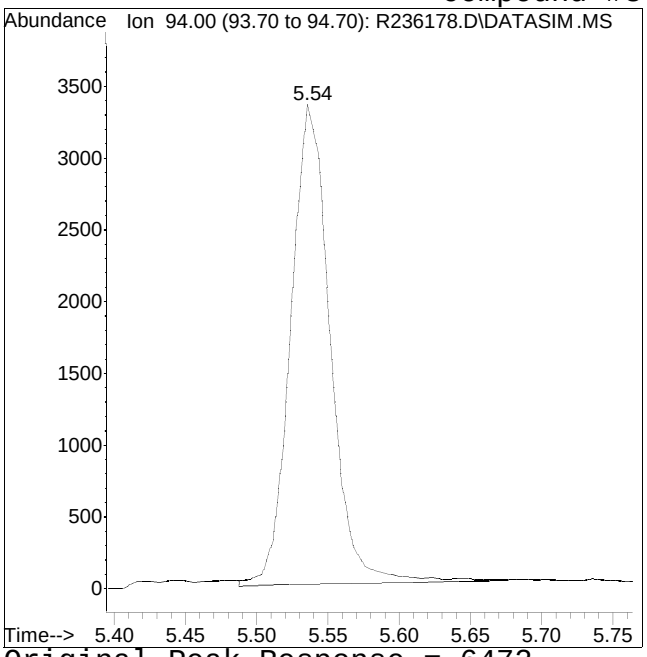
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

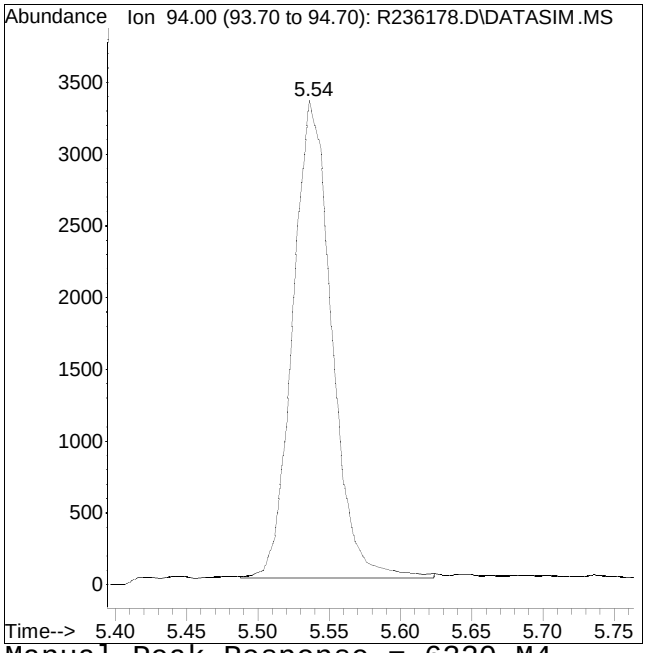
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236178.D
Date Inj'd : 9/2/2015 1:34 am
Sample : ITO15-SIMSTD0.5

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #8: bromomethane



Original Peak Response = 6472



Manual Peak Response = 6320 M4

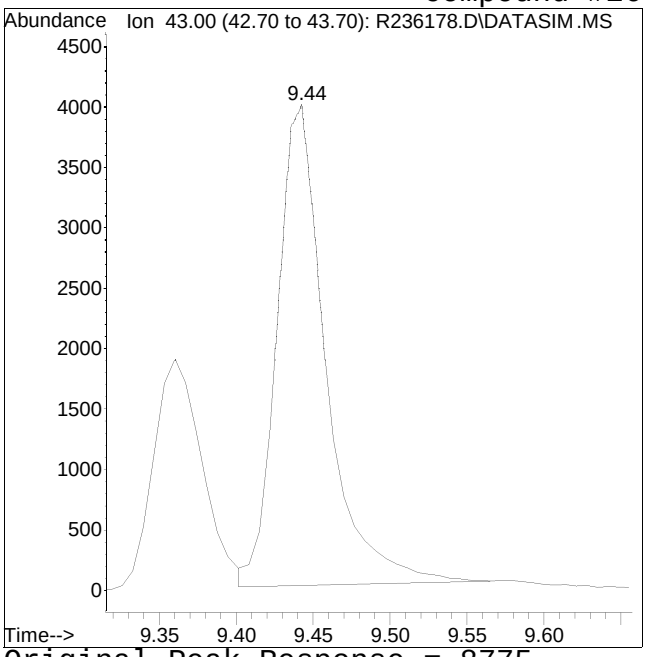
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

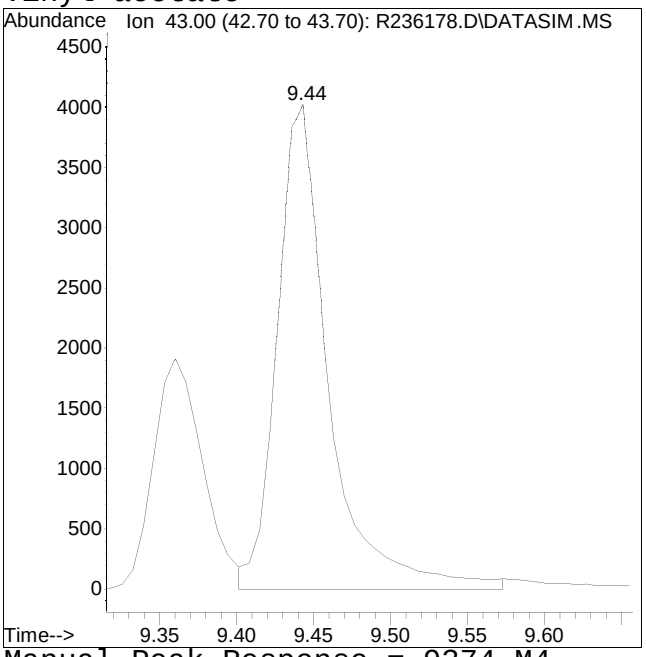
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236178.D
Date Inj'd : 9/2/2015 1:34 am
Sample : ITO15-SIMSTD0.5

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 8775



Manual Peak Response = 9374 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236179.D
Acq On : 2 Sep 2015 2:10 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD1.0
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:43:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	166375	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 99.48%			
33) 1,4-difluorobenzene	12.54	114	441014	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 99.28%			
51) chlorobenzene-D5	16.89	54	97425	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 100.19%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.23	65	153934	10.093	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.93%			
53) toluene-D8	15.23	98	477385	10.068	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.68%			
67) bromofluorobenzene	18.06	95	277904	9.816	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.16%			
Target Compounds						Qvalue
2) propylene	4.31	41	10255M6	1.128	ppbV	
3) dichlorodifluoromethane	4.41	85	31019	1.443	ppbV	100
4) chloromethane	4.64	50	13069	1.061	ppbV	99
5) Freon-114	4.79	85	37652	1.039	ppbV	99
6) vinyl chloride	4.95	62	14105	1.041	ppbV	100
7) 1,3-butadiene	5.16	54	9716	1.031	ppbV	82
8) bromomethane	5.54	94	12149	1.034	ppbV	98
9) chloroethane	5.78	64	6819	1.057	ppbV	98
10) ethanol	6.05	31	39440	4.956	ppbV	97
11) vinyl bromide	6.27	106	12570	1.040	ppbV	98
12) acetone	6.67	43	98578	5.222	ppbV #	99
13) trichlorofluoromethane	6.83	101	34815	1.044	ppbV	100
14) isopropyl alcohol	7.06	45	54274	2.597	ppbV	100
15) acrylonitrile	7.27	53	9998	1.093	ppbV	98
16) 1,1-dichloroethene	7.65	61	24237	1.056	ppbV	100
17) tertiary butyl alcohol	7.88	59	29742	1.059	ppbV	97
18) methylene chloride	7.82	49	23249	1.305	ppbV	97
19) 3-chloropropene	7.97	41	16371	1.023	ppbV	97
20) carbon disulfide	8.15	76	42636	1.044	ppbV	97
21) Freon 113	8.16	101	29254	1.055	ppbV	99
22) Halothane	8.74	117	22370	1.044	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	22905	1.043	ppbV	93
24) 1,1-dichloroethane	9.21	63	26589	1.038	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236179.D
Acq On : 2 Sep 2015 2:10 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD1.0
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:43:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.34	73	37230	1.044	ppbV		100
26) vinyl acetate	9.43	43	16655M4	0.922	ppbV		
27) 2-butanone	9.74	43	28830	1.013	ppbV		98
28) cis-1,2-dichloroethene	10.18	61	20670	1.046	ppbV	#	86
29) Ethyl Acetate	10.50	61	4514	1.037	ppbV		99
30) chloroform	10.53	83	30739	1.040	ppbV		99
31) Tetrahydrofuran	11.04	42	16845	1.138	ppbV		93
32) 1,2-dichloroethane	11.35	62	21099	1.033	ppbV		100
34) hexane	10.43	57	20177	1.046	ppbV	#	57
36) 1,1,1-trichloroethane	11.64	97	30538	1.038	ppbV		100
37) benzene	12.15	78	40921	1.039	ppbV		99
38) carbon tetrachloride	12.32	117	32260	1.030	ppbV		99
39) cyclohexane	12.46	56	21050	1.036	ppbV		100
40) dibromomethane	13.04	93	18226	1.038	ppbV		99
41) 1,2-dichloropropane	13.06	63	16511	1.038	ppbV		99
42) bromodichloromethane	13.29	83	35576	1.023	ppbV		100
43) 1,4-dioxane	13.39	88	9005	0.981	ppbV	#	80
44) trichloroethene	13.33	130	18920	1.037	ppbV		99
45) 2,2,4-trimethylpentane	13.36	57	67436	1.043	ppbV		99
46) heptane	13.65	43	24230	1.025	ppbV		100
47) cis-1,3-dichloropropene	14.29	75	91406	0.997	ppbV		99
48) 4-methyl-2-pentanone	14.37	43	34952	0.998	ppbV	#	86
49) trans-1,3-dichloropropene	14.86	75	29078	0.976	ppbV		97
50) 1,1,2-trichloroethane	15.05	97	22003	1.024	ppbV		96
52) toluene	15.32	91	68360	1.030	ppbV		100
54) 2-hexanone	15.59	43	45488	0.928	ppbV	#	93
55) dibromochloromethane	15.74	129	40224	0.989	ppbV		99
56) 1,2-dibromoethane	15.96	107	35479	1.007	ppbV		99
57) tetrachloroethene	16.36	166	30170	1.057	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.91	131	23625	1.040	ppbV		97
59) chlorobenzene	16.93	112	41822	1.035	ppbV		100
60) ethylbenzene	17.22	91	65171	1.018	ppbV		99
61) m+p-xylene	17.36	91	101642	2.015	ppbV		99
62) bromoform	17.44	173	30751	0.970	ppbV		100
63) styrene	17.64	104	36410	0.975	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.72	83	41161	1.000	ppbV		99
65) o-xylene	17.72	91	52408	1.009	ppbV		100
66) 1,2,3-trichloropropane	17.82	75	31656	0.980	ppbV		99
68) isopropylbenzene	18.16	105	68966	1.013	ppbV		99
69) bromobenzene	18.24	77	38093	0.992	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236179.D
Acq On : 2 Sep 2015 2:10 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD1.0
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:43:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.63	105	72700	0.957	ppbV		98
71) 1,3,5-trimethylbenzene	18.68	105	62082	1.014	ppbV		98
72) tert-butylbenzene	18.99	119	61588	0.988	ppbV		99
73) 1,2,4-trimethylbenzene	18.99	105	59238	0.963	ppbV		98
74) Benzyl Chloride	19.11	91	45387	0.813	ppbV		96
75) 1,3-dichlorobenzene	19.12	146	40408	0.911	ppbV		99
76) 1,4-dichlorobenzene	19.17	146	48906	1.025	ppbV		98
77) sec-butylbenzene	19.19	105	87496	0.975	ppbV		97
78) p-isopropyltoluene	19.30	119	74576	0.960	ppbV		98
79) 1,2-dichlorobenzene	19.43	146	42399	0.951	ppbV		98
80) n-butylbenzene	19.62	91	71673	0.930	ppbV		98
81) 1,2,4-trichlorobenzene	20.85	180	33709	0.831	ppbV	#	90
82) naphthalene	20.97	128	67742	0.797	ppbV		98
83) 1,2,3-trichlorobenzene	21.23	180	31191	0.800	ppbV	#	91
84) hexachlorobutadiene	21.28	225	30046	0.884	ppbV	#	83

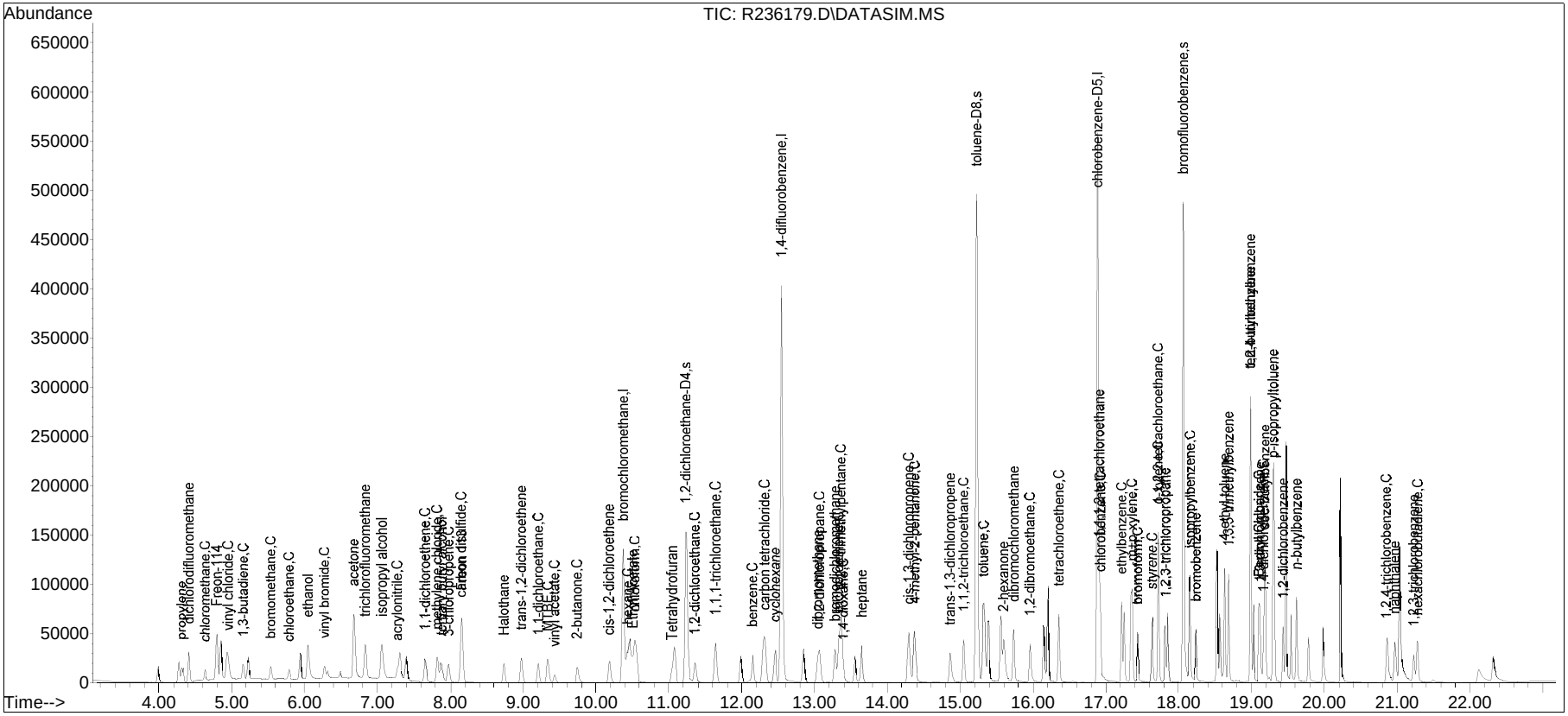
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236179.D
Acq On : 2 Sep 2015 2:10 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD1.0
Misc : WG817908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 02 12:43:07 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

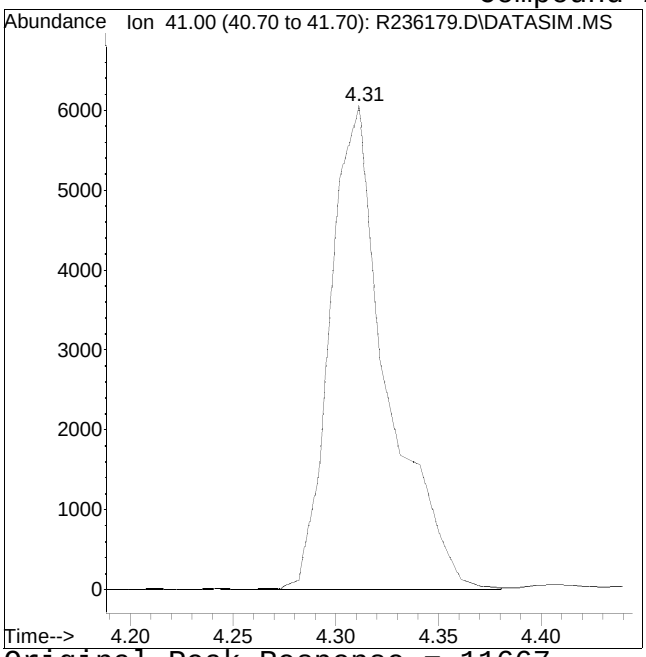
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



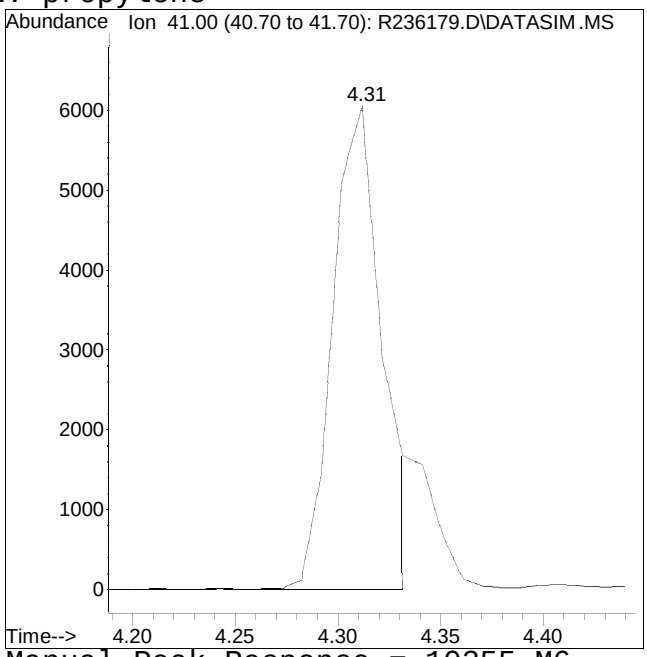
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236179.D
Date Inj'd : 9/2/2015 2:10 am
Sample : ITO15-SIMSTD1.0
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 11667



Manual Peak Response = 10255 M6

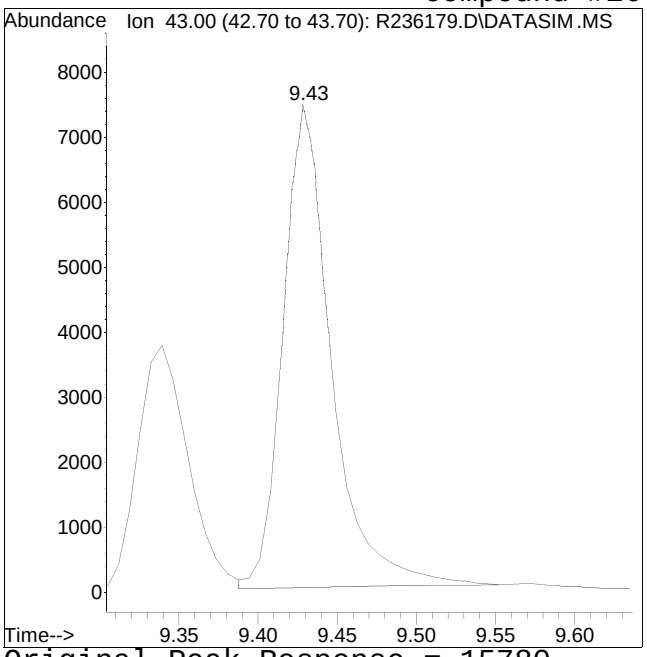
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

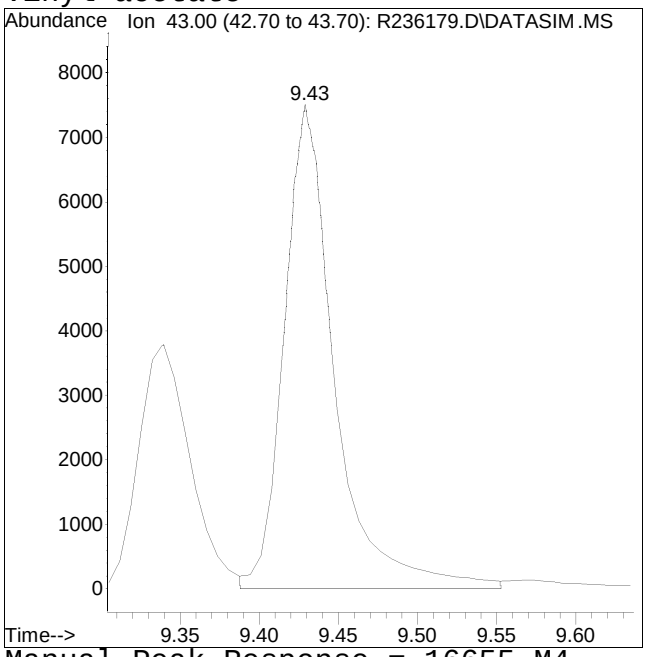
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236179.D
Date Inj'd : 9/2/2015 2:10 am
Sample : ITO15-SIMSTD1.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #26: vinyl acetate



Original Peak Response = 15780



Manual Peak Response = 16655 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236180.D
Acq On : 2 Sep 2015 2:44 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:29:43 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	167253	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 100.00%			
33) 1,4-difluorobenzene	12.54	114	444205	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 100.00%			
51) chlorobenzene-D5	16.89	54	97241	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 100.00%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.23	65	153618	10.000	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
53) toluene-D8	15.23	98	473265	10.000	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
67) bromofluorobenzene	18.06	95	282573	10.000	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
Target Compounds						Qvalue
2) propylene	4.30	41	45700M6	5.000	ppbV	
3) dichlorodifluoromethane	4.41	85	108059	5.000	ppbV	100
4) chloromethane	4.64	50	61896	5.000	ppbV	100
5) Freon-114	4.79	85	182129	5.000	ppbV	100
6) vinyl chloride	4.95	62	68120	5.000	ppbV	100
7) 1,3-butadiene	5.15	54	47307	4.996	ppbV	100
8) bromomethane	5.54	94	59031	5.000	ppbV	100
9) chloroethane	5.78	64	32413	5.000	ppbV	100
10) ethanol	6.01	31	199763	24.972	ppbV	100
11) vinyl bromide	6.26	106	60747	4.999	ppbV	100
12) acetone	6.63	43	474087	24.984	ppbV	100
13) trichlorofluoromethane	6.83	101	167555	5.000	ppbV	100
14) isopropyl alcohol	7.01	45	262288	12.486	ppbV	100
15) acrylonitrile	7.25	53	45976M6	5.000	ppbV	
16) 1,1-dichloroethene	7.65	61	115384	5.000	ppbV	100
17) tertiary butyl alcohol	7.81	59	141151	5.000	ppbV	100
18) methylene chloride	7.82	49	89550	5.000	ppbV	100
19) 3-chloropropene	7.97	41	80412	5.000	ppbV	100
20) carbon disulfide	8.15	76	205195	5.000	ppbV	100
21) Freon 113	8.16	101	139433	5.000	ppbV	100
22) Halothane	8.74	117	107654	5.000	ppbV	100
23) trans-1,2-dichloroethene	8.97	61	110370	4.997	ppbV	100
24) 1,1-dichloroethane	9.21	63	128794	5.000	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236180.D
Acq On : 2 Sep 2015 2:44 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:29:43 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.31	73	179306	4.999	ppbV	100
26) vinyl acetate	9.41	43	90762	5.000	ppbV	100
27) 2-butanone	9.70	43	142987	5.000	ppbV	100
28) cis-1,2-dichloroethene	10.19	61	99348	5.000	ppbV	100
29) Ethyl Acetate	10.47	61	21870	5.000	ppbV	100
30) chloroform	10.53	83	148512	5.000	ppbV	100
31) Tetrahydrofuran	11.00	42	74402M6	5.000	ppbV	
32) 1,2-dichloroethane	11.35	62	102663	5.000	ppbV	100
34) hexane	10.42	57	97130	4.999	ppbV	100
36) 1,1,1-trichloroethane	11.64	97	148197	5.000	ppbV	100
37) benzene	12.15	78	198386	5.000	ppbV	100
38) carbon tetrachloride	12.32	117	157706	5.000	ppbV	100
39) cyclohexane	12.46	56	102345	5.000	ppbV	100
40) dibromomethane	13.04	93	88412	5.000	ppbV	100
41) 1,2-dichloropropane	13.06	63	80101	5.000	ppbV	100
42) bromodichloromethane	13.29	83	175219	5.000	ppbV	100
43) 1,4-dioxane	13.35	88	46232	5.000	ppbV	100
44) trichloroethene	13.33	130	91908	5.000	ppbV	100
45) 2,2,4-trimethylpentane	13.36	57	325768	5.000	ppbV	100
46) heptane	13.65	43	119088	5.000	ppbV	100
47) cis-1,3-dichloropropene	14.29	75	461912	5.000	ppbV	100
48) 4-methyl-2-pentanone	14.32	43	176363	5.000	ppbV	100
49) trans-1,3-dichloropropene	14.86	75	150065	5.000	ppbV	100
50) 1,1,2-trichloroethane	15.05	97	108212	5.000	ppbV	100
52) toluene	15.32	91	331093	5.000	ppbV	100
54) 2-hexanone	15.56	43	244502	5.000	ppbV	100
55) dibromochloromethane	15.74	129	202909	5.000	ppbV	100
56) 1,2-dibromoethane	15.96	107	175906	5.000	ppbV	100
57) tetrachloroethene	16.36	166	142448	5.000	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.91	131	113397	5.000	ppbV	100
59) chlorobenzene	16.93	112	201576	5.000	ppbV	100
60) ethylbenzene	17.22	91	319402	5.000	ppbV	100
61) m+p-xylene	17.36	91	503477	10.000	ppbV	100
62) bromoform	17.44	173	158221	5.000	ppbV	100
63) styrene	17.64	104	186346	5.000	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.71	83	205355	5.000	ppbV	100
65) o-xylene	17.72	91	259248	5.000	ppbV	100
66) 1,2,3-trichloropropane	17.81	75	161281	5.000	ppbV	100
68) isopropylbenzene	18.15	105	339913	5.000	ppbV	100
69) bromobenzene	18.24	77	191691	5.000	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236180.D
Acq On : 2 Sep 2015 2:44 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:29:43 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.63	105	379064	5.000	ppbV	100
71) 1,3,5-trimethylbenzene	18.68	105	305504	5.000	ppbV	100
72) tert-butylbenzene	18.99	119	311170	5.000	ppbV	100
73) 1,2,4-trimethylbenzene	18.99	105	306888	5.000	ppbV	100
74) Benzyl Chloride	19.10	91	278521	5.000	ppbV	100
75) 1,3-dichlorobenzene	19.12	146	221324	5.000	ppbV	100
76) 1,4-dichlorobenzene	19.17	146	238070M3	5.000	ppbV	
77) sec-butylbenzene	19.18	105	447723	5.000	ppbV	100
78) p-isopropyltoluene	19.30	119	387779	5.000	ppbV	100
79) 1,2-dichlorobenzene	19.43	146	222387	5.000	ppbV	100
80) n-butylbenzene	19.61	91	384815	5.000	ppbV	100
81) 1,2,4-trichlorobenzene	20.85	180	202416	5.000	ppbV	100
82) naphthalene	20.97	128	424004	5.000	ppbV	100
83) 1,2,3-trichlorobenzene	21.21	180	194577	5.000	ppbV	100
84) hexachlorobutadiene	21.27	225	169582	5.000	ppbV	100

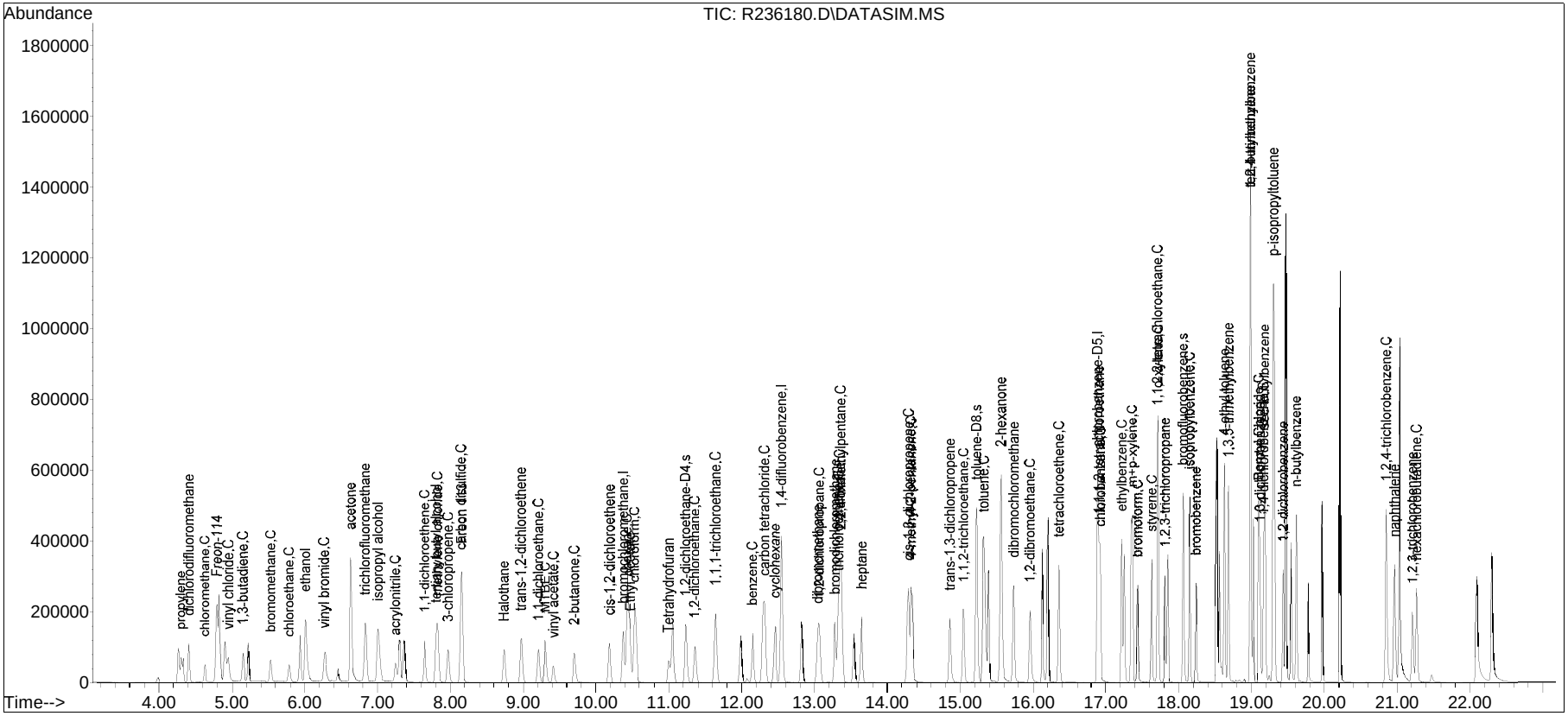
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236180.D
Acq On : 2 Sep 2015 2:44 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:29:43 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D

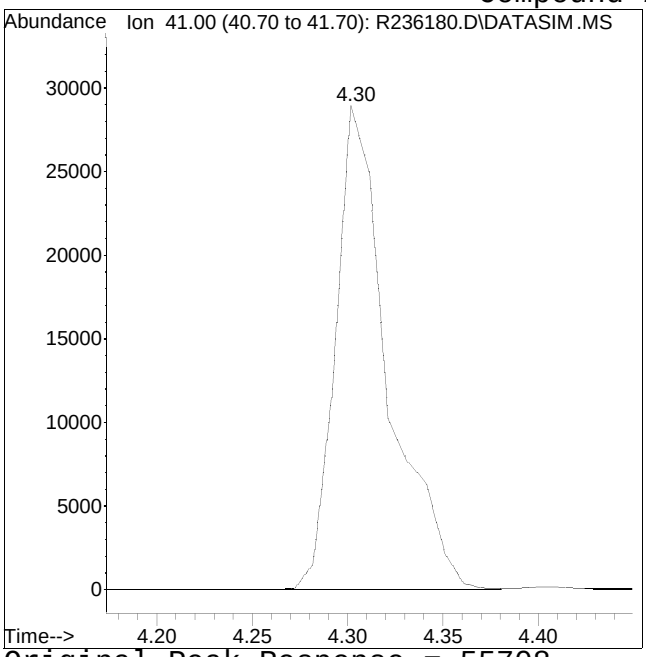


Manual Integration/Negative Proof Report

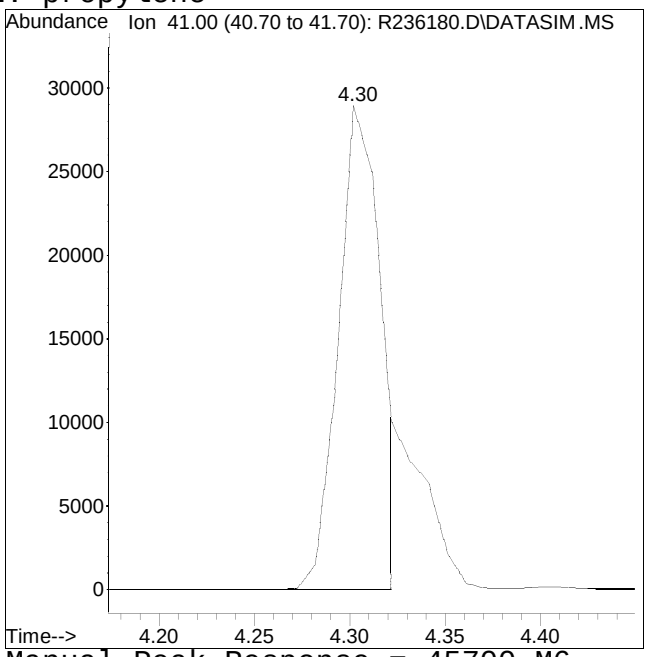
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236180.D
Date Inj'd : 9/2/2015 2:44 am
Sample : ITO15-SIMSTD5.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 55708



Manual Peak Response = 45700 M6

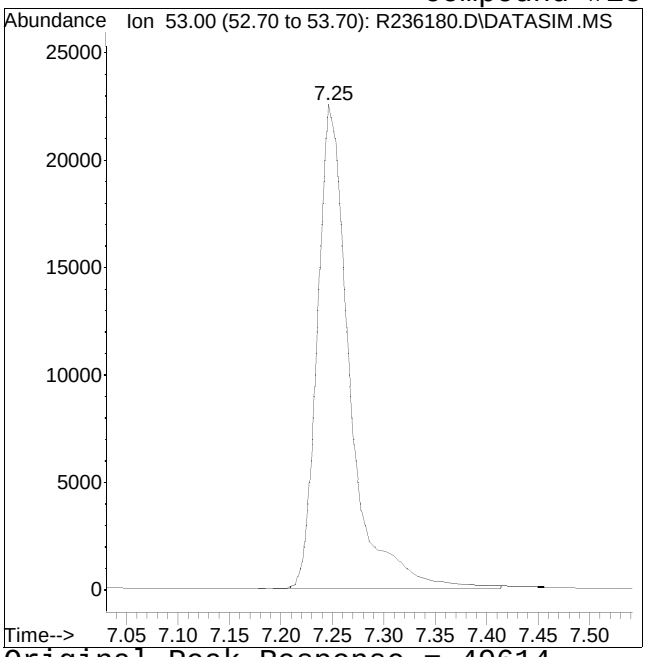
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

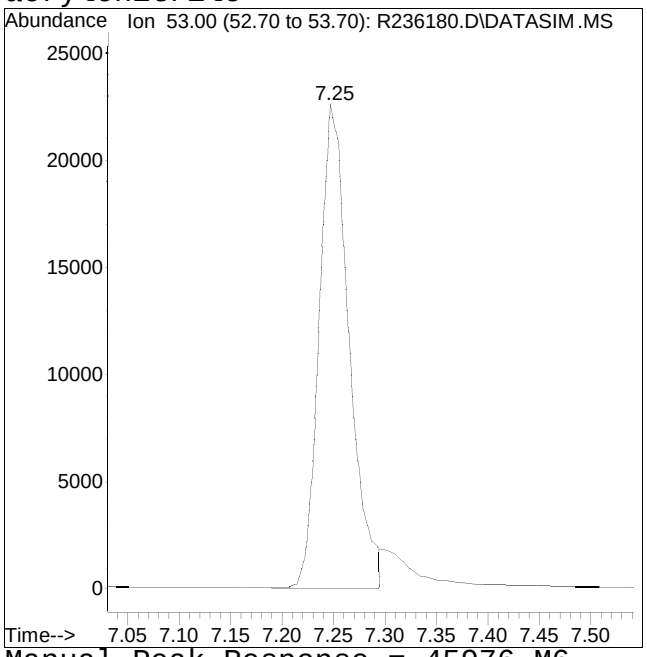
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236180.D
Date Inj'd : 9/2/2015 2:44 am
Sample : ITO15-SIMSTD5.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile



Original Peak Response = 49614



Manual Peak Response = 45976 M6

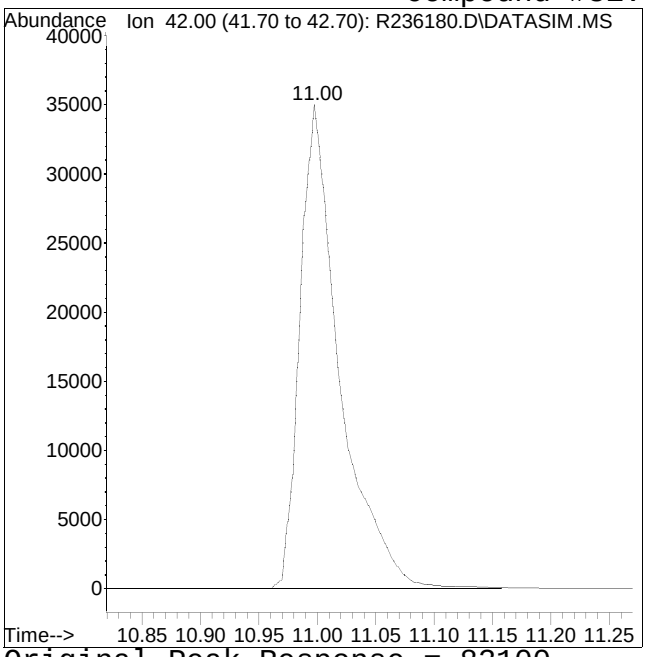
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

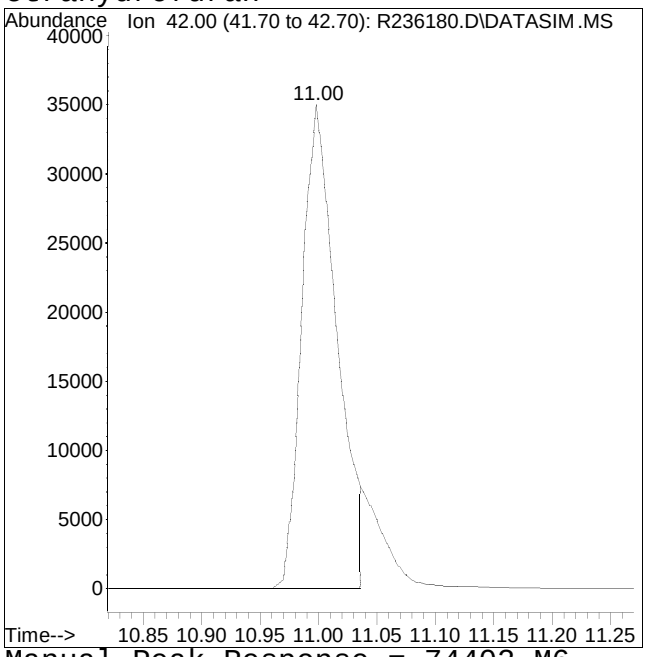
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236180.D
Date Inj'd : 9/2/2015 2:44 am
Sample : ITO15-SIMSTD5.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 83100



Manual Peak Response = 74402 M6

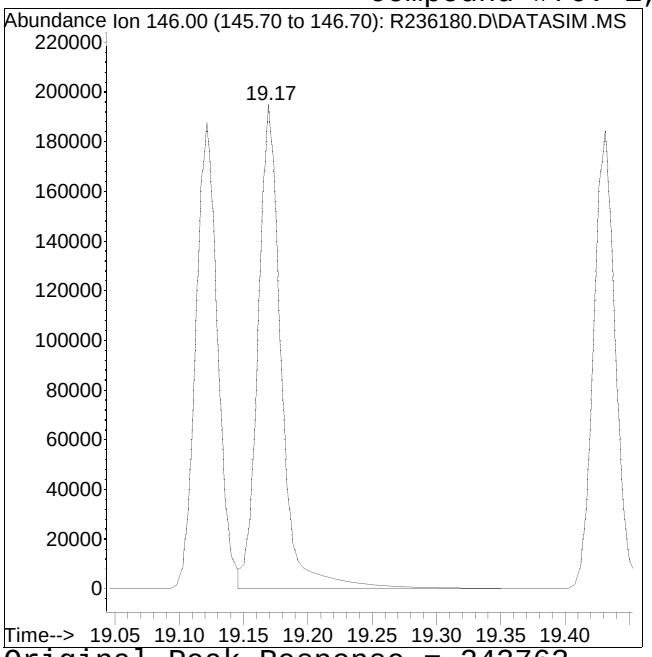
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

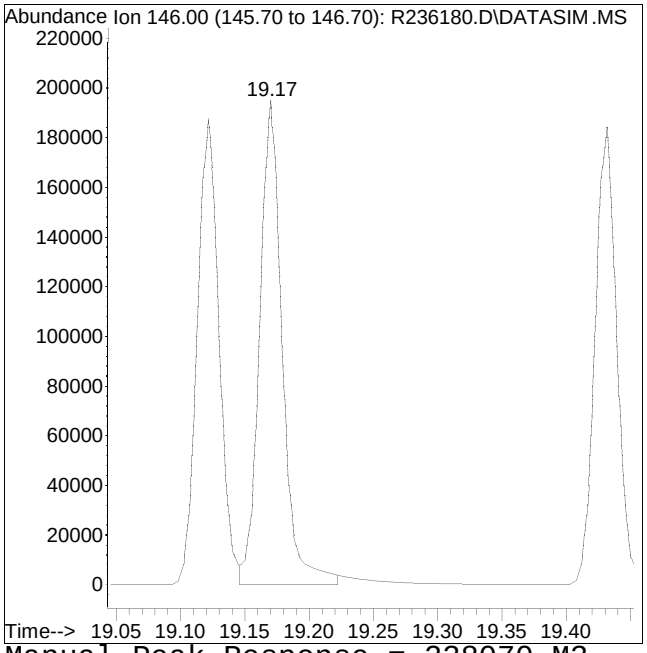
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236180.D
Date Inj'd : 9/2/2015 2:44 am
Sample : ITO15-SIMSTD5.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 243763



Manual Peak Response = 238070 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\AIR2\2015\150901SIM_ICAL\
Data File : R236181.D
Acq On : 2 Sep 2015 3:19 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD10.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:44:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	169769	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 101.50%			
33) 1,4-difluorobenzene	12.54	114	447935	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 100.84%			
51) chlorobenzene-D5	16.89	54	99067	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 101.88%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154352	9.964	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.64%			
53) toluene-D8	15.23	98	479029	9.935	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.35%			
67) bromofluorobenzene	18.06	95	286976	9.969	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.69%			
Target Compounds						Qvalue
2) propylene	4.30	41	98071M6	10.571	ppbV	
3) dichlorodifluoromethane	4.41	85	231948	10.573	ppbV	100
4) chloromethane	4.64	50	120887	9.621	ppbV	100
5) Freon-114	4.79	85	356770	9.649	ppbV	99
6) vinyl chloride	4.95	62	134420	9.720	ppbV	100
7) 1,3-butadiene	5.15	54	93342	9.711	ppbV	96
8) bromomethane	5.54	94	117431	9.799	ppbV	99
9) chloroethane	5.78	64	63867	9.706	ppbV	100
10) ethanol	6.01	31	392798	48.375	ppbV	98
11) vinyl bromide	6.27	106	118657	9.619	ppbV	99
12) acetone	6.62	43	931998	48.388	ppbV	99
13) trichlorofluoromethane	6.84	101	329745	9.693	ppbV	99
14) isopropyl alcohol	7.00	45	517733	24.281	ppbV	100
15) acrylonitrile	7.25	53	92689M6	9.931	ppbV	
16) 1,1-dichloroethene	7.65	61	227720	9.722	ppbV	99
17) tertiary butyl alcohol	7.79	59	277858	9.697	ppbV	100
18) methylene chloride	7.82	49	171774	9.449	ppbV	96
19) 3-chloropropene	7.97	41	159369	9.763	ppbV	99
20) carbon disulfide	8.15	76	405876	9.743	ppbV	99
21) Freon 113	8.16	101	274456	9.695	ppbV	100
22) Halothane	8.74	117	213694	9.778	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	219815	9.805	ppbV	93
24) 1,1-dichloroethane	9.21	63	254232	9.723	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236181.D
Acq On : 2 Sep 2015 3:19 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD10.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:44:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.30	73	355681	9.770	ppbV		97
26) vinyl acetate	9.41	43	203463	11.042	ppbV		99
27) 2-butanone	9.70	43	287080	9.890	ppbV		99
28) cis-1,2-dichloroethene	10.19	61	195969	9.717	ppbV		96
29) Ethyl Acetate	10.46	61	45102	10.159	ppbV		76
30) chloroform	10.53	83	292363	9.697	ppbV		98
31) Tetrahydrofuran	10.99	42	148361M6	9.822	ppbV		
32) 1,2-dichloroethane	11.35	62	201041	9.646	ppbV		99
34) hexane	10.43	57	192487	9.825	ppbV	#	64
36) 1,1,1-trichloroethane	11.64	97	287478	9.618	ppbV		98
37) benzene	12.15	78	393727	9.841	ppbV		98
38) carbon tetrachloride	12.32	117	311561	9.796	ppbV		99
39) cyclohexane	12.46	56	203074	9.838	ppbV		99
40) dibromomethane	13.04	93	172825	9.692	ppbV		99
41) 1,2-dichloropropane	13.06	63	158823	9.831	ppbV		100
42) bromodichloromethane	13.29	83	345523	9.778	ppbV		100
43) 1,4-dioxane	13.34	88	93958	10.077	ppbV		84
44) trichloroethene	13.33	130	182583	9.850	ppbV		99
45) 2,2,4-trimethylpentane	13.36	57	647209	9.851	ppbV		100
46) heptane	13.65	43	237229	9.877	ppbV		100
47) cis-1,3-dichloropropene	14.29	75	935535	10.042	ppbV		100
48) 4-methyl-2-pentanone	14.32	43	349810	9.835	ppbV	#	91
49) trans-1,3-dichloropropene	14.86	75	308526	10.194	ppbV		99
50) 1,1,2-trichloroethane	15.05	97	214970	9.850	ppbV		98
52) toluene	15.32	91	653346	9.685	ppbV		100
54) 2-hexanone	15.55	43	486583	9.767	ppbV		99
55) dibromochloromethane	15.74	129	401905	9.721	ppbV		100
56) 1,2-dibromoethane	15.96	107	350515	9.779	ppbV		100
57) tetrachloroethene	16.36	166	280905	9.678	ppbV		100
58) 1,1,1,2-tetrachloroethane	16.91	131	224633	9.722	ppbV		100
59) chlorobenzene	16.93	112	398669	9.707	ppbV		100
60) ethylbenzene	17.22	91	636373	9.778	ppbV		99
61) m+p-xylene	17.36	91	1006509	19.623	ppbV		99
62) bromoform	17.44	173	317248	9.841	ppbV		100
63) styrene	17.64	104	379227	9.988	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.71	83	403302	9.639	ppbV		100
65) o-xylene	17.72	91	516078	9.770	ppbV		100
66) 1,2,3-trichloropropane	17.81	75	319943	9.736	ppbV		100
68) isopropylbenzene	18.15	105	669239	9.663	ppbV		100
69) bromobenzene	18.24	77	384662	9.848	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236181.D
Acq On : 2 Sep 2015 3:19 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD10.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:44:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.63	105	756114	9.790	ppbV	100
71) 1,3,5-trimethylbenzene	18.68	105	609210	9.787	ppbV	100
72) tert-butylbenzene	18.99	119	594037	9.369	ppbV	100
73) 1,2,4-trimethylbenzene	18.99	105	593212	9.487	ppbV	99
74) Benzyl Chloride	19.10	91	578671	10.197	ppbV	98
75) 1,3-dichlorobenzene	19.12	146	441283	9.785	ppbV	99
76) 1,4-dichlorobenzene	19.17	146	470240	9.694	ppbV	100
77) sec-butylbenzene	19.18	105	870937	9.547	ppbV	99
78) p-isopropyltoluene	19.30	119	751651	9.513	ppbV	99
79) 1,2-dichlorobenzene	19.43	146	438955	9.687	ppbV	100
80) n-butylbenzene	19.61	91	763094	9.732	ppbV	99
81) 1,2,4-trichlorobenzene	20.85	180	403194	9.776	ppbV	99
82) naphthalene	20.97	128	869828	10.068	ppbV	100
83) 1,2,3-trichlorobenzene	21.21	180	394231	9.944	ppbV	97
84) hexachlorobutadiene	21.27	225	333005	9.637	ppbV	98

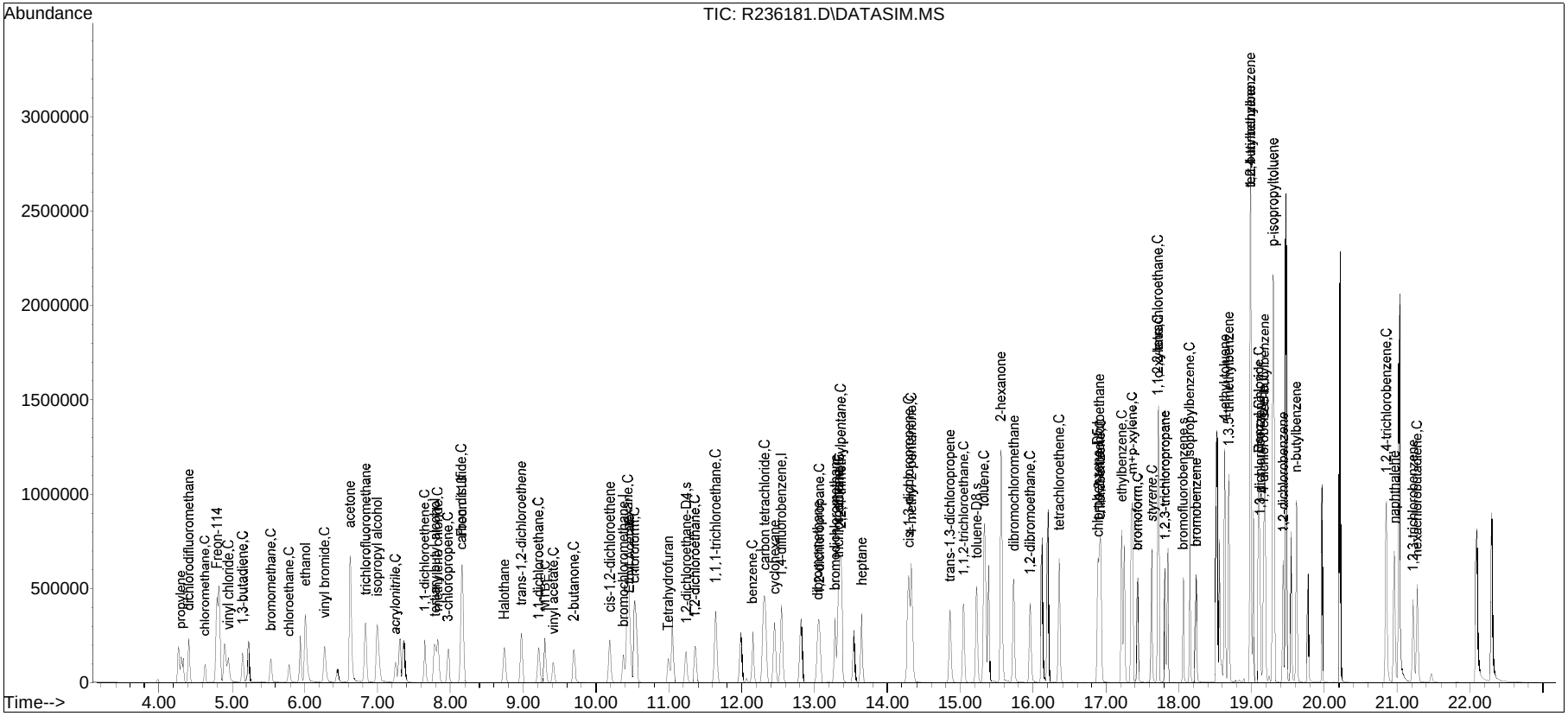
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236181.D
Acq On : 2 Sep 2015 3:19 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD10.0
Misc : WG817908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 02 12:44:10 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D

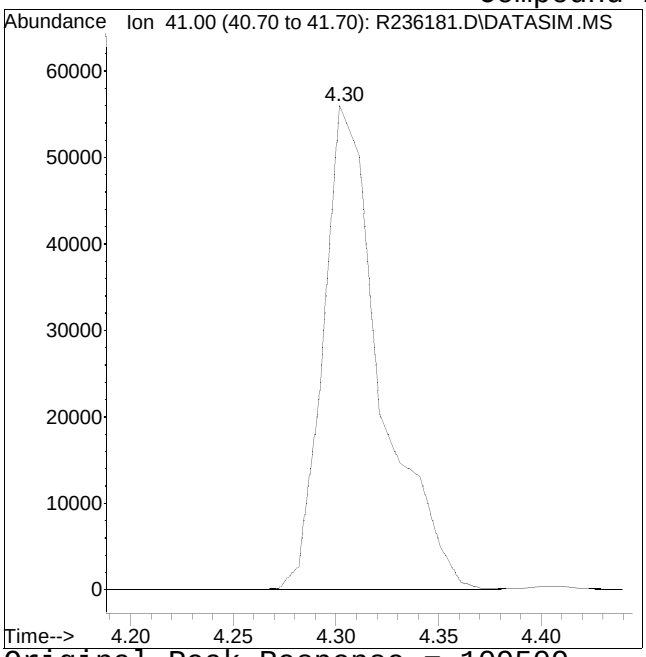


Manual Integration/Negative Proof Report

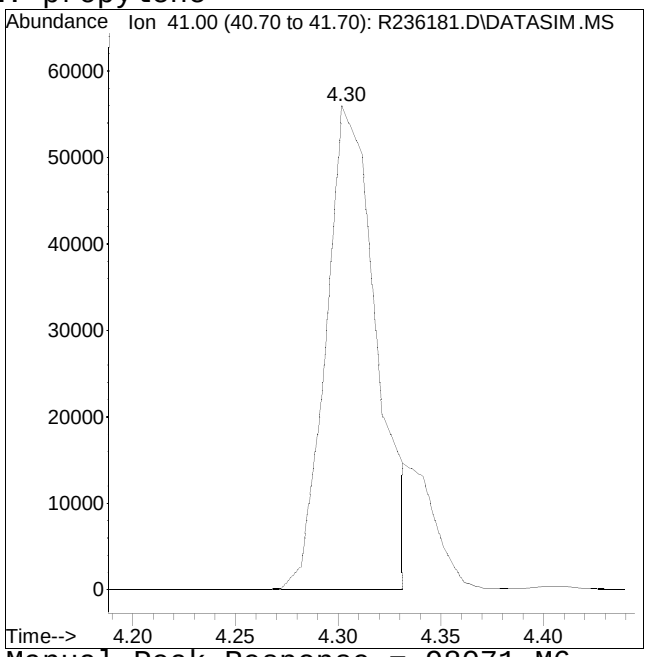
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236181.D
Date Inj'd : 9/2/2015 3:19 am
Sample : ITO15-SIMSTD10.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 109509



Manual Peak Response = 98071 M6

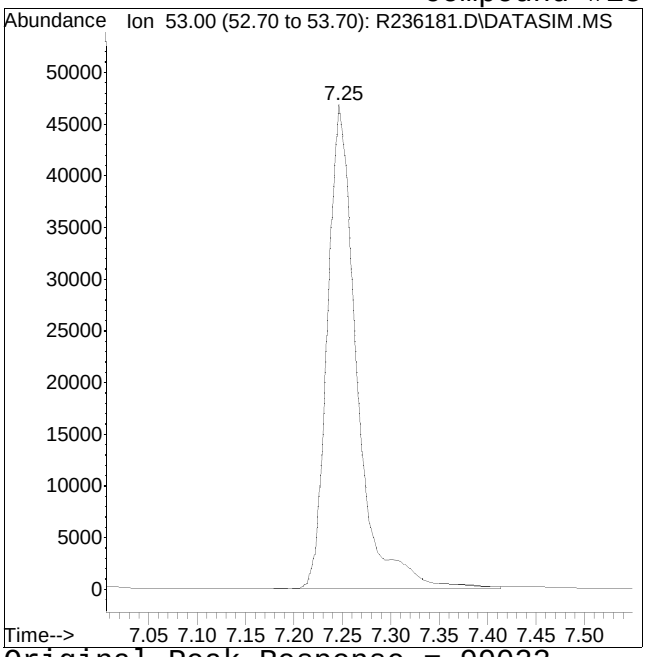
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

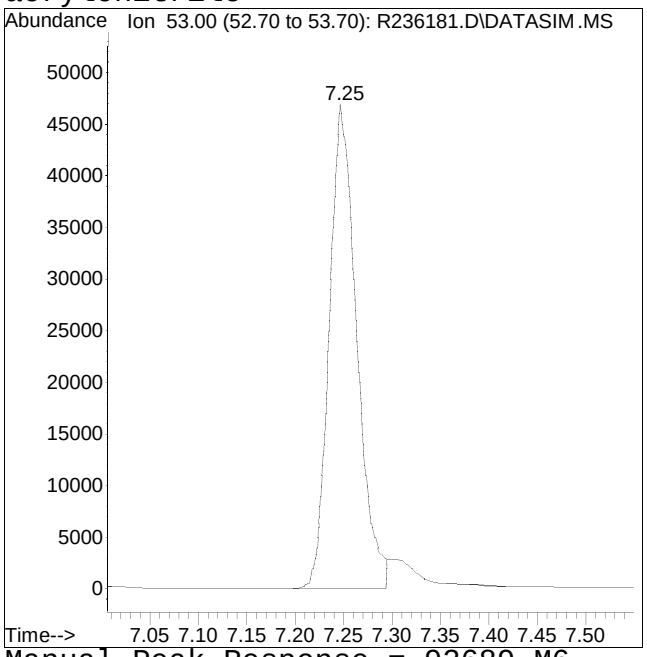
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236181.D
Date Inj'd : 9/2/2015 3:19 am
Sample : ITO15-SIMSTD10.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile



Original Peak Response = 99023



Manual Peak Response = 92689 M6

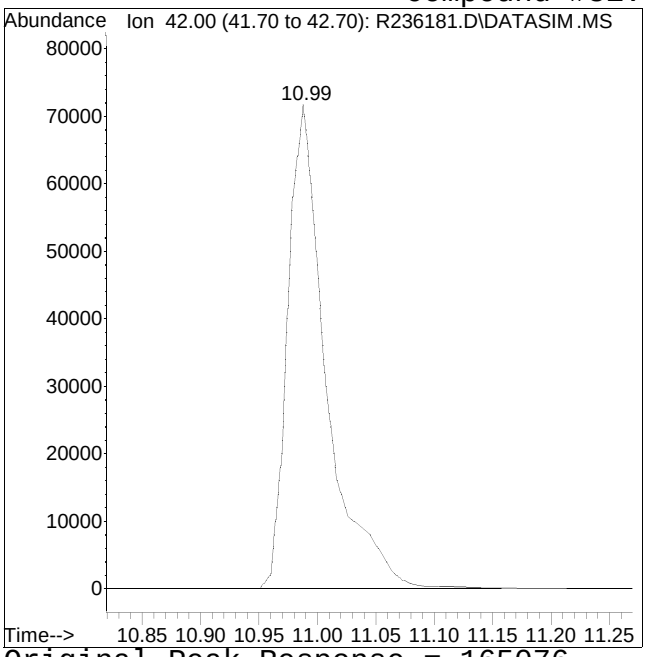
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

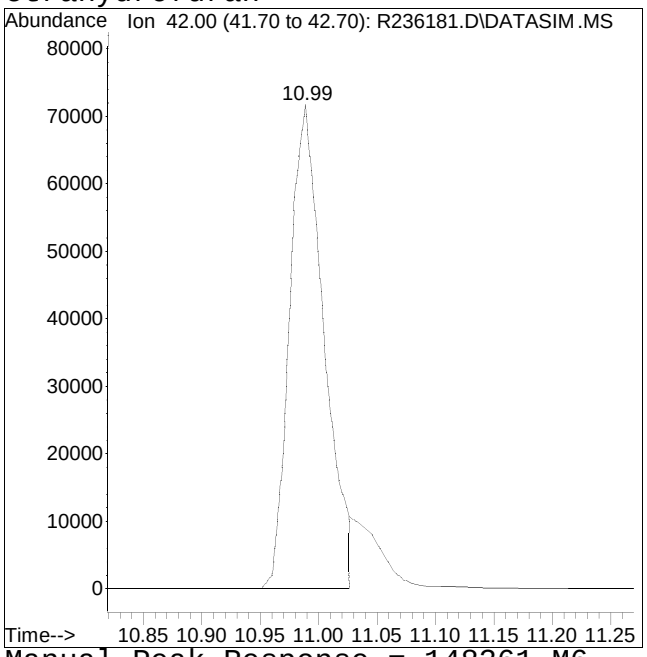
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236181.D
Date Inj'd : 9/2/2015 3:19 am
Sample : ITO15-SIMSTD10.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 165076



Manual Peak Response = 148361 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236182.D
Acq On : 2 Sep 2015 3:51 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD20.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:45:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	171800	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 102.72%			
33) 1,4-difluorobenzene	12.54	114	442320	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 99.58%			
51) chlorobenzene-D5	16.89	54	99297	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 102.11%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	153128	10.011	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.11%			
53) toluene-D8	15.23	98	482588	9.986	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.86%			
67) bromofluorobenzene	18.06	95	286507	9.929	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.29%			
Target Compounds						Qvalue
2) propylene	4.30	41	182287M6	19.416	ppbV	
3) dichlorodifluoromethane	4.41	85	494818	22.290	ppbV	100
4) chloromethane	4.64	50	242053	19.036	ppbV	99
5) Freon-114	4.79	85	702793	18.783	ppbV	100
6) vinyl chloride	4.95	62	269373	19.249	ppbV	100
7) 1,3-butadiene	5.15	54	184669	18.986	ppbV	98
8) bromomethane	5.54	94	238027	19.628	ppbV	99
9) chloroethane	5.78	64	129542	19.454	ppbV	99
10) ethanol	6.00	31	797261	97.026	ppbV	99
11) vinyl bromide	6.27	106	238130	19.076	ppbV	99
12) acetone	6.62	43	1824044	93.583	ppbV	95
13) trichlorofluoromethane	6.84	101	654312	19.007	ppbV	99
14) isopropyl alcohol	6.99	45	1028109	47.647	ppbV	100
15) acrylonitrile	7.25	53	190102M6	20.127	ppbV	
16) 1,1-dichloroethene	7.65	61	455630	19.222	ppbV	98
17) tertiary butyl alcohol	7.77	59	563854	19.445	ppbV	100
18) methylene chloride	7.82	49	340691	18.519	ppbV	94
19) 3-chloropropene	7.97	41	325616	19.711	ppbV	95
20) carbon disulfide	8.15	76	819246	19.434	ppbV	99
21) Freon 113	8.16	101	547458	19.111	ppbV	99
22) Halothane	8.74	117	422156	19.088	ppbV	100
23) trans-1,2-dichloroethene	8.98	61	442984	19.527	ppbV	94
24) 1,1-dichloroethane	9.21	63	511876	19.346	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236182.D
Acq On : 2 Sep 2015 3:51 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD20.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:45:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.30	73	711481	19.312	ppbV		98
26) vinyl acetate	9.41	43	487690	26.155	ppbV		99
27) 2-butanone	9.69	43	580392	19.758	ppbV		100
28) cis-1,2-dichloroethene	10.19	61	394163	19.312	ppbV		95
29) Ethyl Acetate	10.46	61	93065	20.714	ppbV		97
30) chloroform	10.54	83	586218	19.214	ppbV		98
31) Tetrahydrofuran	10.98	42	309341M6	20.238	ppbV		
32) 1,2-dichloroethane	11.35	62	403557	19.134	ppbV		99
34) hexane	10.43	57	387236	20.016	ppbV	#	53
36) 1,1,1-trichloroethane	11.64	97	575832	19.511	ppbV		96
37) benzene	12.16	78	781417	19.778	ppbV		96
38) carbon tetrachloride	12.32	117	619187	19.715	ppbV		98
39) cyclohexane	12.46	56	408391	20.037	ppbV		97
40) dibromomethane	13.04	93	346613	19.686	ppbV		100
41) 1,2-dichloropropane	13.06	63	322069	20.190	ppbV		99
42) bromodichloromethane	13.29	83	695531	19.932	ppbV		99
43) 1,4-dioxane	13.33	88	191498	20.799	ppbV	#	76
44) trichloroethene	13.34	130	359967	19.666	ppbV		95
45) 2,2,4-trimethylpentane	13.36	57	1301439	20.060	ppbV		99
46) heptane	13.65	43	478818	20.189	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	1905183	20.711	ppbV		99
48) 4-methyl-2-pentanone	14.32	43	706930	20.127	ppbV	#	83
49) trans-1,3-dichloropropene	14.86	75	635250	21.256	ppbV		99
50) 1,1,2-trichloroethane	15.05	97	431032	20.001	ppbV		97
52) toluene	15.32	91	1316306	19.467	ppbV		100
54) 2-hexanone	15.55	43	988036	19.787	ppbV		95
55) dibromochloromethane	15.74	129	812099	19.597	ppbV		100
56) 1,2-dibromoethane	15.96	107	710367	19.774	ppbV		100
57) tetrachloroethene	16.36	166	558049	19.182	ppbV		98
58) 1,1,1,2-tetrachloroethane	16.91	131	449016	19.388	ppbV		98
59) chlorobenzene	16.93	112	794331	19.295	ppbV		98
60) ethylbenzene	17.22	91	1260121	19.318	ppbV		100
61) m+p-xylene	17.36	91	1992333	38.752	ppbV		99
62) bromoform	17.44	173	635354	19.662	ppbV		100
63) styrene	17.64	104	759621	19.960	ppbV		100
64) 1,1,2,2-tetrachloroethane	17.71	83	802908	19.144	ppbV		100
65) o-xylene	17.72	91	1013320	19.139	ppbV		100
66) 1,2,3-trichloropropane	17.81	75	650731	19.756	ppbV		100
68) isopropylbenzene	18.15	105	1323257	19.062	ppbV		99
69) bromobenzene	18.24	77	773125	19.748	ppbV		98

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236182.D
Acq On : 2 Sep 2015 3:51 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD20.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:45:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.63	105	1471851	19.012	ppbV	99
71) 1,3,5-trimethylbenzene	18.68	105	1185910	19.007	ppbV	100
72) tert-butylbenzene	18.99	119	1136756	17.888	ppbV	99
73) 1,2,4-trimethylbenzene	18.99	105	1147402	18.307	ppbV	97
74) Benzyl Chloride	19.10	91	1203663	21.161	ppbV	98
75) 1,3-dichlorobenzene	19.12	146	868549	19.215	ppbV	97
76) 1,4-dichlorobenzene	19.17	146	907762	18.670	ppbV	98
77) sec-butylbenzene	19.18	105	1673350	18.300	ppbV	98
78) p-isopropyltoluene	19.30	119	1443320	18.225	ppbV	98
79) 1,2-dichlorobenzene	19.43	146	846751	18.644	ppbV	97
80) n-butylbenzene	19.61	91	1473875	18.754	ppbV	99
81) 1,2,4-trichlorobenzene	20.85	180	743438	17.984	ppbV	99
82) naphthalene	20.97	128	1591944	18.384	ppbV	99
83) 1,2,3-trichlorobenzene	21.21	180	716190	18.023	ppbV	95
84) hexachlorobutadiene	21.27	225	611890	17.668	ppbV	96

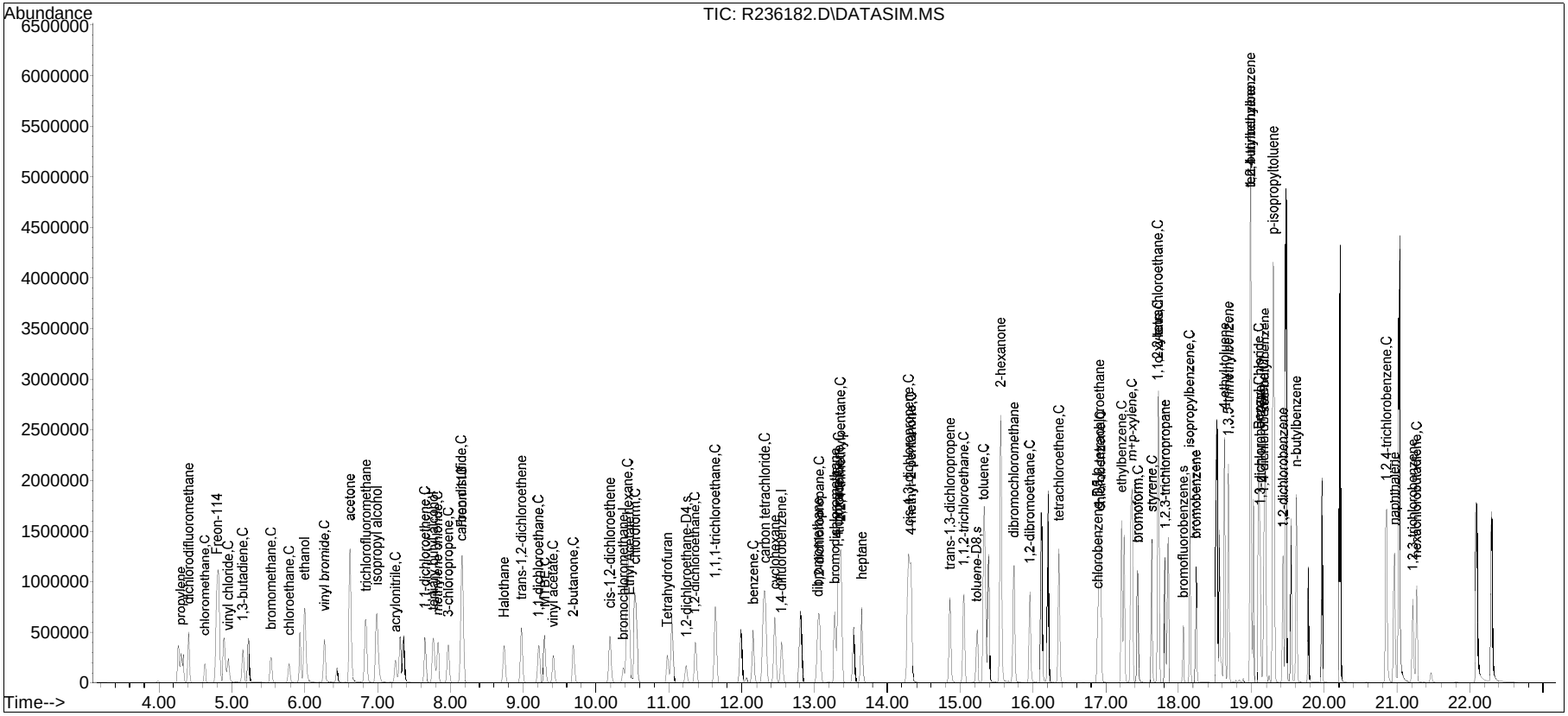
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236182.D
Acq On : 2 Sep 2015 3:51 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD20.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:45:08 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D

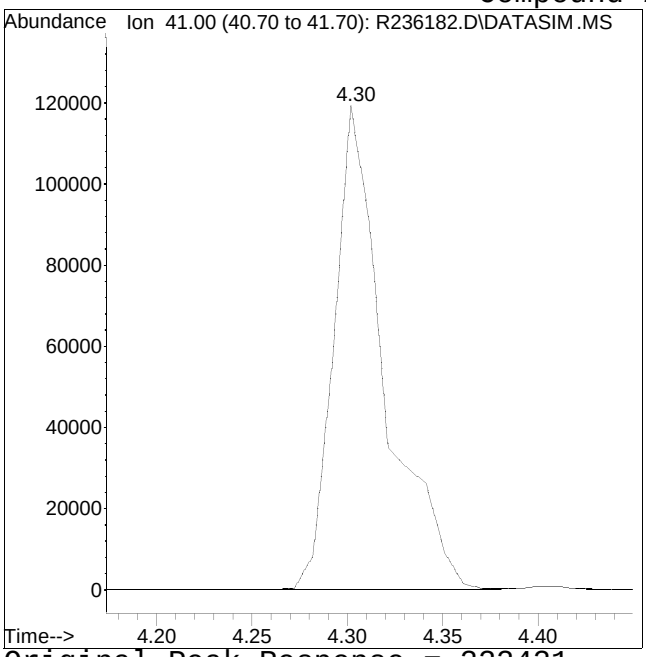


Manual Integration/Negative Proof Report

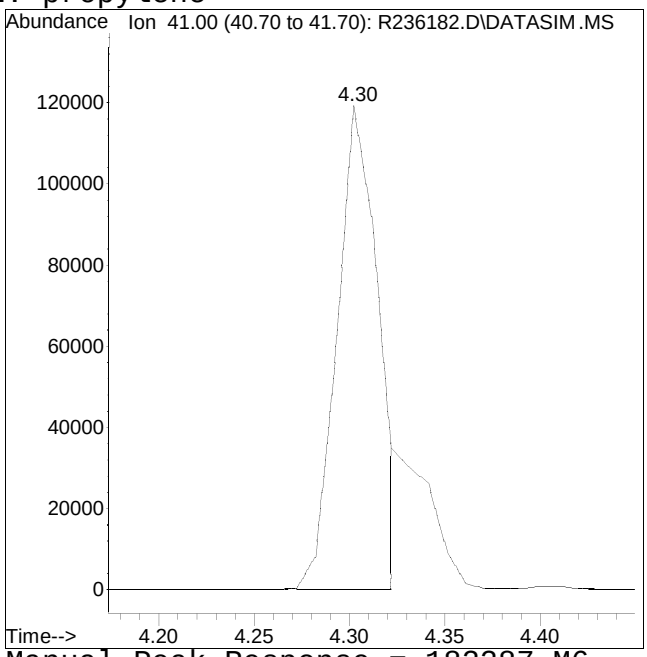
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236182.D
Date Inj'd : 9/2/2015 3:51 am
Sample : ITO15-SIMSTD20.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 222421



Manual Peak Response = 182287 M6

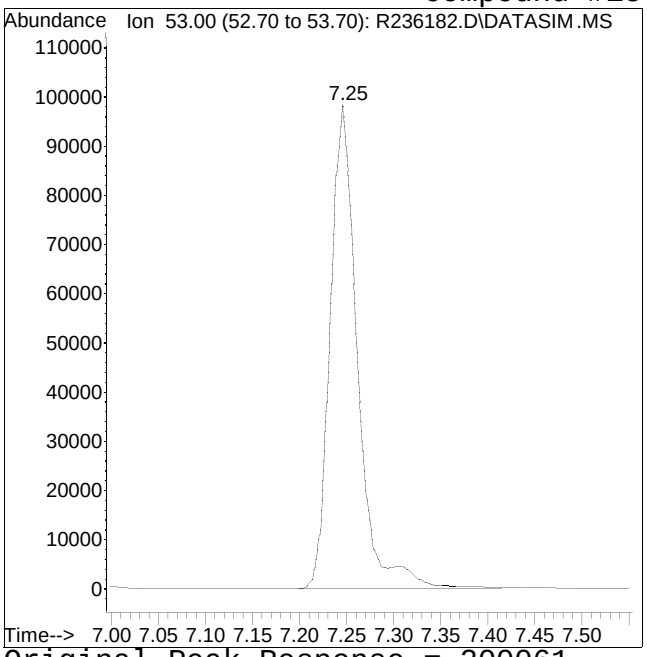
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

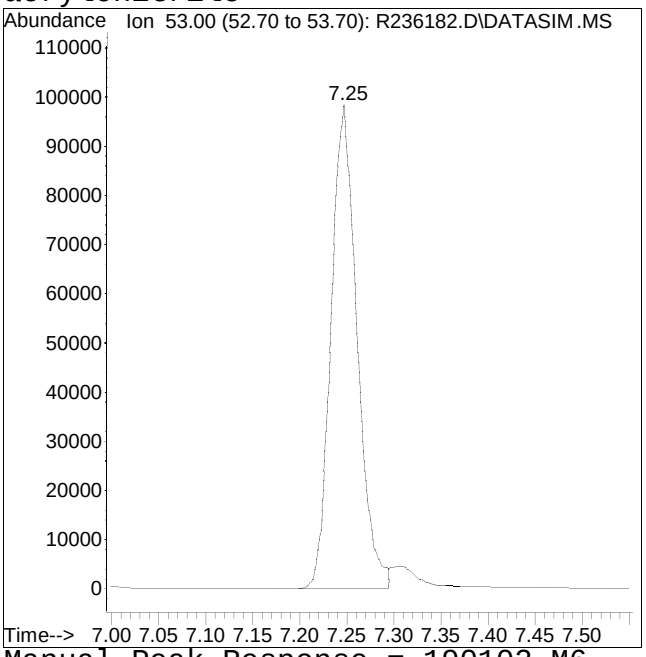
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236182.D
Date Inj'd : 9/2/2015 3:51 am
Sample : ITO15-SIMSTD20.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile



Original Peak Response = 200061



Manual Peak Response = 190102 M6

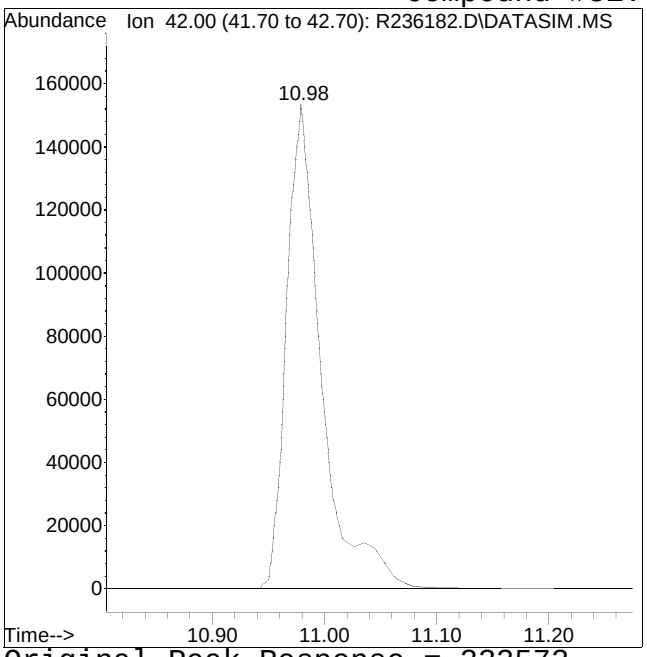
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

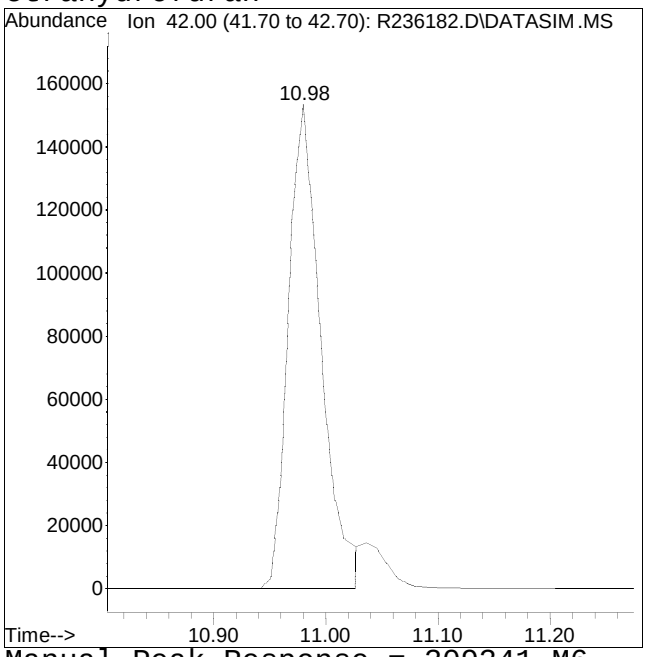
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236182.D
Date Inj'd : 9/2/2015 3:51 am
Sample : ITO15-SIMSTD20.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #31: Tetrahydrofuran



Original Peak Response = 333572



Manual Peak Response = 309341 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236183.D
Acq On : 2 Sep 2015 4:25 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD50.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:46:17 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	180232	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 107.76%			
33) 1,4-difluorobenzene	12.55	114	450324	10.000	ppbV	0.01
Standard Area = 444205			Recovery = 101.38%			
51) chlorobenzene-D5	16.89	54	99711	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 102.54%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.24	65	154566	9.925	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.25%			
53) toluene-D8	15.23	98	480707	9.906	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.06%			
67) bromofluorobenzene	18.06	95	292009	10.078	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.78%			
Target Compounds						Qvalue
2) propylene	4.30	41	439380M6	44.610	ppbV	
3) dichlorodifluoromethane	4.41	85	1265193	54.326	ppbV	100
4) chloromethane	4.64	50	586320	43.953	ppbV	100
5) Freon-114	4.79	85	1651495	42.074	ppbV	99
6) vinyl chloride	4.95	62	654797	44.601	ppbV	100
7) 1,3-butadiene	5.15	54	449503	44.051	ppbV	100
8) bromomethane	5.54	94	568017	44.647	ppbV	99
9) chloroethane	5.78	64	311843	44.640	ppbV	99
10) ethanol	6.02	31	1906427	221.156	ppbV	96
11) vinyl bromide	6.27	106	567270	43.316	ppbV	99
12) acetone	6.62	43	4139436	202.439	ppbV	96
13) trichlorofluoromethane	6.84	101	1550644	42.937	ppbV	99
14) isopropyl alcohol	7.00	45	2443845	107.959	ppbV	99
15) acrylonitrile	7.25	53	467689M6	47.200	ppbV	
16) 1,1-dichloroethene	7.66	61	1107720	44.545	ppbV	98
17) tertiary butyl alcohol	7.77	59	1387068	45.596	ppbV	97
18) methylene chloride	7.83	49	815681	42.264	ppbV	98
19) 3-chloropropene	7.97	41	805321	46.469	ppbV	96
20) carbon disulfide	8.16	76	1989973	44.998	ppbV	96
21) Freon 113	8.17	101	1309505	43.574	ppbV	100
22) Halothane	8.75	117	1018072	43.879	ppbV	99
23) trans-1,2-dichloroethene	8.98	61	1081295	45.434	ppbV	97
24) 1,1-dichloroethane	9.22	63	1245073	44.855	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236183.D
Acq On : 2 Sep 2015 4:25 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD50.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:46:17 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.29	73	1736696	44.935	ppbV		99
26) vinyl acetate	9.41	43	1370176	70.046	ppbV		99
27) 2-butanone	9.69	43	1423366	46.188	ppbV		99
28) cis-1,2-dichloroethene	10.19	61	958296	44.756	ppbV		90
29) Ethyl Acetate	10.46	61	230475	48.898	ppbV		94
30) chloroform	10.54	83	1401944	43.801	ppbV		99
31) Tetrahydrofuran	10.98	42	760334	47.417	ppbV		92
32) 1,2-dichloroethane	11.36	62	972388	43.948	ppbV		99
34) hexane	10.43	57	927253	47.078	ppbV	#	64
36) 1,1,1-trichloroethane	11.64	97	1386463	46.142	ppbV		93
37) benzene	12.16	78	1892556	47.051	ppbV		99
38) carbon tetrachloride	12.33	117	1477325	46.202	ppbV		99
39) cyclohexane	12.46	56	996671	48.030	ppbV		95
40) dibromomethane	13.04	93	830728	46.342	ppbV		100
41) 1,2-dichloropropane	13.07	63	783408	48.237	ppbV		97
42) bromodichloromethane	13.29	83	1650204	46.450	ppbV		97
43) 1,4-dioxane	13.33	88	468644	49.995	ppbV	#	71
44) trichloroethene	13.34	130	844370	45.311	ppbV		98
45) 2,2,4-trimethylpentane	13.36	57	3112357	47.120	ppbV		97
46) heptane	13.65	43	1169487	48.435	ppbV		98
47) cis-1,3-dichloropropene	14.29	75	4653175	49.684	ppbV		98
48) 4-methyl-2-pentanone	14.32	43	1702366	47.607	ppbV	#	81
49) trans-1,3-dichloropropene	14.86	75	1555951	51.138	ppbV		98
50) 1,1,2-trichloroethane	15.05	97	1034475	47.149	ppbV		92
52) toluene	15.33	91	3096083	45.597	ppbV		99
54) 2-hexanone	15.55	43	2331805	46.504	ppbV		96
55) dibromochloromethane	15.74	129	1911282	45.930	ppbV		99
56) 1,2-dibromoethane	15.96	107	1681660	46.616	ppbV		98
57) tetrachloroethene	16.36	166	1308338	44.786	ppbV		95
58) 1,1,1,2-tetrachloroethane	16.91	131	1026492	44.140	ppbV		100
59) chlorobenzene	16.93	112	1828838	44.240	ppbV		98
60) ethylbenzene	17.22	91	2893803	44.178	ppbV		100
61) m+p-xylene	17.36	91	4473990	86.661	ppbV		100
62) bromoform	17.44	173	1468584	45.260	ppbV		99
63) styrene	17.64	104	1756483	45.962	ppbV		96
64) 1,1,2,2-tetrachloroethane	17.72	83	1837770	43.638	ppbV		100
65) o-xylene	17.72	91	2181876	41.038	ppbV		98
66) 1,2,3-trichloropropane	17.82	75	1542372	46.632	ppbV		99
68) isopropylbenzene	18.16	105	2916296	41.835	ppbV		96
69) bromobenzene	18.24	77	1805037	45.916	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236183.D
Acq On : 2 Sep 2015 4:25 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD50.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:46:17 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
70) 4-ethyl toluene	18.63	105	3245032	41.743	ppbV		98
71) 1,3,5-trimethylbenzene	18.68	105	2645069	42.218	ppbV		99
72) tert-butylbenzene	18.99	119	2354217	36.891	ppbV		95
73) 1,2,4-trimethylbenzene	18.99	105	2370217	37.660	ppbV		99
74) Benzyl Chloride	19.11	91	2766870	48.440	ppbV		93
75) 1,3-dichlorobenzene	19.13	146	1977721	43.573	ppbV		98
76) 1,4-dichlorobenzene	19.17	146	2008479	41.138	ppbV		99
77) sec-butylbenzene	19.19	105	3516029	38.293	ppbV		93
78) p-isopropyltoluene	19.30	119	3025994	38.050	ppbV		97
79) 1,2-dichlorobenzene	19.44	146	1959159	42.957	ppbV		97
80) n-butylbenzene	19.62	91	3220595	40.809	ppbV		92
81) 1,2,4-trichlorobenzene	20.85	180	1689579	40.701	ppbV		97
82) naphthalene	20.97	128	3693970	42.481	ppbV	#	95
83) 1,2,3-trichlorobenzene	21.21	180	1734699	43.472	ppbV		98
84) hexachlorobutadiene	21.27	225	1445807	41.573	ppbV		95

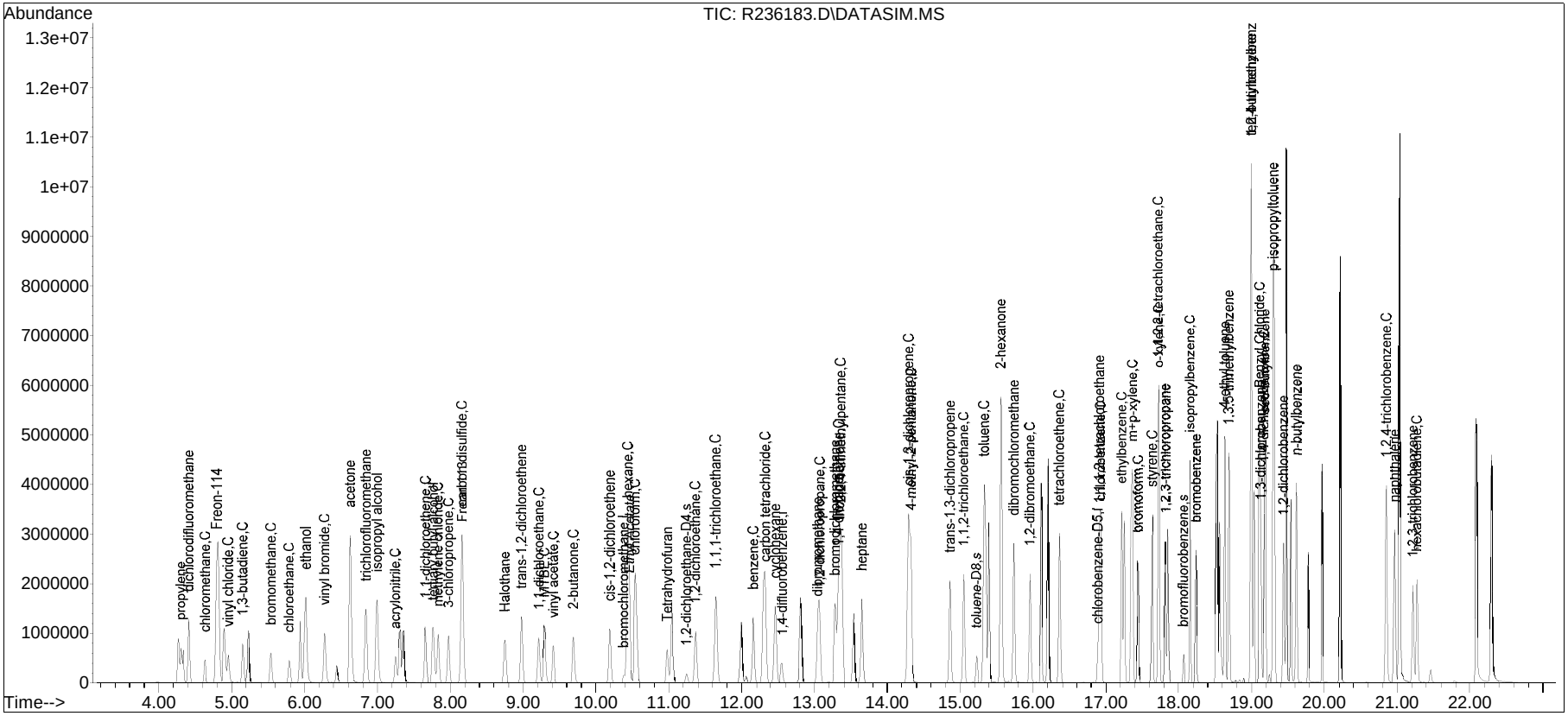
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236183.D
Acq On : 2 Sep 2015 4:25 am
Operator : AIRPIANO2:RY
Sample : ITO15-SIMSTD50.0
Misc : WG817908
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 02 12:46:17 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:26:01 2015
Response via : Initial Calibration

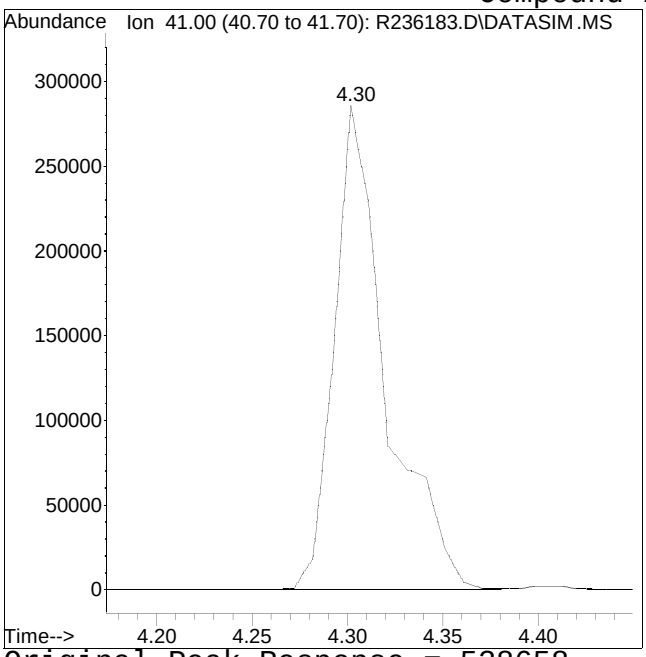
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



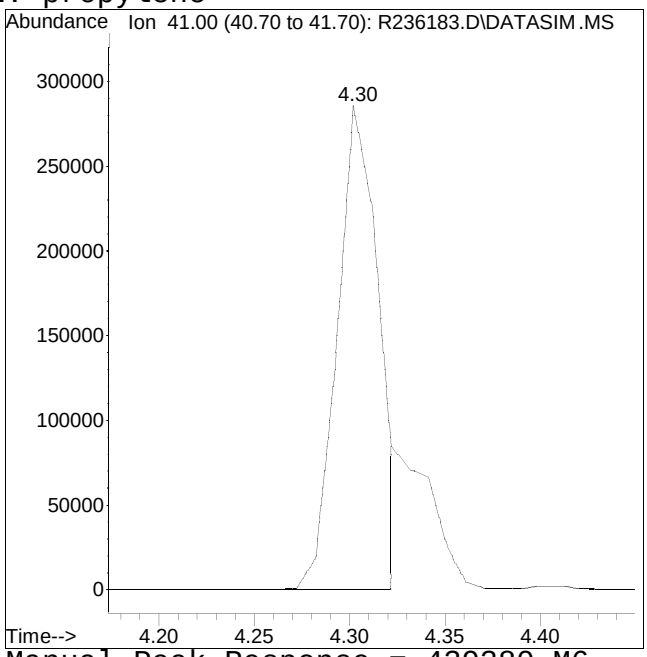
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236183.D
Date Inj'd : 9/2/2015 4:25 am
Sample : ITO15-SIMSTD50.0
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #2: propylene



Original Peak Response = 538658



Manual Peak Response = 439380 M6

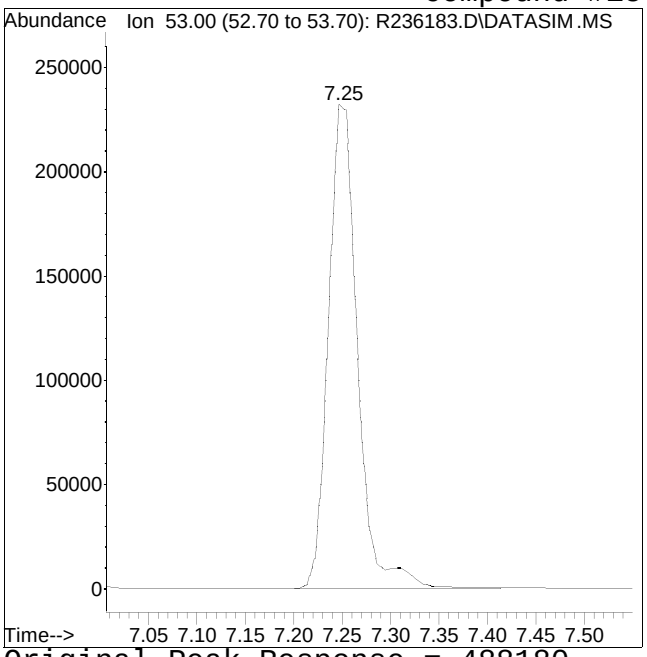
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

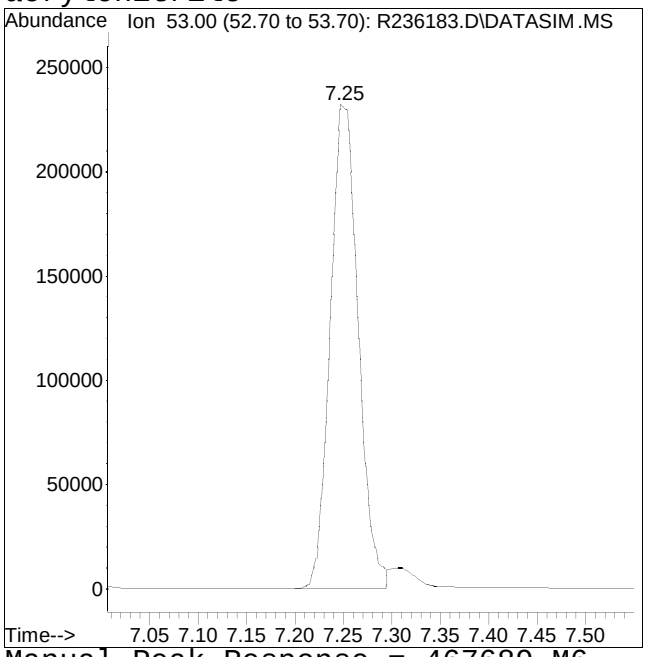
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236183.D
Date Inj'd : 9/2/2015 4:25 am
Sample : ITO15-SIMSTD50.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:29 pm

Compound #15: acrylonitrile



Original Peak Response = 488180



Manual Peak Response = 467689 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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	0.586	0.620	-5.8	117	0.00
3		dichlorodifluoromethane	1.343	0.946	29.6	76	0.00
4	C	chloromethane	0.806	0.732	9.2	102	0.00
5		Freon-114	2.198	2.151	2.1	102	0.00
6	C	vinyl chloride	0.825	0.808	2.1	102	0.00
7	C	1,3-butadiene	0.563	0.596	-5.9	109	0.00
8	C	bromomethane	0.718	0.706	1.7	103	0.00
9	C	chloroethane	0.461	0.388	15.8	103	0.00
10		ethanol	0.486	0.449	7.6	97	0.00
11	C	vinyl bromide	0.742	0.713	3.9	101	0.00
12		acetone	1.145	1.114	2.7	101	0.00
13		trichlorofluoromethane	2.021	2.004	0.8	103	0.00
14		isopropyl alcohol	1.241	1.309	-5.5	108	0.00
15	C	acrylonitrile	0.597	0.518	13.2	97	0.00
16	C	1,1-dichloroethene	1.386	1.395	-0.6	104	0.00
17		tertiary butyl alcohol	1.833	1.610	12.2	98	0.00
18	C	methylene chloride	1.188	1.081	9.0	104	0.00
19	C	3-chloropropene	1.132	1.033	8.7	111	0.00
20	C	carbon disulfide	2.496	2.416	3.2	102	0.00
21		Freon 113	1.688	1.691	-0.2	105	0.00
22		Halothane	1.294	1.180	8.8	95	0.00
23		trans-1,2-dichloroethene	1.326	1.218	8.1	95	0.00
24	C	1,1-dichloroethane	1.540	1.549	-0.6	104	0.00
25	C	MTBE	2.154	2.184	-1.4	105	0.00
26	C	vinyl acetate	1.231	1.459	-18.5	139	0.00
27	C	2-butanone	1.709	1.710	-0.1	103	0.00
28		cis-1,2-dichloroethene	1.196	1.315	-9.9	114	0.00
29		Ethyl Acetate	0.269	0.259	3.7	102	0.00
30	C	chloroform	1.768	1.810	-2.4	105	0.00
31		Tetrahydrofuran	0.951	0.974	-2.4	113	0.00
32	C	1,2-dichloroethane	1.231	1.221	0.8	103	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00
34	C	hexane	0.452	0.436	3.5	104	0.00
35	s	1,2-dichloroethane-D4	0.344	0.343	0.3	104	0.00
36	C	1,1,1-trichloroethane	0.675	0.666	1.3	105	0.00
37	C	benzene	0.921	0.884	4.0	104	0.00
38	C	carbon tetrachloride	0.708	0.709	-0.1	105	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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	0.473	0.461	2.5	105	0.00
40		dibromomethane	0.439	0.365	16.9	96	0.00
41	C	1,2-dichloropropane	0.370	0.362	2.2	105	0.00
42		bromodichloromethane	0.786	0.787	-0.1	105	0.00
43	C	1,4-dioxane	0.211	0.208	1.4	105	0.00
44	C	trichloroethene	0.417	0.417	0.0	106	0.00
45	C	2,2,4-trimethylpentane	1.464	1.462	0.1	105	0.00
46		heptane	0.543	0.529	2.6	103	0.00
47	C	cis-1,3-dichloropropene	2.040	2.215	-8.6	112	0.00
48	C	4-methyl-2-pentanone	0.776	0.783	-0.9	103	0.00
49		trans-1,3-dichloropropene	0.657	0.614	6.5	95	0.00
50	C	1,1,2-trichloroethane	0.485	0.494	-1.9	106	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	104	0.00
52	C	toluene	6.928	6.826	1.5	105	0.00
53	s	toluene-D8	4.869	4.882	-0.3	105	0.00
54		2-hexanone	4.486	4.907	-9.4	102	0.00
55		dibromochloromethane	4.047	4.108	-1.5	103	0.00
56	C	1,2-dibromoethane	3.559	3.647	-2.5	105	0.00
57	C	tetrachloroethene	3.192	2.930	8.2	104	0.00
58		1,1,1,2-tetrachloroethane	2.321	2.187	5.8	98	0.00
59	C	chlorobenzene	4.128	4.213	-2.1	106	0.00
60	C	ethylbenzene	6.446	6.650	-3.2	106	0.00
61	C	m+p-xylene	5.004	5.209	-4.1	105	0.00
62	C	bromoform	3.065	3.201	-4.4	103	0.00
63	C	styrene	3.664	3.907	-6.6	106	0.00
64	C	1,1,2,2-tetrachloroethane	4.026	4.234	-5.2	105	0.00
65	C	o-xylene	5.172	5.445	-5.3	107	0.00
66		1,2,3-trichloropropane	3.120	3.051	2.2	96	0.00
67	s	bromofluorobenzene	2.853	2.869	-0.6	103	0.00
68	C	isopropylbenzene	6.815	6.781	0.5	101	0.00
69		bromobenzene	3.754	3.702	1.4	98	0.00
70		4-ethyl toluene	6.977	7.507	-7.6	100	0.00
71		1,3,5-trimethylbenzene	6.211	6.331	-1.9	105	0.00
72		tert-butylbenzene	6.016	5.916	1.7	96	0.00
73		1,2,4-trimethylbenzene	5.689	6.311	-10.9	104	0.00
74	C	Benzyl Chloride	5.138	5.577	-8.5	102	0.00
75		1,3-dichlorobenzene	3.844	4.489	-16.8	103	0.00
76	C	1,4-dichlorobenzene	4.650	4.970	-6.9	106	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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	8.383	8.481	-1.2	96	0.00
78		p-isopropyltoluene	7.037	6.907	1.8	90	0.00
79		1,2-dichlorobenzene	4.079	4.570	-12.0	104	0.00
80		n-butylbenzene	6.608	7.364	-11.4	97	0.00
81	C	1,2,4-trichlorobenzene	3.215	3.997	-24.3	100	0.00
82		naphthalene	6.576	7.805	-18.7	93	0.00
83		1,2,3-trichlorobenzene	3.050	3.578	-17.3	93	0.00
84	C	hexachlorobutadiene	2.947	3.325	-12.8	99	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\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	172568	10.000	ppbV	0.00
Standard Area = 167253			Recovery = 103.18%			
33) 1,4-difluorobenzene	12.54	114	465676	10.000	ppbV	0.00
Standard Area = 444205			Recovery = 104.83%			
51) chlorobenzene-D5	16.89	54	101460	10.000	ppbV	0.00
Standard Area = 97241			Recovery = 104.34%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.23	65	159639	9.953	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.53%			
53) toluene-D8	15.22	98	495369	10.028	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.28%			
67) bromofluorobenzene	18.06	95	291139	10.060	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.60%			
Target Compounds						Qvalue
2) propylene	4.30	41	53479M6	5.292	ppbV	
3) dichlorodifluoromethane	4.41	85	81652	3.523	ppbV	100
4) chloromethane	4.64	50	63172	4.539	ppbV	100
5) Freon-114	4.79	85	185573	4.893	ppbV	100
6) vinyl chloride	4.95	62	69738	4.901	ppbV	100
7) 1,3-butadiene	5.15	54	51423	5.293	ppbV	98
8) bromomethane	5.54	94	60924	4.917	ppbV	99
9) chloroethane	5.78	64	33512	4.213	ppbV	100
10) ethanol	6.02	31	193538	23.095	ppbV	96
11) vinyl bromide	6.26	106	61563	4.810	ppbV	100
12) acetone	6.63	43	480798	24.331	ppbV	99
13) trichlorofluoromethane	6.83	101	172880	4.958	ppbV	100
14) isopropyl alcohol	7.01	45	282298	13.182	ppbV	100
15) acrylonitrile	7.25	53	44709M6	4.340	ppbV	
16) 1,1-dichloroethene	7.65	61	120372	5.034	ppbV	99
17) tertiary butyl alcohol	7.81	59	138912	4.393	ppbV	100
18) methylene chloride	7.82	49	93279	4.551	ppbV	100
19) 3-chloropropene	7.97	41	89104	4.561	ppbV	99
20) carbon disulfide	8.15	76	208472	4.839	ppbV	100
21) Freon 113	8.16	101	145891	5.008	ppbV	99
22) Halothane	8.74	117	101794	4.560	ppbV	99
23) trans-1,2-dichloroethene	8.97	61	105124	4.593	ppbV	100
24) 1,1-dichloroethane	9.21	63	133616	5.027	ppbV	100

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.30	73	188460	5.071	ppbV		100
26) vinyl acetate	9.41	43	125853	5.925	ppbV		99
27) 2-butanone	9.70	43	147534	5.003	ppbV		100
28) cis-1,2-dichloroethene	10.19	61	113440	5.496	ppbV		99
29) Ethyl Acetate	10.47	61	22330	4.817	ppbV		95
30) chloroform	10.53	83	156208	5.120	ppbV		100
31) Tetrahydrofuran	11.00	42	84022	5.121	ppbV		98
32) 1,2-dichloroethane	11.35	62	105370	4.959	ppbV		100
34) hexane	10.42	57	101446	4.816	ppbV		93
36) 1,1,1-trichloroethane	11.64	97	155103	4.936	ppbV		99
37) benzene	12.15	78	205817	4.797	ppbV		100
38) carbon tetrachloride	12.32	117	165065	5.006	ppbV		100
39) cyclohexane	12.46	56	107437	4.880	ppbV		99
40) dibromomethane	13.04	93	85057	4.158	ppbV		99
41) 1,2-dichloropropane	13.06	63	84399	4.903	ppbV		99
42) bromodichloromethane	13.29	83	183225	5.006	ppbV		100
43) 1,4-dioxane	13.35	88	48421	4.934	ppbV		97
44) trichloroethene	13.33	130	97070	5.004	ppbV		99
45) 2,2,4-trimethylpentane	13.36	57	340465	4.995	ppbV		99
46) heptane	13.65	43	123107	4.870	ppbV		99
47) cis-1,3-dichloropropene	14.29	75	515806	5.429	ppbV		100
48) 4-methyl-2-pentanone	14.32	43	182298	5.042	ppbV		100
49) trans-1,3-dichloropropene	14.86	75	143017	4.671	ppbV		99
50) 1,1,2-trichloroethane	15.04	97	114979	5.089	ppbV	#	88
52) toluene	15.32	91	346299	4.927	ppbV		100
54) 2-hexanone	15.57	43	248953	5.469	ppbV		99
55) dibromochloromethane	15.74	129	208377	5.075	ppbV		100
56) 1,2-dibromoethane	15.96	107	185022	5.124	ppbV		100
57) tetrachloroethene	16.36	166	148646	4.590	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.91	131	110966	4.713	ppbV		100
59) chlorobenzene	16.93	112	213704	5.102	ppbV		99
60) ethylbenzene	17.22	91	337348	5.158	ppbV		100
61) m+p-xylene	17.36	91	528473	10.409	ppbV		100
62) bromoform	17.44	173	162367	5.221	ppbV		100
63) styrene	17.64	104	198226	5.332	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.71	83	214792	5.259	ppbV		100
65) o-xylene	17.72	91	276206	5.264	ppbV		99
66) 1,2,3-trichloropropane	17.81	75	154793	4.889	ppbV		100
68) isopropylbenzene	18.15	105	343991	4.975	ppbV		99
69) bromobenzene	18.24	77	187814	4.931	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\R236180.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.63	105	380814	5.380	ppbV	100
71) 1,3,5-trimethylbenzene	18.68	105	321185	5.097	ppbV	99
72) tert-butylbenzene	18.99	119	300123	4.917	ppbV	100
73) 1,2,4-trimethylbenzene	18.99	105	320152	5.546	ppbV	97
74) Benzyl Chloride	19.10	91	282919	5.428	ppbV	99
75) 1,3-dichlorobenzene	19.12	146	227708	5.838	ppbV	98
76) 1,4-dichlorobenzene	19.17	146	252117	5.344	ppbV	99
77) sec-butylbenzene	19.18	105	430252	5.059	ppbV	99
78) p-isopropyltoluene	19.30	119	350374	4.908	ppbV	99
79) 1,2-dichlorobenzene	19.43	146	231849	5.602	ppbV	99
80) n-butylbenzene	19.62	91	373599	5.572	ppbV	93
81) 1,2,4-trichlorobenzene	20.85	180	202776	6.217	ppbV	97
82) naphthalene	20.97	128	395962	5.934	ppbV	99
83) 1,2,3-trichlorobenzene	21.21	180	181508	5.866	ppbV	97
84) hexachlorobutadiene	21.27	225	168696	5.642	ppbV	95

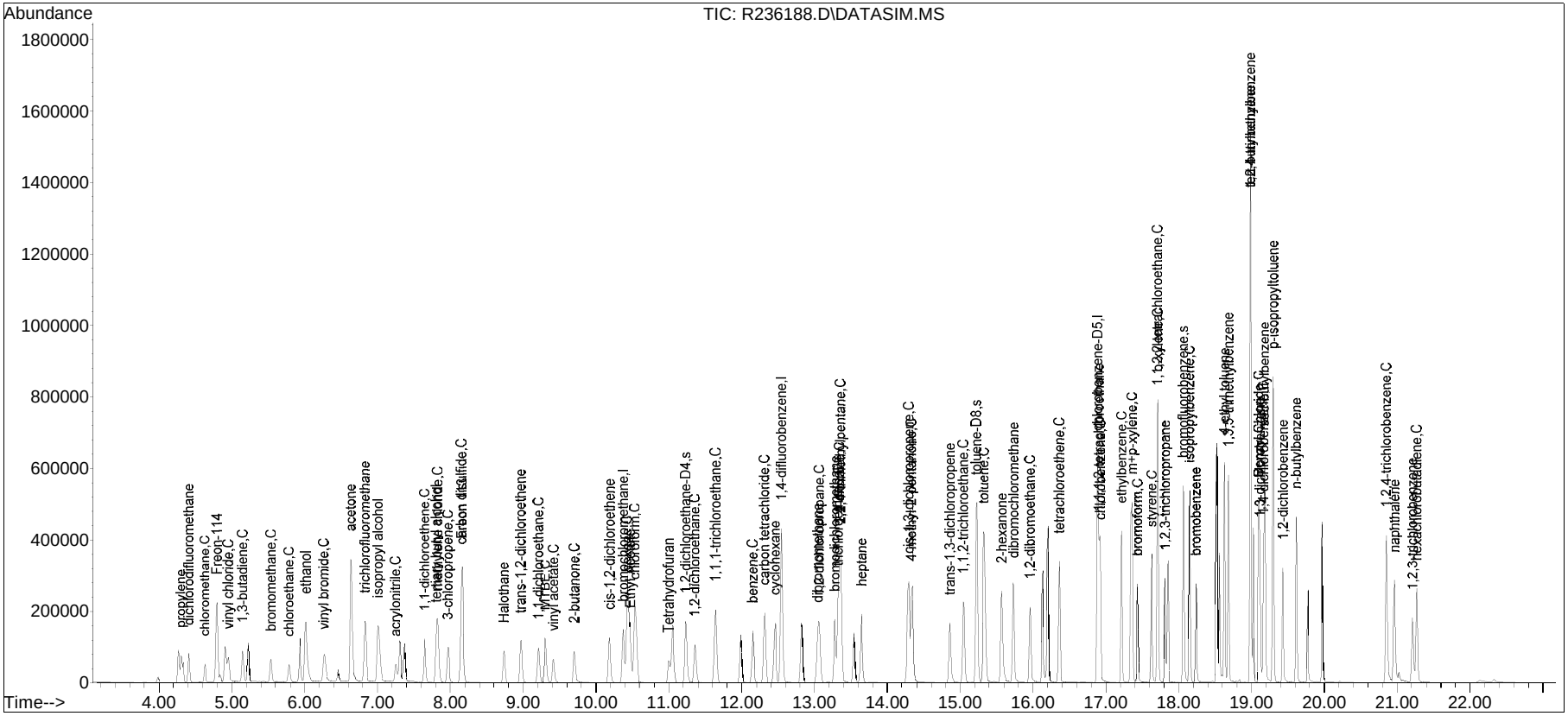
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\
Data File : R236188.D
Acq On : 2 Sep 2015 12:26 pm
Operator : AIRPIANO2:RY
Sample : CTO15-SIMSTD5.0
Misc : WG817908
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 02 12:54:40 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150901SIM_ICAL\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

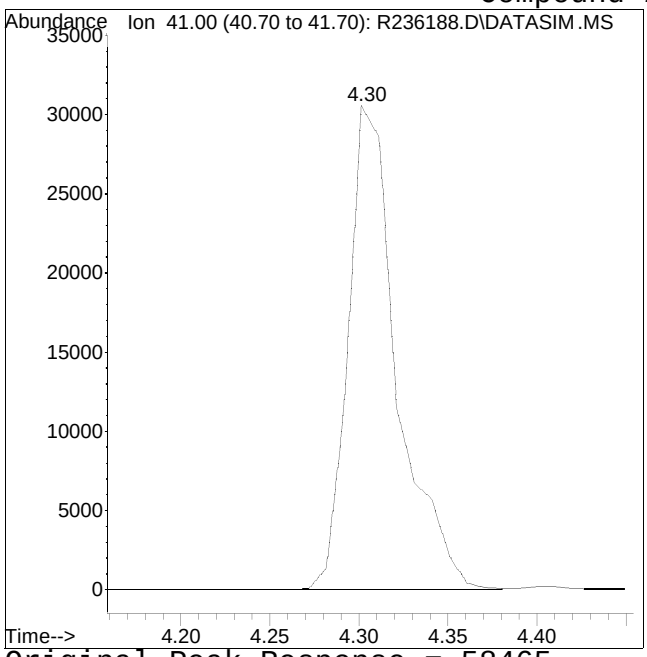
Sub List : Default - All compounds listed0901SIM_ICAL\R236180.D



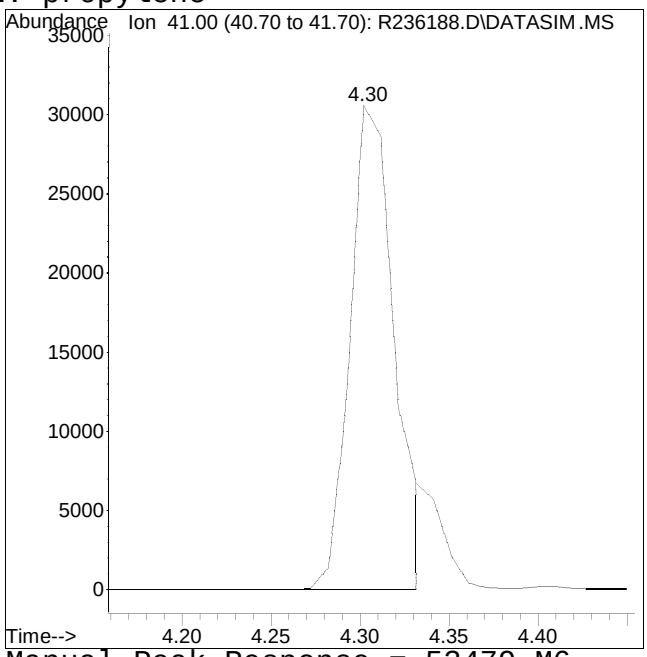
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236188.D
Date Inj'd : 9/2/2015 12:26 pm
Sample : CTO15-SIMSTD5.0
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:53 pm

Compound #2: propylene



Original Peak Response = 58465



Manual Peak Response = 53479 M6

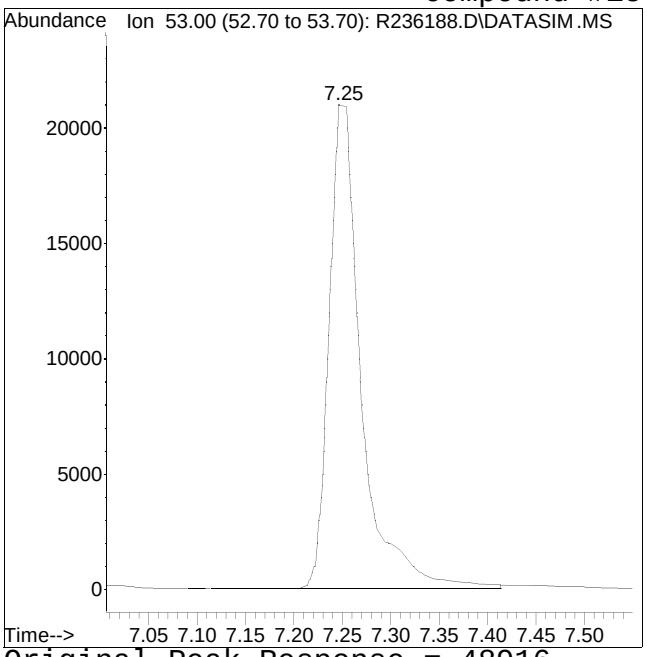
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

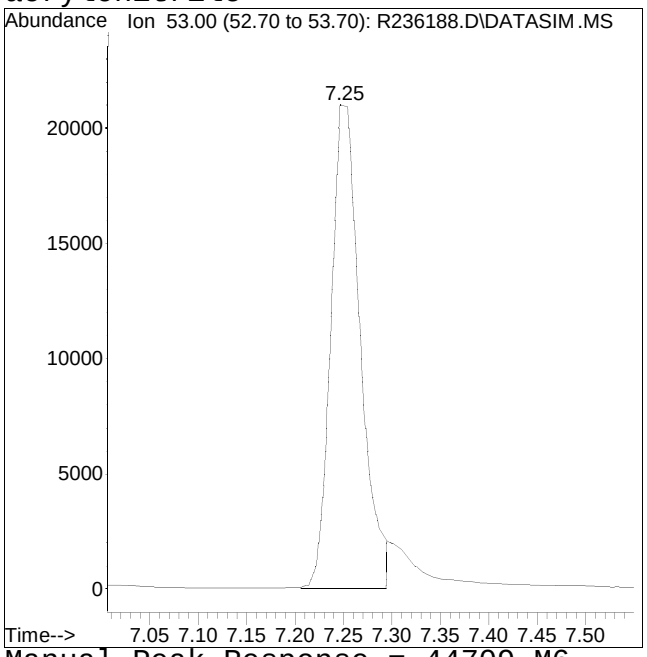
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236188.D
Date Inj'd : 9/2/2015 12:26 pm
Sample : CTO15-SIMSTD5.0

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/2/2015 12:53 pm

Compound #15: acrylonitrile



Original Peak Response = 48916



Manual Peak Response = 44709 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Continuing Calibration

7A

Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1523462

Instrument ID: AIRPIANO2 Calibration Date: 09/24/2015 Time: 12:31

Lab File ID: R236529 Init. Calib. Date(s): 09/01/15 09/02/15

Sample No: WG824625-2,3,25 Init. Calib. Times : 23:20 04:25

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	90	0.00
3		dichlorodifluoromethane	1.343	1.537	-14.4	107	0.00
4	C	chloromethane	0.806	0.708	12.2	86	0.00
5		Freon-114	2.198	2.150	2.2	89	0.00
6	C	vinyl chloride	0.825	0.798	3.3	88	0.00
7	C	1,3-butadiene	0.563	0.569	-1.1	91	0.00
8	C	bromomethane	0.718	0.727	-1.3	93	0.00
9	C	chloroethane	0.461	0.380	17.6	88	0.00
12		acetone	1.145	1.016	11.3	81	0.00
13		trichlorofluoromethane	2.021	1.889	6.5	85	0.00
15	C	acrylonitrile	0.597	0.484	18.9	80	0.00
16	C	1,1-dichloroethene	1.386	1.347	2.8	88	0.00
18	C	methylene chloride	1.188	1.086	8.6	92	0.00
21		Freon 113	1.688	1.731	-2.5	94	0.00
22		Halothane	1.294	1.239	4.3	87	0.00
23		trans-1,2-dichloroethene	1.326	1.217	8.2	83	0.00
24	C	1,1-dichloroethane	1.540	1.568	-1.8	92	0.00
25	C	MTBE	2.154	2.195	-1.9	92	0.00
27	C	2-butanone	1.709	1.670	2.3	88	0.00
28		cis-1,2-dichloroethene	1.196	1.303	-8.9	99	0.00
30	C	chloroform	1.768	1.786	-1.0	91	0.00
32	C	1,2-dichloroethane	1.231	1.110	9.8	82	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00
36	C	1,1,1-trichloroethane	0.675	0.583	13.6	86	0.00
37	C	benzene	0.921	0.866	6.0	95	0.00
38	C	carbon tetrachloride	0.708	0.628	11.3	87	0.00
41	C	1,2-dichloropropane	0.370	0.352	4.9	96	0.00
42		bromodichloromethane	0.786	0.685	12.8	86	0.00
43	C	1,4-dioxane	0.211	0.203	3.8	96	0.00
44	C	trichloroethene	0.417	0.406	2.6	97	0.00
47	C	cis-1,3-dichloropropene	2.040	2.052	-0.6	97	0.00
48	C	4-methyl-2-pentanone	0.776	0.713	8.1	88	0.00
49		trans-1,3-dichloropropene	0.657	0.551	16.1	80	0.00
50	C	1,1,2-trichloroethane	0.485	0.486	-0.2	98	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	85	0.00
52	C	toluene	6.928	7.720	-11.4	96	0.00
55		dibromochloromethane	4.047	4.416	-9.1	90	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015

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)
56	C	1,2-dibromoethane	3.559	4.012	-12.7	94	0.00
57	C	tetrachloroethene	3.192	3.444	-7.9	100	0.00
58		1,1,1,2-tetrachloroethane	2.321	2.392	-3.1	87	0.00
59	C	chlorobenzene	4.128	4.784	-15.9	98	0.00
60	C	ethylbenzene	6.446	7.483	-16.1	97	0.00
61	C	m+p-xylene	5.004	5.828	-16.5	96	0.00
62	C	bromoform	3.065	3.522	-14.9	92	0.00
63	C	styrene	3.664	4.425	-20.8	98	0.00
64	C	1,1,2,2-tetrachloroethane	4.026	4.777	-18.7	96	0.00
65	C	o-xylene	5.172	6.035	-16.7	96	0.00
68	C	isopropylbenzene	6.815	7.704	-13.0	94	0.00
70		4-ethyl toluene	6.977	8.238	-18.1	90	0.00
71		1,3,5-trimethylbenzene	6.211	7.245	-16.6	98	0.00
73		1,2,4-trimethylbenzene	5.689	7.059	-24.1	95	0.00
75		1,3-dichlorobenzene	3.844	5.223	-35.9#	98	0.00
76	C	1,4-dichlorobenzene	4.650	5.712	-22.8	99	0.00
77		sec-butylbenzene	8.383	9.457	-12.8	87	0.00
78		p-isopropyltoluene	7.037	7.890	-12.1	84	0.00
79		1,2-dichlorobenzene	4.079	5.236	-28.4	97	0.00
80		n-butylbenzene	6.608	8.218	-24.4	88	0.00
81	C	1,2,4-trichlorobenzene	3.215	4.697	-46.1#	96	0.00
82		naphthalene	6.576	8.972	-36.4#	88	0.00
83		1,2,3-trichlorobenzene	3.050	4.190	-37.4#	89	0.00
84	C	hexachlorobutadiene	2.947	4.041	-37.1#	99	0.00

* Evaluation of CC level amount vs concentration.

FORM VII TO15-SIM

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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	90	0.00
3		dichlorodifluoromethane	1.343	1.537	-14.4	107	0.00
4	C	chloromethane	0.806	0.708	12.2	86	0.00
5		Freon-114	2.198	2.150	2.2	89	0.00
6	C	vinyl chloride	0.825	0.798	3.3	88	0.00
7	C	1,3-butadiene	0.563	0.569	-1.1	91	0.00
8	C	bromomethane	0.718	0.727	-1.3	93	0.00
9	C	chloroethane	0.461	0.380	17.6	88	0.00
12		acetone	1.145	1.016	11.3	81	0.00
13		trichlorofluoromethane	2.021	1.889	6.5	85	0.00
15	C	acrylonitrile	0.597	0.484	18.9	80	0.00
16	C	1,1-dichloroethene	1.386	1.347	2.8	88	0.00
18	C	methylene chloride	1.188	1.086	8.6	92	0.00
21		Freon 113	1.688	1.731	-2.5	94	0.00
22		Halothane	1.294	1.239	4.3	87	0.00
23		trans-1,2-dichloroethene	1.326	1.217	8.2	83	0.00
24	C	1,1-dichloroethane	1.540	1.568	-1.8	92	0.00
25	C	MTBE	2.154	2.195	-1.9	92	0.00
27	C	2-butanone	1.709	1.670	2.3	88	0.00
28		cis-1,2-dichloroethene	1.196	1.303	-8.9	99	0.00
30	C	chloroform	1.768	1.786	-1.0	91	0.00
32	C	1,2-dichloroethane	1.231	1.110	9.8	82	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00
36	C	1,1,1-trichloroethane	0.675	0.583	13.6	86	0.00
37	C	benzene	0.921	0.866	6.0	95	0.00
38	C	carbon tetrachloride	0.708	0.628	11.3	87	0.00
41	C	1,2-dichloropropane	0.370	0.352	4.9	96	0.00
42		bromodichloromethane	0.786	0.685	12.8	86	0.00
43	C	1,4-dioxane	0.211	0.203	3.8	96	0.00
44	C	trichloroethene	0.417	0.406	2.6	97	0.00
47	C	cis-1,3-dichloropropene	2.040	2.052	-0.6	97	0.00
48	C	4-methyl-2-pentanone	0.776	0.713	8.1	88	0.00
49		trans-1,3-dichloropropene	0.657	0.551	16.1	80	0.00
50	C	1,1,2-trichloroethane	0.485	0.486	-0.2	98	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	85	0.00
52	C	toluene	6.928	7.720	-11.4	96	0.00
55		dibromochloromethane	4.047	4.416	-9.1	90	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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)
56	C	1,2-dibromoethane	3.559	4.012	-12.7	94	0.00
57	C	tetrachloroethene	3.192	3.444	-7.9	100	0.00
58		1,1,1,2-tetrachloroethane	2.321	2.392	-3.1	87	0.00
59	C	chlorobenzene	4.128	4.784	-15.9	98	0.00
60	C	ethylbenzene	6.446	7.483	-16.1	97	0.00
61	C	m+p-xylene	5.004	5.828	-16.5	96	0.00
62	C	bromoform	3.065	3.522	-14.9	92	0.00
63	C	styrene	3.664	4.425	-20.8	98	0.00
64	C	1,1,2,2-tetrachloroethane	4.026	4.777	-18.7	96	0.00
65	C	o-xylene	5.172	6.035	-16.7	96	0.00
68	C	isopropylbenzene	6.815	7.704	-13.0	94	0.00
70		4-ethyl toluene	6.977	8.238	-18.1	90	0.00
71		1,3,5-trimethylbenzene	6.211	7.245	-16.6	98	0.00
73		1,2,4-trimethylbenzene	5.689	7.059	-24.1	95	0.00
75		1,3-dichlorobenzene	3.844	5.223	-35.9#	98	0.00
76	C	1,4-dichlorobenzene	4.650	5.712	-22.8	99	0.00
77		sec-butylbenzene	8.383	9.457	-12.8	87	0.00
78		p-isopropyltoluene	7.037	7.890	-12.1	84	0.00
79		1,2-dichlorobenzene	4.079	5.236	-28.4	97	0.00
80		n-butylbenzene	6.608	8.218	-24.4	88	0.00
81	C	1,2,4-trichlorobenzene	3.215	4.697	-46.1#	96	0.00
82		naphthalene	6.576	8.972	-36.4#	88	0.00
83		1,2,3-trichlorobenzene	3.050	4.190	-37.4#	89	0.00
84	C	hexachlorobutadiene	2.947	4.041	-37.1#	99	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\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	150935	10.000	ppbV	0.00
Standard Area = 150935			Recovery = 100.00%			
33) 1,4-difluorobenzene	12.54	114	437351	10.000	ppbV	0.00
Standard Area = 437351			Recovery = 100.00%			
51) chlorobenzene-D5	16.89	54	82771	10.000	ppbV	0.00
Standard Area = 82771			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.41	85	116014	5.724	ppbV	99
4) chloromethane	4.64	50	53436	4.390	ppbV	99
5) Freon-114	4.79	85	162261	4.892	ppbV	98
6) vinyl chloride	4.95	62	60247	4.841	ppbV	100
7) 1,3-butadiene	5.16	54	42905M6	5.049	ppbV	
8) bromomethane	5.54	94	54851	5.061	ppbV	99
9) chloroethane	5.79	64	28668	4.121	ppbV	93
12) acetone	6.64	43	383314	22.178	ppbV	94
13) trichlorofluoromethane	6.84	101	142559	4.675	ppbV	99
15) acrylonitrile	7.25	53	36564M6	4.058	ppbV	
16) 1,1-dichloroethene	7.65	61	101659	4.861	ppbV	98
18) methylene chloride	7.82	49	81991	4.573	ppbV	100
21) Freon 113	8.16	101	130613	5.126	ppbV	96
22) Halothane	8.74	117	93471	4.787	ppbV	94
23) trans-1,2-dichloroethene	8.98	61	91857	4.588	ppbV	90
24) 1,1-dichloroethane	9.21	63	118364	5.092	ppbV	100
25) MTBE	9.31	73	165684	5.097	ppbV	95
27) 2-butanone	9.70	43	126063	4.888	ppbV	98
28) cis-1,2-dichloroethene	10.19	61	98310	5.446	ppbV	98
30) chloroform	10.53	83	134822	5.052	ppbV	98
32) 1,2-dichloroethane	11.35	62	83798	4.509	ppbV	98
36) 1,1,1-trichloroethane	11.64	97	127518	4.321	ppbV	98
37) benzene	12.15	78	189388	4.700	ppbV	99
38) carbon tetrachloride	12.32	117	137289	4.433	ppbV	99
41) 1,2-dichloropropane	13.06	63	76913	4.758	ppbV	96
42) bromodichloromethane	13.29	83	149830M6	4.359	ppbV	
43) 1,4-dioxane	13.35	88	44302	4.807	ppbV	95
44) trichloroethene	13.33	130	88828	4.875	ppbV	98
47) cis-1,3-dichloropropene	14.29	75	448716	5.029	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) 4-methyl-2-pentanone	14.32	43	156000	4.594	ppbV		95
49) trans-1,3-dichloropropene	14.86	75	120426	4.188	ppbV		93
50) 1,1,2-trichloroethane	15.05	97	106195	5.005	ppbV		95
52) toluene	15.32	91	319499	5.572	ppbV		99
55) dibromochloromethane	15.74	129	182759	5.456	ppbV		100
56) 1,2-dibromoethane	15.96	107	166018	5.636	ppbV		100
57) tetrachloroethene	16.36	166	142521	5.395	ppbV		93
58) 1,1,1,2-tetrachloroethane	16.91	131	98996	5.153	ppbV		98
59) chlorobenzene	16.93	112	197970	5.794	ppbV		97
60) ethylbenzene	17.22	91	309686	5.804	ppbV		98
61) m+p-xylene	17.36	91	482383	11.647	ppbV		97
62) bromoform	17.44	173	145780	5.746	ppbV		99
63) styrene	17.63	104	183147	6.039	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.71	83	197682	5.932	ppbV		100
65) o-xylene	17.72	91	249757	5.835	ppbV		97
68) isopropylbenzene	18.15	105	318815	5.652	ppbV		98
70) 4-ethyl toluene	18.63	105	340922M6	5.904	ppbV		
71) 1,3,5-trimethylbenzene	18.68	105	299834	5.832	ppbV		97
73) 1,2,4-trimethylbenzene	18.99	105	292134	6.204	ppbV		94
75) 1,3-dichlorobenzene	19.12	146	216138	6.793	ppbV		94
76) 1,4-dichlorobenzene	19.17	146	236383	6.141	ppbV		94
77) sec-butylbenzene	19.18	105	391363	5.641	ppbV		97
78) p-isopropyltoluene	19.30	119	326520	5.606	ppbV		97
79) 1,2-dichlorobenzene	19.43	146	216700	6.418	ppbV		95
80) n-butylbenzene	19.61	91	340116	6.218	ppbV		96
81) 1,2,4-trichlorobenzene	20.85	180	194400	7.306	ppbV	#	93
82) naphthalene	20.97	128	371317	6.821	ppbV		97
83) 1,2,3-trichlorobenzene	21.21	180	173403	6.870	ppbV	#	92
84) hexachlorobutadiene	21.27	225	167243	6.856	ppbV	#	84

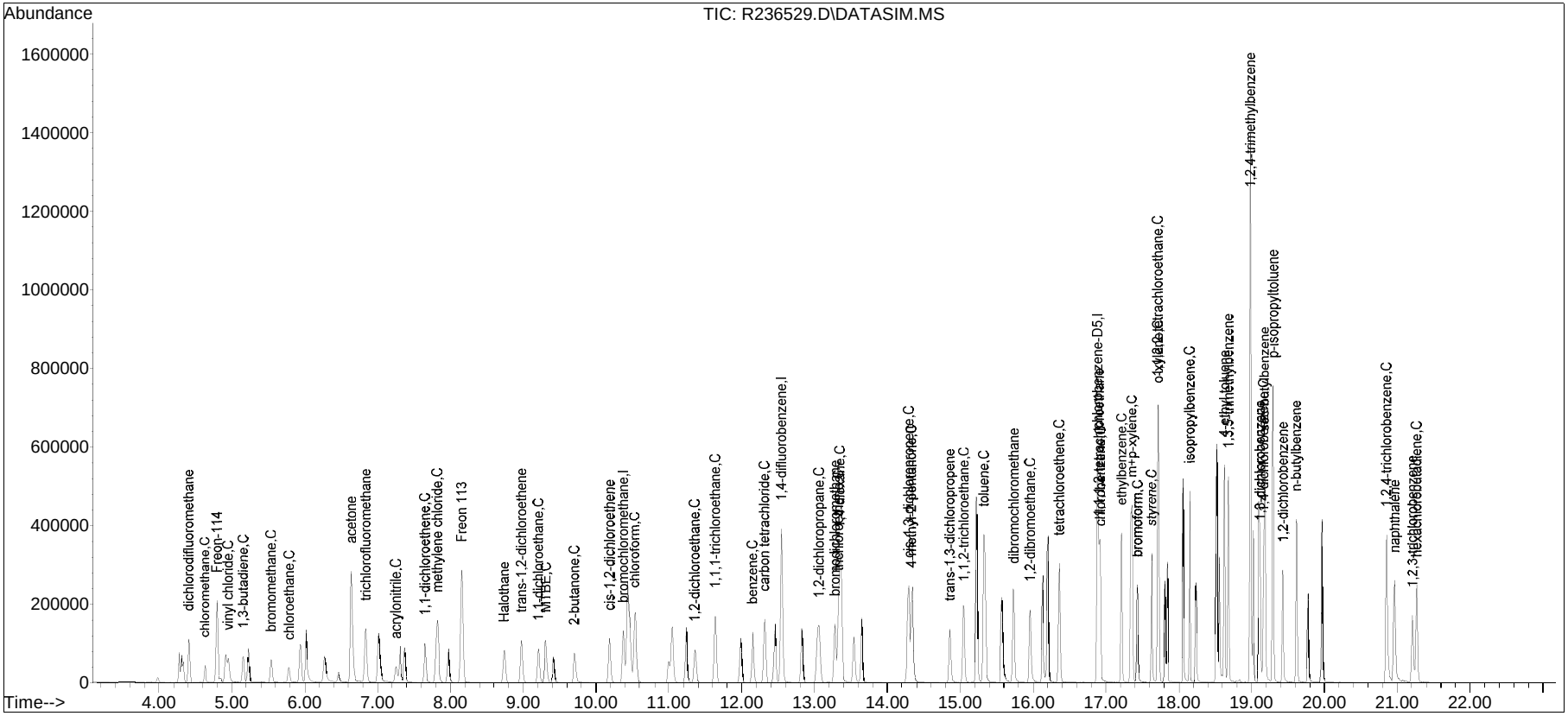
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-2,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

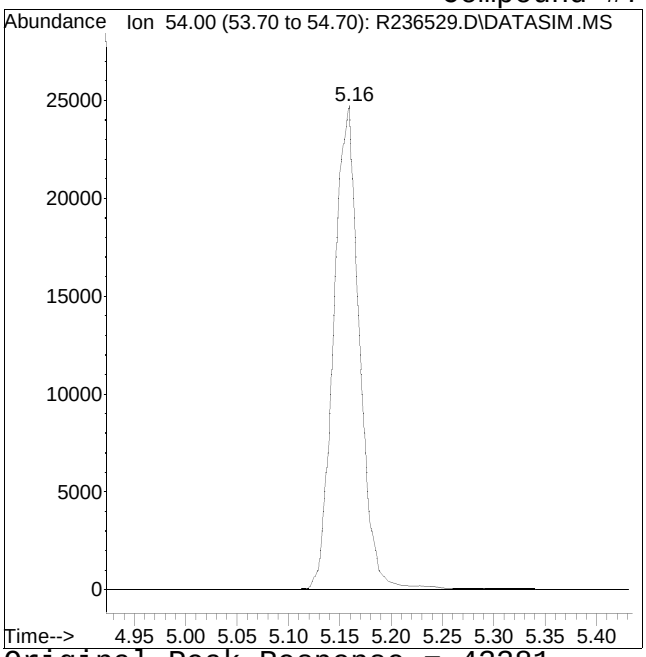
Sub List : Default-SIM - All compounds listedSIM\R236529.D



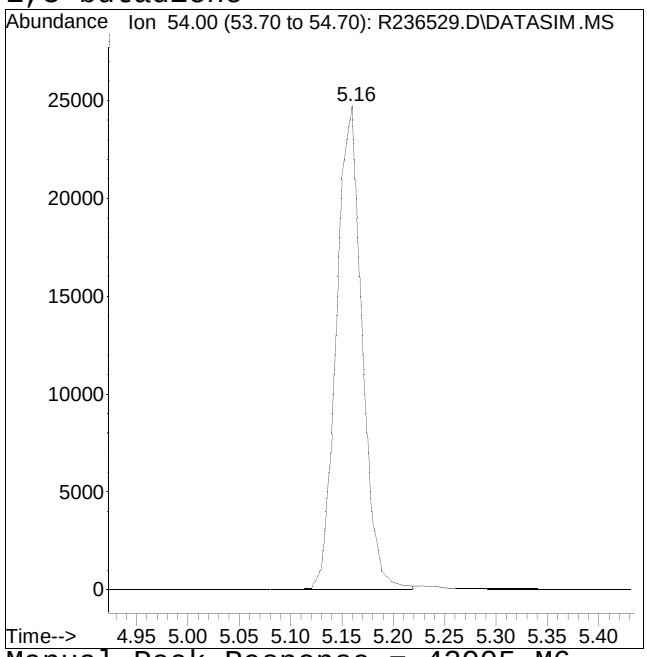
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-2,3,250,250
Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #7: 1,3-butadiene



Original Peak Response = 43381



Manual Peak Response = 42905 M6

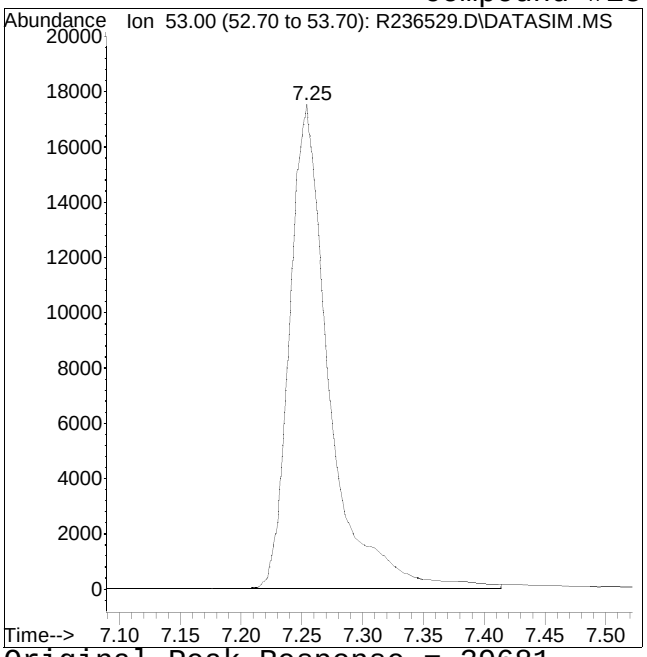
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

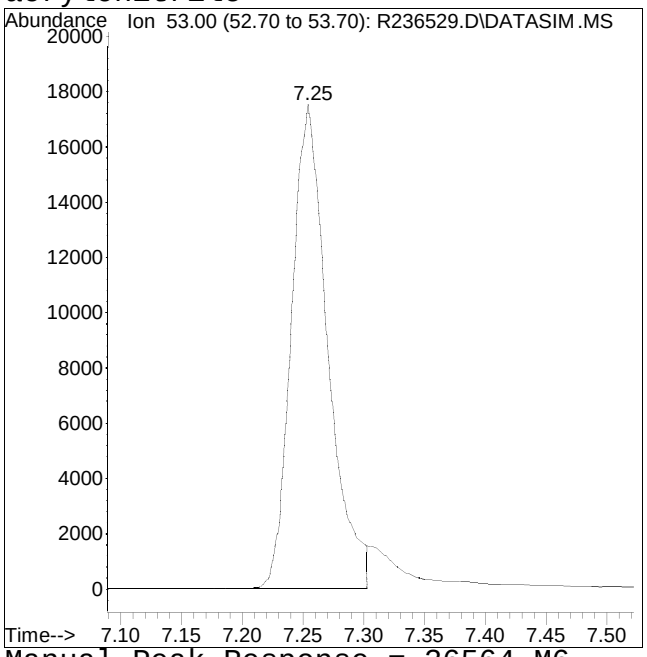
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-2,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #15: acrylonitrile



Original Peak Response = 39681



Manual Peak Response = 36564 M6

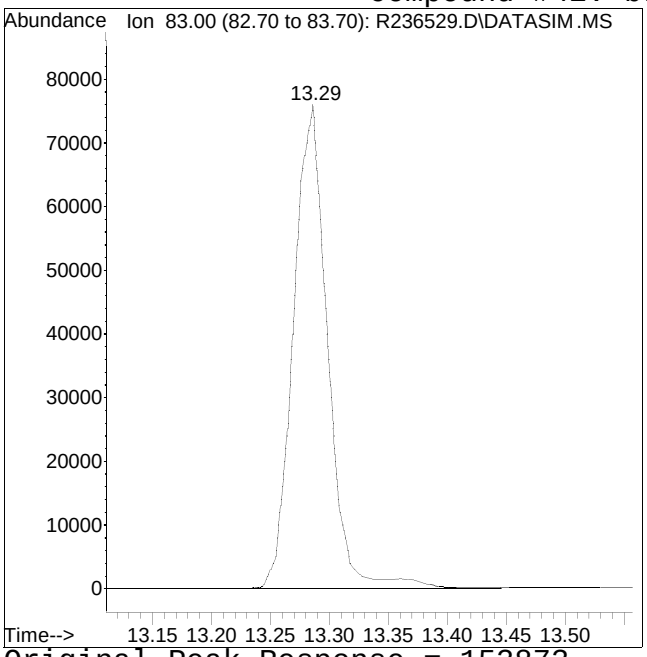
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

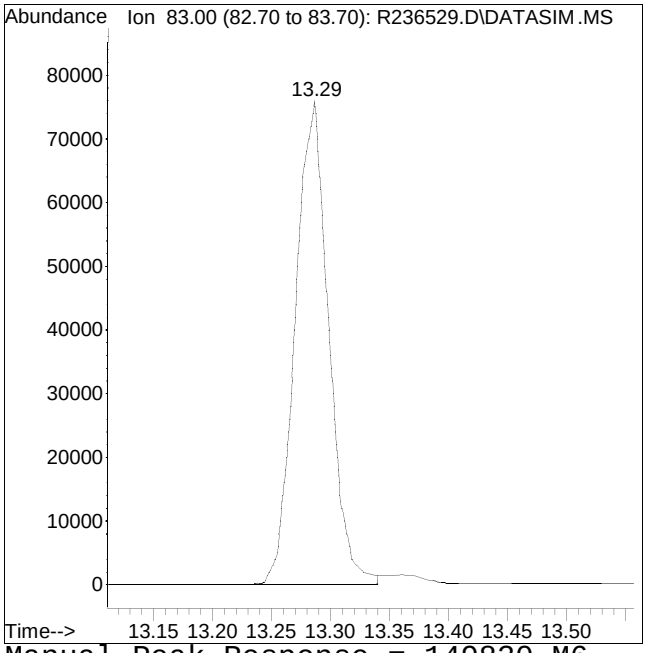
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-2,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #42: bromodichloromethane



Original Peak Response = 153873



Manual Peak Response = 149830 M6

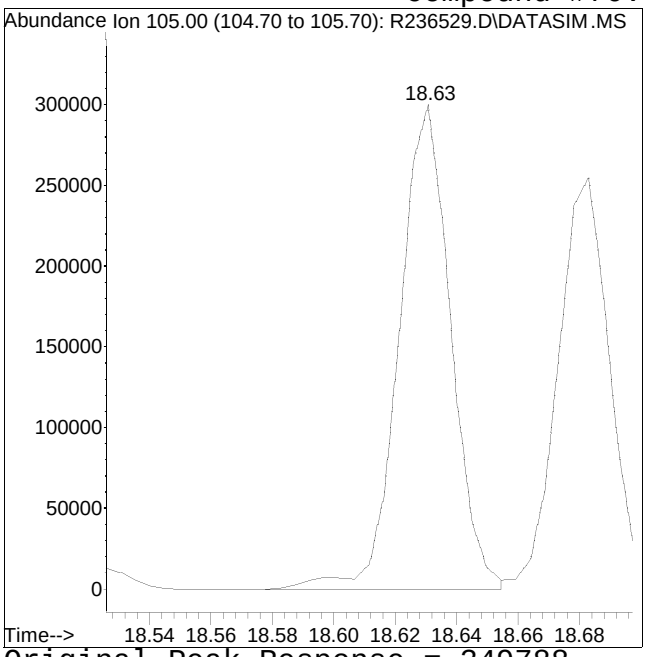
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

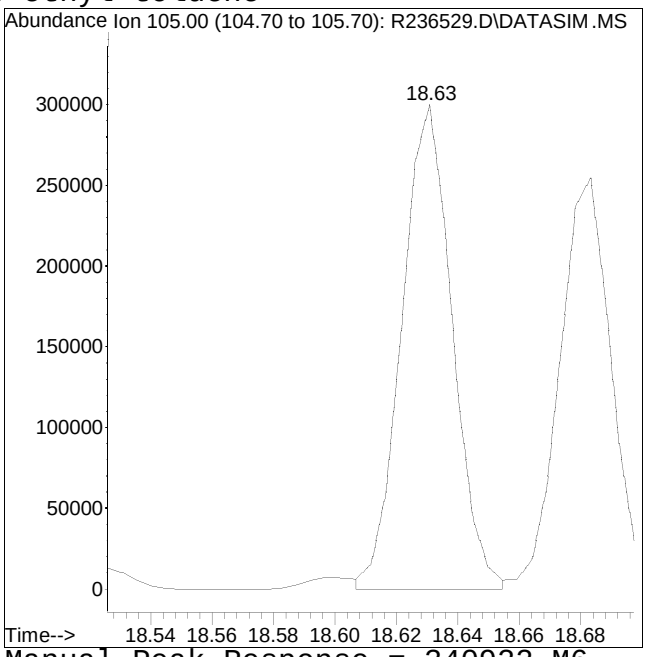
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-2,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #70: 4-ethyl toluene



Original Peak Response = 349788



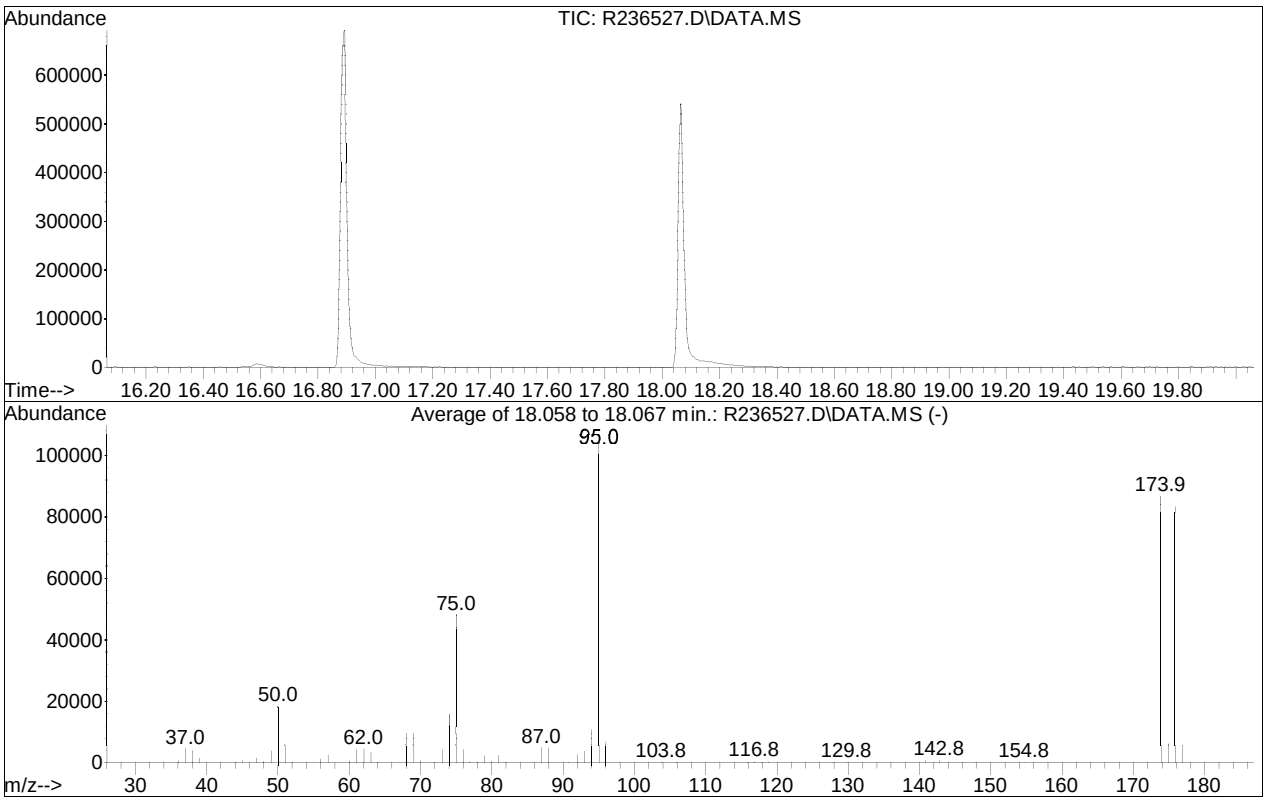
Manual Peak Response = 340922 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236527.D
Acq On : 24 Sep 2015 11:22 am
Operator : AIRPIANO2:RY
Sample : WG824625-1,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Sep 02 12:46:49 2015



AutoFind: Scans 1777, 1778, 1779; Background Corrected with Scan 1769

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.6	18435	PASS
75	95	30	66	46.0	48139	PASS
95	95	100	100	100.0	104573	PASS
96	95	5	9	6.6	6919	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.0	86819	PASS
175	174	4	9	7.5	6491	PASS
176	174	93	101	95.9	83232	PASS
177	176	5	9	6.7	5561	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236531.D
Acq On : 24 Sep 2015 2:09 pm
Operator : AIRPIANO2:RY
Sample : WG824625-4,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 24 14:48:37 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	145608	10.000	ppbV	0.00
Standard Area = 150935			Recovery = 96.47%			
33) 1,4-difluorobenzene	12.54	114	417358	10.000	ppbV	0.00
Standard Area = 437351			Recovery = 95.43%			
51) chlorobenzene-D5	16.89	54	73809	10.000	ppbV	0.00
Standard Area = 82771			Recovery = 89.17%			
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.94		0		N.D.	
16) 1,1-dichloroethene	7.66		0		N.D.	
23) trans-1,2-dichloroethene	8.98		0		N.D.	
28) cis-1,2-dichloroethene	10.18		0		N.D.	
44) trichloroethene	13.34		0		N.D.	
57) tetrachloroethene	16.36		0		N.D.	

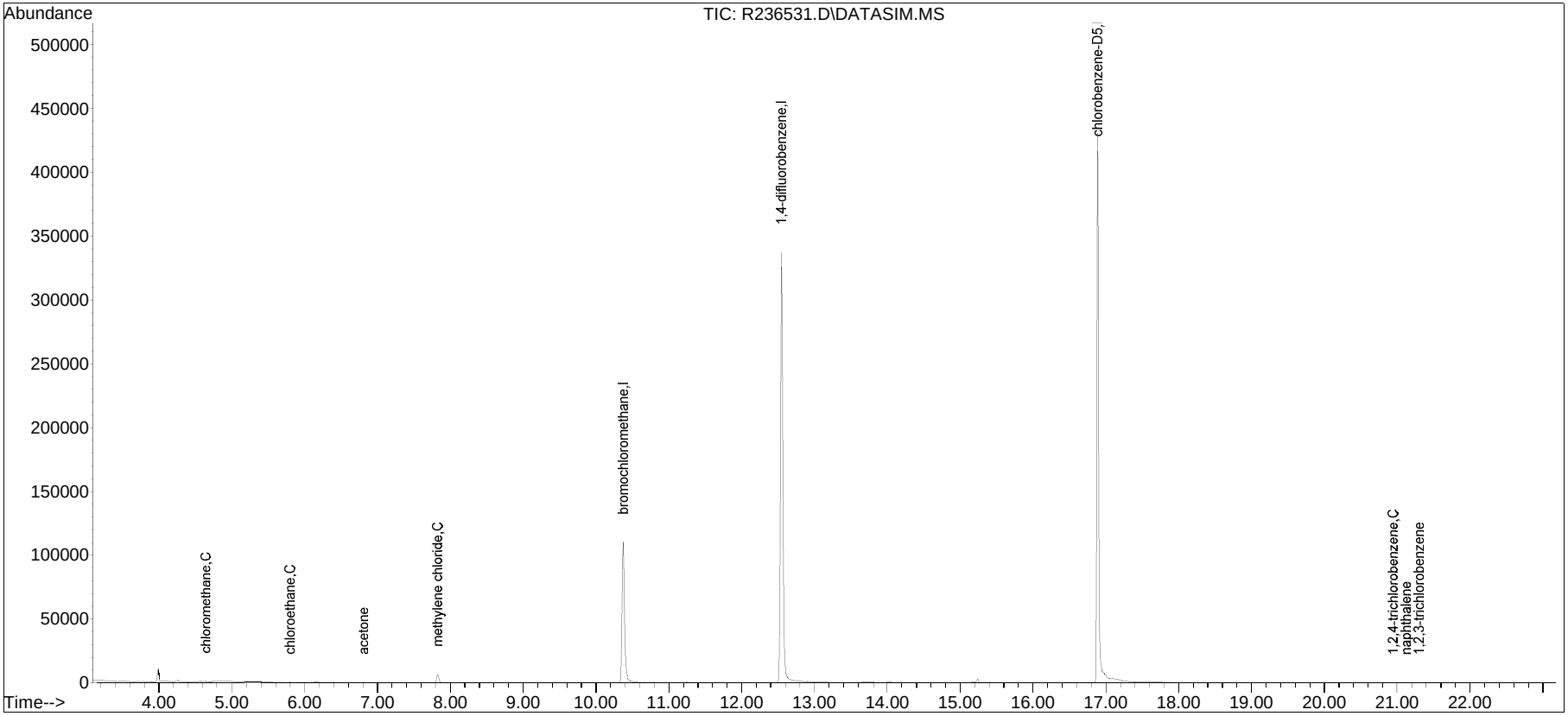
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236531.D
Acq On : 24 Sep 2015 2:09 pm
Operator : AIRPIANO2:RY
Sample : WG824625-4,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 24 14:48:37 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : Default-SIM - All compounds listedSIM\R236529.D



TSIM150901.M Fri Sep 25 10:17:05 2015 Page 2

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-3,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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	90	0.00
3		dichlorodifluoromethane	5.000	5.724	-14.5	107	0.00
4	C	chloromethane	5.000	4.390	12.2	86	0.00
5		Freon-114	5.000	4.892	2.2	89	0.00
6	C	vinyl chloride	5.000	4.841	3.2	88	0.00
7	C	1,3-butadiene	5.000	5.049	-1.0	91	0.00
8	C	bromomethane	5.000	5.061	-1.2	93	0.00
9	C	chloroethane	5.000	4.121	17.6	88	0.00
12		acetone	25.000	22.178	11.3	81	0.00
13		trichlorofluoromethane	5.000	4.675	6.5	85	0.00
15	C	acrylonitrile	5.000	4.058	18.8	80	0.00
16	C	1,1-dichloroethene	5.000	4.861	2.8	88	0.00
18	C	methylene chloride	5.000	4.573	8.5	92	0.00
21		Freon 113	5.000	5.126	-2.5	94	0.00
22		Halothane	5.000	4.787	4.3	87	0.00
23		trans-1,2-dichloroethene	5.000	4.588	8.2	83	0.00
24	C	1,1-dichloroethane	5.000	5.092	-1.8	92	0.00
25	C	MTBE	5.000	5.097	-1.9	92	0.00
27	C	2-butanone	5.000	4.888	2.2	88	0.00
28		cis-1,2-dichloroethene	5.000	5.446	-8.9	99	0.00
30	C	chloroform	5.000	5.052	-1.0	91	0.00
32	C	1,2-dichloroethane	5.000	4.509	9.8	82	0.00
33	I	1,4-difluorobenzene	10.000	10.000	0.0	98	0.00
36	C	1,1,1-trichloroethane	5.000	4.321	13.6	86	0.00
37	C	benzene	5.000	4.700	6.0	95	0.00
38	C	carbon tetrachloride	5.000	4.433	11.3	87	0.00
41	C	1,2-dichloropropane	5.000	4.758	4.8	96	0.00
42		bromodichloromethane	5.000	4.359	12.8	86	0.00
43	C	1,4-dioxane	5.000	4.807	3.9	96	0.00
44	C	trichloroethene	5.000	4.875	2.5	97	0.00
47	C	cis-1,3-dichloropropene	5.000	5.029	-0.6	97	0.00
48	C	4-methyl-2-pentanone	5.000	4.594	8.1	88	0.00
49		trans-1,3-dichloropropene	5.000	4.188	16.2	80	0.00
50	C	1,1,2-trichloroethane	5.000	5.005	-0.1	98	0.00
51	I	chlorobenzene-D5	10.000	10.000	0.0	85	0.00
52	C	toluene	5.000	5.572	-11.4	96	0.00
55		dibromochloromethane	5.000	5.456	-9.1	90	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-3,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
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)
56	C	1,2-dibromoethane	5.000	5.636	-12.7	94	0.00
57	C	tetrachloroethene	5.000	5.395	-7.9	100	0.00
58		1,1,1,2-tetrachloroethane	5.000	5.153	-3.1	87	0.00
59	C	chlorobenzene	5.000	5.794	-15.9	98	0.00
60	C	ethylbenzene	5.000	5.804	-16.1	97	0.00
61	C	m+p-xylene	10.000	11.647	-16.5	96	0.00
62	C	bromoform	5.000	5.746	-14.9	92	0.00
63	C	styrene	5.000	6.039	-20.8	98	0.00
64	C	1,1,2,2-tetrachloroethane	5.000	5.932	-18.6	96	0.00
65	C	o-xylene	5.000	5.835	-16.7	96	0.00
68	C	isopropylbenzene	5.000	5.652	-13.0	94	0.00
70		4-ethyl toluene	5.000	5.904	-18.1	90	0.00
71		1,3,5-trimethylbenzene	5.000	5.832	-16.6	98	0.00
73		1,2,4-trimethylbenzene	5.000	6.204	-24.1	95	0.00
75		1,3-dichlorobenzene	5.000	6.793	-35.9#	98	0.00
76	C	1,4-dichlorobenzene	5.000	6.141	-22.8	99	0.00
77		sec-butylbenzene	5.000	5.641	-12.8	87	0.00
78		p-isopropyltoluene	5.000	5.606	-12.1	84	0.00
79		1,2-dichlorobenzene	5.000	6.418	-28.4	97	0.00
80		n-butylbenzene	5.000	6.218	-24.4	88	0.00
81	C	1,2,4-trichlorobenzene	5.000	7.306	-46.1#	96	0.00
82		naphthalene	5.000	6.821	-36.4#	88	0.00
83		1,2,3-trichlorobenzene	5.000	6.870	-37.4#	89	0.00
84	C	hexachlorobutadiene	5.000	6.856	-37.1#	99	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\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-3,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	150935	10.000	ppbV	0.00
Standard Area = 150935			Recovery = 100.00%			
33) 1,4-difluorobenzene	12.54	114	437351	10.000	ppbV	0.00
Standard Area = 437351			Recovery = 100.00%			
51) chlorobenzene-D5	16.89	54	82771	10.000	ppbV	0.00
Standard Area = 82771			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.41	85	116014	5.724	ppbV	99
4) chloromethane	4.64	50	53436	4.390	ppbV	99
5) Freon-114	4.79	85	162261	4.892	ppbV	98
6) vinyl chloride	4.95	62	60247	4.841	ppbV	100
7) 1,3-butadiene	5.16	54	42905M6	5.049	ppbV	
8) bromomethane	5.54	94	54851	5.061	ppbV	99
9) chloroethane	5.79	64	28668	4.121	ppbV	93
12) acetone	6.64	43	383314	22.178	ppbV	94
13) trichlorofluoromethane	6.84	101	142559	4.675	ppbV	99
15) acrylonitrile	7.25	53	36564M6	4.058	ppbV	
16) 1,1-dichloroethene	7.65	61	101659	4.861	ppbV	98
18) methylene chloride	7.82	49	81991	4.573	ppbV	100
21) Freon 113	8.16	101	130613	5.126	ppbV	96
22) Halothane	8.74	117	93471	4.787	ppbV	94
23) trans-1,2-dichloroethene	8.98	61	91857	4.588	ppbV	90
24) 1,1-dichloroethane	9.21	63	118364	5.092	ppbV	100
25) MTBE	9.31	73	165684	5.097	ppbV	95
27) 2-butanone	9.70	43	126063	4.888	ppbV	98
28) cis-1,2-dichloroethene	10.19	61	98310	5.446	ppbV	98
30) chloroform	10.53	83	134822	5.052	ppbV	98
32) 1,2-dichloroethane	11.35	62	83798	4.509	ppbV	98
36) 1,1,1-trichloroethane	11.64	97	127518	4.321	ppbV	98
37) benzene	12.15	78	189388	4.700	ppbV	99
38) carbon tetrachloride	12.32	117	137289	4.433	ppbV	99
41) 1,2-dichloropropane	13.06	63	76913	4.758	ppbV	96
42) bromodichloromethane	13.29	83	149830M6	4.359	ppbV	
43) 1,4-dioxane	13.35	88	44302	4.807	ppbV	95
44) trichloroethene	13.33	130	88828	4.875	ppbV	98
47) cis-1,3-dichloropropene	14.29	75	448716	5.029	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-3,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) 4-methyl-2-pentanone	14.32	43	156000	4.594	ppbV		95
49) trans-1,3-dichloropropene	14.86	75	120426	4.188	ppbV		93
50) 1,1,2-trichloroethane	15.05	97	106195	5.005	ppbV		95
52) toluene	15.32	91	319499	5.572	ppbV		99
55) dibromochloromethane	15.74	129	182759	5.456	ppbV		100
56) 1,2-dibromoethane	15.96	107	166018	5.636	ppbV		100
57) tetrachloroethene	16.36	166	142521	5.395	ppbV		93
58) 1,1,1,2-tetrachloroethane	16.91	131	98996	5.153	ppbV		98
59) chlorobenzene	16.93	112	197970	5.794	ppbV		97
60) ethylbenzene	17.22	91	309686	5.804	ppbV		98
61) m+p-xylene	17.36	91	482383	11.647	ppbV		97
62) bromoform	17.44	173	145780	5.746	ppbV		99
63) styrene	17.63	104	183147	6.039	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.71	83	197682	5.932	ppbV		100
65) o-xylene	17.72	91	249757	5.835	ppbV		97
68) isopropylbenzene	18.15	105	318815	5.652	ppbV		98
70) 4-ethyl toluene	18.63	105	340922M6	5.904	ppbV		
71) 1,3,5-trimethylbenzene	18.68	105	299834	5.832	ppbV		97
73) 1,2,4-trimethylbenzene	18.99	105	292134	6.204	ppbV		94
75) 1,3-dichlorobenzene	19.12	146	216138	6.793	ppbV		94
76) 1,4-dichlorobenzene	19.17	146	236383	6.141	ppbV		94
77) sec-butylbenzene	19.18	105	391363	5.641	ppbV		97
78) p-isopropyltoluene	19.30	119	326520	5.606	ppbV		97
79) 1,2-dichlorobenzene	19.43	146	216700	6.418	ppbV		95
80) n-butylbenzene	19.61	91	340116	6.218	ppbV		96
81) 1,2,4-trichlorobenzene	20.85	180	194400	7.306	ppbV	#	93
82) naphthalene	20.97	128	371317	6.821	ppbV		97
83) 1,2,3-trichlorobenzene	21.21	180	173403	6.870	ppbV	#	92
84) hexachlorobutadiene	21.27	225	167243	6.856	ppbV	#	84

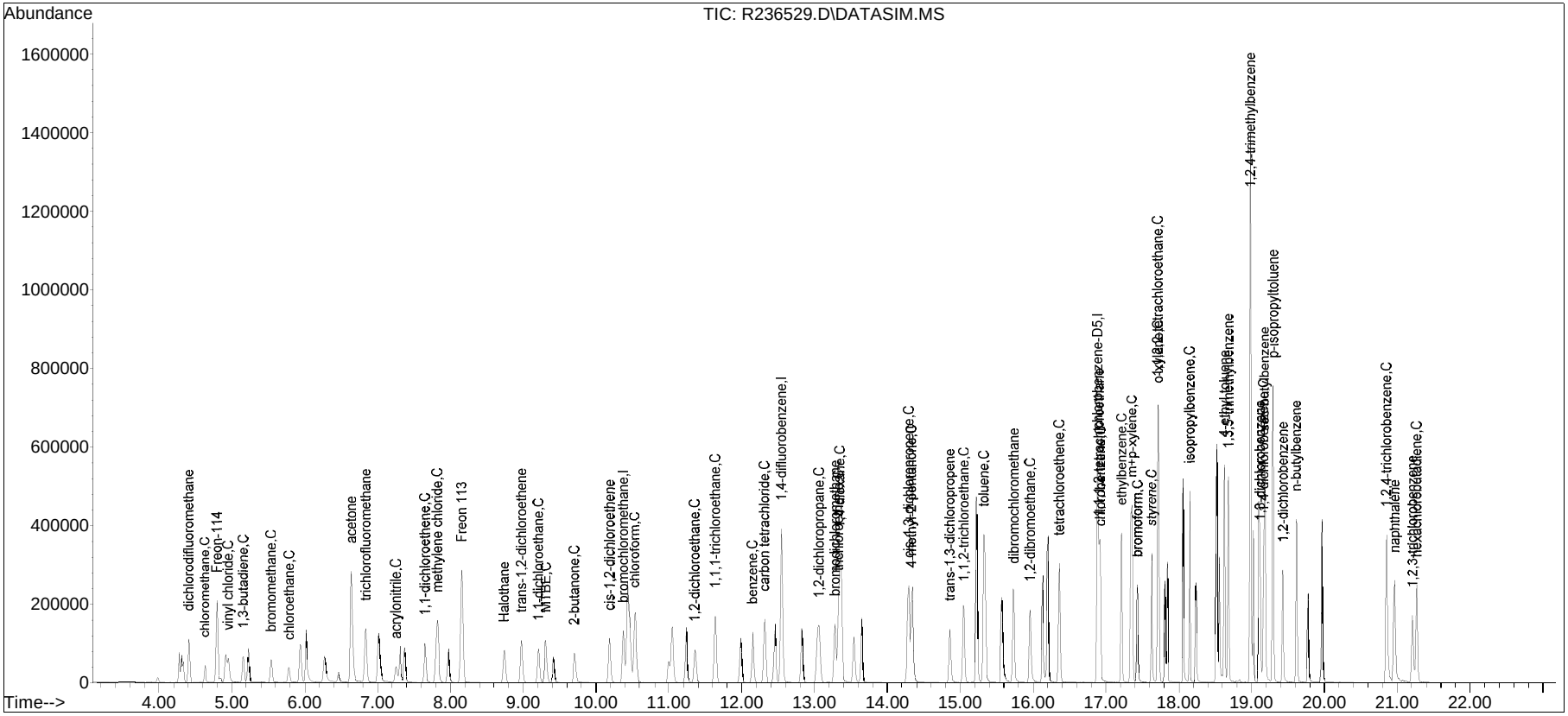
(#) = qualifier out of range (m) = manual integration (+) = signals summed

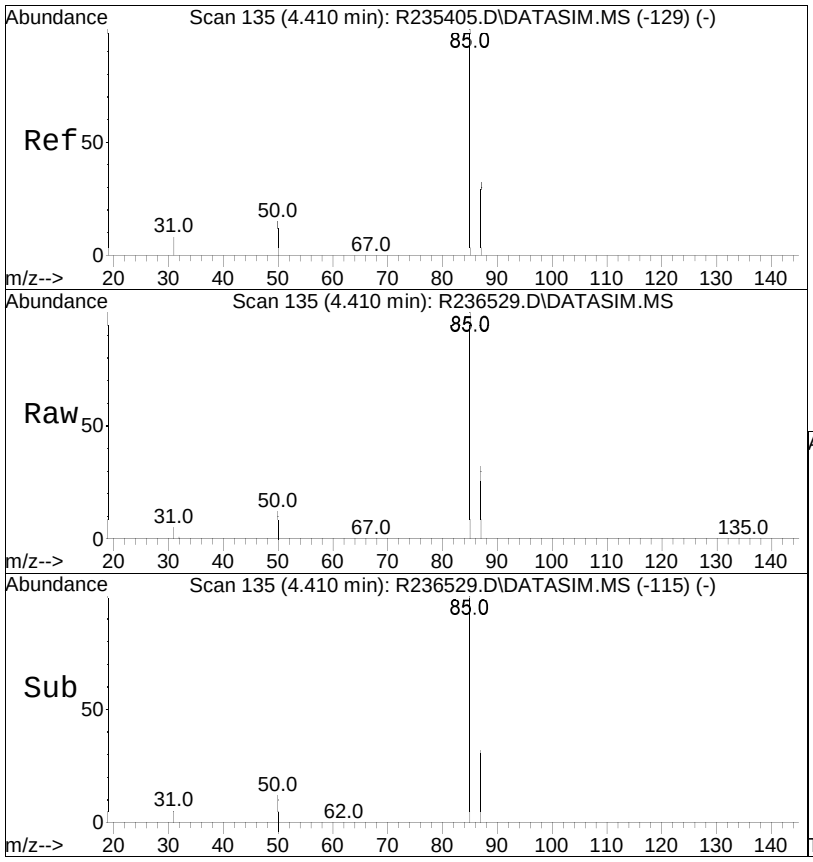
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236529.D
Acq On : 24 Sep 2015 12:31 pm
Operator : AIRPIANO2:RY
Sample : WG824625-3,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 24 13:09:18 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : Default-SIM - All compounds listedSIM\R236529.D

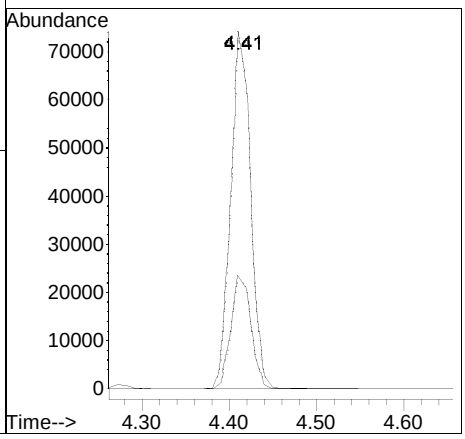


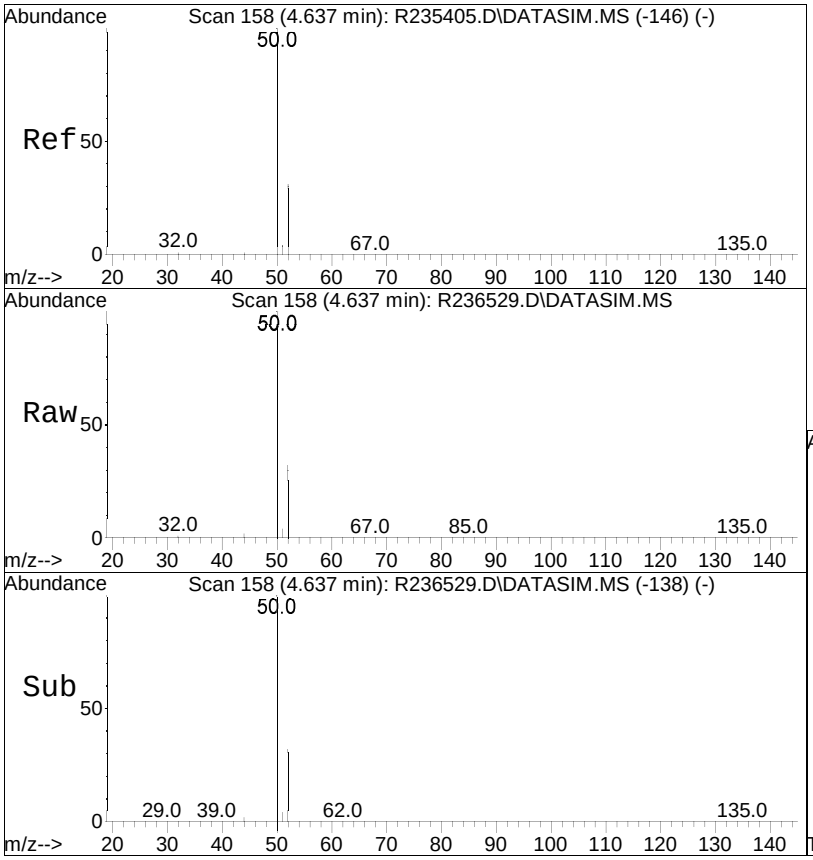


#3
dichlorodifluoromethane
Concen: 5.72 ppbV
RT: 4.41 min Scan# 135
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 85 Resp: 116014

Ion	Ratio	Lower	Upper
85	100		
87	31.8	25.9	38.9

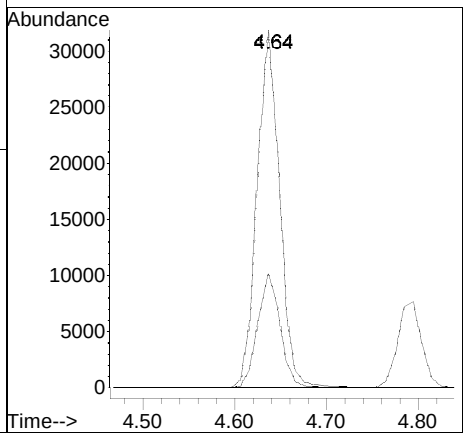


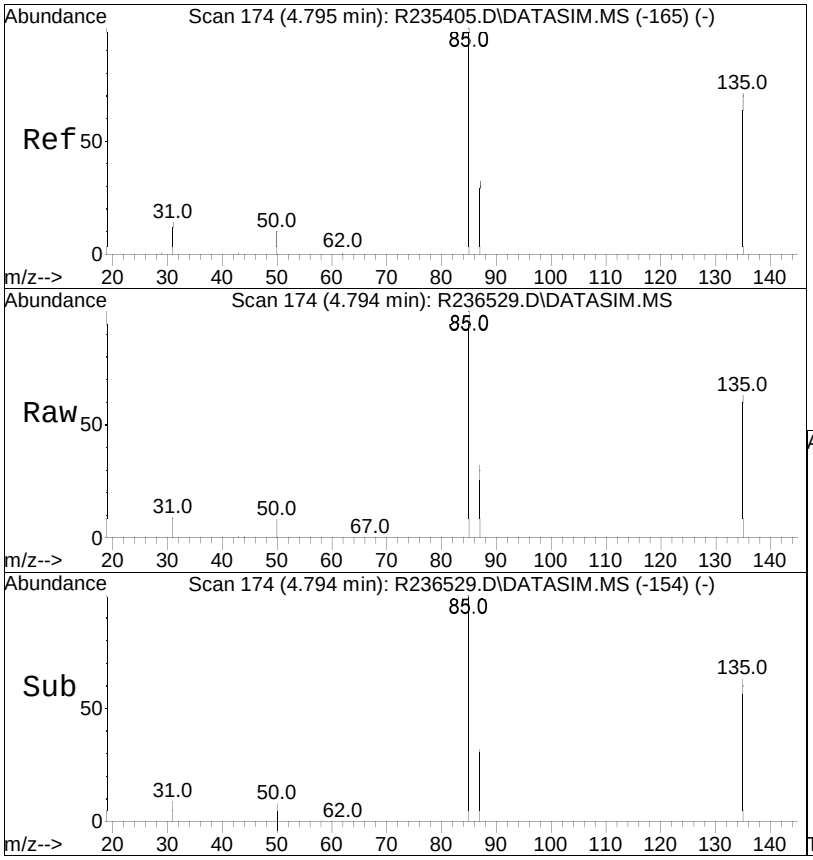


#4
chloromethane
Concen: 4.39 ppbV
RT: 4.64 min Scan# 158
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 50 Resp: 53436

Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.4	39.6

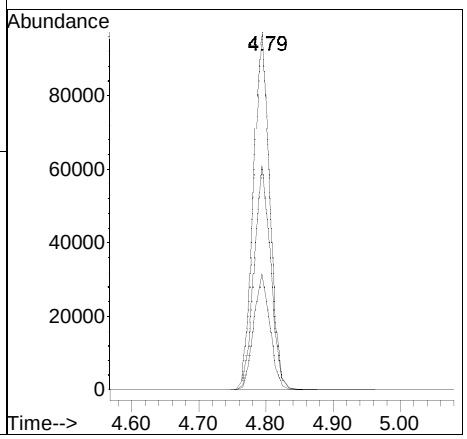


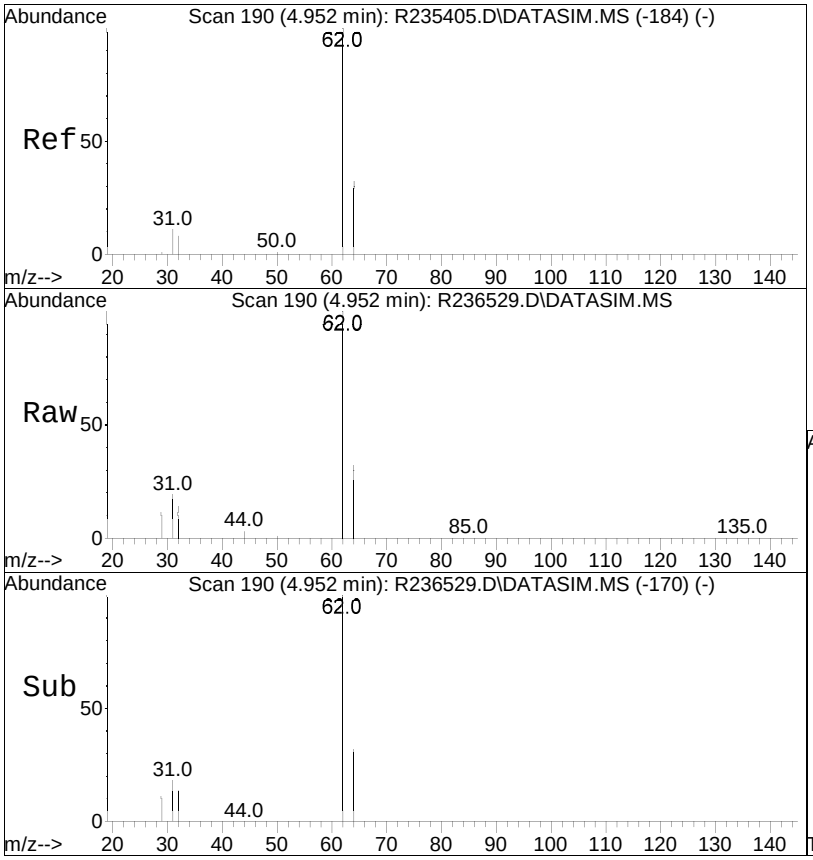


#5
Freon-114
Concen: 4.89 ppbV
RT: 4.79 min Scan# 174
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 85 Resp: 162261

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1
135	62.9	48.5	72.7

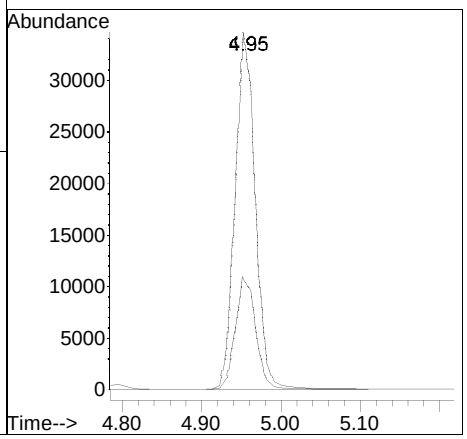


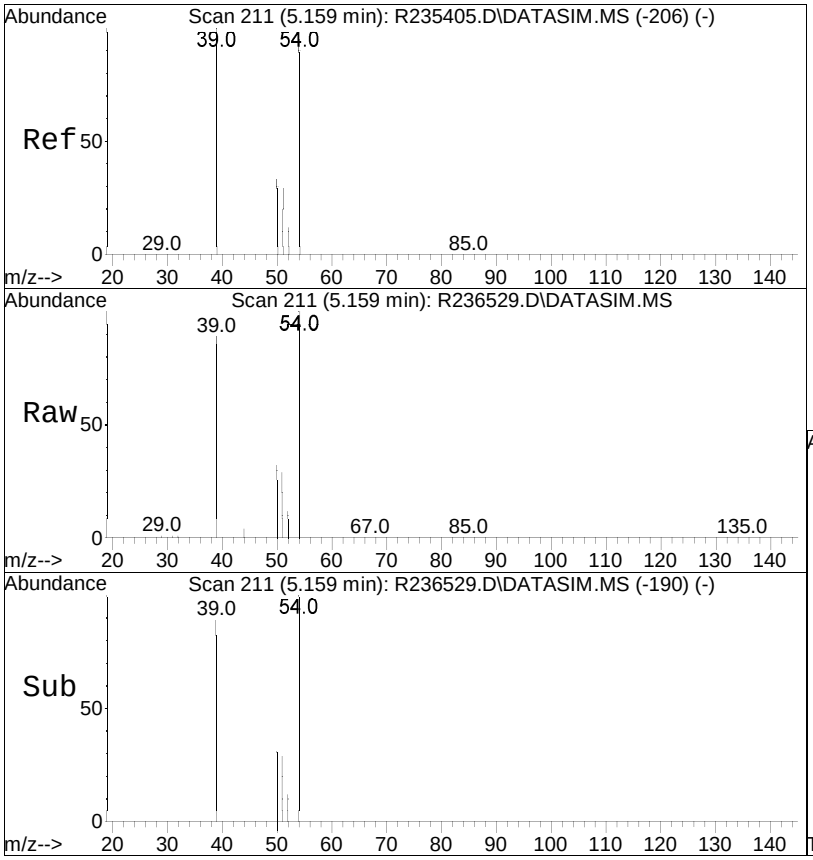


#6
vinyl chloride
Concen: 4.84 ppbV
RT: 4.95 min Scan# 190
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 62 Resp: 60247

Ion	Ratio	Lower	Upper
62	100		
64	31.6	25.5	38.3

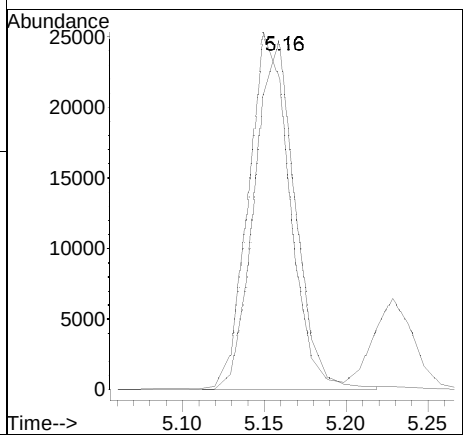


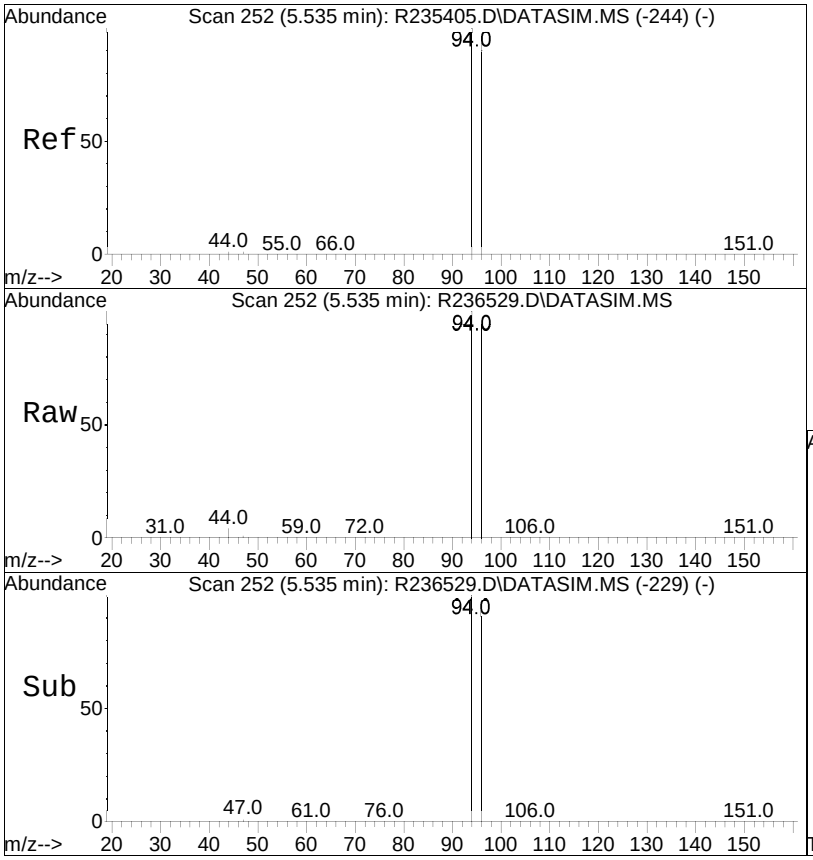


#7
1,3-butadiene
Concen: 5.05 ppbV m
RT: 5.16 min Scan# 211
Delta R.T. 0.010 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 54 Resp: 42905

Ion	Ratio	Lower	Upper
54	100		
39	88.9	91.3	136.9#

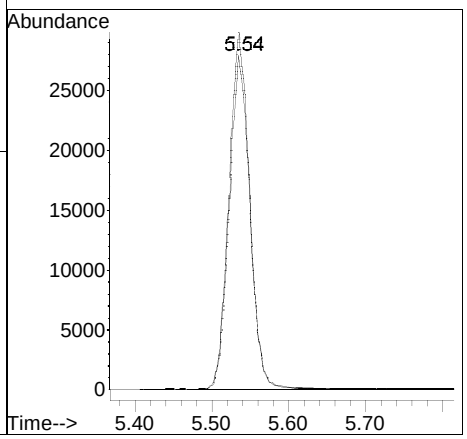


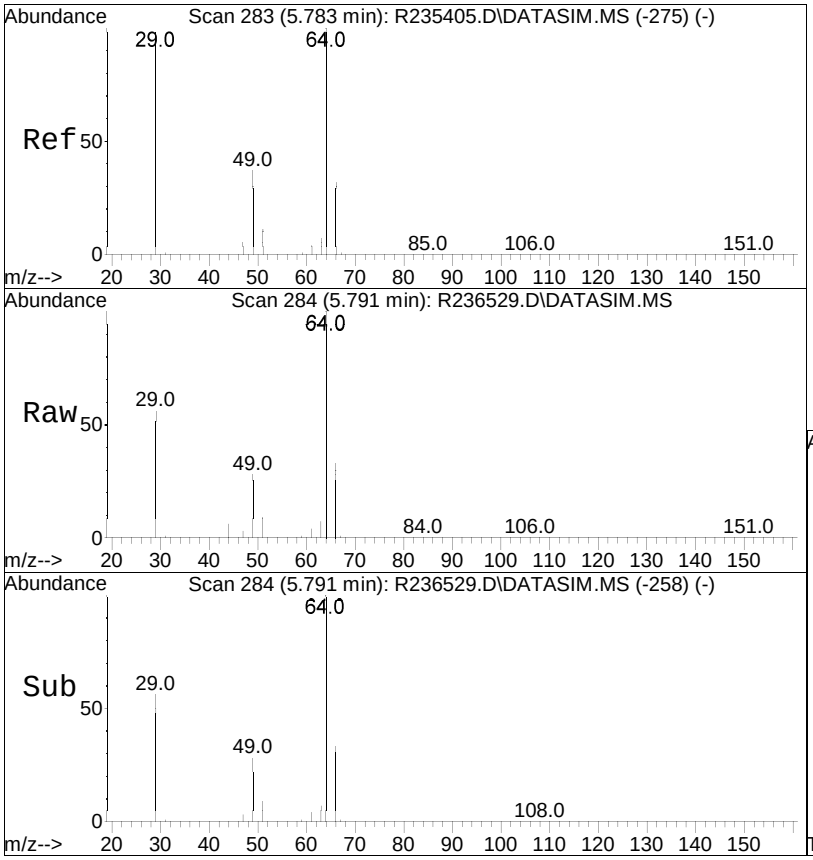


#8
bromomethane
Concen: 5.06 ppbV
RT: 5.54 min Scan# 252
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 94 Resp: 54851

Ion	Ratio	Lower	Upper
94	100		
96	93.5	75.5	113.3

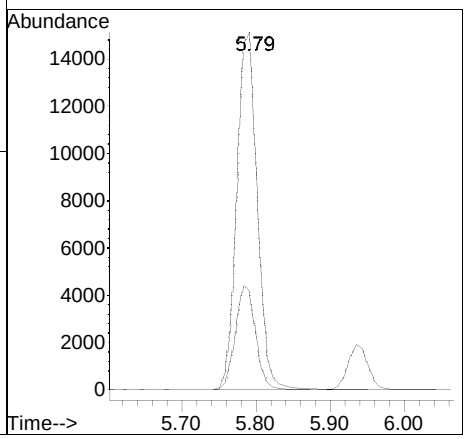


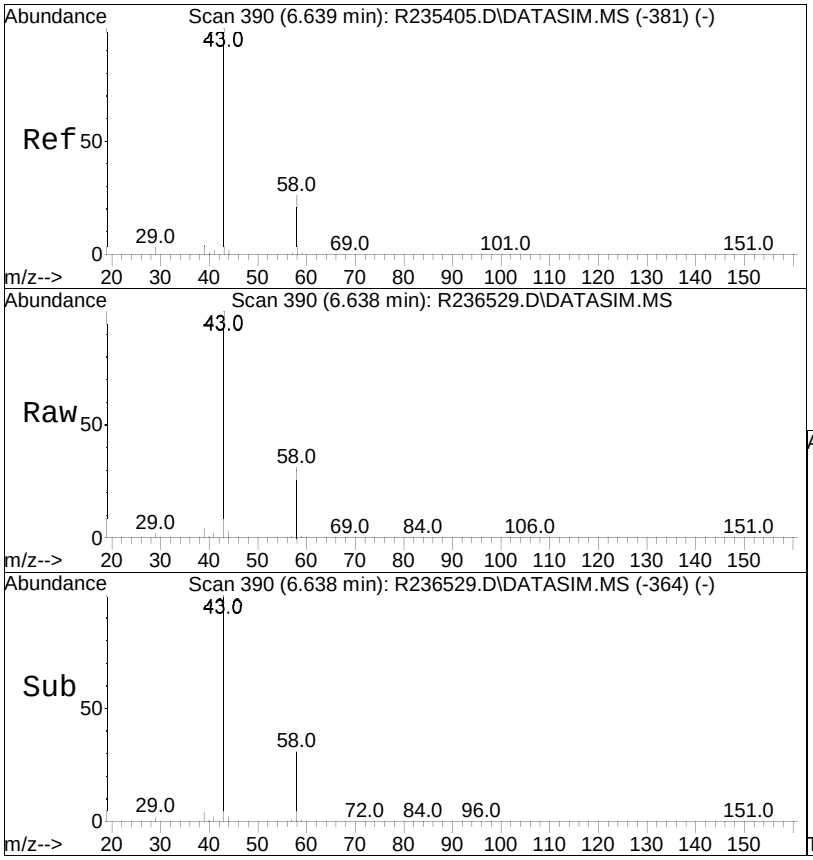


#9
chloroethane
Concen: 4.12 ppbV
RT: 5.79 min Scan# 284
Delta R.T. 0.008 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 64 Resp: 28668

Ion	Ratio	Lower	Upper
64	100		
49	27.5	25.1	37.7

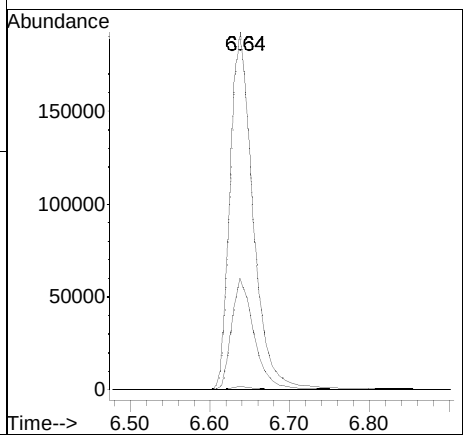


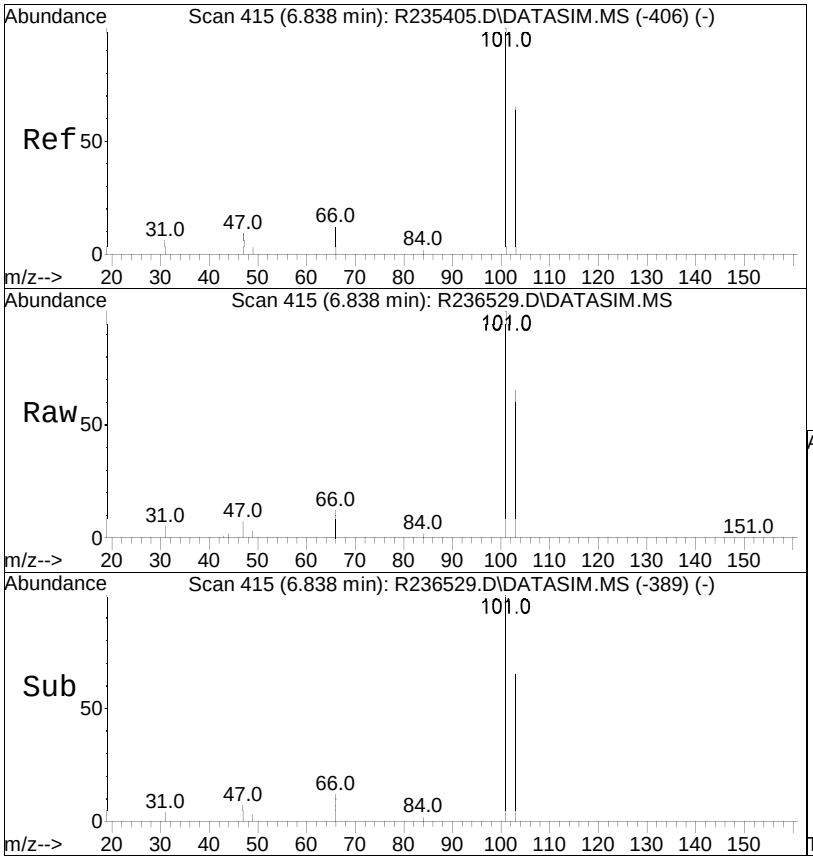


#12
acetone
Concen: 22.18 ppbV
RT: 6.64 min Scan# 390
Delta R.T. 0.008 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 43 Resp: 383314

Ion	Ratio	Lower	Upper
43	100		
58	31.2	22.4	33.6
57	0.9	0.6	1.0

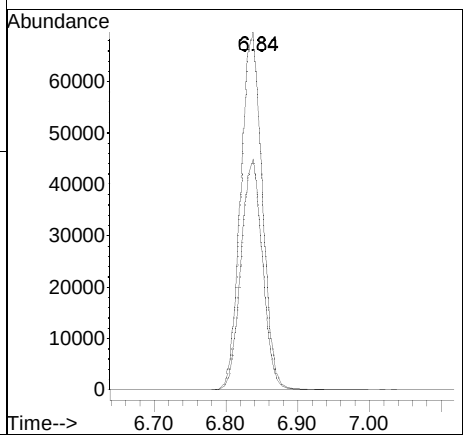


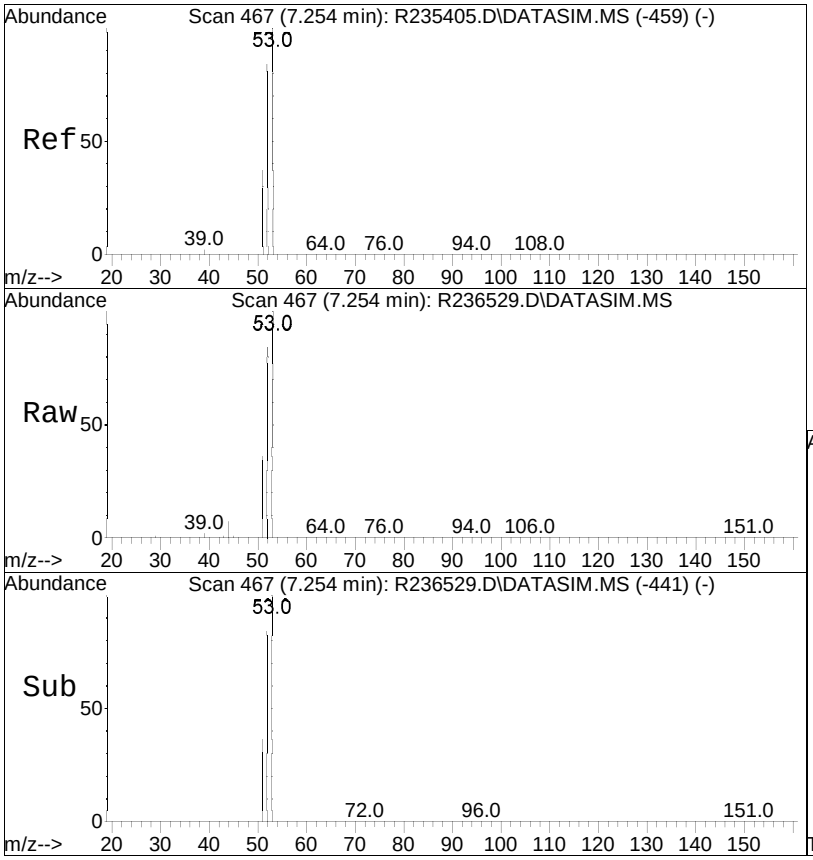


#13
trichlorofluoromethane
Concen: 4.67 ppbV
RT: 6.84 min Scan# 415
Delta R.T. 0.008 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:101 Resp: 142559

Ion	Ratio	Lower	Upper
101	100		
103	64.6	51.4	77.0

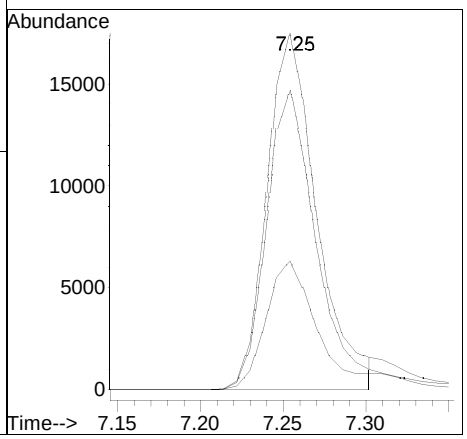


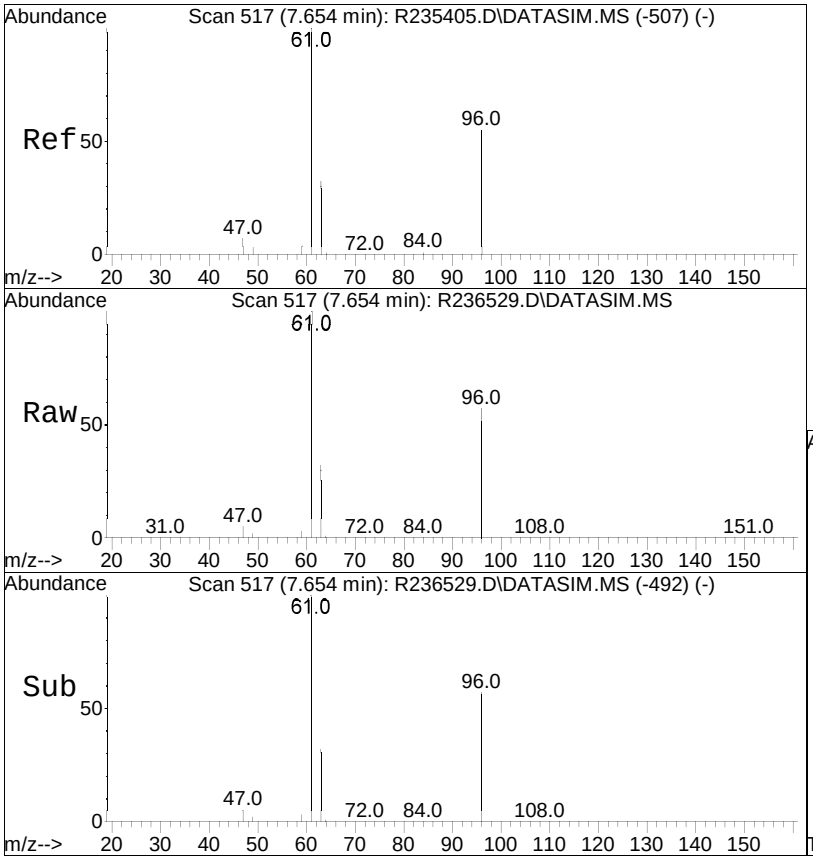


#15
acrylonitrile
Concen: 4.06 ppbV m
RT: 7.25 min Scan# 467
Delta R.T. 0.008 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 53 Resp: 36564

Ion	Ratio	Lower	Upper
53	100		
52	84.1	67.5	101.3
51	36.1	29.5	44.3

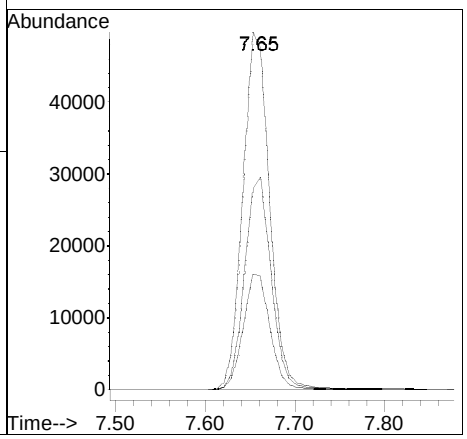


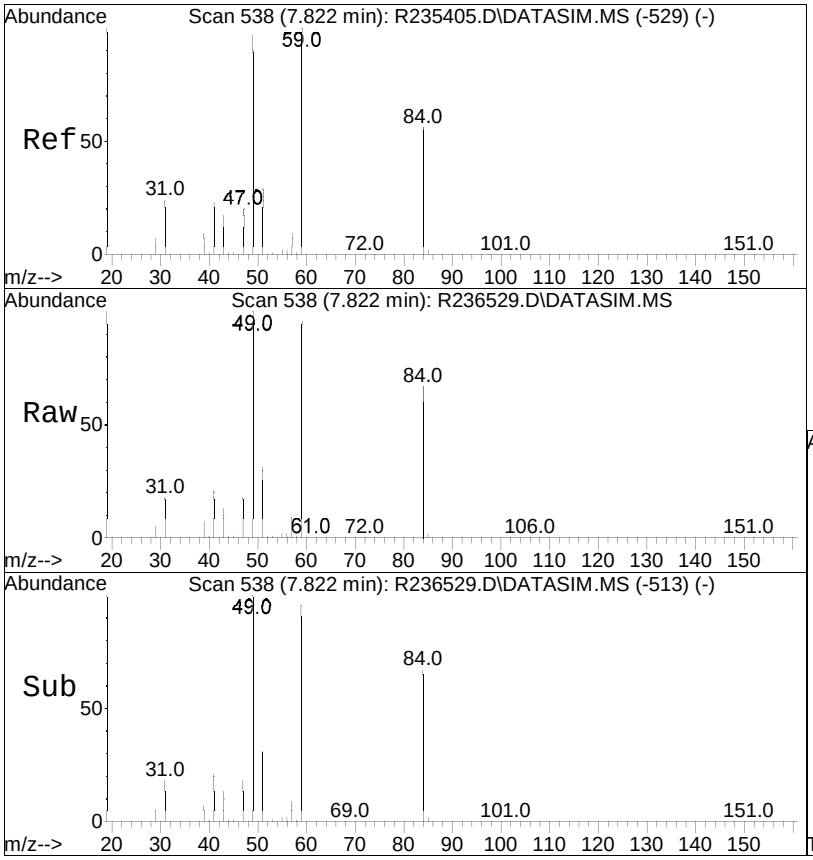


#16
1,1-dichloroethene
Concen: 4.86 ppbV
RT: 7.65 min Scan# 517
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 61 Resp: 101659

Ion	Ratio	Lower	Upper
61	100		
96	56.5	43.4	65.0
63	32.2	25.8	38.6

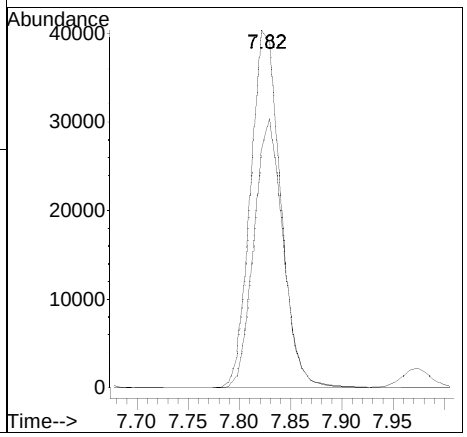


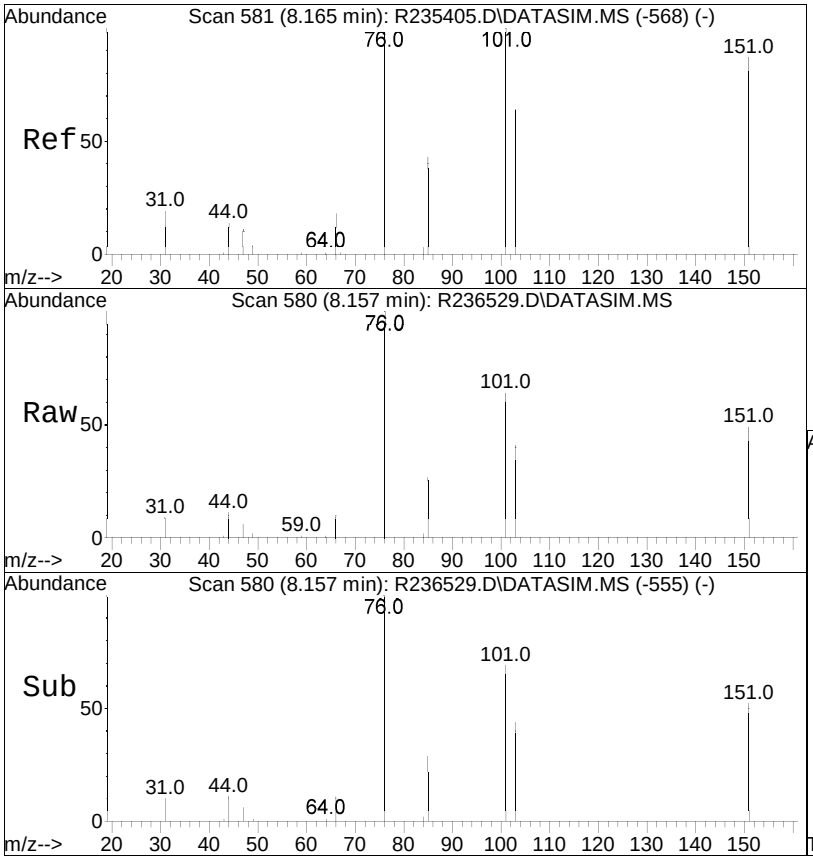


#18
methylene chloride
Concen: 4.57 ppbV
RT: 7.82 min Scan# 538
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 49 Resp: 81991

Ion	Ratio	Lower	Upper
49	100		
84	66.5	53.0	79.6

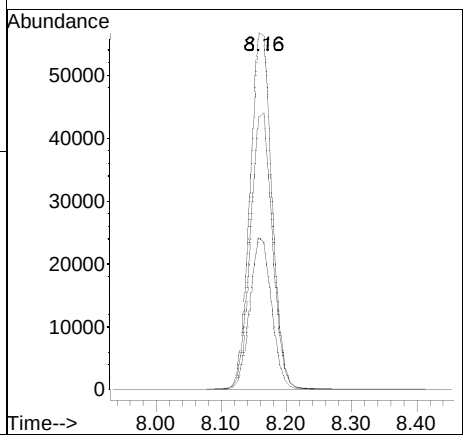


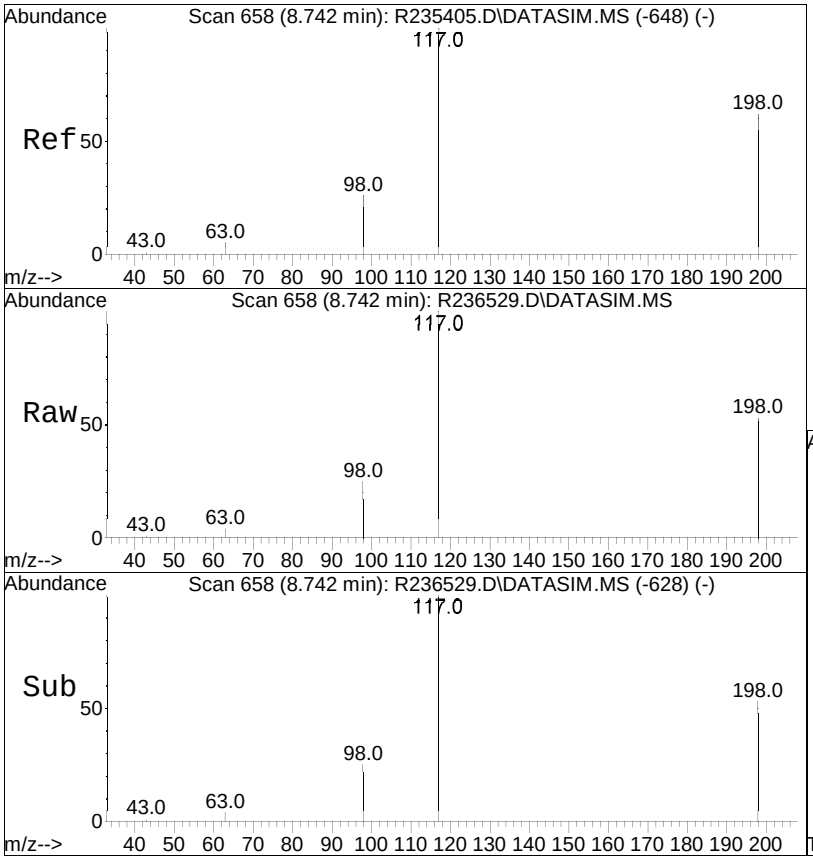


#21
Freon 113
Concen: 5.13 ppbV
RT: 8.16 min Scan# 580
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:101 Resp: 130613

Ion	Ratio	Lower	Upper
101	100		
85	42.6	36.2	54.2
151	76.3	58.2	87.4

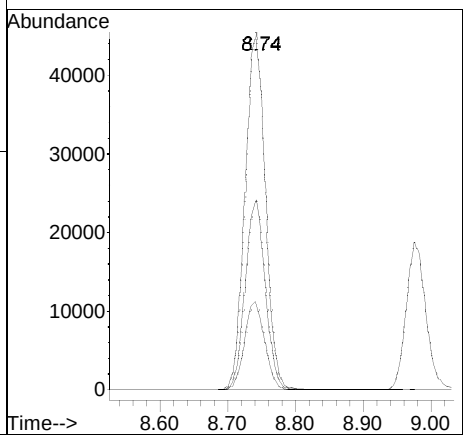


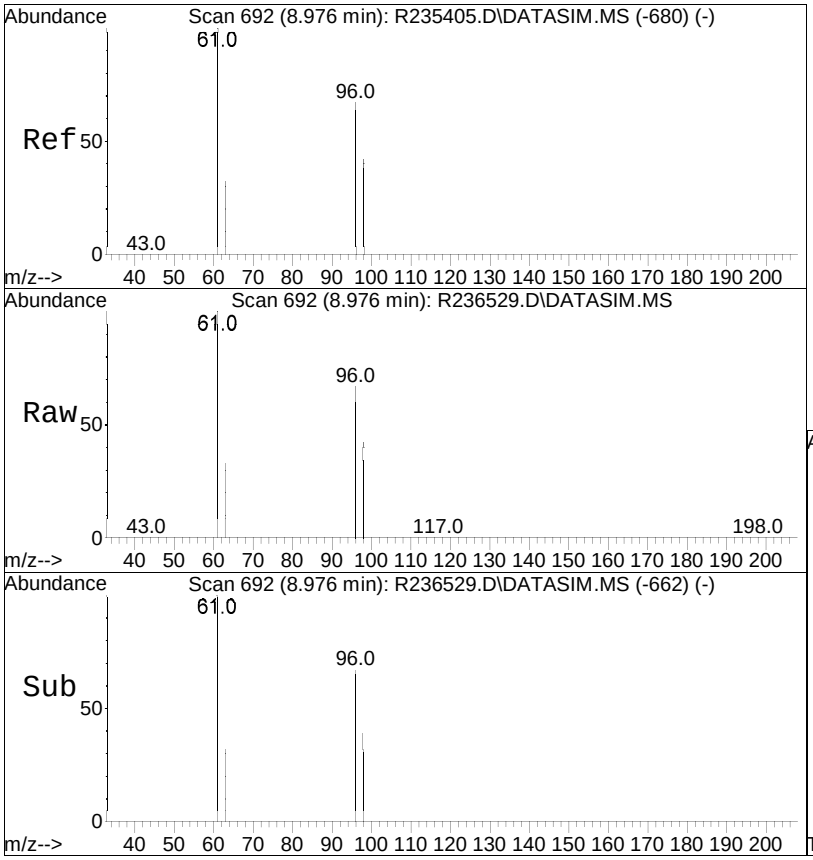


#22
Halothane
Concen: 4.79 ppbV
RT: 8.74 min Scan# 658
Delta R.T. 0.007 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:117 Resp: 93471

Ion	Ratio	Lower	Upper
117	100		
198	53.4	39.1	58.7
98	24.7	21.3	31.9

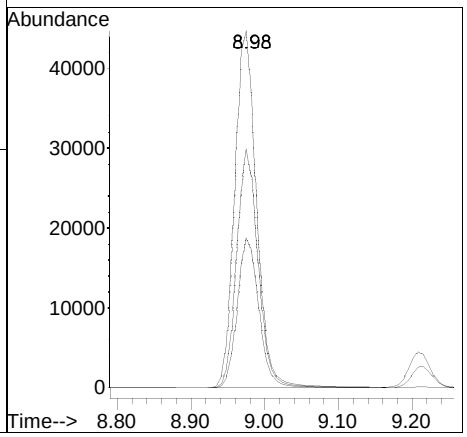


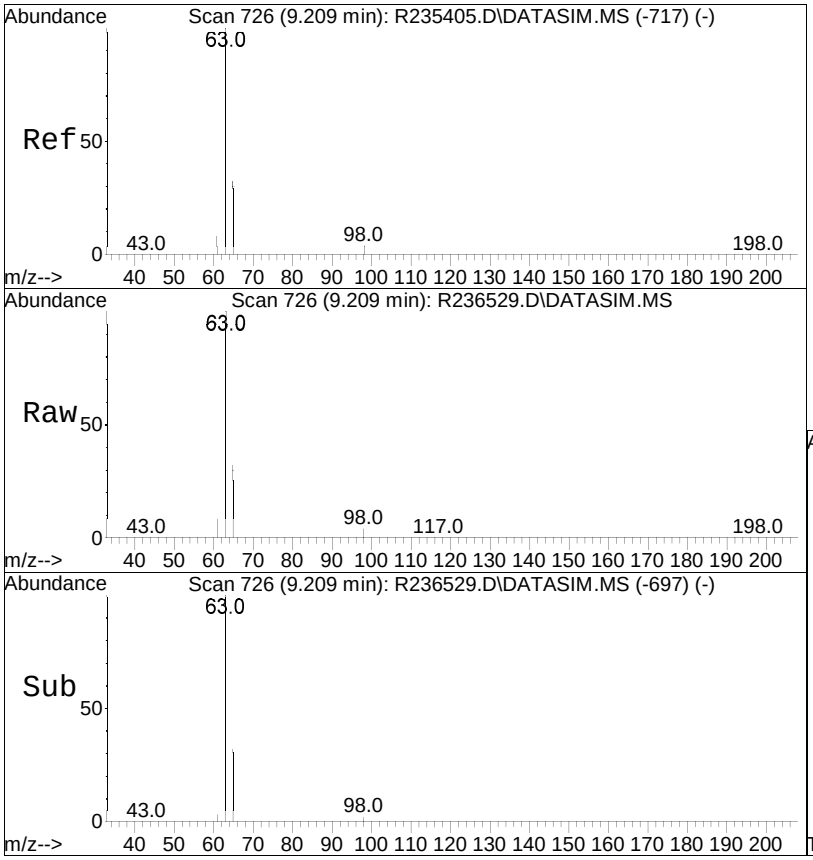


#23
trans-1,2-dichloroethene
Concen: 4.59 ppbV
RT: 8.98 min Scan# 692
Delta R.T. 0.007 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 61 Resp: 91857

Ion	Ratio	Lower	Upper
61	100		
96	66.9	47.2	70.8
98	42.2	29.0	43.6

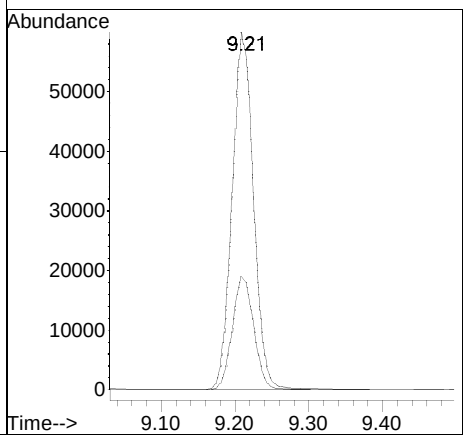


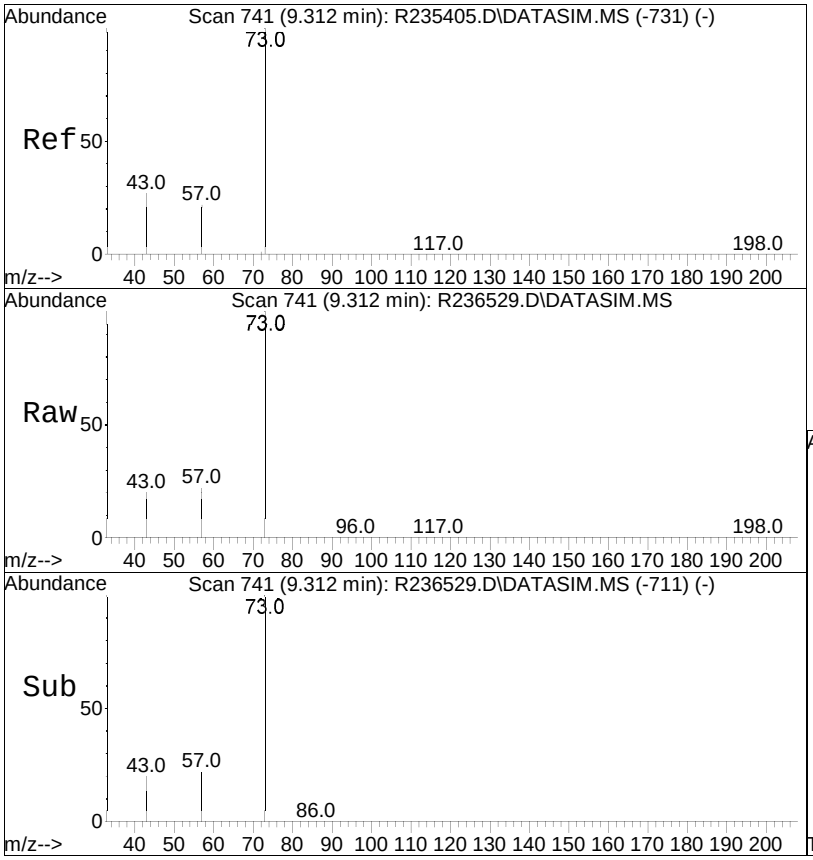


#24
1,1-dichloroethane
Concen: 5.09 ppbV
RT: 9.21 min Scan# 726
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 63 Resp: 118364

Ion	Ratio	Lower	Upper
63	100		
65	31.7	25.5	38.3

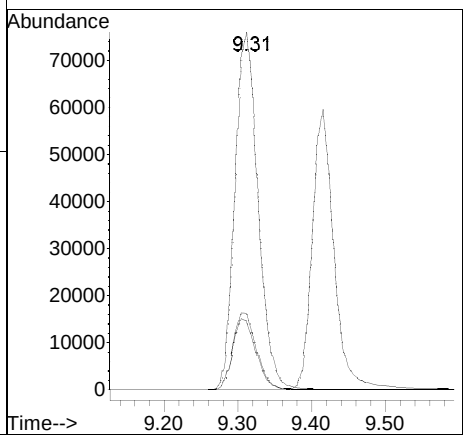


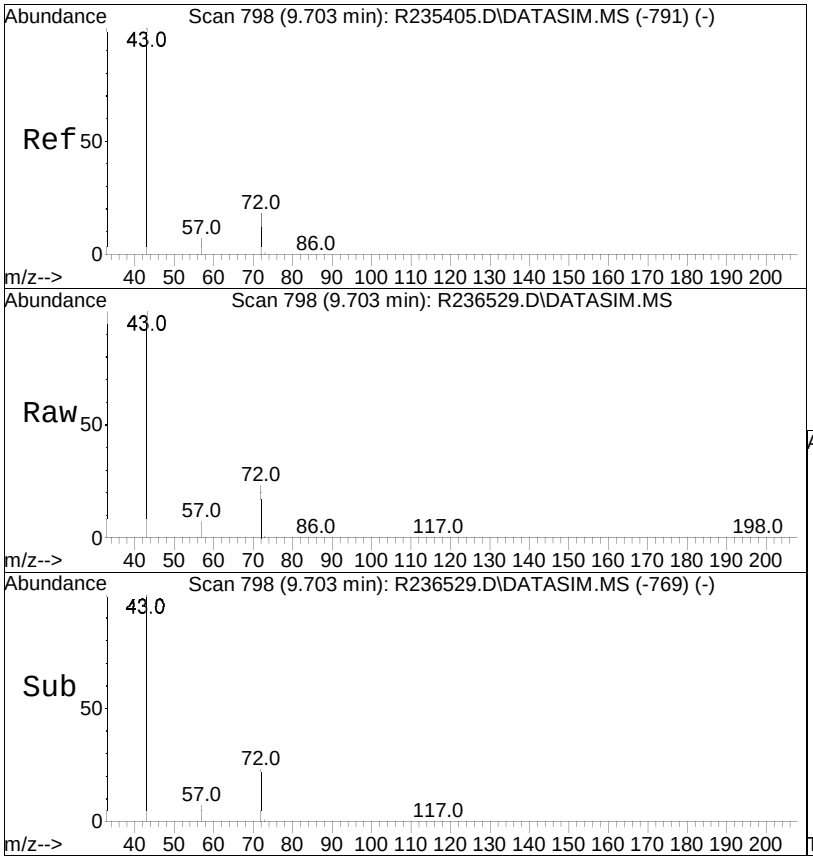


#25
MTBE
Concen: 5.10 ppbV
RT: 9.31 min Scan# 741
Delta R.T. 0.007 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 73 Resp: 165684

Ion	Ratio	Lower	Upper
73	100		
57	21.5	17.8	26.6
43	19.5	18.7	28.1

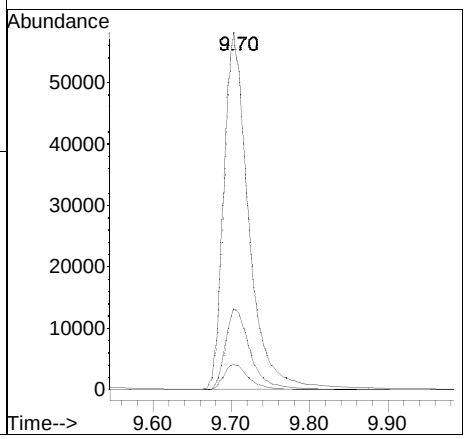


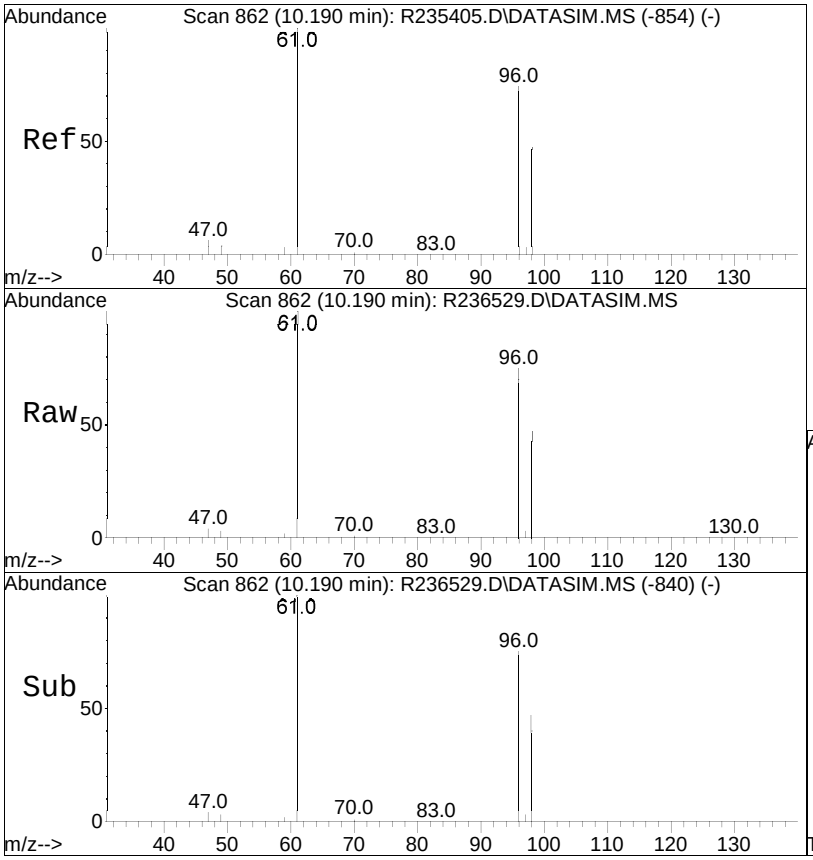


#27
2-butanone
Concen: 4.89 ppbV
RT: 9.70 min Scan# 798
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 43 Resp: 126063

Ion	Ratio	Lower	Upper
43	100		
72	22.9	17.5	26.3
57	7.4	5.8	8.8

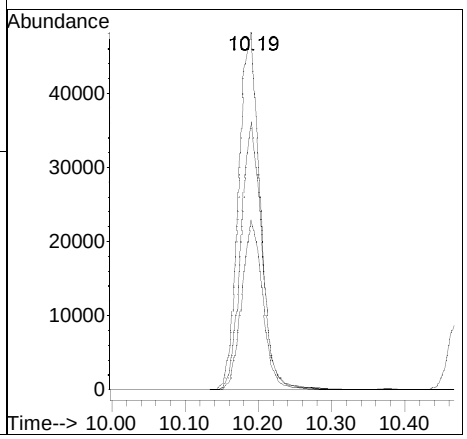


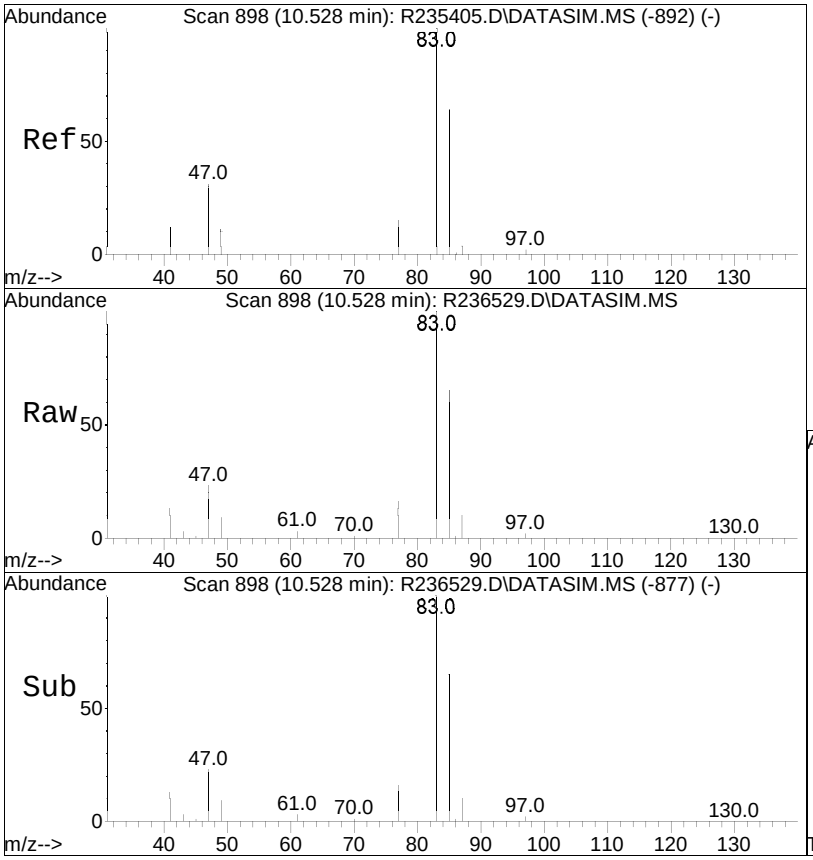


#28
cis-1,2-dichloroethene
Concen: 5.45 ppbV
RT: 10.19 min Scan# 862
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 61 Resp: 98310

Ion	Ratio	Lower	Upper
61	100		
96	75.1	58.4	87.6
98	47.4	37.3	55.9

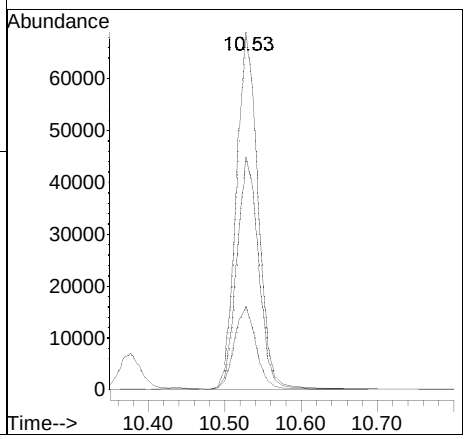


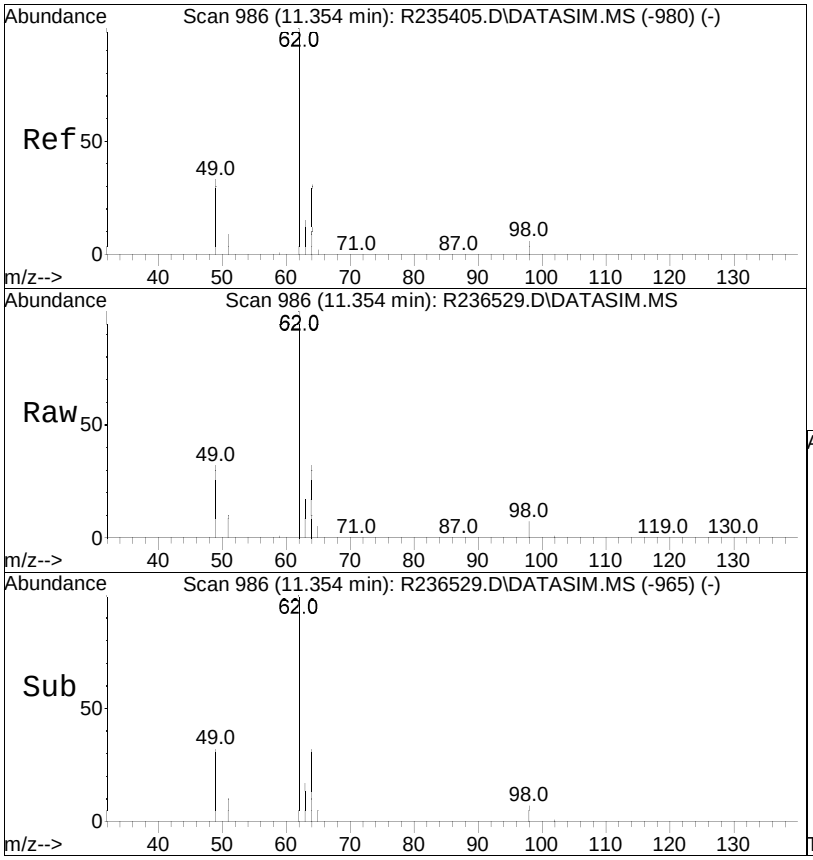


#30
chloroform
Concen: 5.05 ppbV
RT: 10.53 min Scan# 898
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 83 Resp: 134822

Ion	Ratio	Lower	Upper
83	100		
85	65.2	52.6	78.8
47	23.3	21.0	31.4

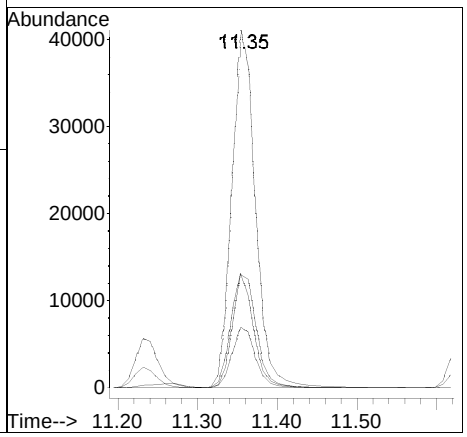


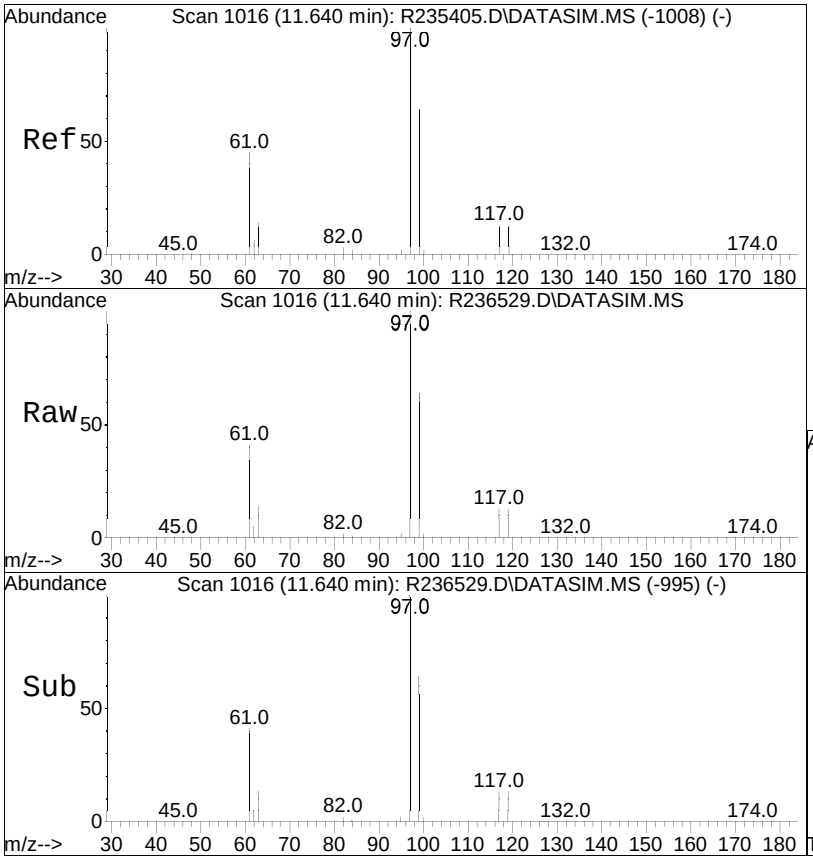


#32
1,2-dichloroethane
Concen: 4.51 ppbV
RT: 11.35 min Scan# 986
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 62 Resp: 83798

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.5	38.3
49	32.2	24.2	36.2
63	17.1	12.6	18.8

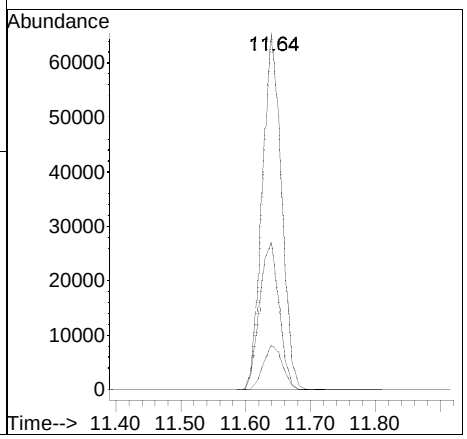


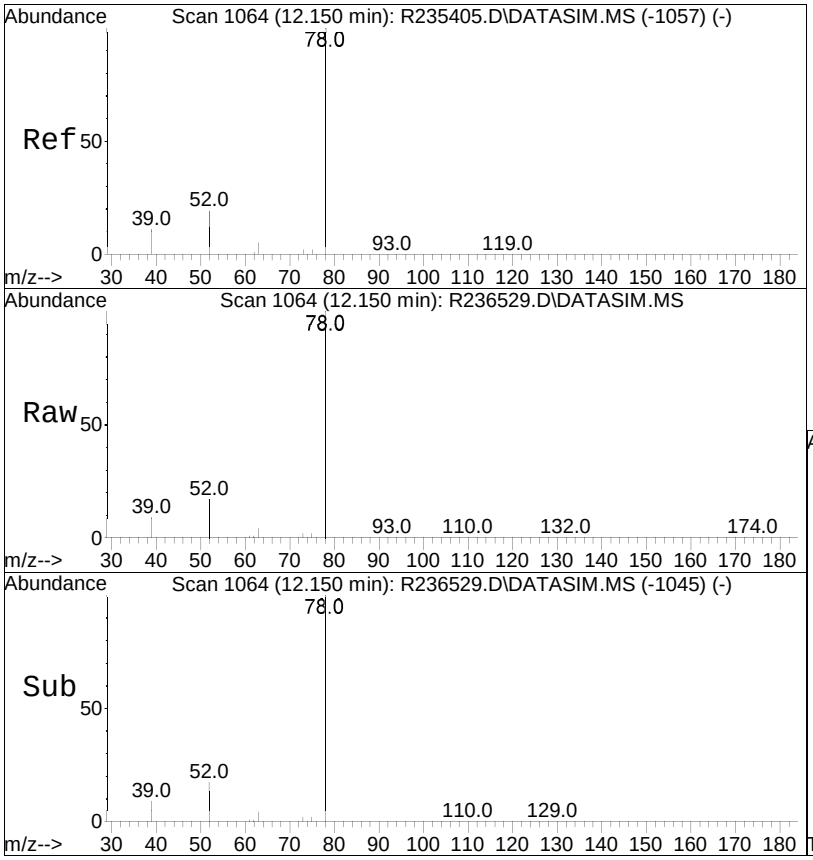


#36
1,1,1-trichloroethane
Concen: 4.32 ppbV
RT: 11.64 min Scan# 1016
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 97 Resp: 127518

Ion	Ratio	Lower	Upper
97	100		
61	41.3	34.3	51.5
119	12.6	9.6	14.4

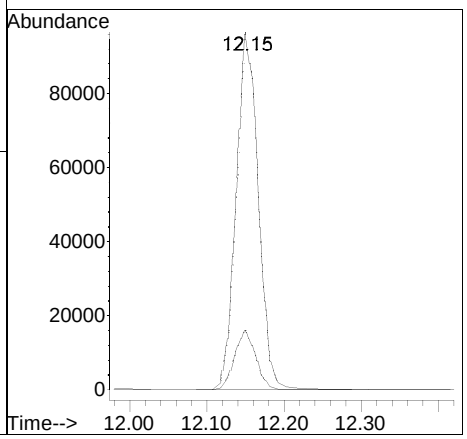


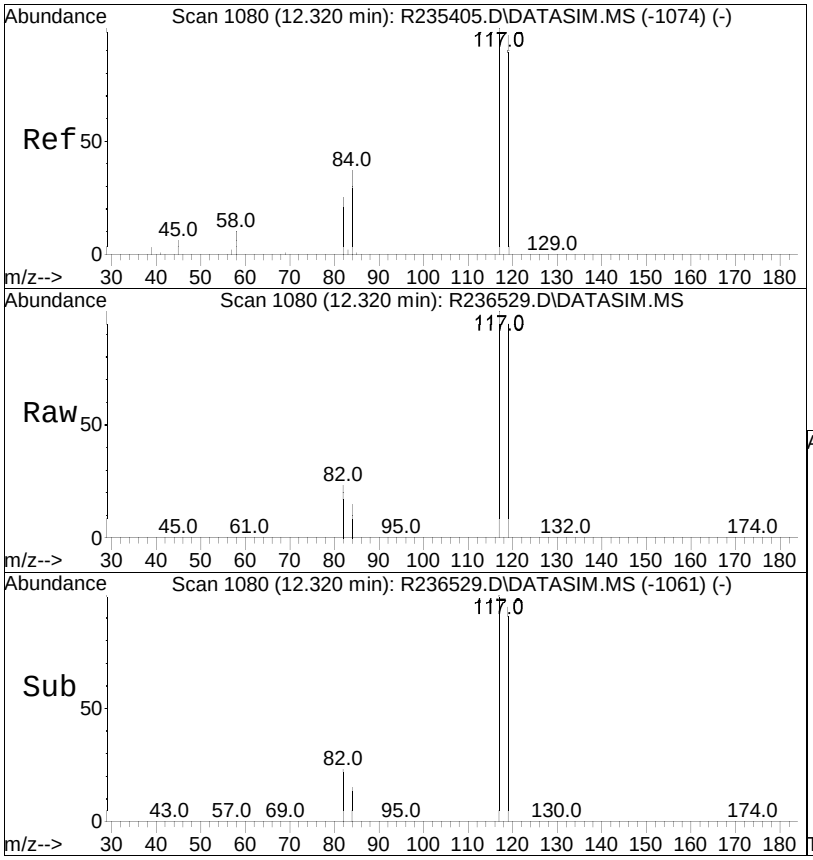


#37
benzene
Concen: 4.70 ppbV
RT: 12.15 min Scan# 1064
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 78 Resp: 189388

Ion	Ratio	Lower	Upper
78	100		
52	16.8	13.8	20.8

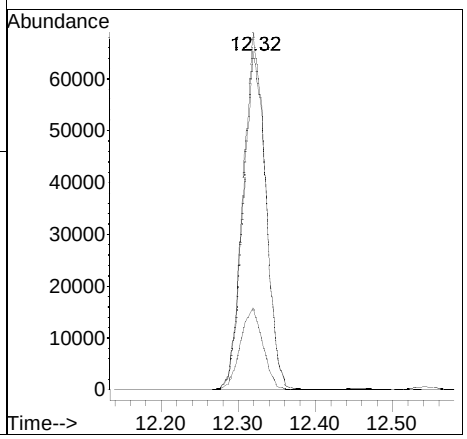


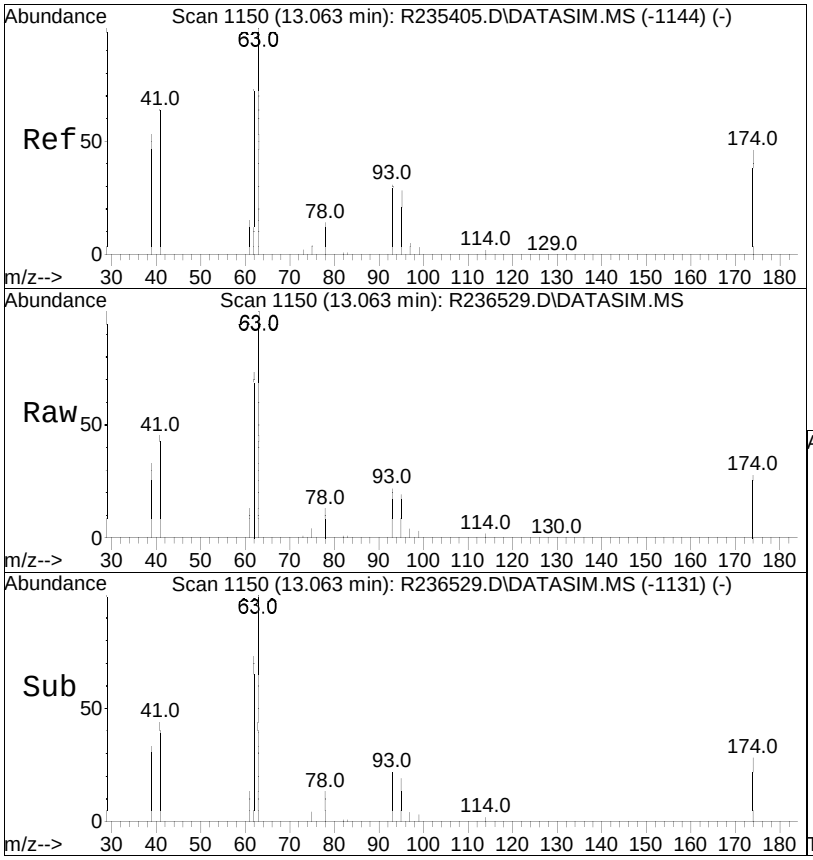


#38
carbon tetrachloride
Concen: 4.43 ppbV
RT: 12.32 min Scan# 1080
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:117 Resp: 137289

Ion	Ratio	Lower	Upper
117	100		
119	95.0	76.6	114.8
82	23.0	20.1	30.1

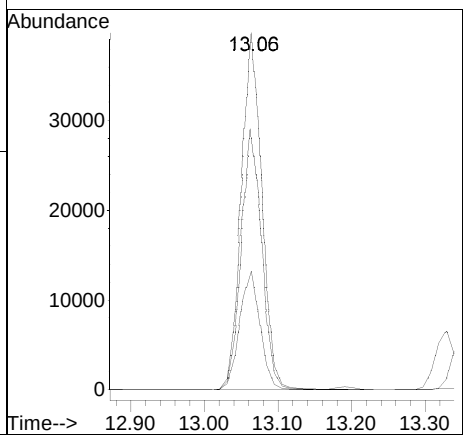


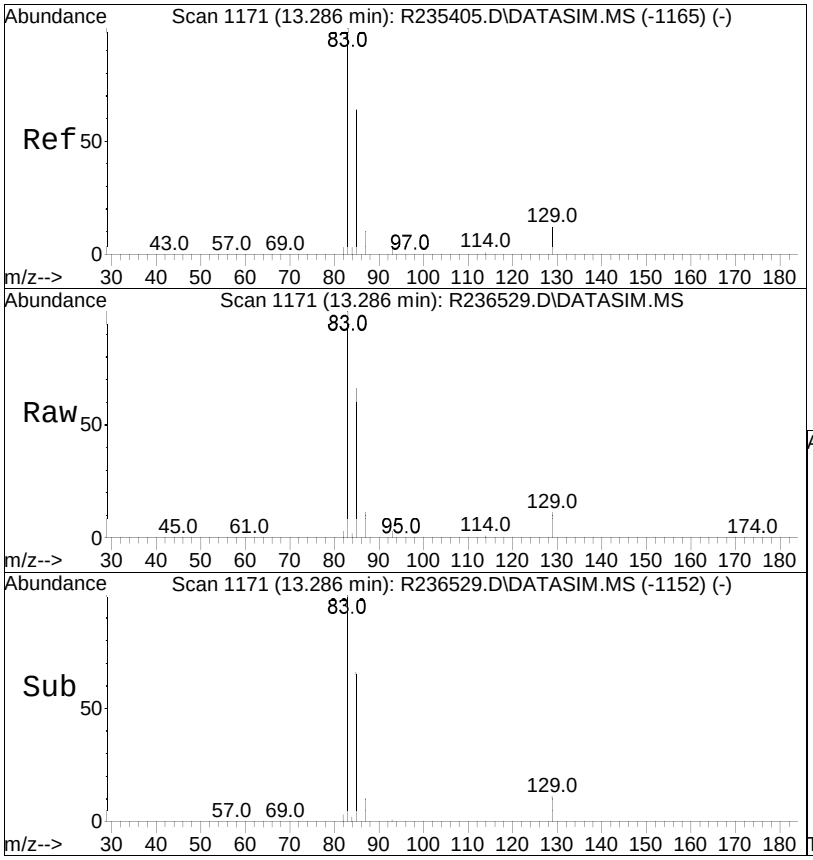


#41
1,2-dichloropropane
Concen: 4.76 ppbV
RT: 13.06 min Scan# 1150
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 63 Resp: 76913

Ion	Ratio	Lower	Upper
63	100		
62	73.0	58.6	88.0
39	33.3	32.2	48.2

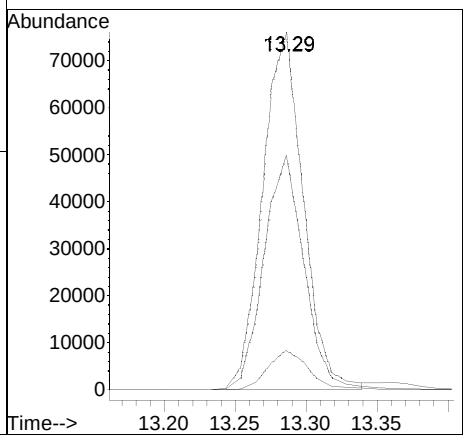


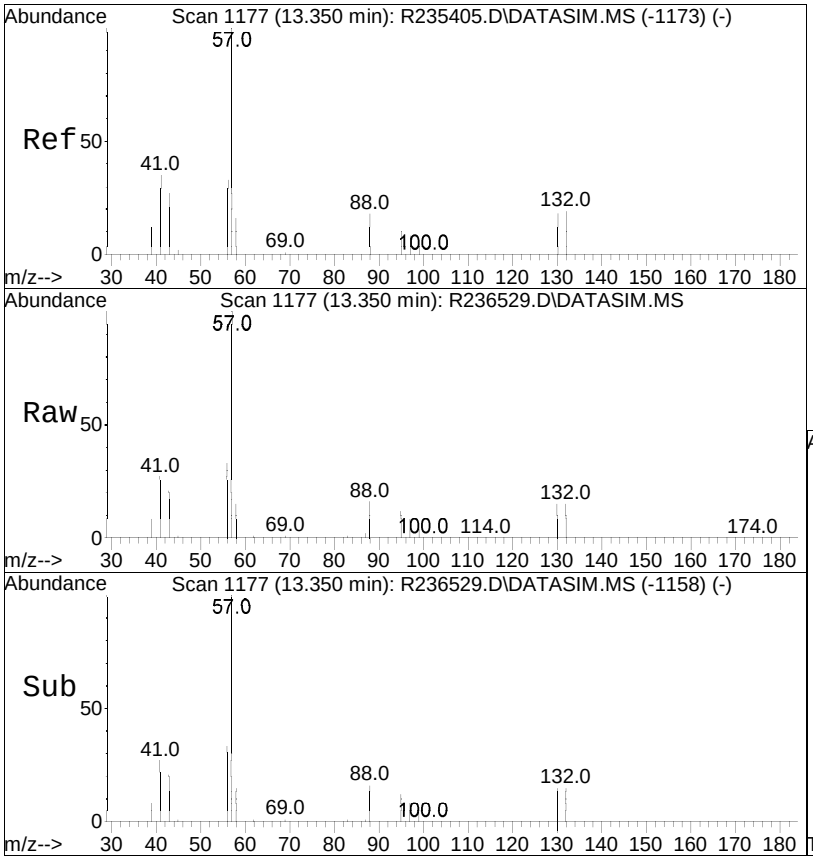


#42
bromodichloromethane
Concen: 4.36 ppbV m
RT: 13.29 min Scan# 1171
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 83 Resp: 149830

Ion	Ratio	Lower	Upper
83	100		
85	65.6	52.6	79.0
129	11.2	8.6	13.0

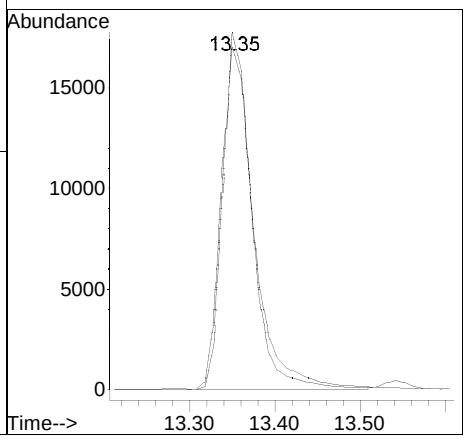


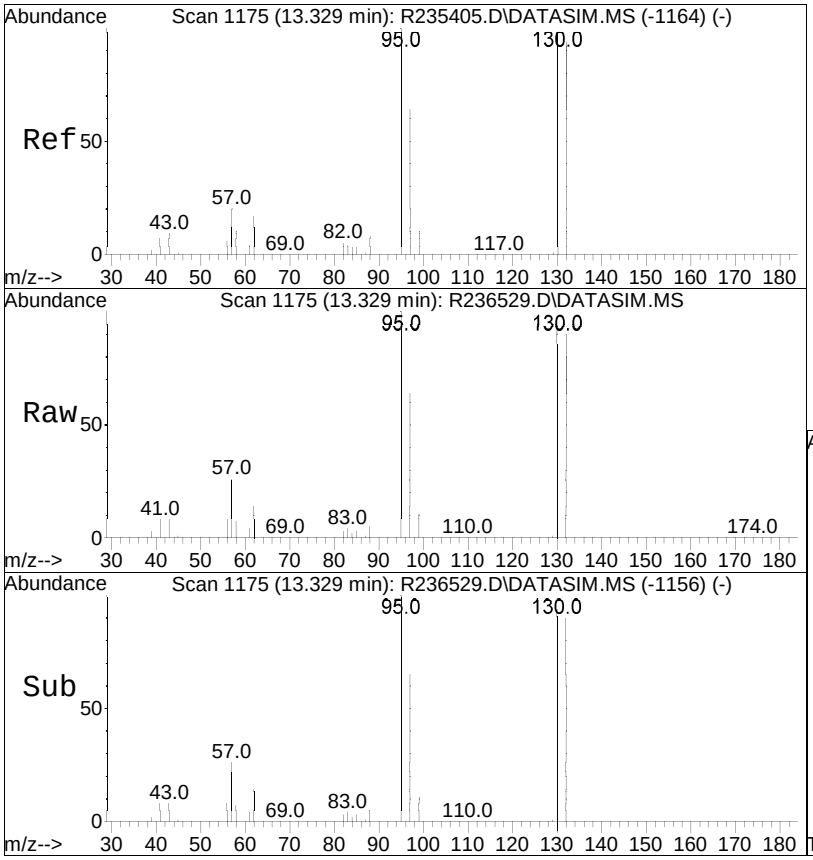


#43
1,4-dioxane
Concen: 4.81 ppbV
RT: 13.35 min Scan# 1177
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 88 Resp: 44302

Ion	Ratio	Lower	Upper
88	100		
58	96.2	73.4	110.2

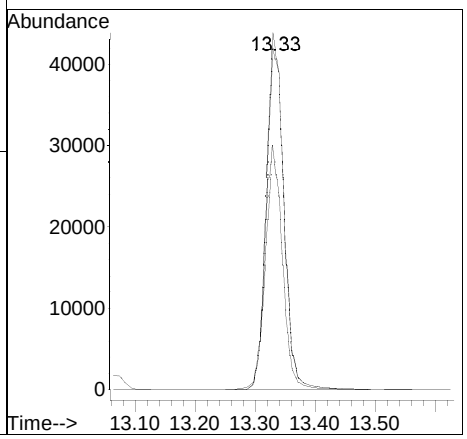


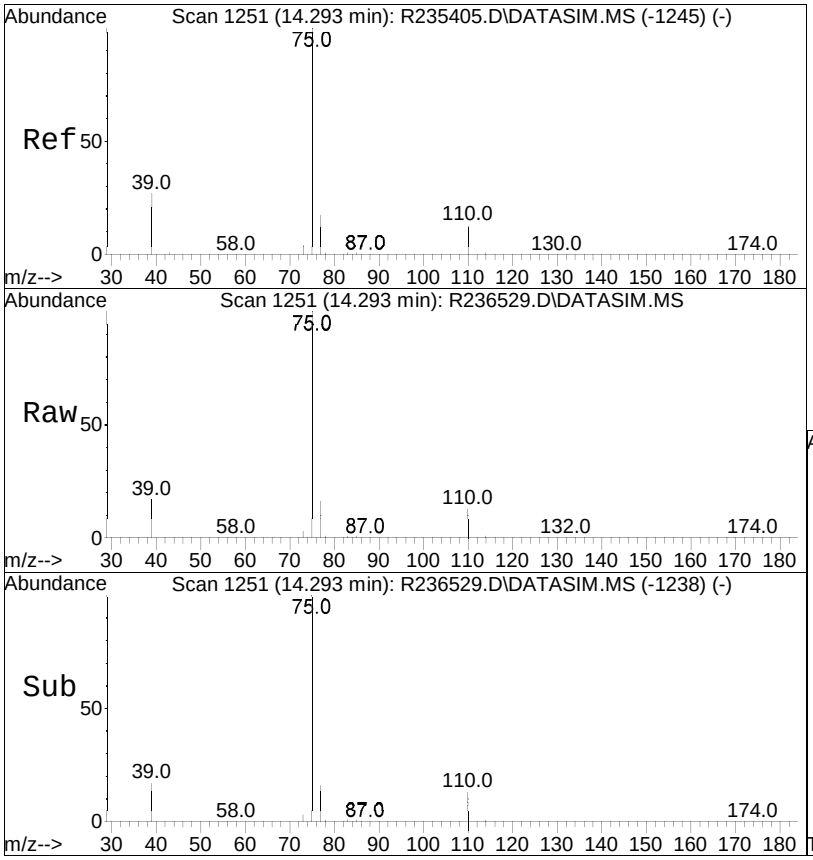


#44
trichloroethene
Concen: 4.88 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:130 Resp: 88828

Ion	Ratio	Lower	Upper
130	100		
132	96.0	77.0	115.6
97	68.6	57.8	86.8

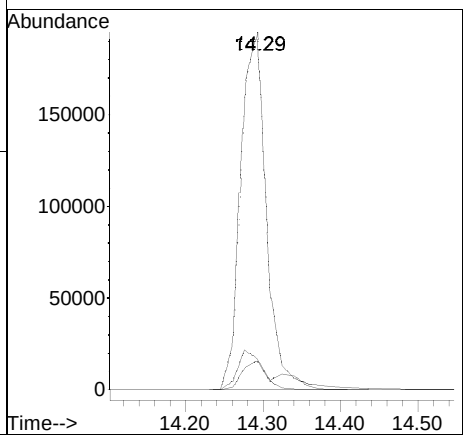


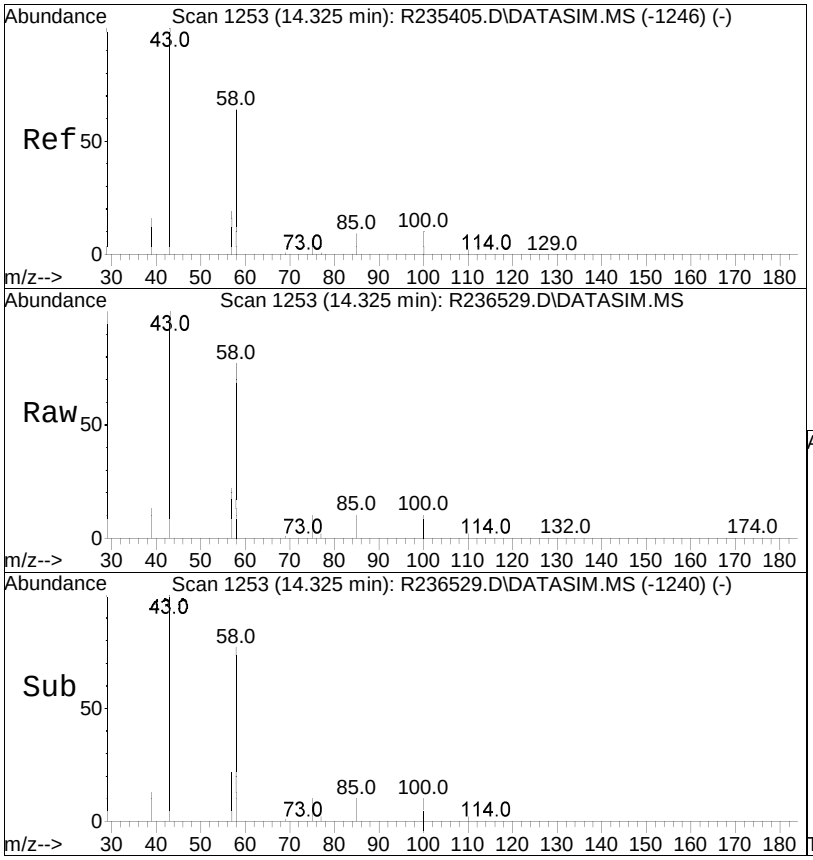


#47
cis-1,3-dichloropropene
Concen: 5.03 ppbV
RT: 14.29 min Scan# 1251
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 75 Resp: 448716

Ion	Ratio	Lower	Upper
75	100		
39	8.7	8.1	12.1
77	8.2	6.5	9.7

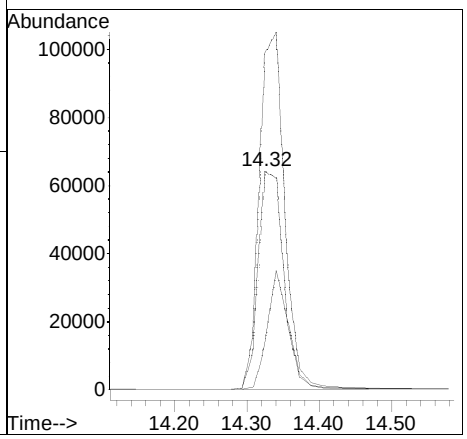


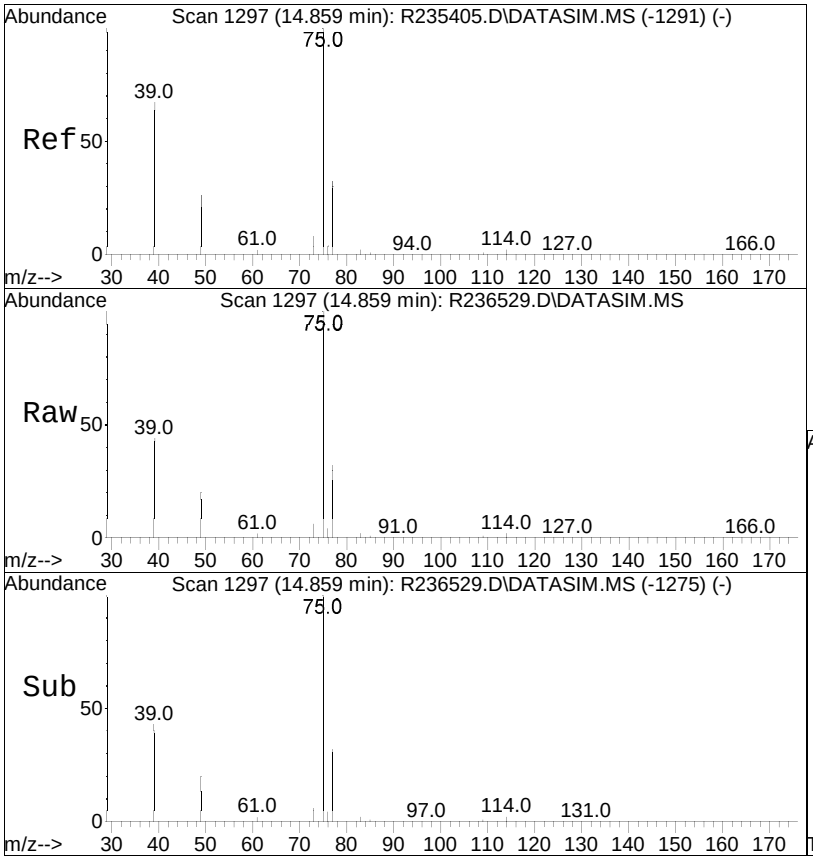


#48
4-methyl-2-pentanone
Concen: 4.59 ppbV
RT: 14.32 min Scan# 1253
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 43 Resp: 156000

Ion	Ratio	Lower	Upper
43	100		
58	153.2	116.8	175.2
100	20.5	17.4	26.0

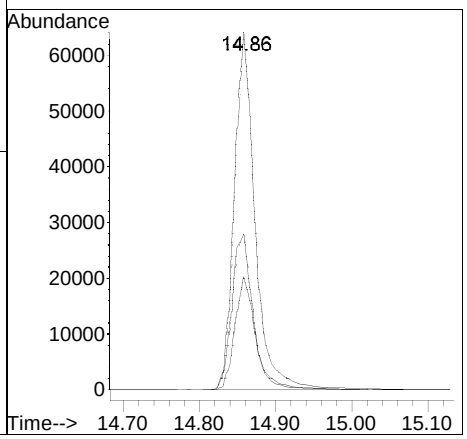


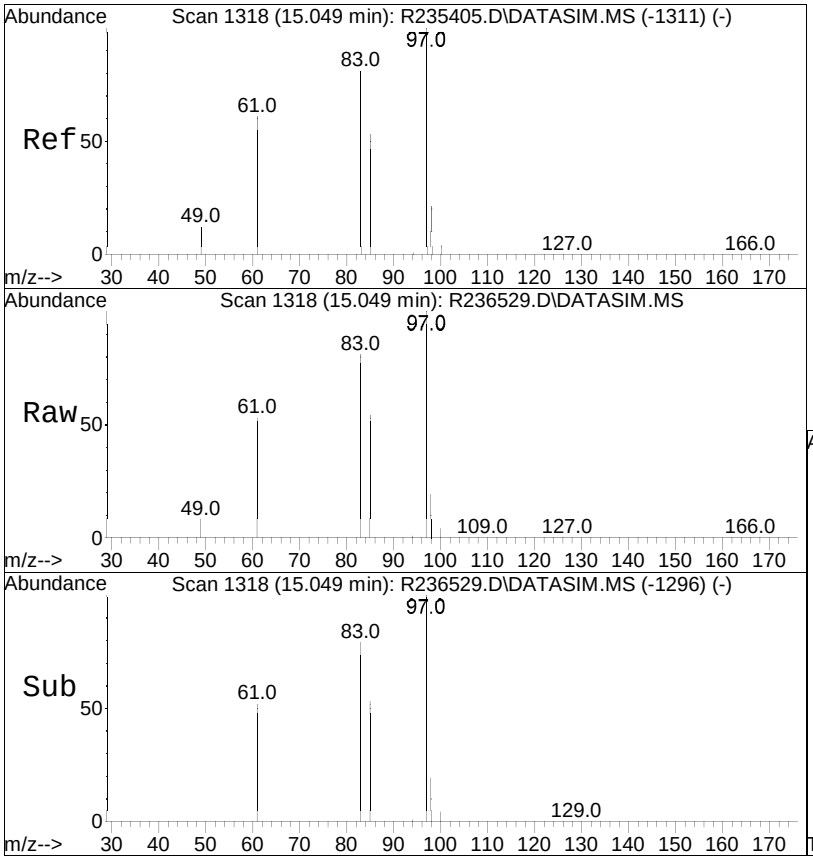


#49
trans-1,3-dichloropropene
Concen: 4.19 ppbV
RT: 14.86 min Scan# 1297
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 75 Resp: 120426

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.2	37.8
39	43.5	41.0	61.4

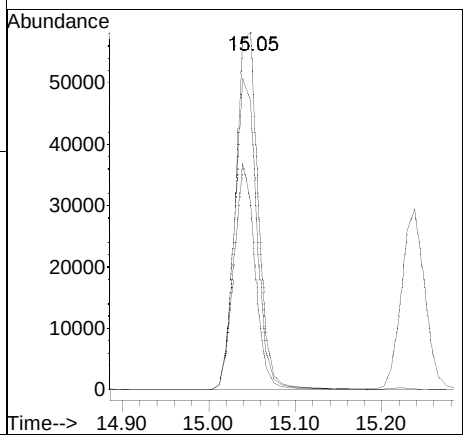


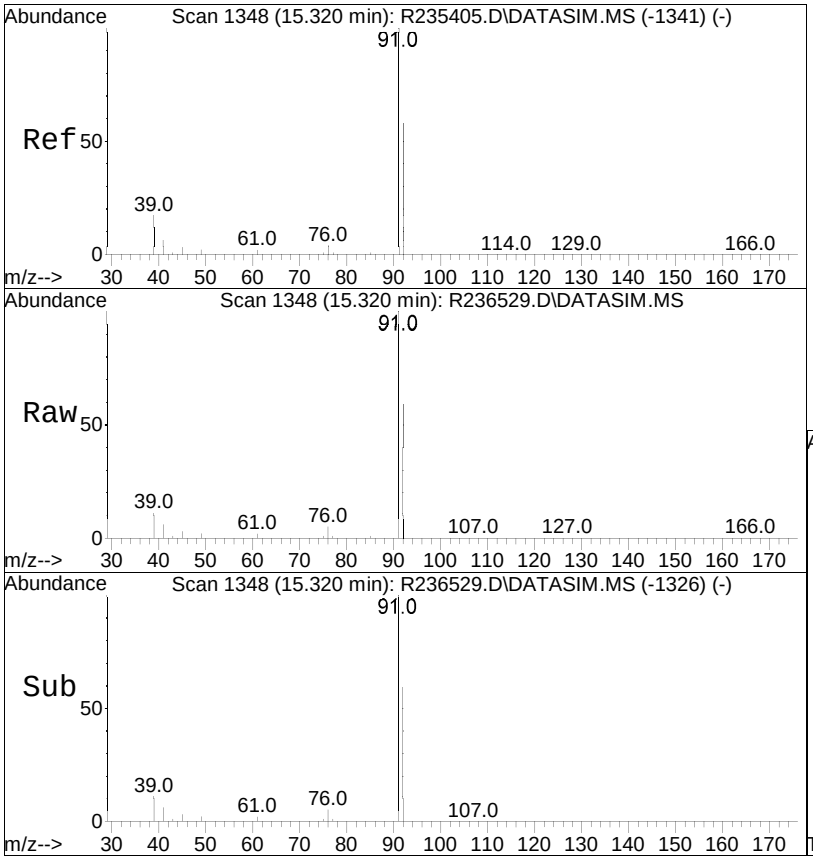


#50
1,1,2-trichloroethane
Concen: 5.00 ppbV
RT: 15.05 min Scan# 1318
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 97 Resp: 106195

Ion	Ratio	Lower	Upper
97	100		
83	81.1	66.0	99.0
61	52.8	48.3	72.5

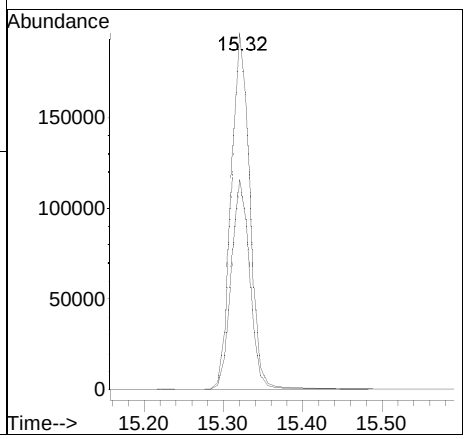


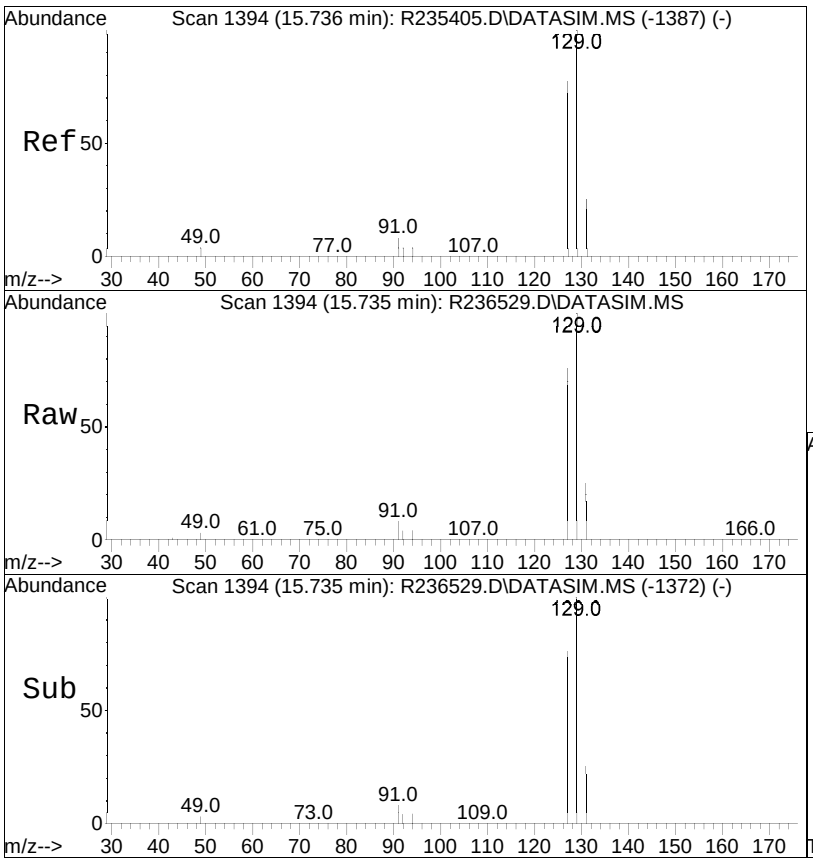


#52
toluene
Concen: 5.57 ppbV
RT: 15.32 min Scan# 1348
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 91 Resp: 319499

Ion	Ratio	Lower	Upper
91	100		
92	58.8	46.6	69.8

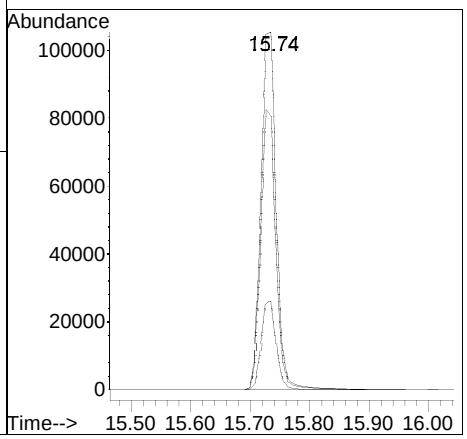


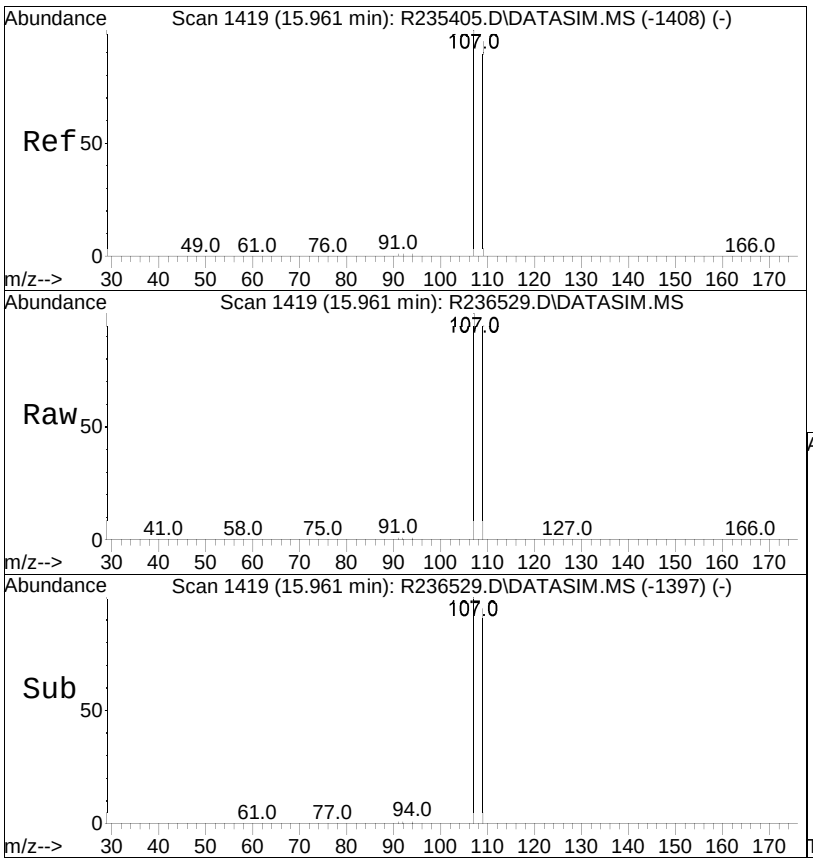


#55
dibromochloromethane
Concen: 5.46 ppbV
RT: 15.74 min Scan# 1394
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:129 Resp: 182759

Ion	Ratio	Lower	Upper
129	100		
127	76.4	61.5	92.3
131	24.8	19.8	29.6

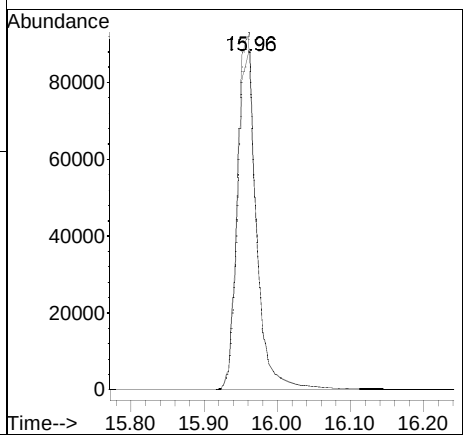


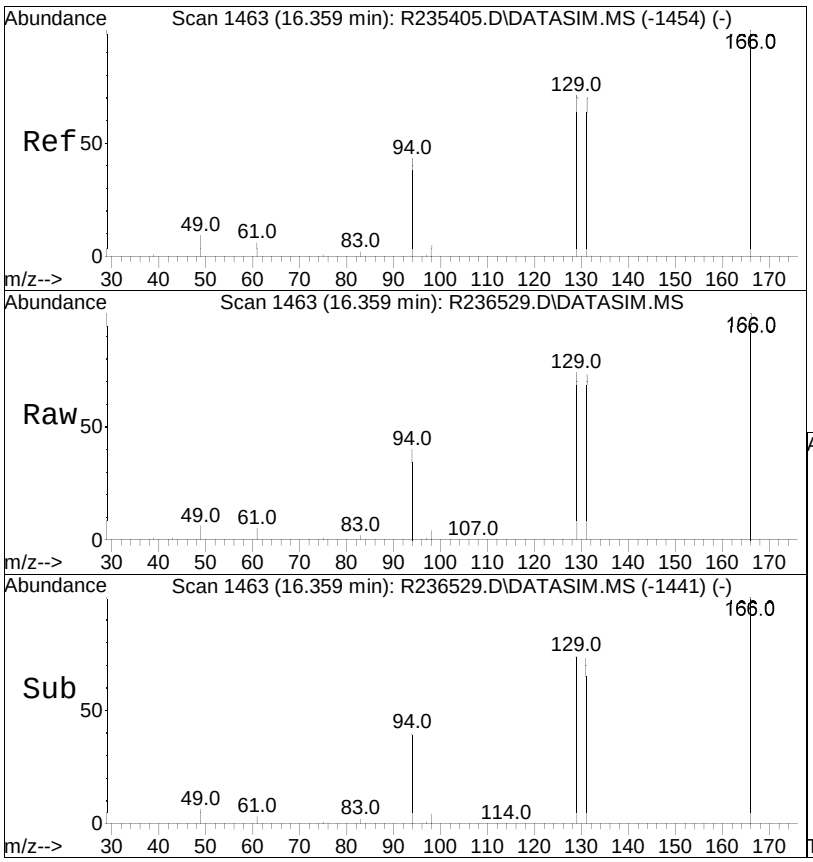


#56
1,2-dibromoethane
Concen: 5.64 ppbV
RT: 15.96 min Scan# 1419
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:107 Resp: 166018

Ion	Ratio	Lower	Upper
107	100		
109	95.1	75.8	113.6

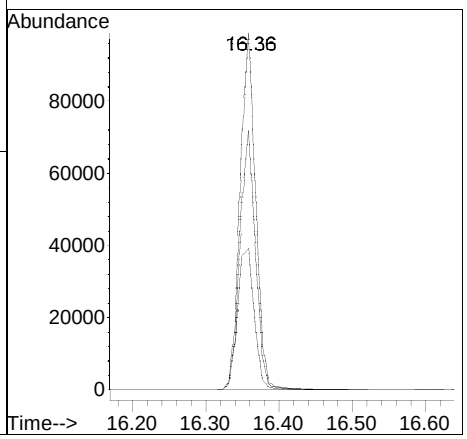


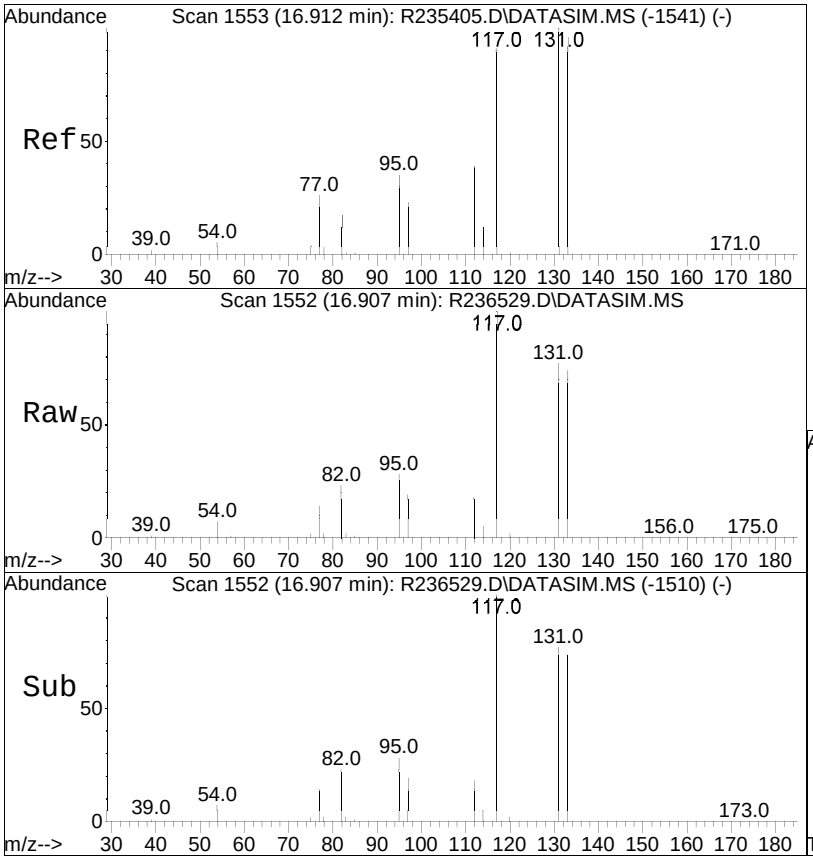


#57
tetrachloroethene
Concen: 5.39 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:166 Resp: 142521

Ion	Ratio	Lower	Upper
166	100		
131	72.7	60.6	90.8
94	39.7	39.0	58.6

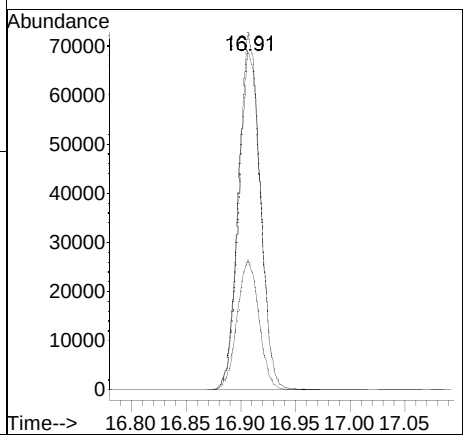


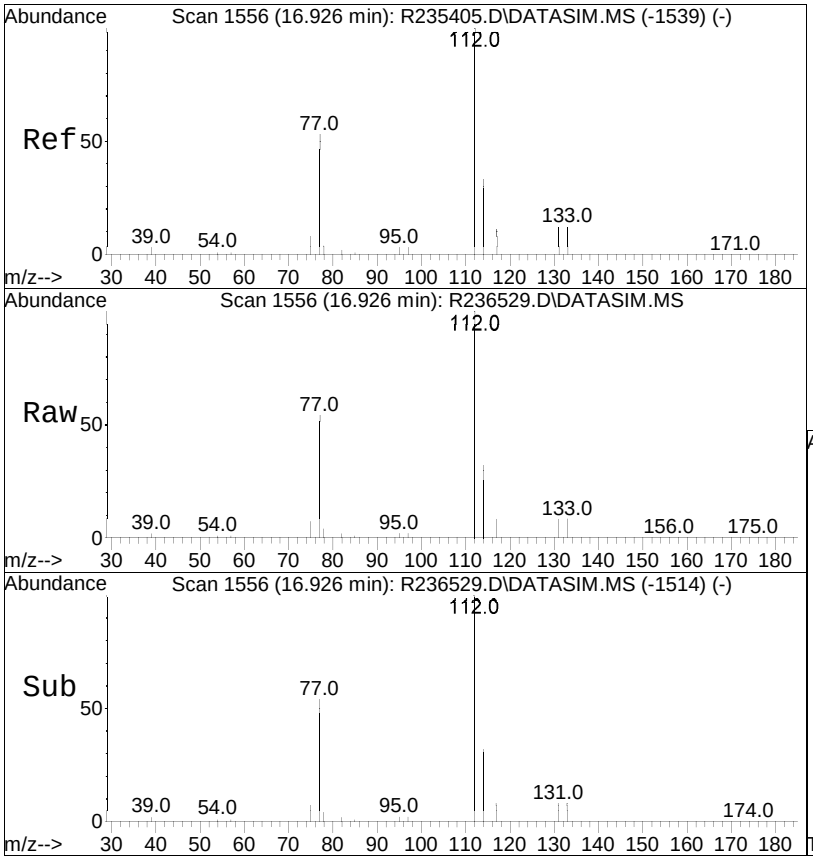


#58
1,1,1,2-tetrachloroethane
Concen: 5.15 ppbV
RT: 16.91 min Scan# 1552
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:131 Resp: 98996

Ion	Ratio	Lower	Upper
131	100		
133	95.1	75.7	113.5
95	36.6	32.6	48.8

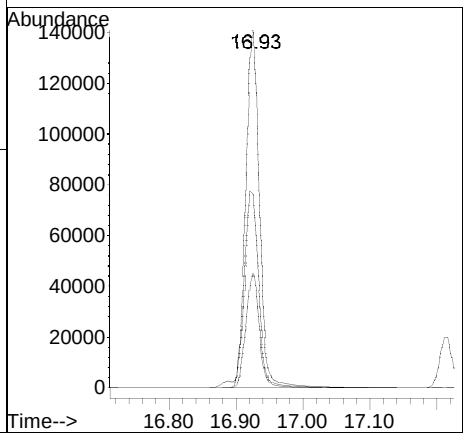


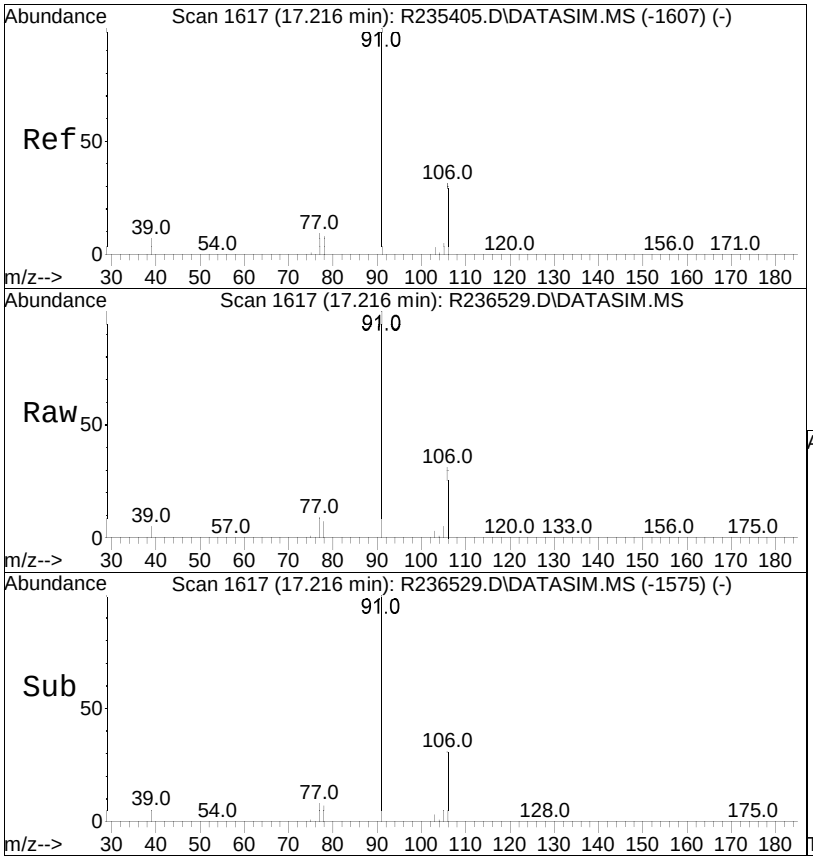


#59
chlorobenzene
Concen: 5.79 ppbV
RT: 16.93 min Scan# 1556
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:112 Resp: 197970

Ion	Ratio	Lower	Upper
112	100		
114	32.2	25.9	38.9
77	54.3	46.1	69.1

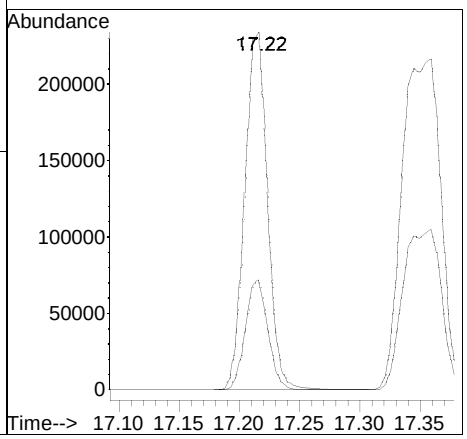


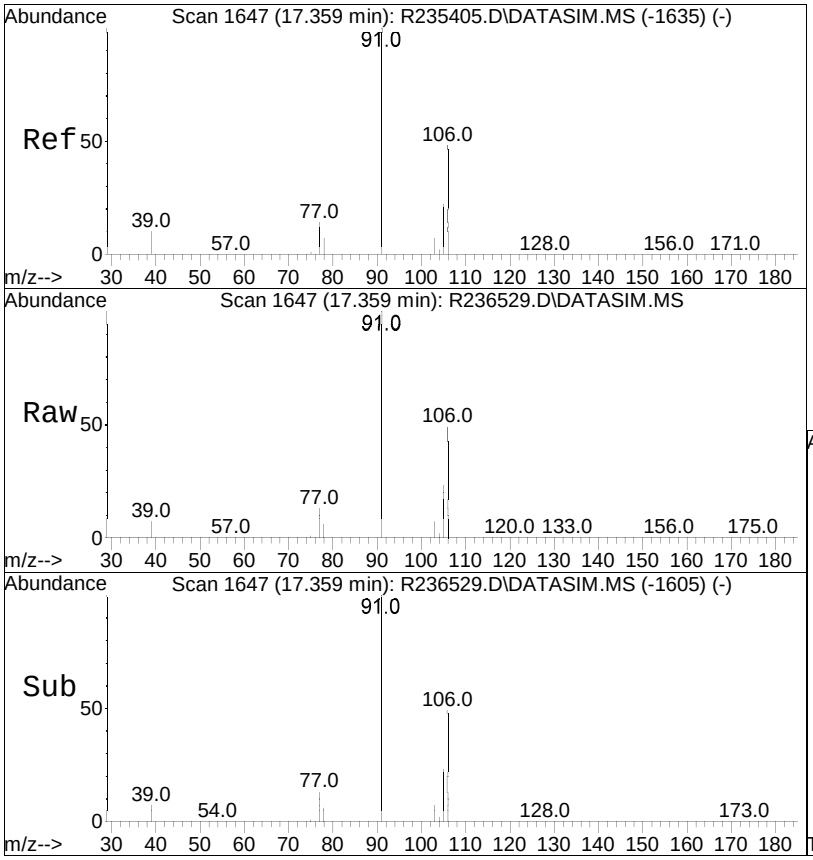


#60
ethylbenzene
Concen: 5.80 ppbV
RT: 17.22 min Scan# 1617
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 91 Resp: 309686

Ion	Ratio	Lower	Upper
91	100		
106	31.0	24.2	36.2

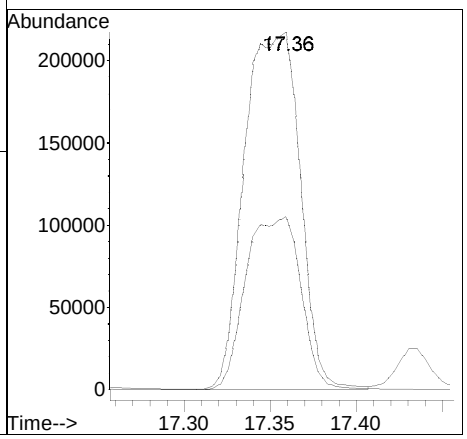


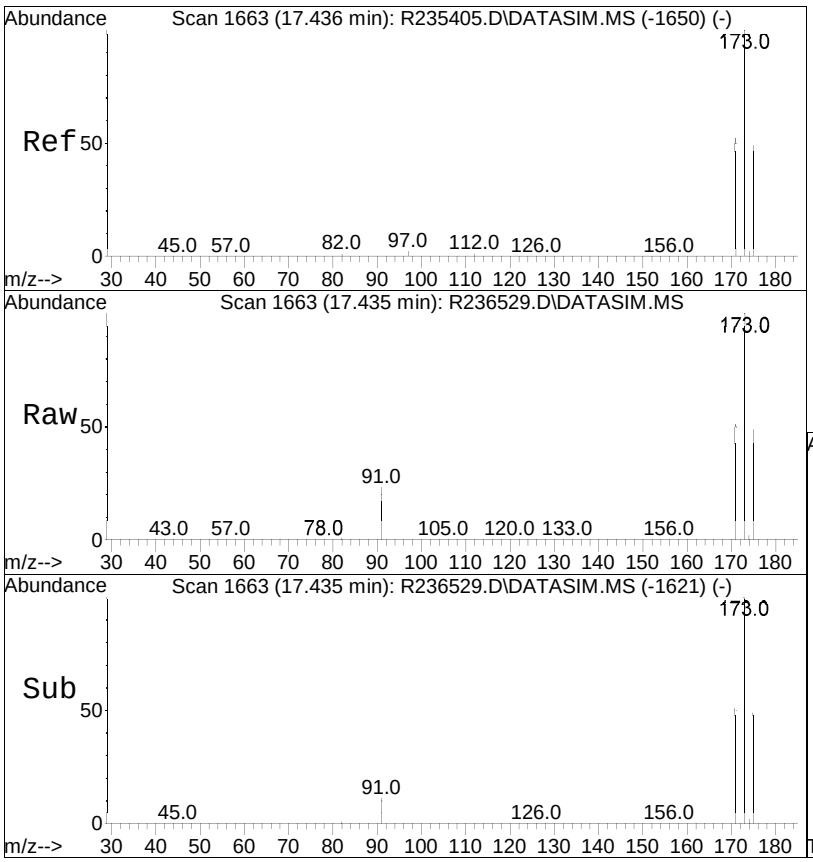


#61
m+p-xylene
Concen: 11.65 ppbV
RT: 17.36 min Scan# 1647
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 91 Resp: 482383

Ion	Ratio	Lower	Upper
91	100		
106	48.5	37.4	56.0

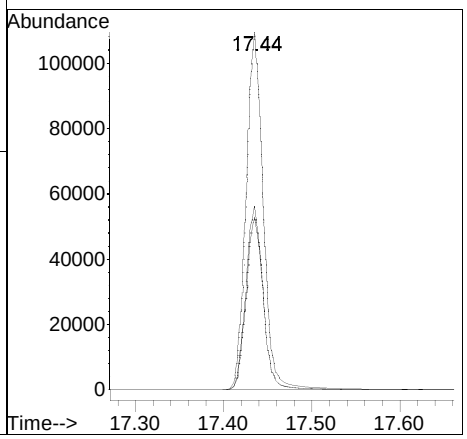


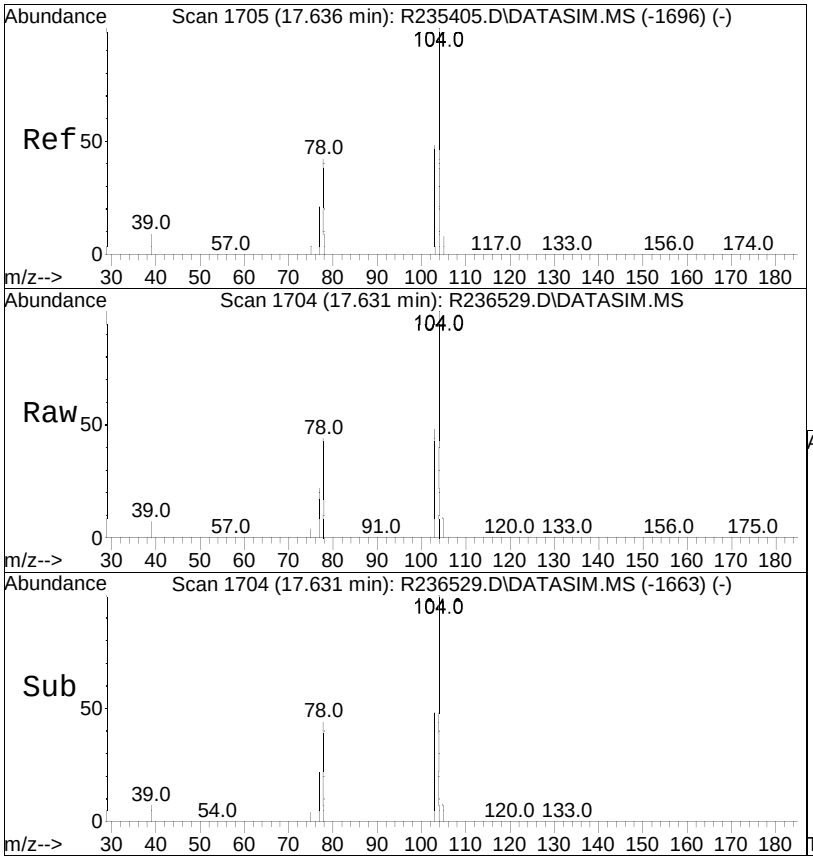


#62
bromoform
Concen: 5.75 ppbV
RT: 17.44 min Scan# 1663
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:173 Resp: 145780

Ion	Ratio	Lower	Upper
173	100		
175	48.5	38.7	58.1
171	51.5	41.8	62.6

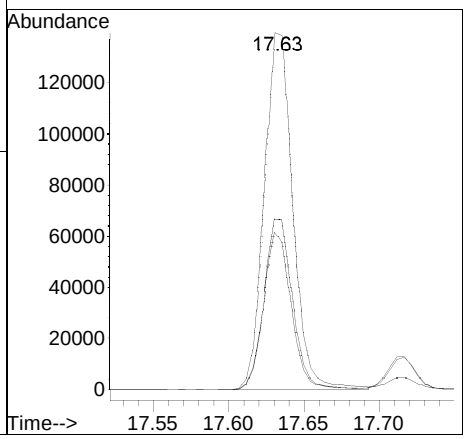


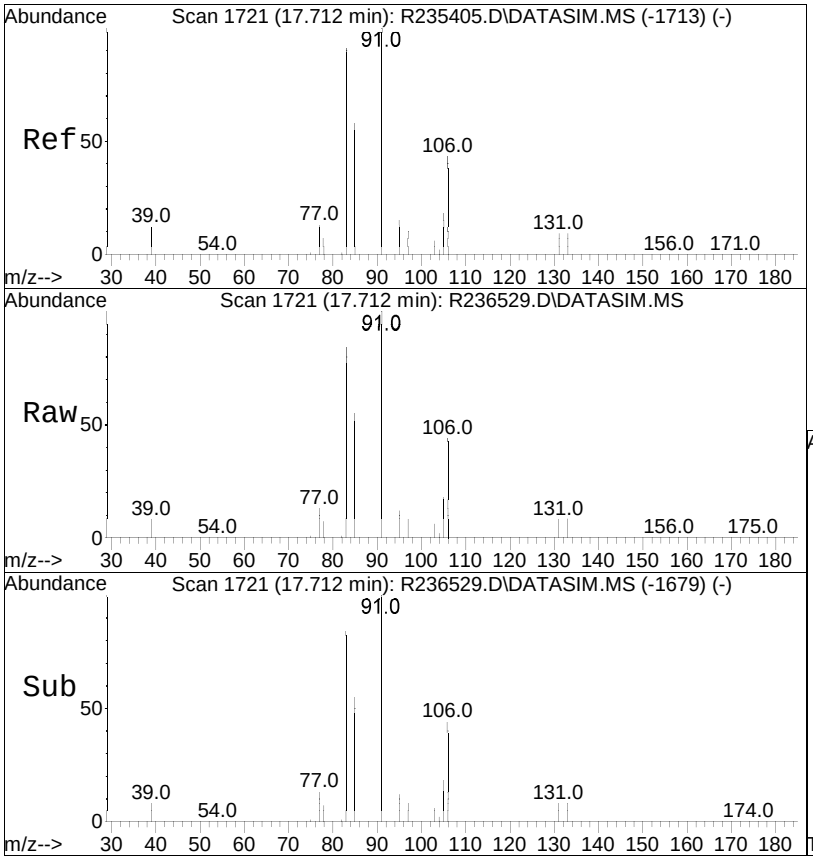


#63
styrene
Concen: 6.04 ppbV
RT: 17.63 min Scan# 1704
Delta R.T. -0.005 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:104 Resp: 183147

Ion	Ratio	Lower	Upper
104	100		
103	47.9	38.2	57.4
78	44.2	36.1	54.1

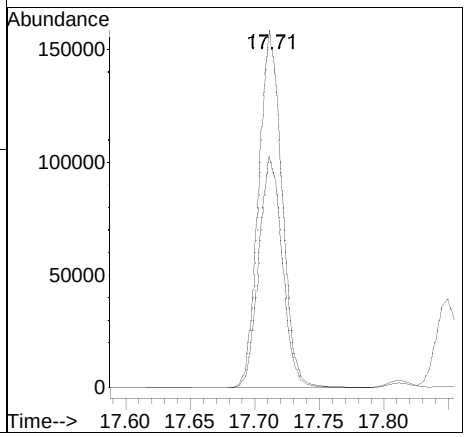


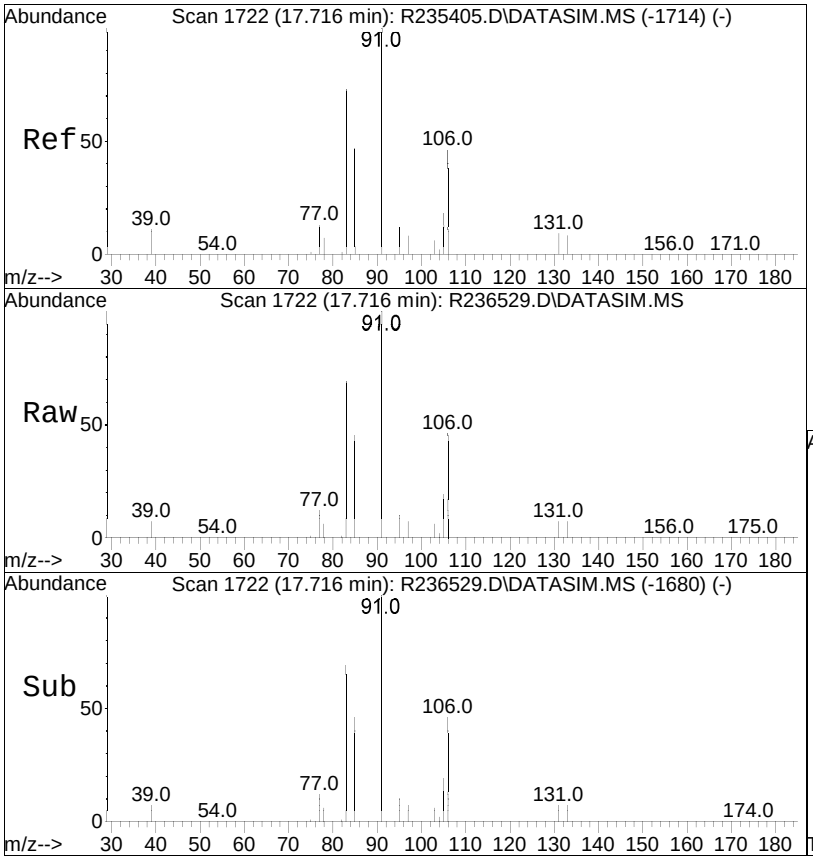


#64
1,1,2,2-tetrachloroethane
Concen: 5.93 ppbV
RT: 17.71 min Scan# 1721
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 83 Resp: 197682

Ion	Ratio	Lower	Upper
83	100		
85	65.1	52.2	78.2

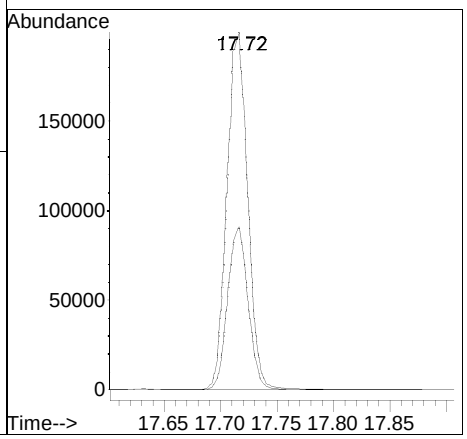


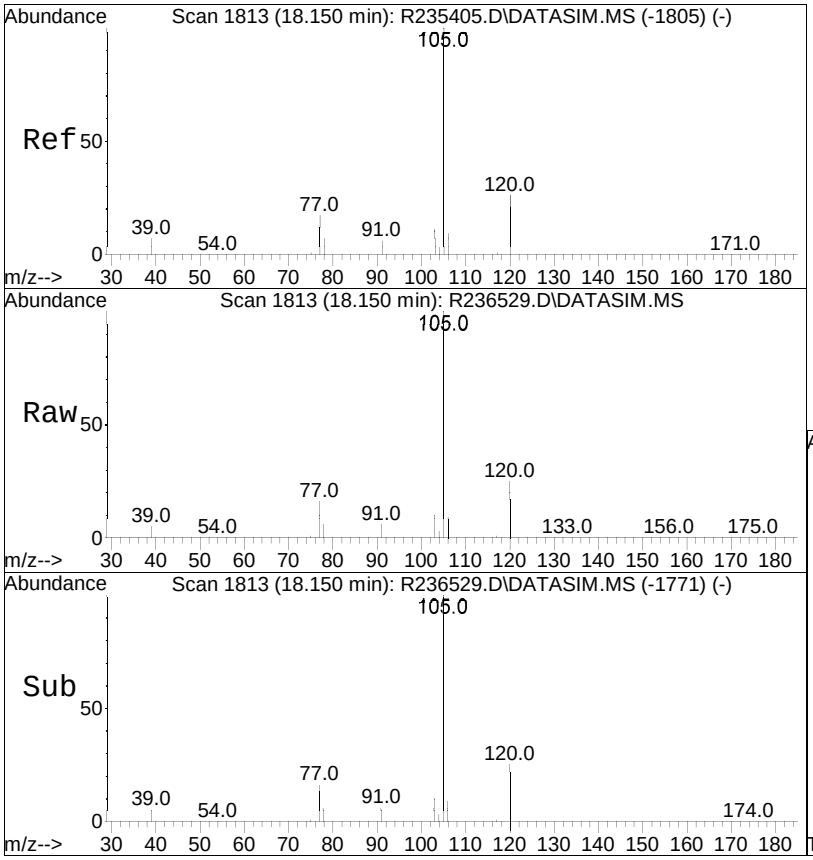


#65
o-xylene
Concen: 5.83 ppbV
RT: 17.72 min Scan# 1722
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 91 Resp: 249757

Ion	Ratio	Lower	Upper
91	100		
106	45.7	35.1	52.7

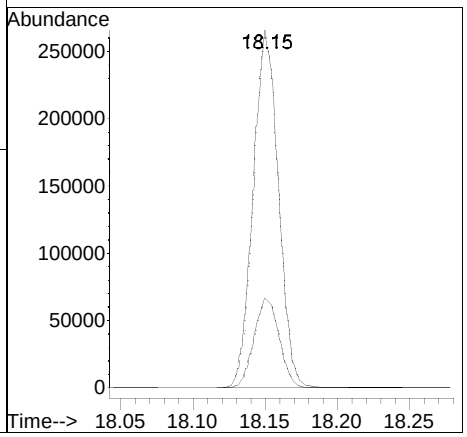


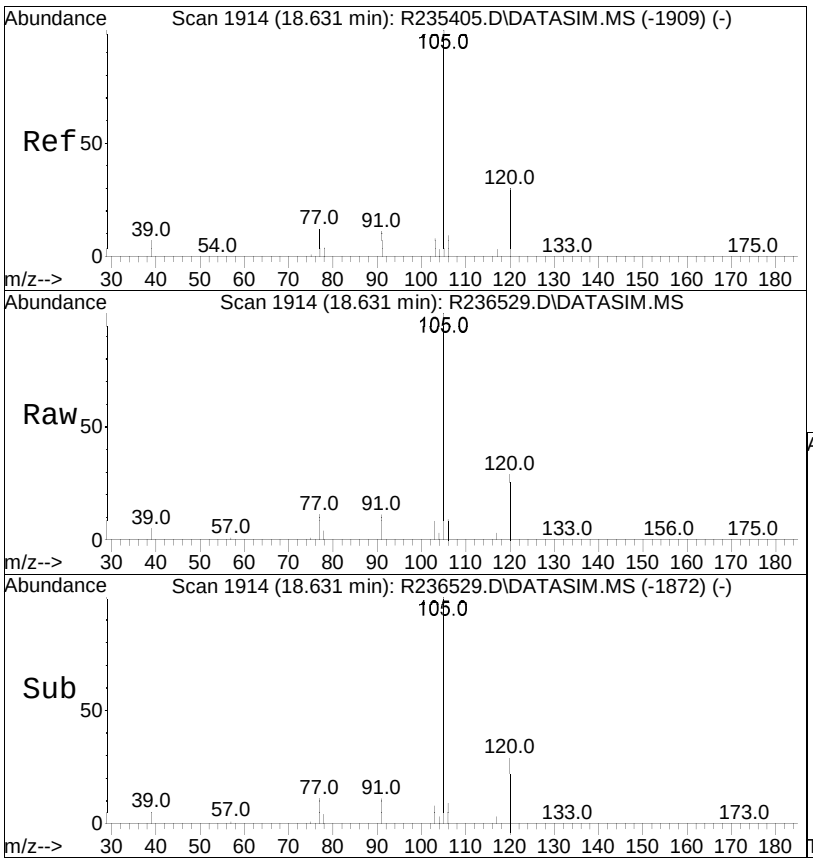


#68
isopropylbenzene
Concen: 5.65 ppbV
RT: 18.15 min Scan# 1813
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:105 Resp: 318815

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.3	28.9

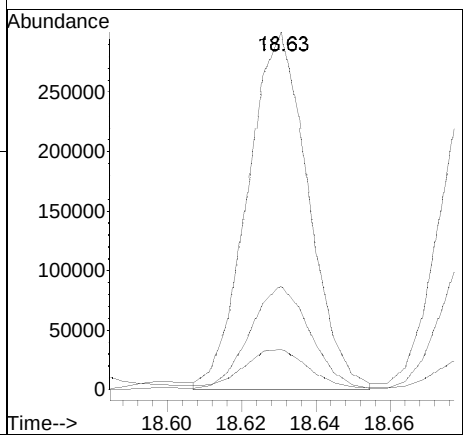


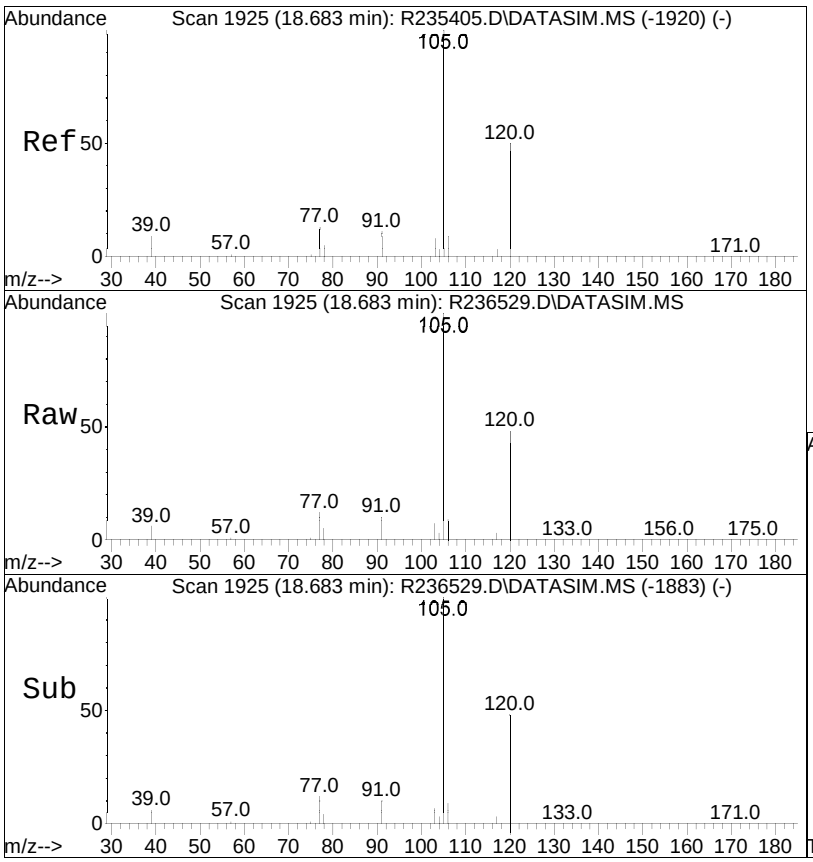


#70
4-ethyl toluene
Concen: 5.90 ppbV m
RT: 18.63 min Scan# 1914
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:105 Resp: 340922

Ion	Ratio	Lower	Upper
105	100		
120	29.2	22.4	33.6
91	11.4	9.8	14.8

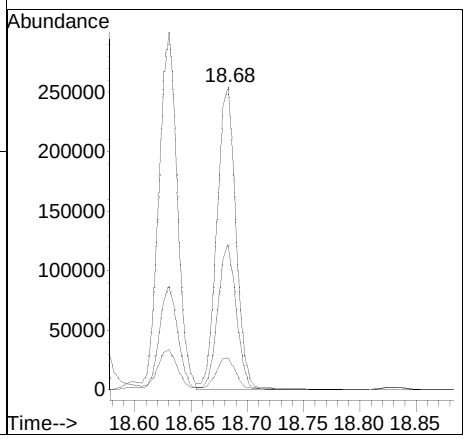


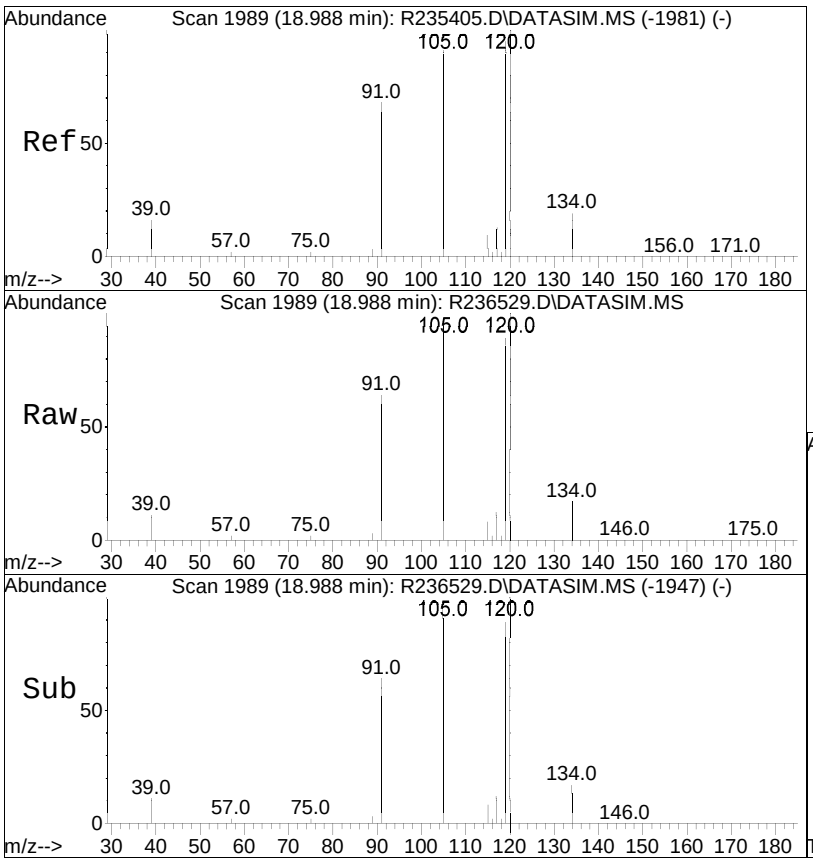


#71
1,3,5-trimethylbenzene
Concen: 5.83 ppbV
RT: 18.68 min Scan# 1925
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:105 Resp: 299834

Ion	Ratio	Lower	Upper
105	100		
120	47.9	36.7	55.1
91	10.5	9.0	13.6

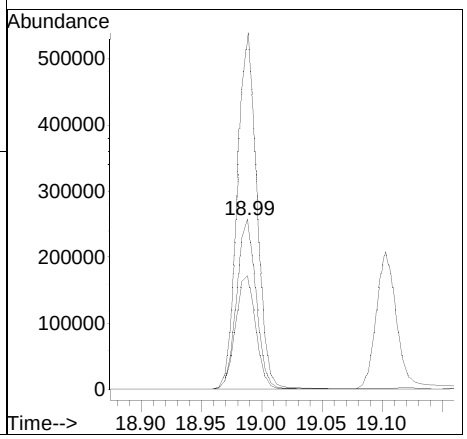


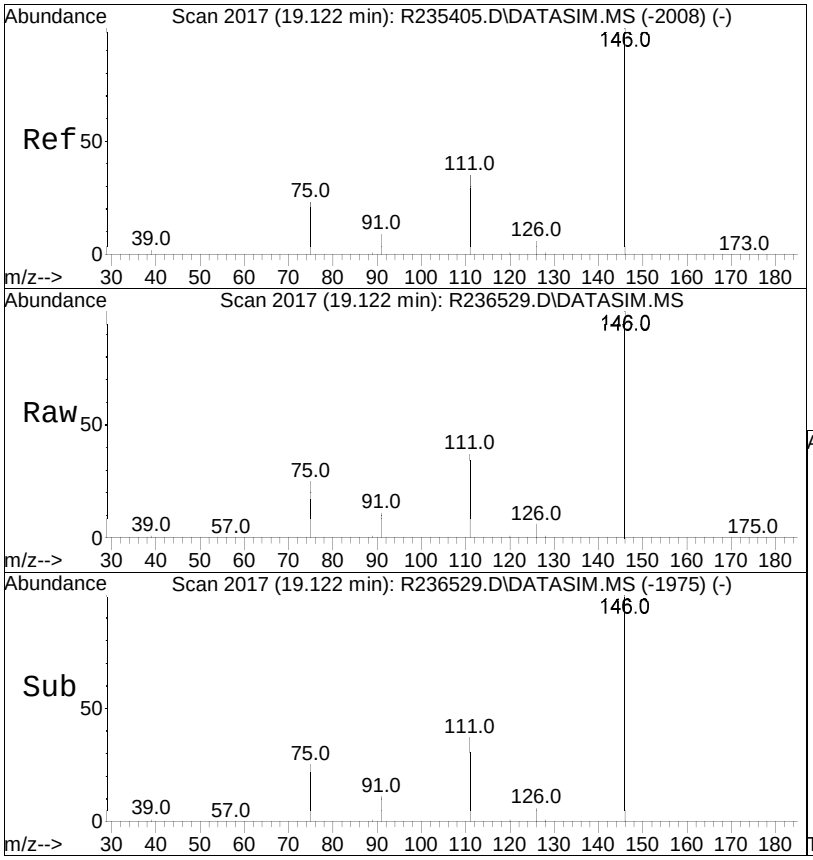


#73
1,2,4-trimethylbenzene
Concen: 6.20 ppbV
RT: 18.99 min Scan# 1989
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:105 Resp: 292134

Ion	Ratio	Lower	Upper
105	100		
120	210.0	162.8	244.2
91	67.2	61.3	91.9

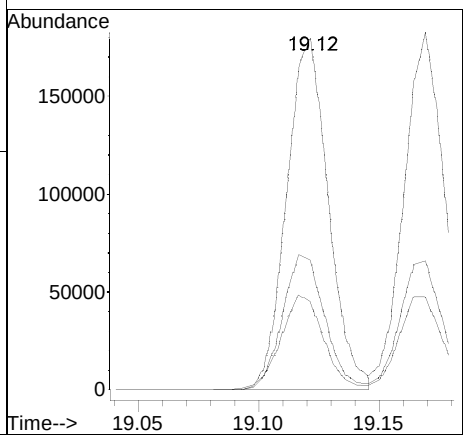


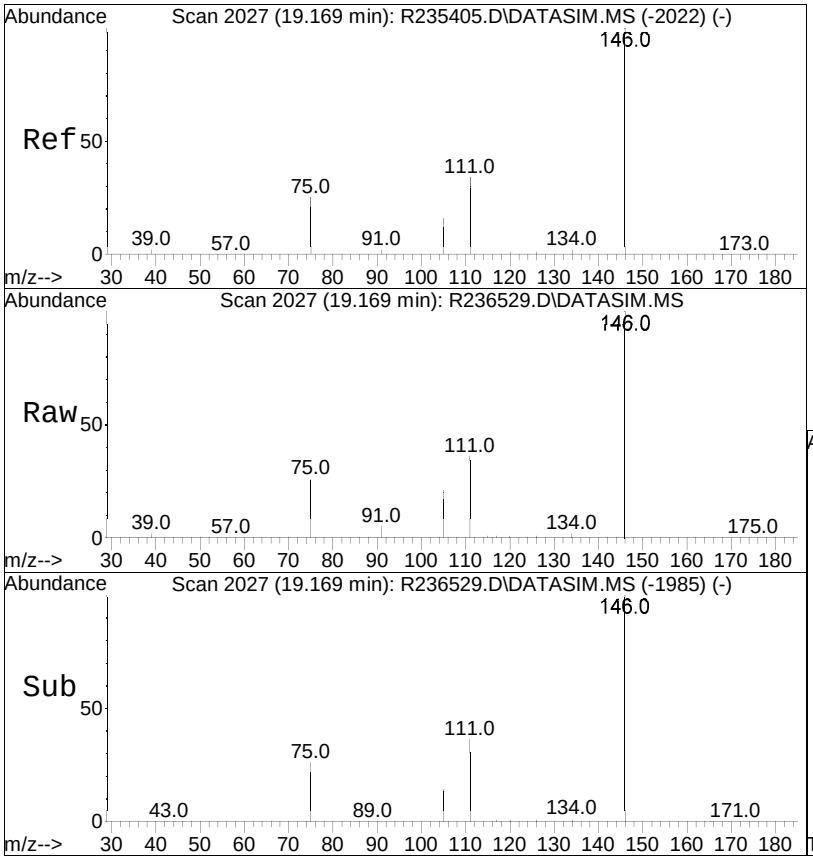


#75
1,3-dichlorobenzene
Concen: 6.79 ppbV
RT: 19.12 min Scan# 2017
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:146 Resp: 216138

Ion	Ratio	Lower	Upper
146	100		
111	36.9	31.6	47.4
75	25.0	23.2	34.8

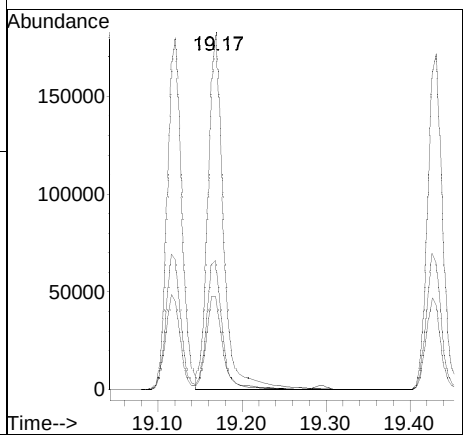


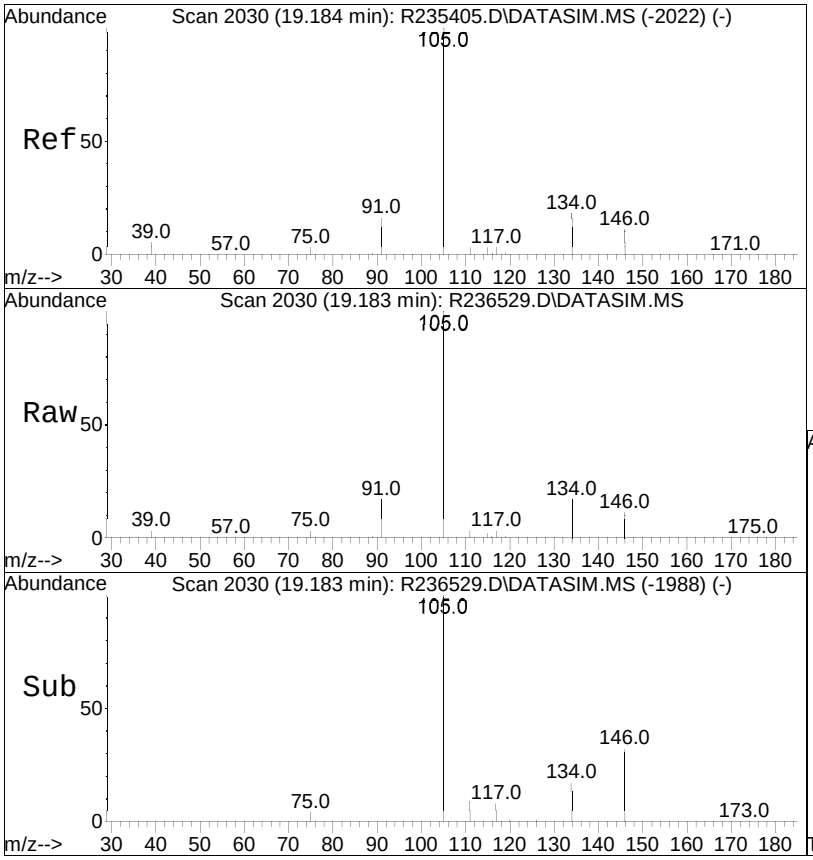


#76
1,4-dichlorobenzene
Concen: 6.14 ppbV
RT: 19.17 min Scan# 2027
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:146 Resp: 236383

Ion	Ratio	Lower	Upper
146	100		
111	36.2	30.8	46.2
75	26.0	24.3	36.5

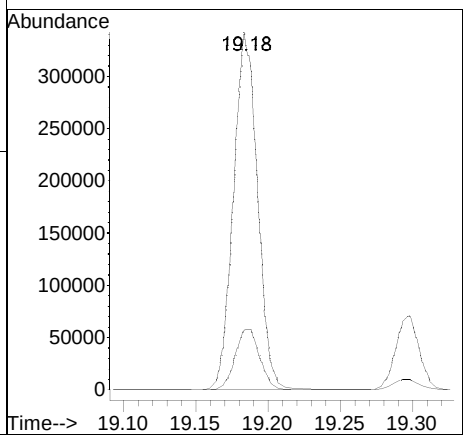


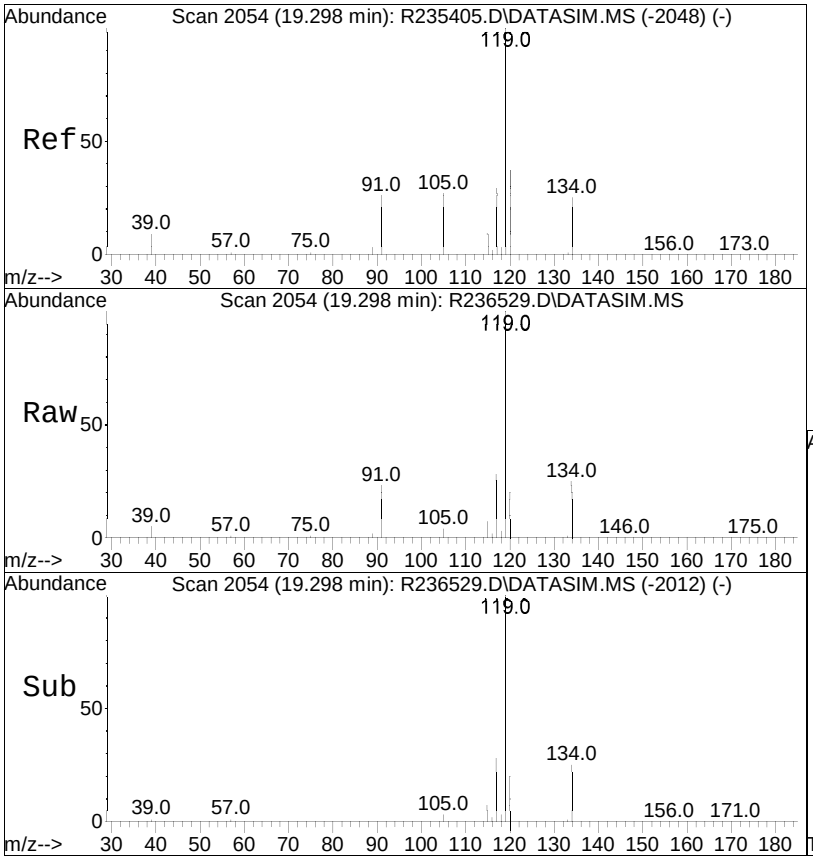


#77
sec-butylbenzene
Concen: 5.64 ppbV
RT: 19.18 min Scan# 2030
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:105 Resp: 391363

Ion	Ratio	Lower	Upper
105	100		
134	16.9	12.6	18.8

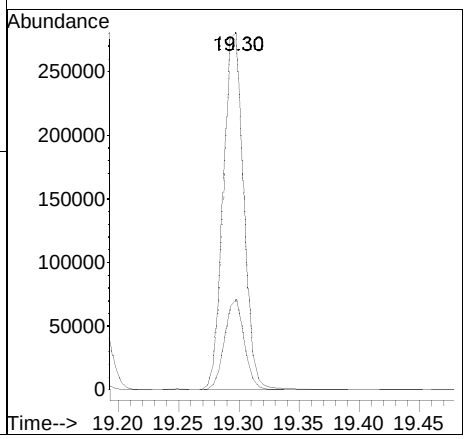


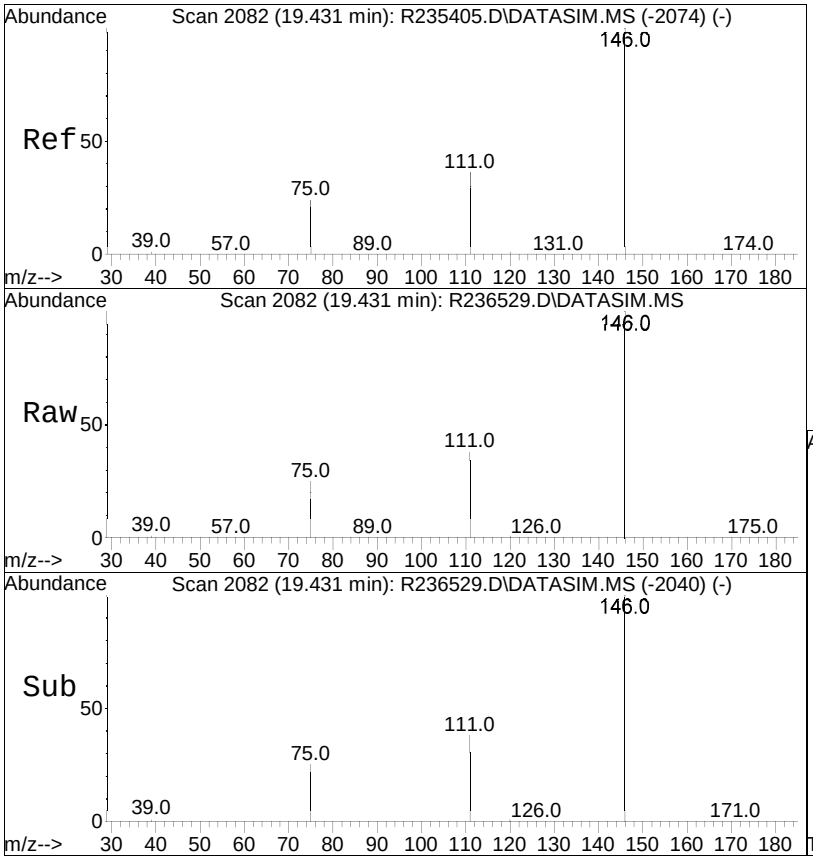


#78
p-isopropyltoluene
Concen: 5.61 ppbV
RT: 19.30 min Scan# 2054
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:119 Resp: 326520

Ion	Ratio	Lower	Upper
119	100		
134	25.5	19.3	28.9

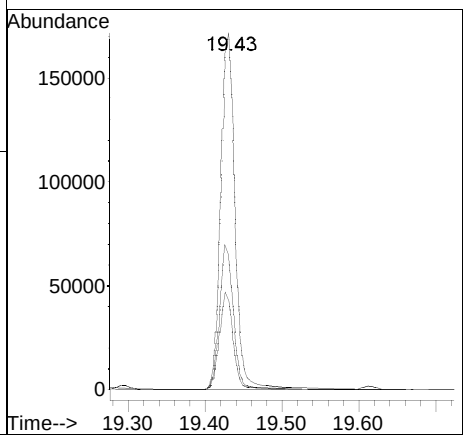


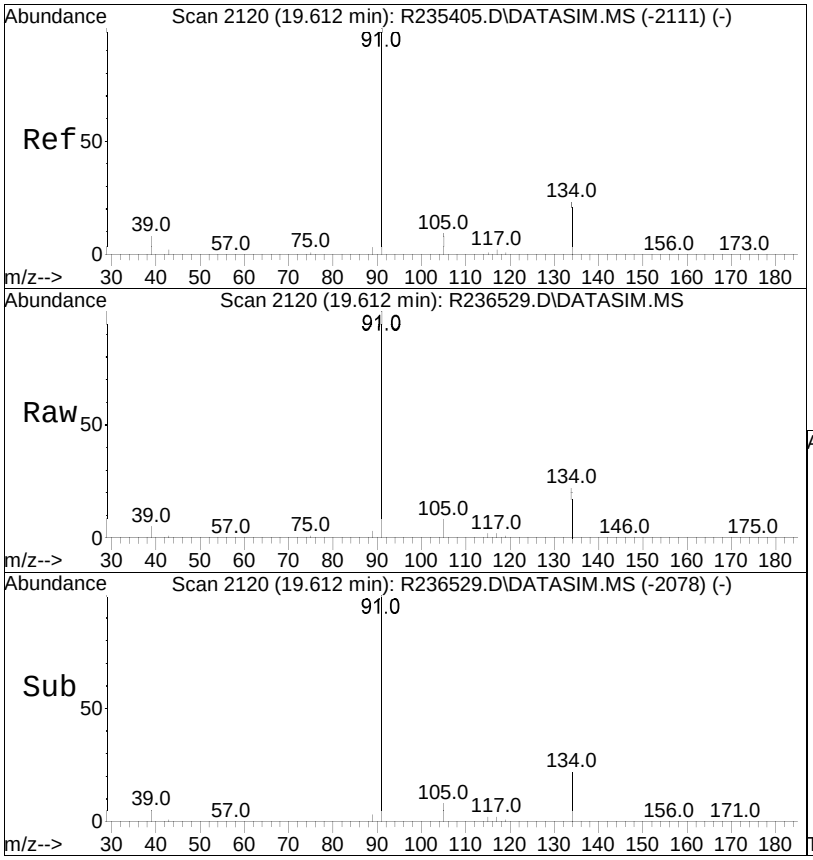


#79
1,2-dichlorobenzene
Concen: 6.42 ppbV
RT: 19.43 min Scan# 2082
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:146 Resp: 216700

Ion	Ratio	Lower	Upper
146	100		
111	37.8	32.0	48.0
75	24.9	22.7	34.1

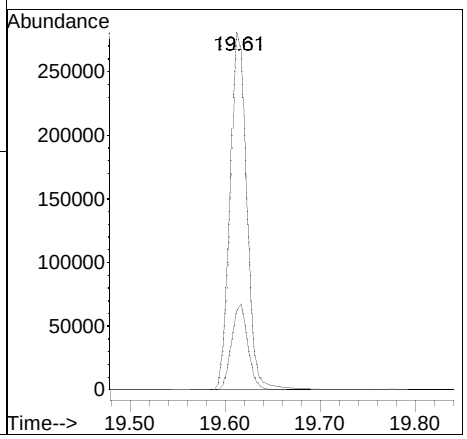


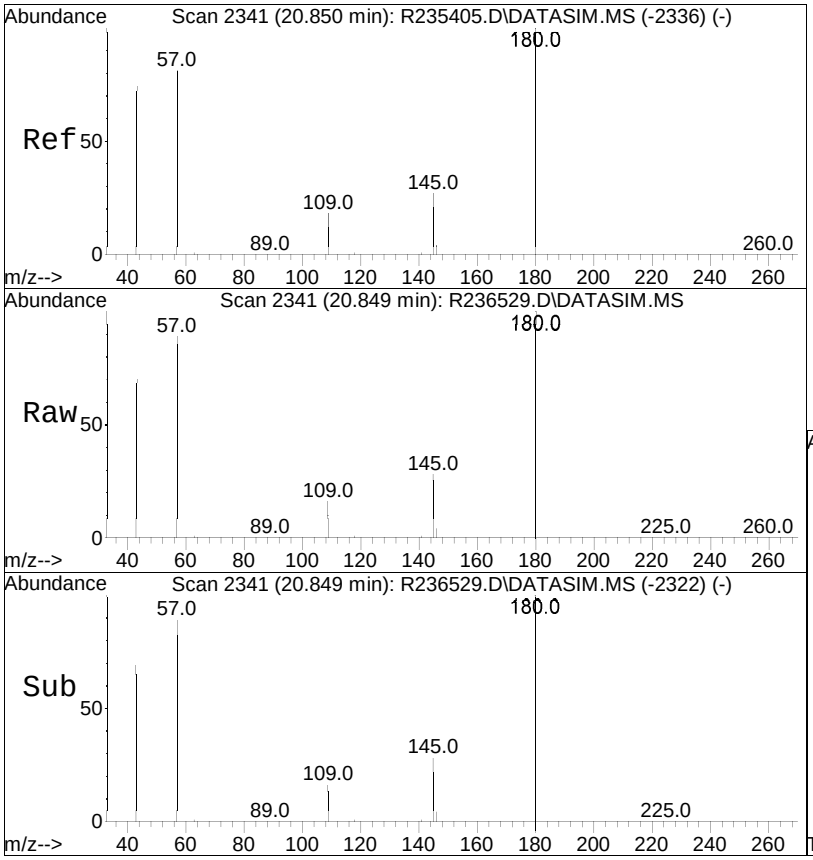


#80
n-butylbenzene
Concen: 6.22 ppbV
RT: 19.61 min Scan# 2120
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion: 91 Resp: 340116

Ion	Ratio	Lower	Upper
91	100		
134	22.1	16.2	24.4

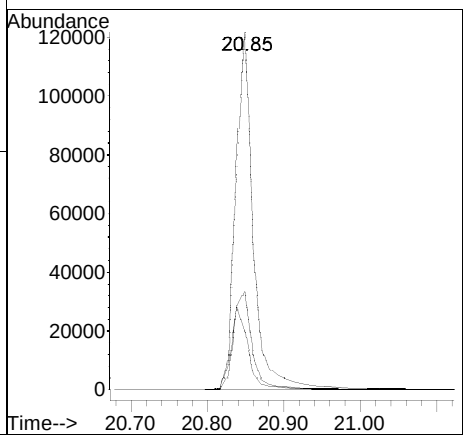


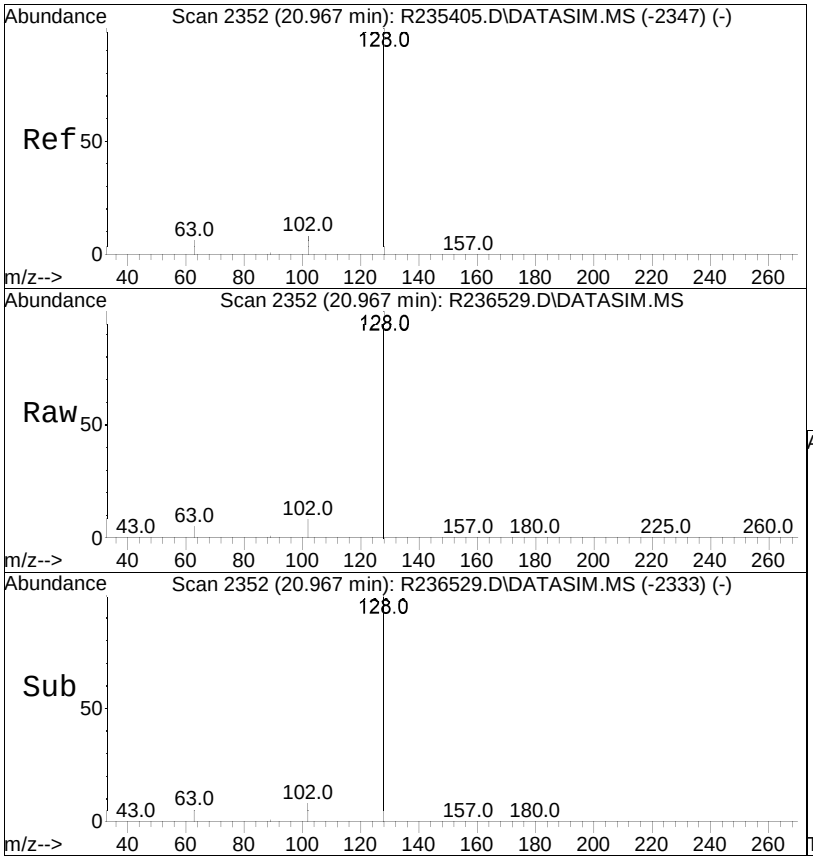


#81
1,2,4-trichlorobenzene
Concen: 7.31 ppbV
RT: 20.85 min Scan# 2341
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:180 Resp: 194400

Ion	Ratio	Lower	Upper
180	100		
145	27.6	24.2	36.2
109	16.4	16.7	25.1#

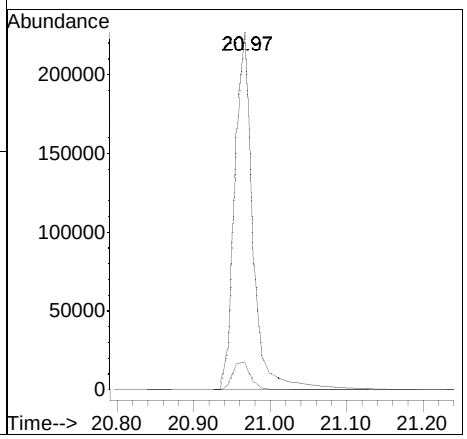


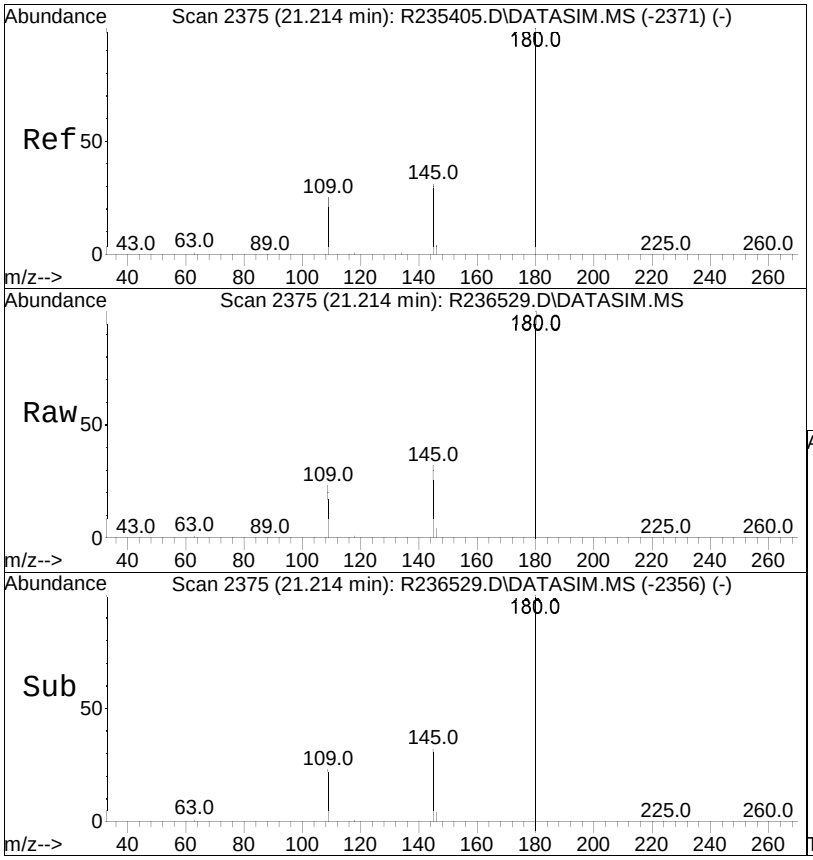


#82
naphthalene
Concen: 6.82 ppbV
RT: 20.97 min Scan# 2352
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:128 Resp: 371317

Ion	Ratio	Lower	Upper
128	100		
102	7.6	6.9	10.3

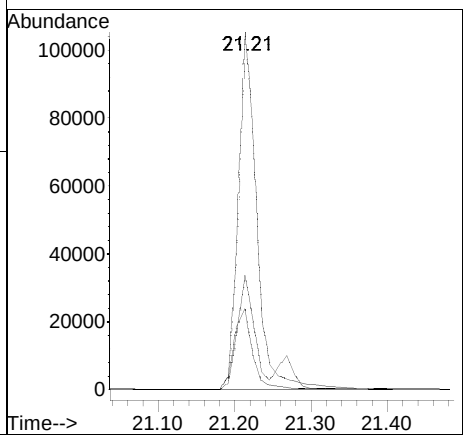


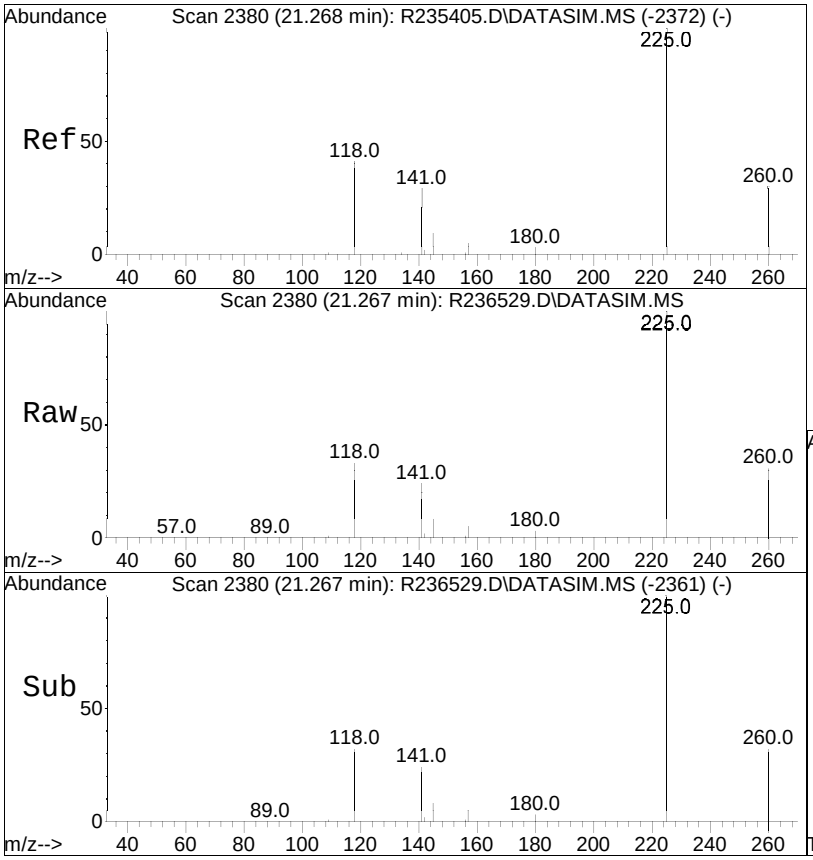


#83
1,2,3-trichlorobenzene
Concen: 6.87 ppbV
RT: 21.21 min Scan# 2375
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:180 Resp: 173403

Ion	Ratio	Lower	Upper
180	100		
145	32.1	28.1	42.1
109	22.6	23.2	34.8#

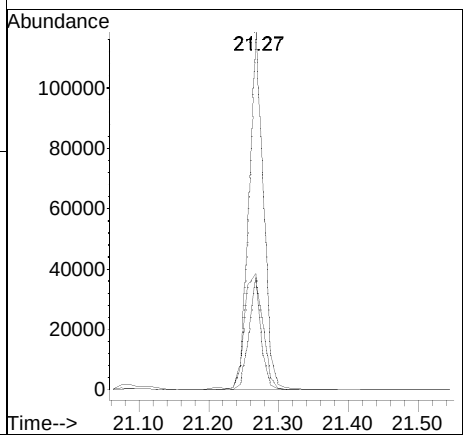




#84
hexachlorobutadiene
Concen: 6.86 ppbV
RT: 21.27 min Scan# 2380
Delta R.T. -0.000 min
Lab File: R236529.D
Acq: 24 Sep 2015 12:31 pm

Tgt Ion:225 Resp: 167243

Ion	Ratio	Lower	Upper
225	100		
260	31.5	23.4	35.0
118	32.5	38.3	57.5#

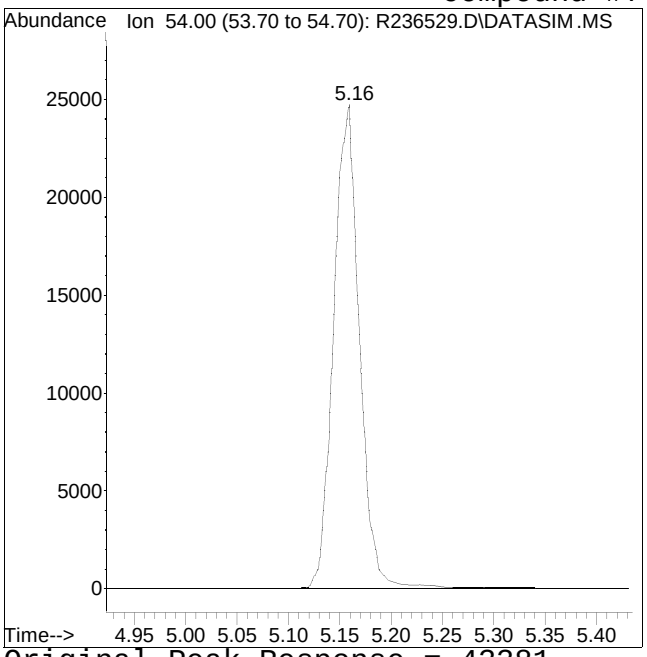


Manual Integration/Negative Proof Report

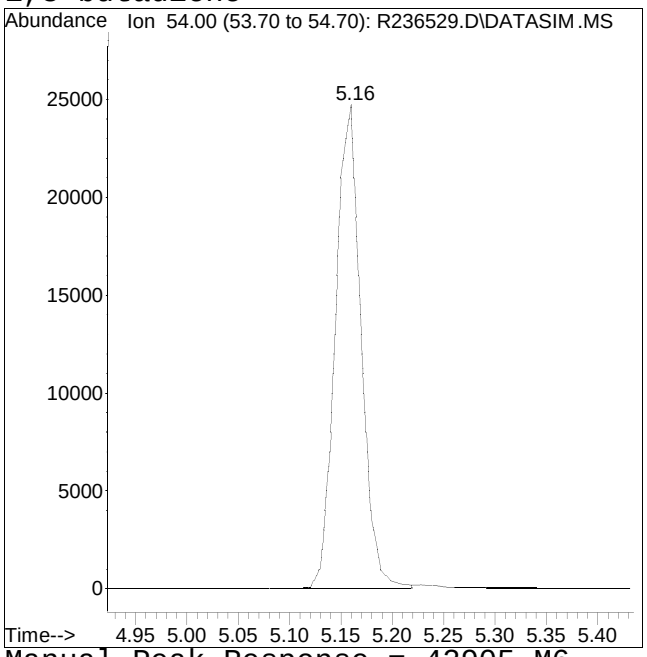
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-3,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #7: 1,3-butadiene



Original Peak Response = 43381



Manual Peak Response = 42905 M6

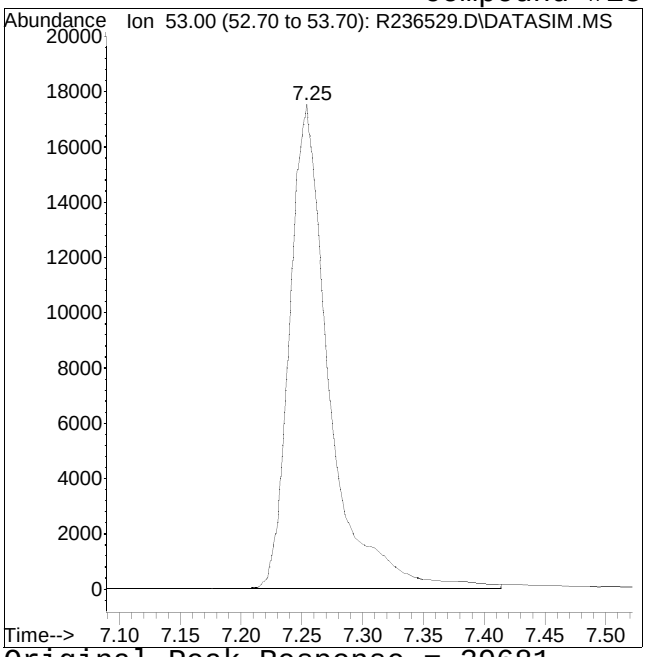
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

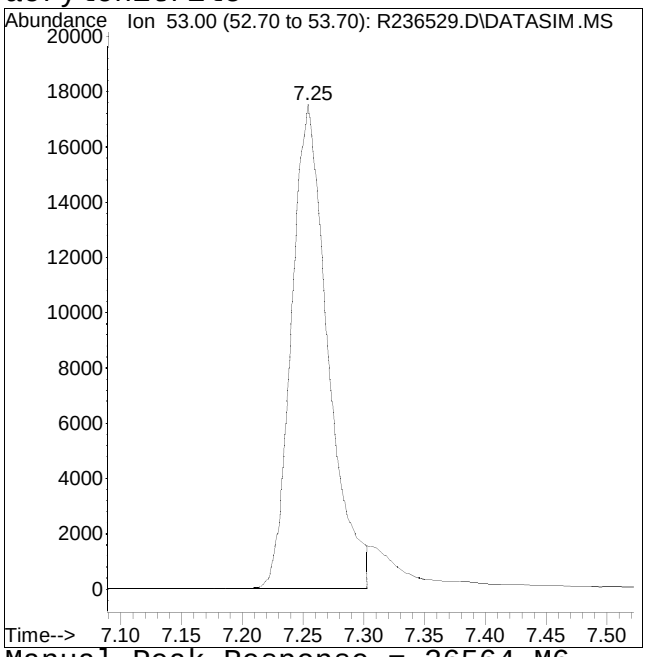
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-3,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #15: acrylonitrile



Original Peak Response = 39681



Manual Peak Response = 36564 M6

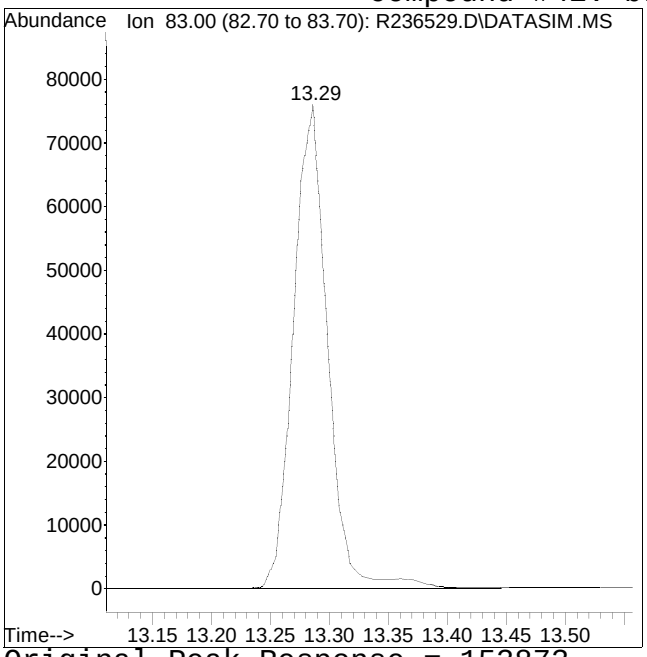
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

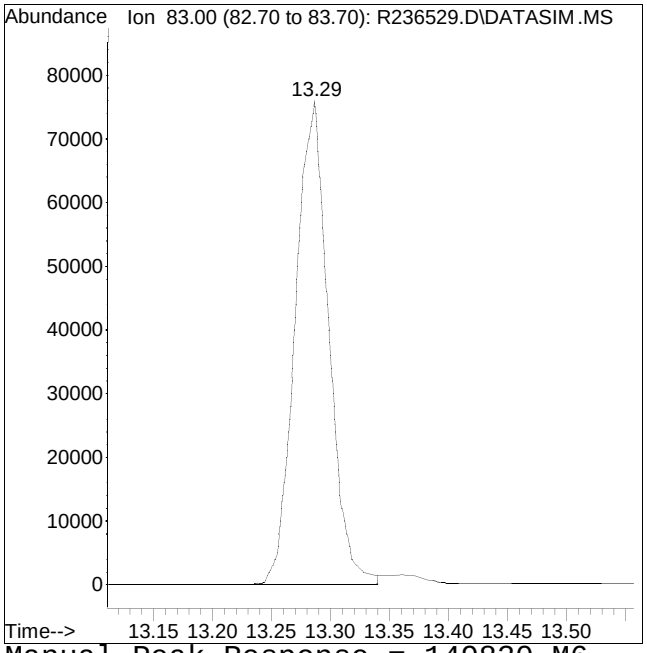
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-3,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #42: bromodichloromethane



Original Peak Response = 153873



Manual Peak Response = 149830 M6

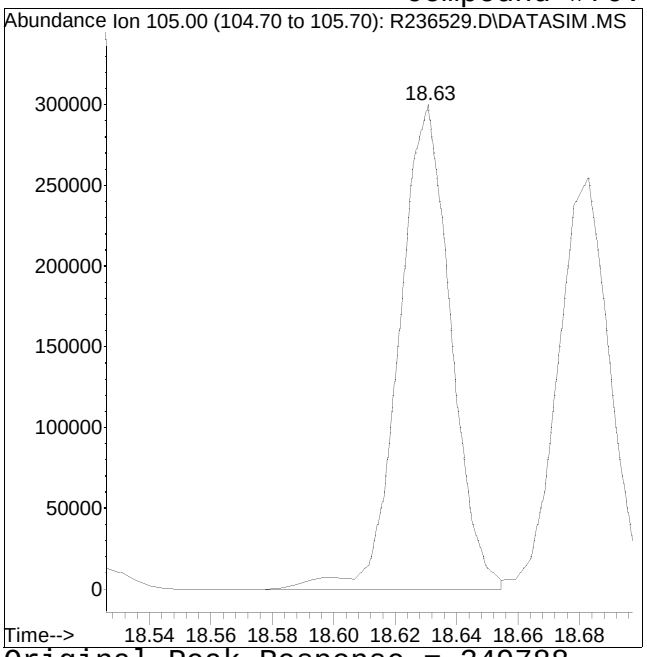
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

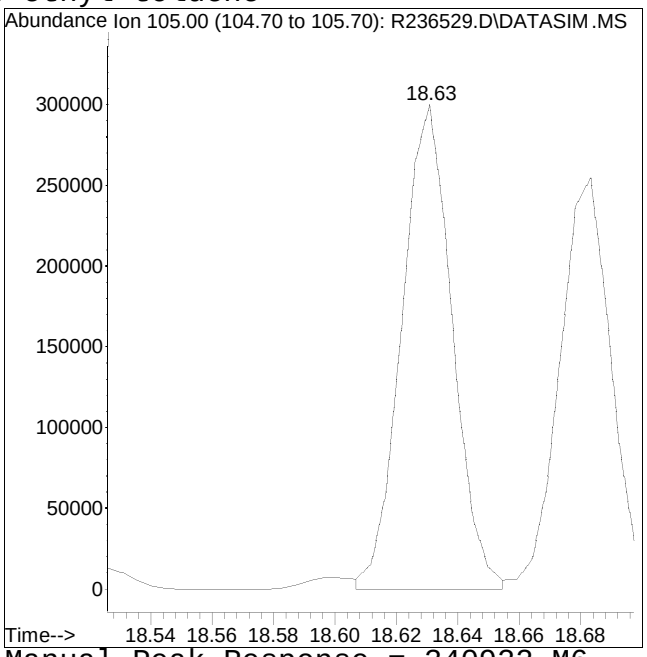
Data Path : O:\Forensics\Data\AIR2\2015Q
Data File : R236529.D
Date Inj'd : 9/24/2015 12:31 pm
Sample : WG824625-3,3,250,250

Method : TSIM150901.M
Operator : AIRPIANO2:RY
Instrument : Air Piano 2
Quant Date : 9/24/2015 12:55 pm

Compound #70: 4-ethyl toluene



Original Peak Response = 349788



Manual Peak Response = 340922 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236542.D
Acq On : 24 Sep 2015 9:05 pm
Operator : AIRPIANO2:RY
Sample : WG824625-5,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 10:32:39 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR2\2015\150924SIM\R236529.D
Sub List : 9_Chlorinateds - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.38	49	139401	10.000	ppbV	0.00
Standard Area = 150935			Recovery =		92.36%	
33) 1,4-difluorobenzene	12.54	114	389987	10.000	ppbV	0.00
Standard Area = 437351			Recovery =		89.17%	
51) chlorobenzene-D5	16.89	54	71784	10.000	ppbV	0.00
Standard Area = 82771			Recovery =		86.73%	
System Monitoring Compounds						
Target Compounds						Qvalue
6) vinyl chloride	4.95	62	467	0.041	ppbV	98
16) 1,1-dichloroethene	0.00		0	N.D.	d	
23) trans-1,2-dichloroethene	8.98		0	N.D.		
28) cis-1,2-dichloroethene	10.19		0	N.D.		
44) trichloroethene	13.33	130	337	0.021	ppbV	98
57) tetrachloroethene	16.36	166	355148	15.501	ppbV	93

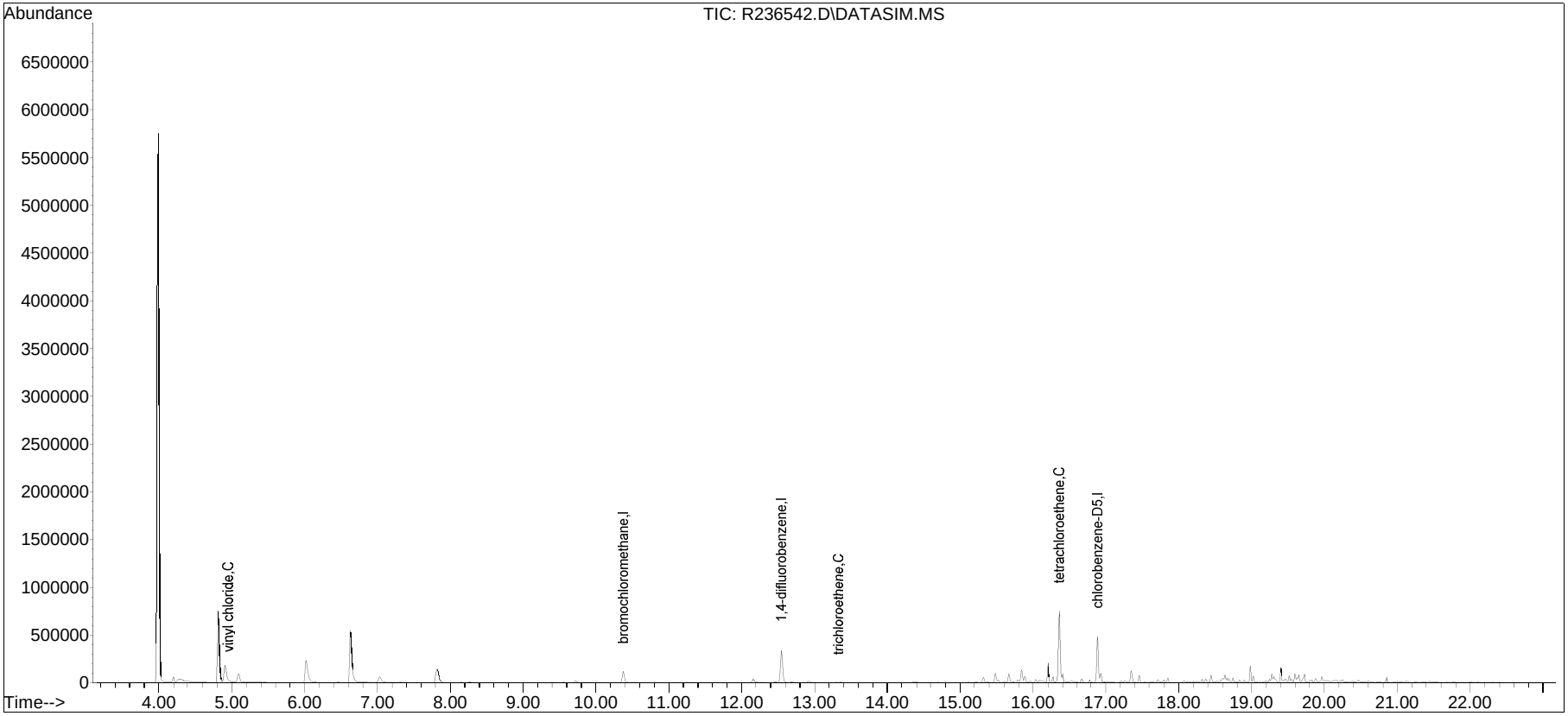
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

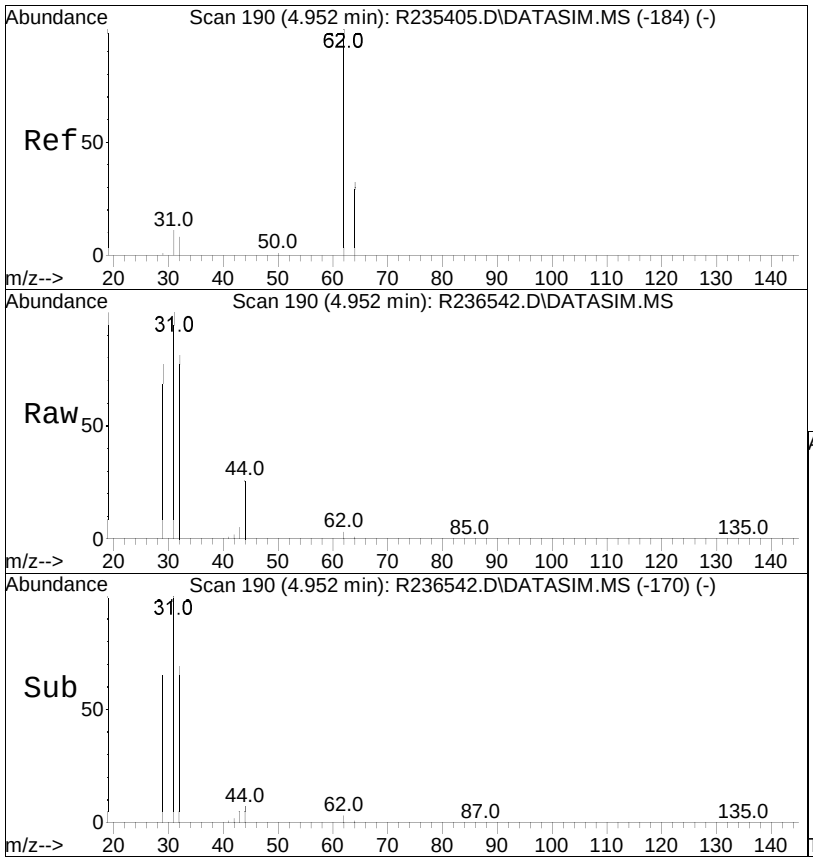
Data Path : O:\Forensics\Data\AIR2\2015\150924SIM\
Data File : R236542.D
Acq On : 24 Sep 2015 9:05 pm
Operator : AIRPIANO2:RY
Sample : WG824625-5,3,250,250
Misc : WG824625,ICAL11407
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 10:32:39 2015
Quant Method : O:\Forensics\Data\AIR2\2015\150924SIM\TSIM150901.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Sep 02 12:46:49 2015
Response via : Initial Calibration

Sub List : 9_Chlorinateds - .AIR2\2015\150924SIM\R236529.D



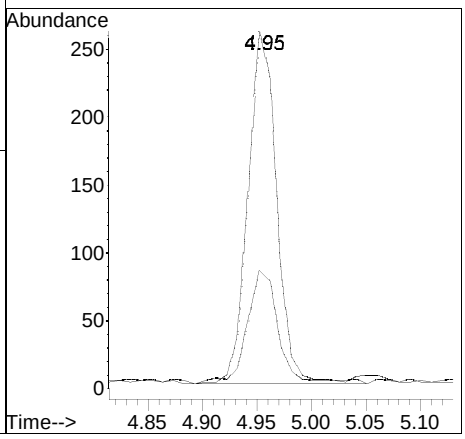
TSIM150901.M Fri Sep 25 10:32:48 2015 Page 2

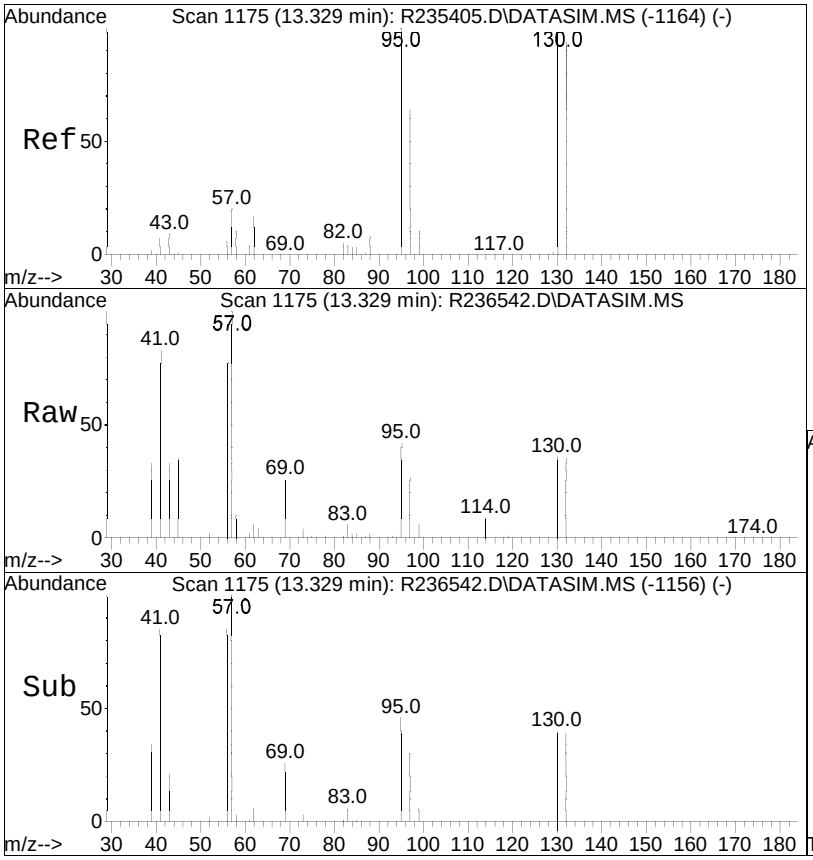


#6
vinyl chloride
Concen: 0.04 ppbV
RT: 4.95 min Scan# 190
Delta R.T. 0.000 min
Lab File: R236542.D
Acq: 24 Sep 2015 9:05 pm

Tgt Ion: 62 Resp: 467

Ion	Ratio	Lower	Upper
62	100		
64	33.1	25.5	38.3

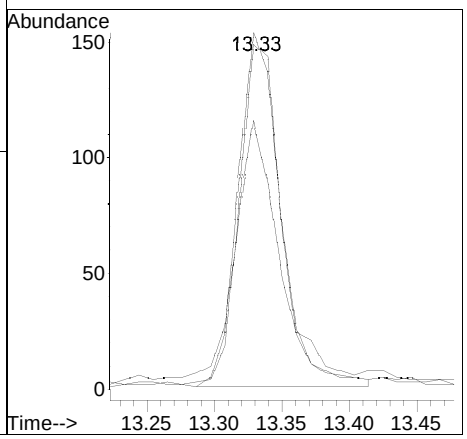


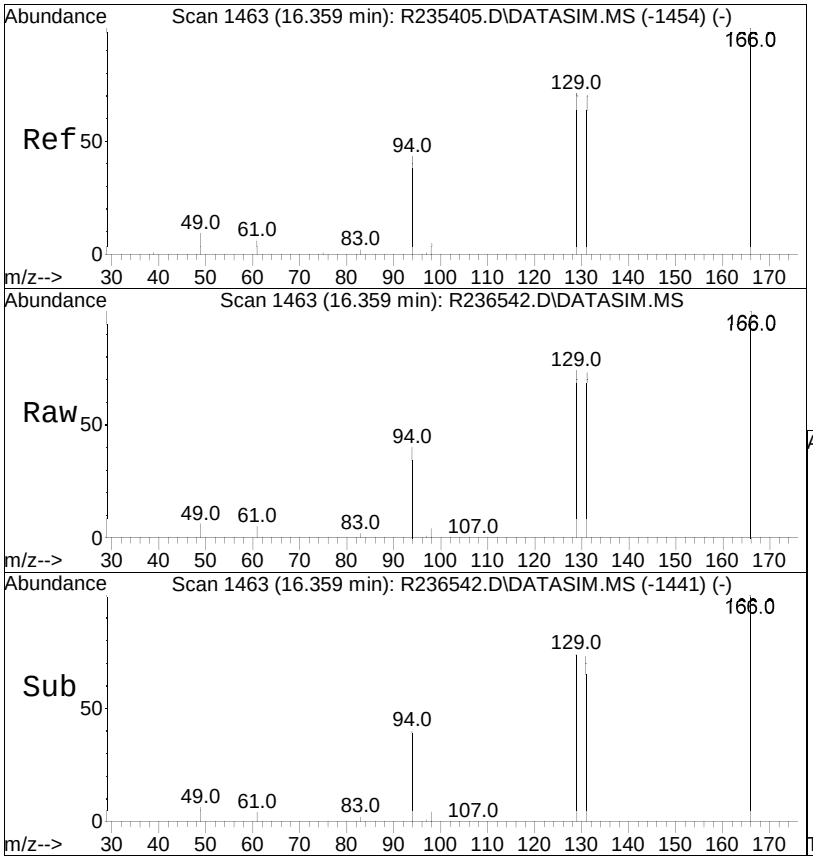


#44
trichloroethene
Concen: 0.02 ppbV
RT: 13.33 min Scan# 1175
Delta R.T. 0.000 min
Lab File: R236542.D
Acq: 24 Sep 2015 9:05 pm

Tgt Ion:130 Resp: 337

Ion	Ratio	Lower	Upper
130	100		
132	96.8	77.0	115.6
97	75.3	57.8	86.8

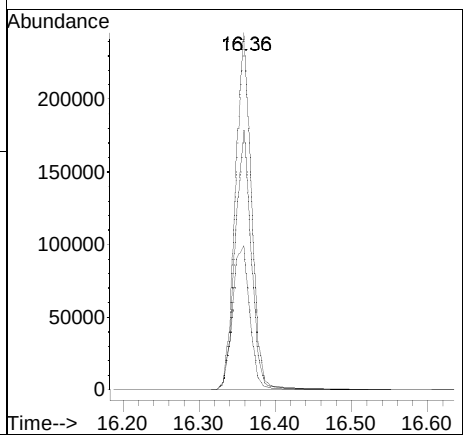




#57
tetrachloroethene
Concen: 15.50 ppbV
RT: 16.36 min Scan# 1463
Delta R.T. 0.000 min
Lab File: R236542.D
Acq: 24 Sep 2015 9:05 pm

Tgt Ion:166 Resp: 355148

Ion	Ratio	Lower	Upper
166	100		
131	72.8	60.6	90.8
94	40.3	39.0	58.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR2\2015Q	Method	: TSIM150901.M
Data File	: R236542.D	Operator	: AIRPIANO2:RY
Date Inj'd	: 9/24/2015 9:05 pm	Instrument	: Air Piano 2
Sample	: WG824625-5,3,250,250	Quant Date	: 9/24/2015 10:45 pm

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).

$V_{ci} = 2.7 * Pl/14.696$

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)

Sep 28 2015, 01:13 pm

Work Group: WG824625 for Department: 3 GC/MS

Created: 24-SEP-15 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1523462-01	VS-FENCE	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-02	AMBIENT	S	TO15-SIM	AIR	DONE	U	1021	0928	S0	Can-6
L1523462-03	VS-DCR	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-04	IA-DCR	S	TO15-SIM	AIR	DONE	U	1021	0928	S0	Can-6
L1523462-05	VS-MRE	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-06	VS-DCF	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-07	IA-DCF	S	TO15-SIM	AIR	DONE	U	1021	0928	S0	Can-6
L1523462-08	VS-VAC	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-09	IA-WINE	S	TO15-SIM	AIR	DONE	U	1021	0928	S0	Can-6
L1523462-10	VS-BOOK	S	TO15-SIM	SOIL_VAPOR	DONE	U	1021	0928	S0	Can-6
L1523462-11	IA-YOGURT	S	TO15-SIM	AIR	DONE	U	1021	0928	S0	Can-6
L1523796-01	CAN 640 SHELF 45	S	TO15-SIM	AIR	DONE	U	1023	1001	NC	Can-6
L1523796-02	CAN 748 SHELF 46	S	TO15-SIM	AIR	DONE	U	1023	1001	NC	Can-6
L1523809-01	CAN 250 SHELF 7	S	TO15-SIM	AIR	DONE	U	1023	1001	NC	Can-2.7
L1523809-02	CAN 909 SHELF 8	S	TO15-SIM	AIR	DONE	U	1023	1001	NC	Can-1
WG824625-1	MS BFB Tune Standard	S	TO15-SIM	AIR	DONE	U				
WG824625-1	MS BFB Tune Standard	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG824625-2	Continuing Calibrati	S	TO15-SIM	AIR	DONE	U				
WG824625-2	Continuing Calibrati	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG824625-3	Laboratory Control S	S	TO15-SIM	AIR	DONE	U				
WG824625-3	Laboratory Control S	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG824625-4	Laboratory Method Bl	S	TO15-SIM	AIR	DONE	U				
WG824625-4	Laboratory Method Bl	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG824625-5	Duplicate Sample	S	TO15-SIM	AIR	DONE	U				
WG824625-5	Duplicate Sample	S	TO15-SIM	SOIL_VAPOR	DONE	U				

Comments:

WG824625-5 L1523462-01

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\150901T_ICAL.SEQ
Date: 09-02-2015
Time: 12:48:00
Int. Std Volume: 100 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BA2090101	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA2090101	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA2090101	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
TA2090101	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.02	1	5	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.04	1	5	100	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.1	1	5	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.2	1	6	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.5	1	6	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD1.0	1	6	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD5.0	1	7	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD10.0	1	7	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD20.0	1	8	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD50.0	1	8	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD100.0	1	8	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA2090101	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA2090102	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-LLSTD10.0	1	2	250	100	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-SIMSTD5.0	1	2	125	100	C:\Smart\Alpha-TO15.CTD	12:00

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 2

Internal Standard/Surrogate IDs: CSS15-014/CSS14-015

Date: 09/01/15

Internal Standard/Surrogate Volume: NA

Analyst Initials: AR/RY

Sequence File Name: 150901.S

SIM ICAL# Full Scan ICAL# TO-12 ICAL# APH ICAL#

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ Sublist	Leak Check Pass ? Y/N
1	TA2090101	TO15_SFS	R236173	250mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS	R236174	SS15-024D 50ML 0.02	SIM ONLY		NA
5	ITO15-SIMSTD0.04	TO15_SFS	R236175	SS15-024D 100ML 0.04	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS	R236176	SS15-024D 250ML 0.1	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS	R236177	SS15-024C 50ML 0.2			NA
6	ITO15-SIMSTD0.5	TO15_SFS	R236178	SS15-024C 125ML 0.5			NA
6	ITO15-SIMSTD1.0	TO15_SFS	R236179	SS15-024C 250ML 1.0			NA
7	ITO15-SIMSTD5.0	TO15_SFS	R236180	SS15-024B1 125ML 5.0			NA
7	ITO15-SIMSTD10.0	TO15_SFS	R236181	SS15-024B1 250ML 10.0			NA
8	ITO15-SIMSTD20.0	TO15_SFS	R236182	SS15-024A 50ML 20.0			NA
8	ITO15-SIMSTD50.0	TO15_SFS	R236183	SS15-024A 125ML 50.0			NA
8	ITO15-LLSTD100.0	TO15_SFS	R236184	SS15-024A 250ML 100.0	NOT FOR SIM		NA
1	BA2090101	TO15_SFS	R236185	250ml			NA
		Pause					NA
1	BA2090102	TO15_SFS	R236186	250ml			NA
2	CTO15-LLSTD10	TO15_SFS	R236187	250ml SS15-026C 10.0	FULLSCAN ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS	R236188	125ml SS15-026C 5.0	SIM ICV		NA

Alpha Analytical Air Lab
Instrument Run Log

Column ID: Rtx-1 0.25 mm ID

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: L1301234-01,3,250,250 { 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

Instrument ID: Airpiano 2

Internal Standard/Surrogate IDs: CSS15-014/CSS14-015

Date: 09/24/15

Internal Standard/Surrogate Volume: NA

Analyst Initials: RY

Sequence File Name: 150924.S

SIM ICAL#11407 Full Scan ICAL#11405 TO-12 ICAL# APH ICAL# 11413

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ Sublist	Leak Check Pass ? Y/N
1	TA2092401	TO15_SFS	R236527	250 mL	TUNE		NA
3	CTO15-LLSTD10.0	TO15_SFS	R236528	SS15-026F 250 mL	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS	R236529	SS15-026F 125 mL	SIM LCS		NA
1	BA2092401	TO15_SFS	R236530	250 mL	BLANK FAILED		NA
1	BA2092402	TO15_SFS	R236531	250 mL	BLANK		NA
2	L1523796-01,3,250,250	TO15_SFS	R236532	250 mL		LL/ SIM	NA
3	L1523796-02,3,250,250	TO15_SFS	R236533	250 mL		LL/ SIM	NA
4	L1523809-01,3,250,250	TO15_SFS	R236534	250 mL		LL/ SIM	NA
5	L1523809-02,3,250,250	TO15_SFS	R236535	250 mL		LL/ SIM	NA
6	L1523462-02,3,250,250	TO15_SFS	R236536	WG824625,ICAL11407		6 CL	Y
7	L1523462-04,3,250,250	TO15_SFS	R236537	WG824625,ICAL11407		6 CL	Y
8	L1523462-07,3,250,250	TO15_SFS	R236538	WG824625,ICAL11407		6 CL	Y
9	L1523462-09,3,250,250	TO15_SFS	R236539	WG824625,ICAL11407		6 CL	Y
10	L1523462-11,3,250,250	TO15_SFS	R236540	WG824625,ICAL11407		6 CL	Y
11	L1523462-01,3,250,250	TO15_SFS	R236541	WG824625,ICAL11407		6 CL	Y
11	L1523462-01DUP,3,250,250	TO15_SFS	R236542	WG824625,ICAL11407	TO15-SIM DUP	6 CL	Y
12	L1523462-03D,3,50,250	TO15_SFS	R236543	WG824625,ICAL11407		6 CL	Y
13	L1523462-05D,3,25,250	TO15_SFS	R236544	WG824625,ICAL11407		6 CL	Y
14	L1523462-06,3,250,250	TO15_SFS	R236545	WG824625,ICAL11407		6 CL	Y
15	L1523462-08D,3,50,250	TO15_SFS	R236546	WG824625,ICAL11407		6 CL	Y
16	L1523462-10D,3,125,250	TO15_SFS	R236547	WG824625,ICAL11407		6 CL	Y

Alpha Analytical Air Lab
Instrument Run Log

Column ID: Rtx-1 0.25 mm ID

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: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume

APPENDIX B
VAPOR INTRUSION SAMPLING DATA USABILITY SUMMARY REPORT

ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC
12 Gill Street, Suite 4700
Woburn, Massachusetts 01801 TEL 781-569-4000 FAX 781-569-4001

October 15, 2015

Mr. Robert Kovacs
Principal Scientist
Roux Associates, Inc.
209 Shafter Street
Islandia, New York 11749-5074

Re: Data Usability Summary Report for Oceanside Site, NY
Alpha Analytical Lab Number L1523462

Dear Mr. Kovacs:

Data review was performed for the data package generated by Alpha Analytical (Lab Number L1523462). Analytical data for eleven (11) summa canister air samples collected by Roux Associates on September 21, 2015 are discussed in this DUSR. USEPA GC/MS method TO-15 was used for the sample analysis of seven site-specific volatile organic compounds. The data validation was performed in accordance with the guidelines presented in the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008*, and in consideration of the specific requirements of USEPA method TO-15.

The data packages provided by the lab contained full deliverables for validation; this DUSR is generated from review of the summary form information, with review of raw data for samples, and limited review of associated raw data for QC samples.

The data review included the following items:

- Data deliverable completeness,
- Laboratory case narratives,
- Chain of custody documentation,
- Holding times,
- Blank results,
- Internal standard results,
- Laboratory control samples,
- Laboratory duplicates,
- Summa canister cleaning certifications,
- Instrument tunes,

- Initial calibration, initial calibration verification, and continuing calibration results,
- Method compliance, and
- Sample result verification.

No data qualifiers are applied to this data set based on the data validation. Copies of the validated sample results are presented in **Appendix A**. Copies of the chain-of-custodies and lab case narratives are presented in **Appendix B**.

Data Deliverable Completeness
A full deliverable data package (i.e., NYSDEC Category B or equivalent) was provided by the laboratory, which included reporting forms and raw data necessary to validate the reported analytical results.

Sample Receipt/Holding Times
All samples were received by the laboratory intact and under proper COCs. All samples were analyzed within the required holding times.

Volatile Analyses by USEPA Method TO-15
Alpha Analytical Lab Number L1523462
No analytical or quality control issues that affect the data quality were noted. Method blank results, internal standard recoveries, laboratory control sample results, and laboratory duplicate results were within the laboratory control limits; results of instrument tunes, initial calibration, initial calibration verification, and continuing calibration were in compliance with the method requirements.

Summary
Sample analyses were found generally compliant with the method requirements. All sample data are usable as reported.

Please do not hesitate to contact me if you have any comments or questions regarding this report.

Sincerely,

ROUX ASSOCIATES, INC.

Yixian Zhang, PhD
Senior Scientist

Enclosure: Definitions of Validation Data Qualifiers

Definitions of Validation Data Qualifiers

Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. The reported quantitation limit is an estimate and may be inaccurate or imprecise.
R	The sample results are rejected and unusable. The analyte may or may not be present.

Appendix A

Validated Sample Results

Alpha Analytical Lab Number L1523462

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-01	Date Collected	: 09/21/15 16:52
Client ID	: VS-FENCE	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 20:31
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236541	Instrument ID	: AIRPIANO2
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	0.040	0.020	--	0.102	0.051	--	
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.021	0.020	--	0.113	0.107	--	
127-18-4	Tetrachloroethene	15.1	0.020	--	102	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-02	Date Collected	: 09/21/15 16:56
Client ID	: AMBIENT	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 17:38
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236536	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.029	0.020	--	0.197	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-03D	Date Collected	: 09/21/15 17:06
Client ID	: VS-DCR	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 21:37
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 5
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236543	Instrument ID	: AIRPIANO2
Sample Amount	: 50.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.100	--	ND	0.256	--	U
75-35-4	1,1-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
79-01-6	Trichloroethene	1.04	0.100	--	5.59	0.537	--	
127-18-4	Tetrachloroethene	224	0.100	--	1520	0.678	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.100	--	ND	0.396	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-04	Date Collected :	09/21/15 17:15
Client ID	: IA-DCR	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 18:13
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236537	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.075	0.020	--	0.403	0.107	--	
127-18-4	Tetrachloroethene	17.2	0.020	--	117	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-05D	Date Collected	: 09/21/15 17:12
Client ID	: VS-MRE	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 22:08
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 10
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236544	Instrument ID	: AIRPIANO2
Sample Amount	: 25.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
79-01-6	Trichloroethene	2.82	0.200	--	15.2	1.07	--	
127-18-4	Tetrachloroethene	416	0.200	--	2820	1.36	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-06	Date Collected :	09/21/15 17:19
Client ID	: VS-DCF	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 22:42
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236545	Instrument ID	: AIRPIANO2
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	0.028	0.020	--	0.072	0.051	--	
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.080	0.020	--	0.430	0.107	--	
127-18-4	Tetrachloroethene	11.5	0.020	--	78.0	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-07	Date Collected	: 09/21/15 17:22
Client ID	: IA-DCF	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 18:48
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236538	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.045	0.020	--	0.242	0.107	--	
127-18-4	Tetrachloroethene	8.92	0.020	--	60.5	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-08D	Date Collected	: 09/21/15 17:41
Client ID	: VS-VAC	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 23:14
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 5
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236546	Instrument ID	: AIRPIANO2
Sample Amount	: 50.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.100	--	ND	0.256	--	U
75-35-4	1,1-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.100	--	ND	0.396	--	U
79-01-6	Trichloroethene	1.95	0.100	--	10.5	0.537	--	
127-18-4	Tetrachloroethene	245	0.100	--	1660	0.678	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.100	--	ND	0.396	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-09	Date Collected	: 09/21/15 17:47
Client ID	: IA-WINE	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 19:22
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236539	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	2.46	0.020	--	16.7	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number:	1802.0001Y000
Lab ID	: L1523462-10D	Date Collected :	09/21/15 17:51
Client ID	: VS-BOOK	Date Received :	09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed :	09/24/15 23:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	2
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236547	Instrument ID	: AIRPIANO2
Sample Amount	: 125 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.040	--	ND	0.102	--	U
75-35-4	1,1-Dichloroethene	ND	0.040	--	ND	0.159	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.040	--	ND	0.159	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.040	--	ND	0.159	--	U
79-01-6	Trichloroethene	0.328	0.040	--	1.76	0.215	--	
127-18-4	Tetrachloroethene	53.6	0.040	--	363	0.271	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.040	--	ND	0.159	--	U

Form 1
Volatile Organics

Client	: Roux Associates, Inc.	Lab Number	: L1523462
Project Name	: OCEANSIDE PLAZA	Project Number	: 1802.0001Y000
Lab ID	: L1523462-11	Date Collected	: 09/21/15 17:53
Client ID	: IA-YOGURT	Date Received	: 09/21/15
Sample Location	: OCEANSIDE,NY	Date Analyzed	: 09/24/15 19:56
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R236540	Instrument ID	: AIRPIANO2
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
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
79-01-6	Trichloroethene	0.055	0.020	--	0.296	0.107	--	
127-18-4	Tetrachloroethene	1.46	0.020	--	9.90	0.136	--	
540-59-0	1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--	U

Appendix B

Laboratory Case Narratives and Chain of Custodies (COCs)

Project Name: OCEANSIDE PLAZA
Project Number: 1802.0001Y000

Lab Number: L1523462
Report Date: 09/28/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1523462-01	VS-FENCE	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 16:52	09/21/15
L1523462-02	AMBIENT	AIR	OCEANSIDE,NY	09/21/15 16:56	09/21/15
L1523462-03	VS-DCR	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:06	09/21/15
L1523462-04	IA-DCR	AIR	OCEANSIDE,NY	09/21/15 17:15	09/21/15
L1523462-05	VS-MRE	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:12	09/21/15
L1523462-06	VS-DCF	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:19	09/21/15
L1523462-07	IA-DCF	AIR	OCEANSIDE,NY	09/21/15 17:22	09/21/15
L1523462-08	VS-VAC	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:41	09/21/15
L1523462-09	IA-WINE	AIR	OCEANSIDE,NY	09/21/15 17:47	09/21/15
L1523462-10	VS-BOOK	SOIL_VAPOR	OCEANSIDE,NY	09/21/15 17:51	09/21/15
L1523462-11	IA-YOGURT	AIR	OCEANSIDE,NY	09/21/15 17:53	09/21/15

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 18, 2015. The canister certification results are provided as an addendum.

Sample L1523462-03, -05, -08, and -10: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

Sample Receipt

The sample designated VS-MRE (L1523462-05) had a RPD for the pre- and post-flow controller calibration check (188% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 10.0 mL/minute; the final flow rate was 0.3 mL/minute. The final pressure recorded by the laboratory of the associated canister was -5.0 inches of mercury. No further action was required.

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: 09/28/15

Title: Technical Director/Representative

AIR ANALYSIS

CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 9/22/15

ALPHA Job #: L1523462

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Roux Associates
Address: 209 Shafter St.
Islandia, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: rkovacs@rouxinc.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Oceanside Plaza
Project Location: Oceanside, NY
Project #: 1802.0001Y000
Project Manager: Rob Kovacs
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: NYSDEC ASP Category B
Report to: *(if different than Project Manager)*

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
Detection limit: 1 µg/m³ or less

Analyze for:
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloroethene (total)
Tetrachloroethene
Trichloroethene
Vinyl Chloride

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
23462-01	VS-FENCE	9-21-15	0842	1652	-30.26	-7.73	SV	VS/AF	6L	2117	0555		X						
-02	AMBIENT	9-21-15	0846	1656	-30.32	-6.51	AA	VS/AF	6L	1610	0018		X						
-03	VS-DCR	9-21-15	0857	1706	-30.16	-6.70	SV	VS/AF	6L	967	0093		X						
-04	IA-DCR	9-21-15	0901	1715	-30.52	-7.38	IA	VS/AF	6L	1644	0401		X						
-05	VS-MRE	9-21-15	0909	1712	-30.43	-5.16	SV	VS/AF	6L	2119	0386		X						
-06	VS-DCF	9-21-15	0916	1719	-30.53	-7.64	SV	VS/AF	6L	940	0551		X						
-07	IA-DCF	9-21-15	0919	1722	-30.19	-8.63	IA	VS/AF	6L	1573	0546		X						
-08	VS-VAC	9-21-15	0931	1741	-30.07	-5.12	SV	VS/AF	6L	1673	0244		X						
-09	IA-WINE	9-21-15	0933	1747	-30.66	-6.32	IA	VS/AF	6L	1611	0377		X						
-10	VS-BOOK	9-21-15	0944	1751	-30.92	-5.95	SV	VS/AF	6L	2055	0639		X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: SUMMA

Relinquished By:	Date/Time	Received By:	Date/Time:
[illegible signature]	9/21/15 18:00	[illegible signature] (AAL)	9/21/15 1800
[illegible signature] (AAL)	9/21/15 2000	Tom [illegible]	9-21-15 2000
Tom [illegible]	9-22-15 0115	[illegible signature]	9/22/15 0115

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 (19-Jun-09)

AIR ANALYSIS

PAGE 2 OF 2

CHAIN OF CUSTODY

Date Rec'd in Lab: 9/22/15

ALPHA Job #: L1523462

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ROUX ASSOCIATES
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: RKOVACS@ROUXINC.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: OCEANSIDE PLAZA
Project Location: OCEANSIDE, NY
Project #: 1802.0001Y000
Project Manager: ROB KOVACS
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: NYSDEC ASP CATEGORY B
Report to: (if different than Project Manager)

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
DETECTION LIMIT: 1 µg/m³ OR LESS

ANALYZE FOR:
1,1-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
1,2-DICHLOROETHENE (TOTAL)
TETRACHLOROETHENE
TRICHLOROETHENE
VINYL CHLORIDE

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS: TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
-11	IA-YOGURT	9-21-15	0946	1753	-30.14	-6.71	IA	VS/AF	6L	1053	0432		X						

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

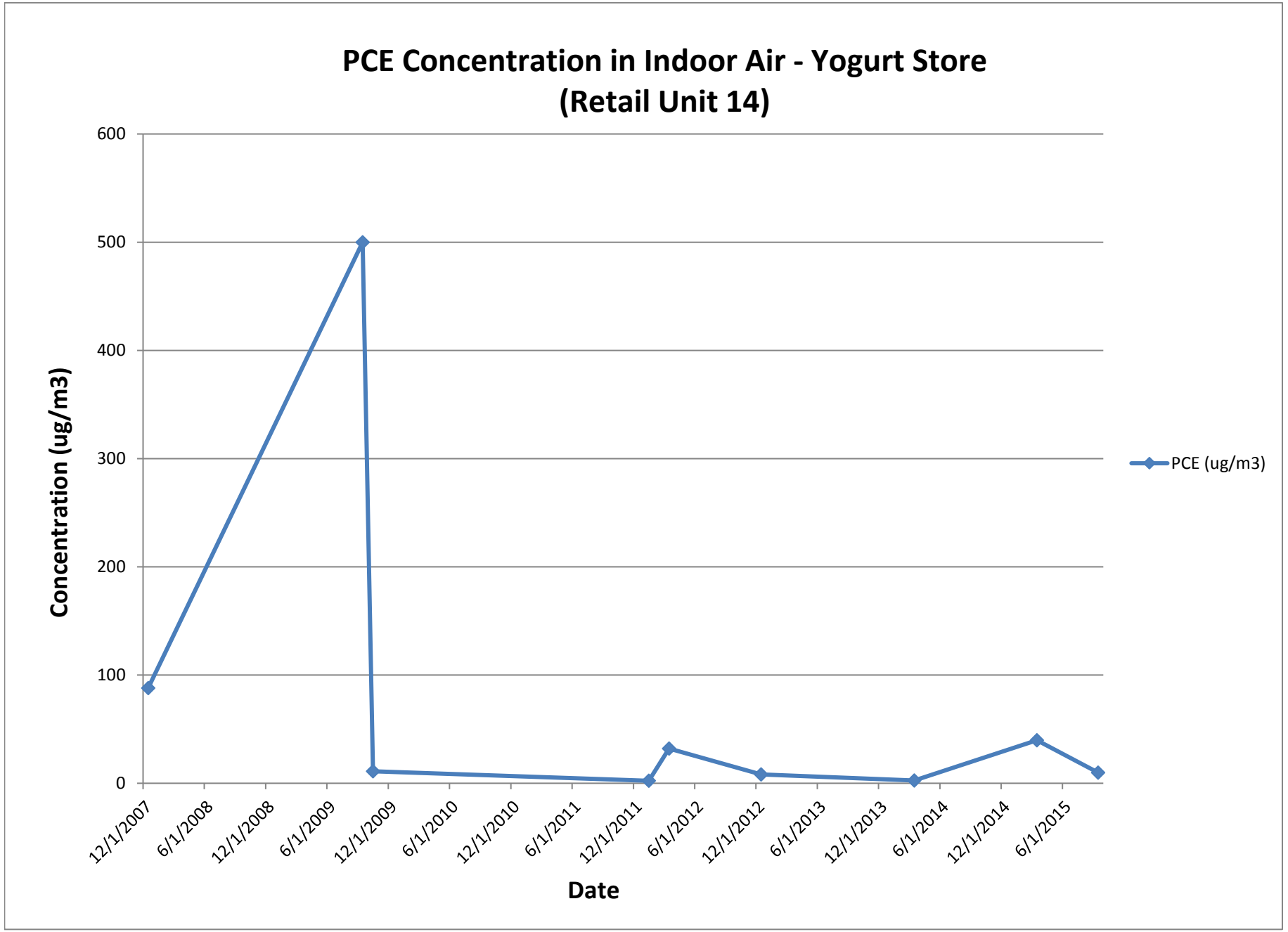
Container Type: SUMMA

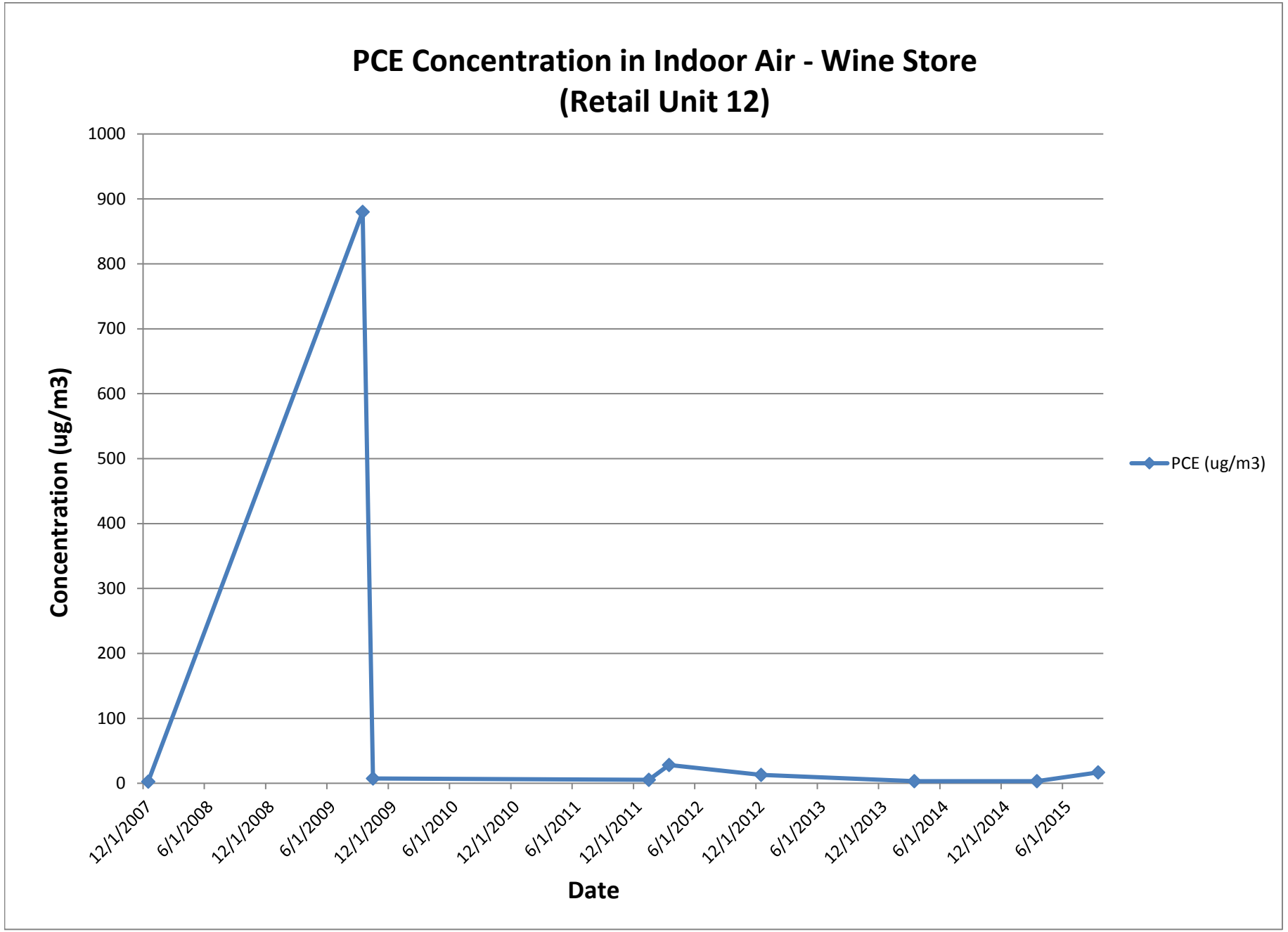
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

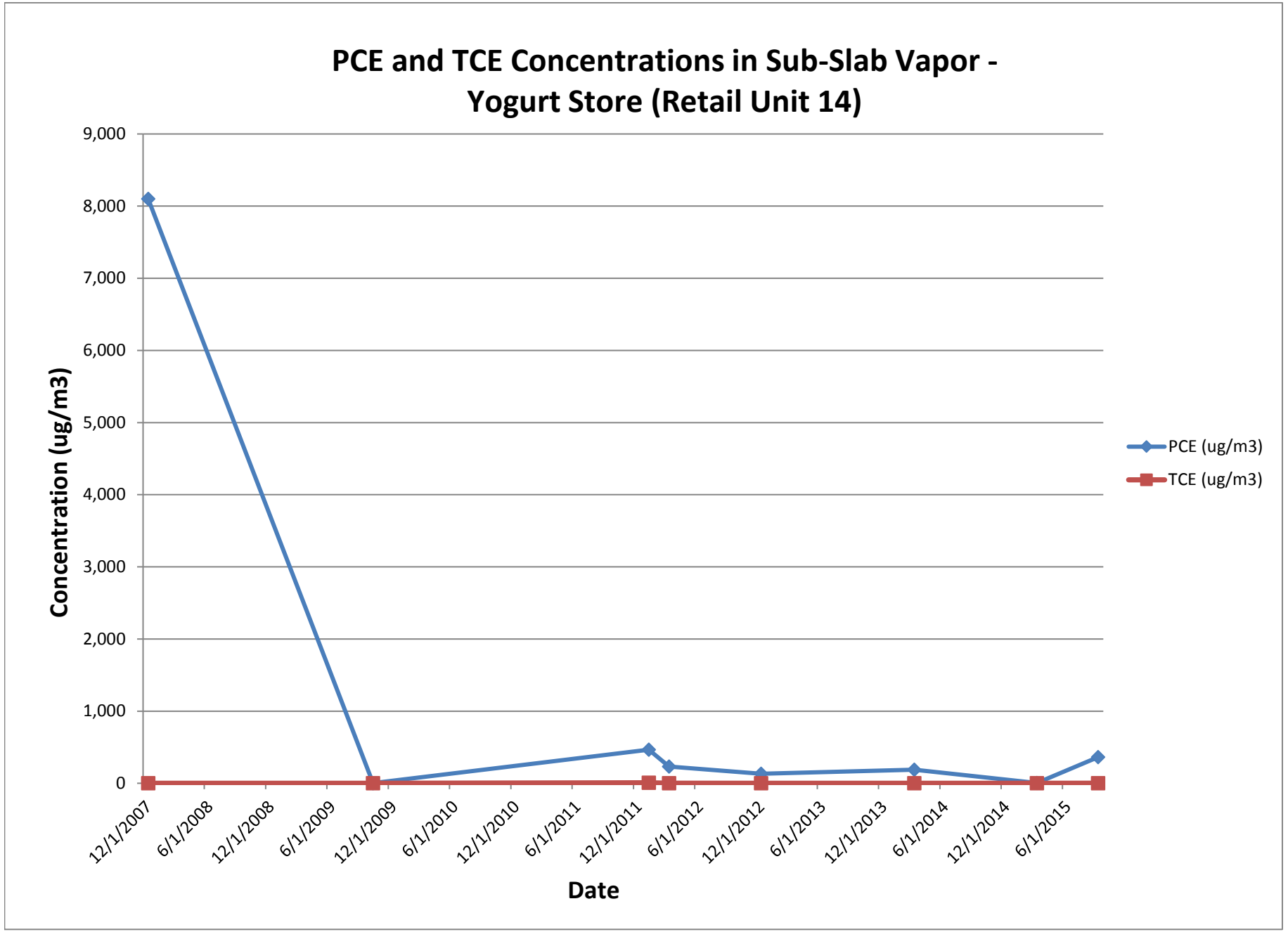
Relinquished By:	Date/Time	Received By:	Date/Time:
Valerie Salvatore	9/21/15 18:06	[illegible]	9/21/15 1600
[illegible] (AAL)	9/21/15 2000	Tom Tobin	9-21-15 2000
Tom Tobin	9-22-15 0115	[illegible]	9/22/15 0115

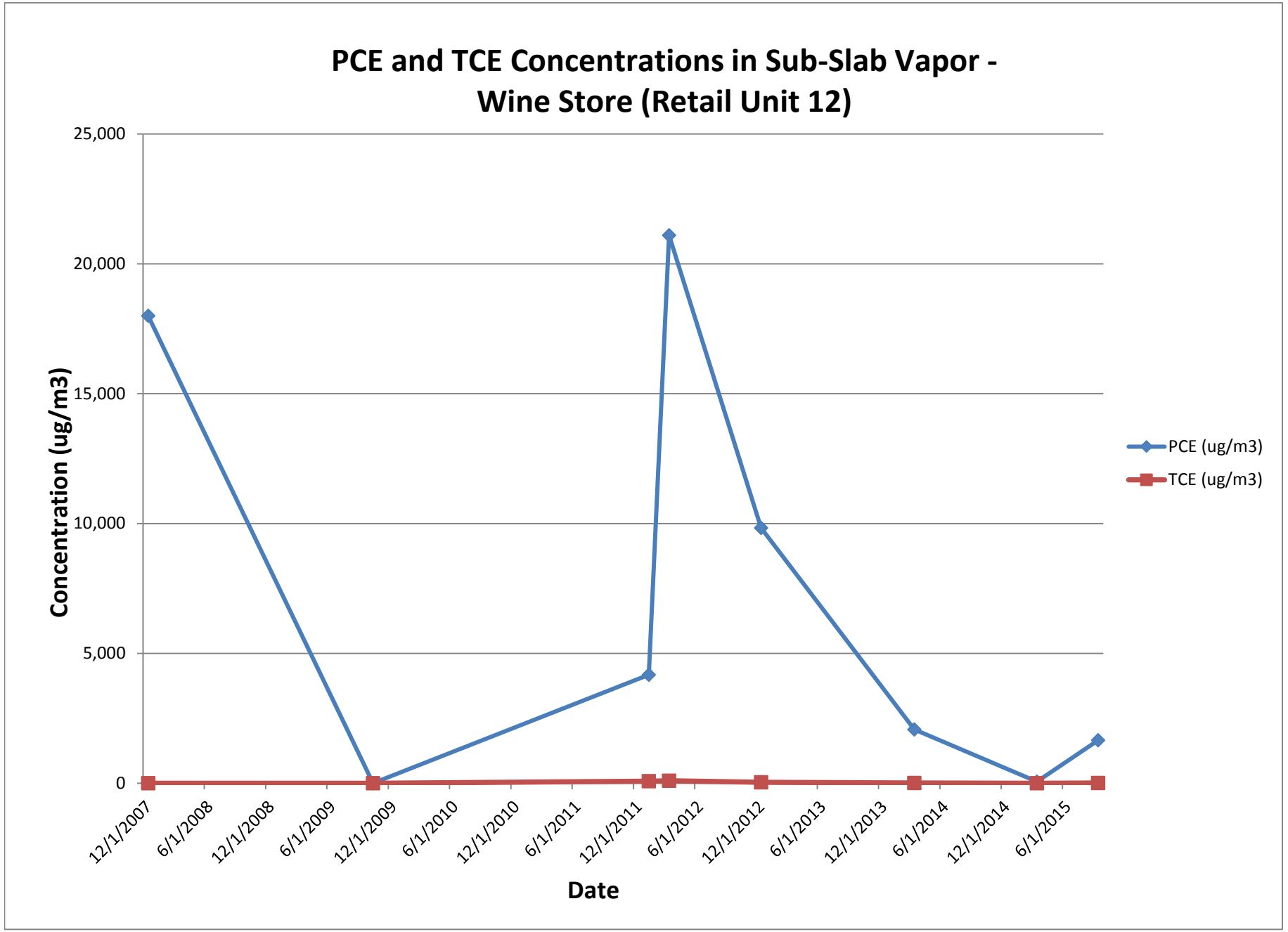
Form No: 101-02 (19-Jun-09)

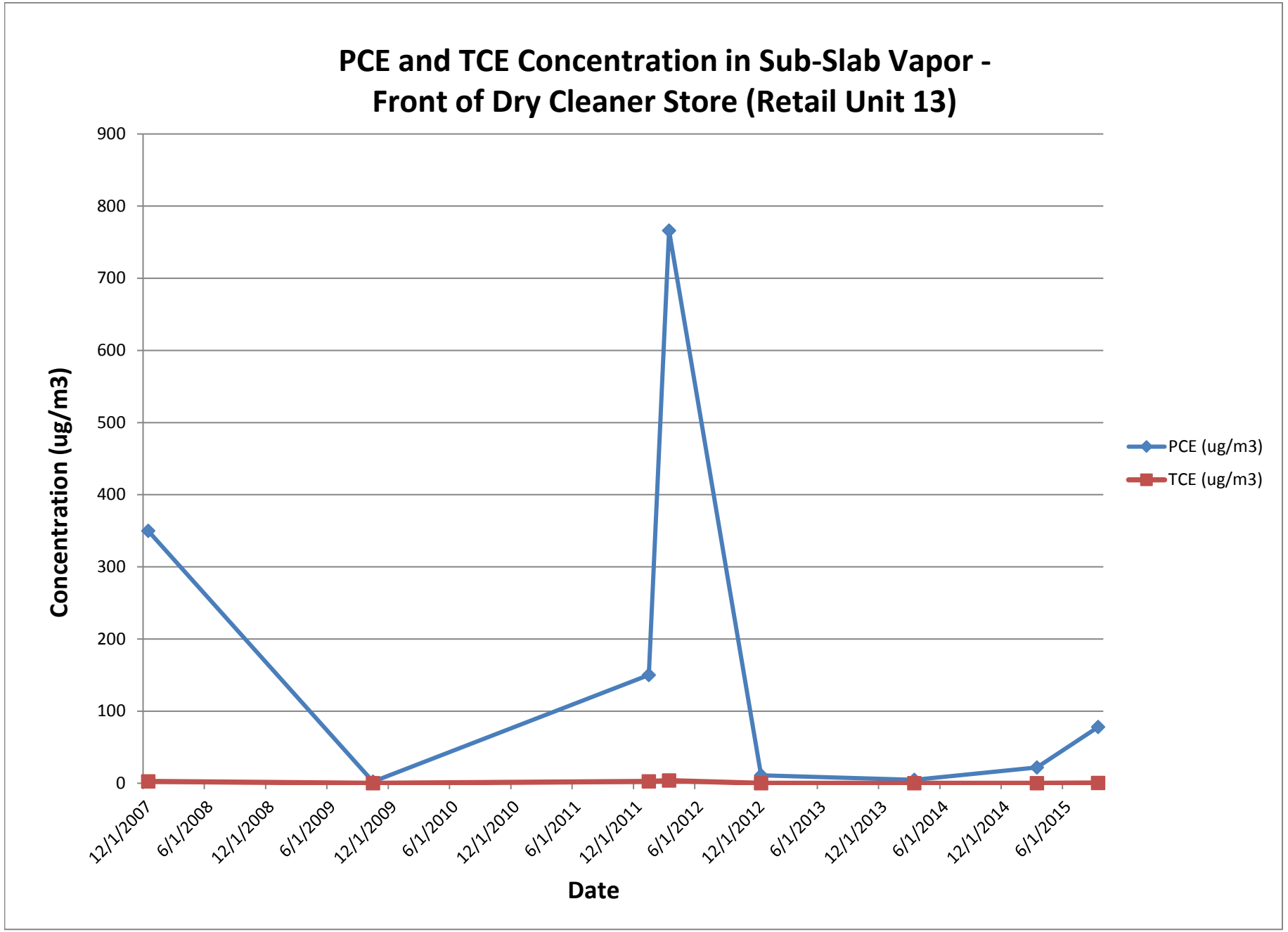
APPENDIX C
VAPOR INTRUSION CONCENTRATION GRAPHS

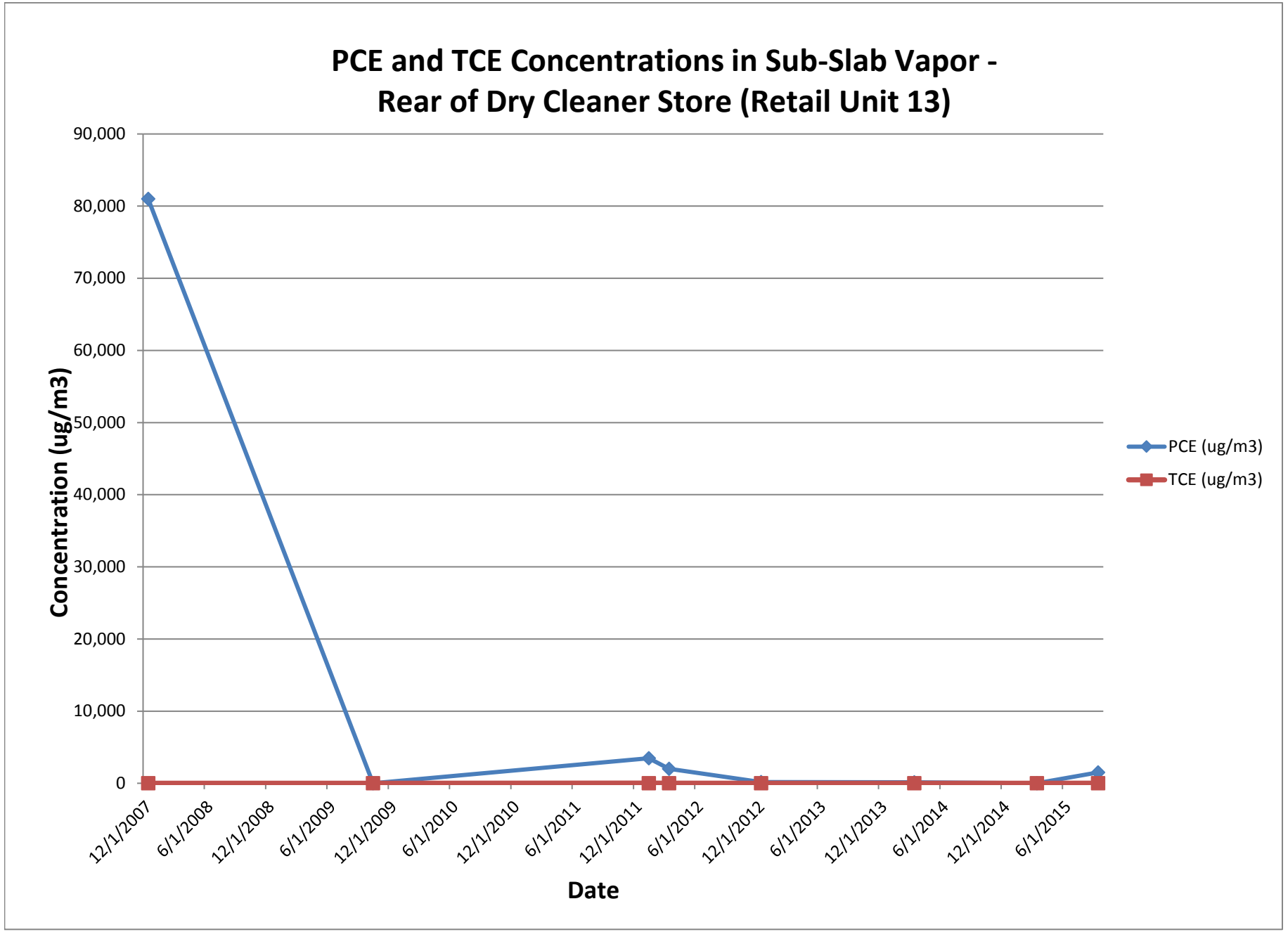

PCE Concentration in Indoor Air - Yogurt Store
(Retail Unit 14)
Concentration (ug/m3)
600
500
400
300
200
100
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)

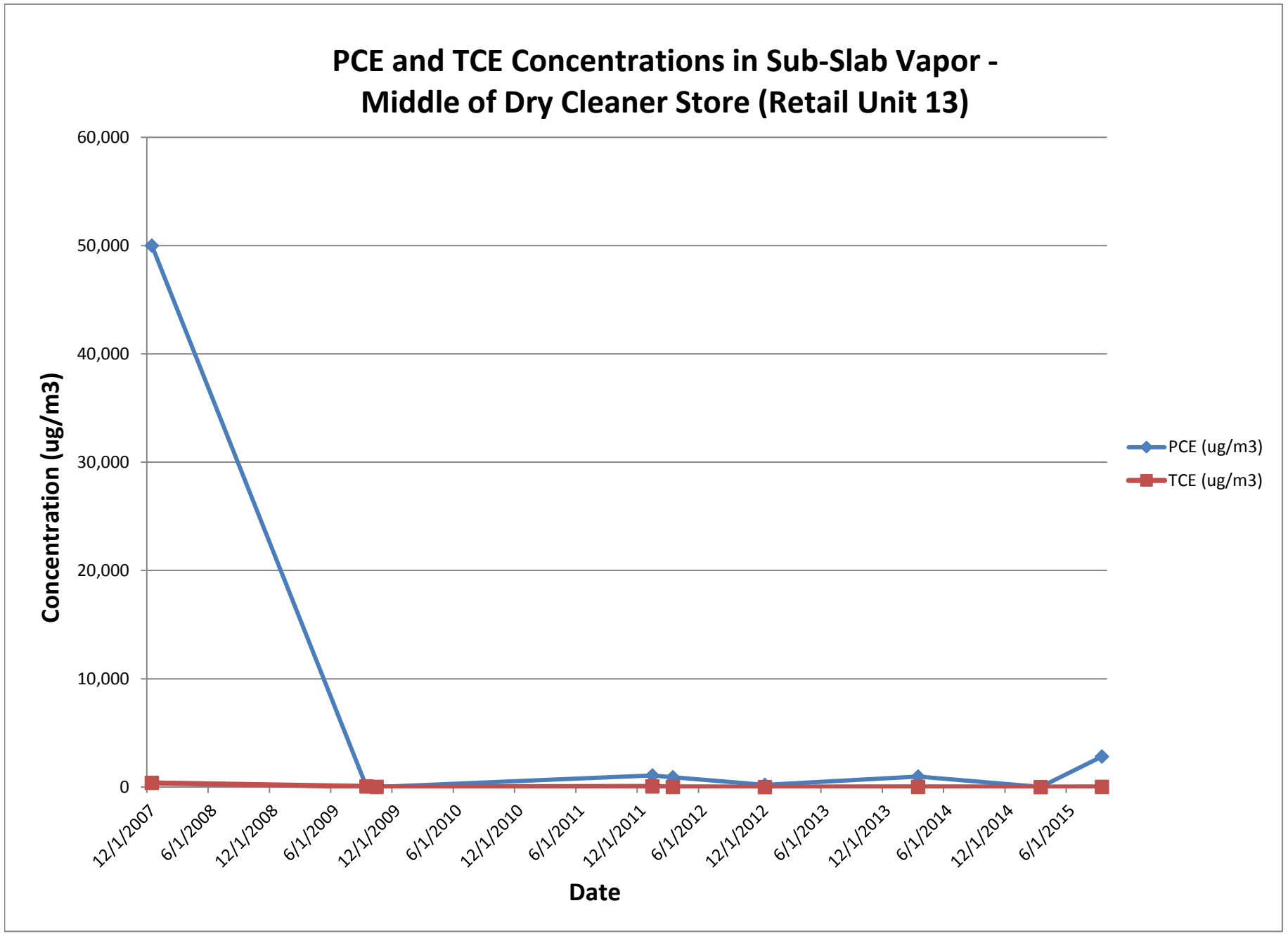

PCE Concentration in Indoor Air - Wine Store
(Retail Unit 12)
Concentration (ug/m3)
1000
900
800
700
600
500
400
300
200
100
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)


PCE and TCE Concentrations in Sub-Slab Vapor - Yogurt Store (Retail Unit 14)
Concentration (ug/m3)
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)
TCE (ug/m3)


PCE and TCE Concentrations in Sub-Slab Vapor - Wine Store (Retail Unit 12)
25,000
20,000
15,000
10,000
5,000
0
Concentration (ug/m3)
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)
TCE (ug/m3)


PCE and TCE Concentration in Sub-Slab Vapor -
Front of Dry Cleaner Store (Retail Unit 13)
Concentration (ug/m3)
900
800
700
600
500
400
300
200
100
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)
TCE (ug/m3)


PCE and TCE Concentrations in Sub-Slab Vapor - Rear of Dry Cleaner Store (Retail Unit 13)
Concentration (ug/m3)
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)
TCE (ug/m3)


PCE and TCE Concentrations in Sub-Slab Vapor - Middle of Dry Cleaner Store (Retail Unit 13)
Concentration (ug/m3)
60,000
50,000
40,000
30,000
20,000
10,000
0
12/1/2007
6/1/2008
12/1/2008
6/1/2009
12/1/2009
6/1/2010
12/1/2010
6/1/2011
12/1/2011
6/1/2012
12/1/2012
6/1/2013
12/1/2013
6/1/2014
12/1/2014
6/1/2015
Date
PCE (ug/m3)
TCE (ug/m3)

APPENDIX D
GROUNDWATER SAMPLING LABORATORY ANALYTICAL DATA SHEETS

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

NYSDEC ASP Category B Data Package

Prepared for:

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

Project: Oceanside Plaza
Groundwater and Water Samples
Collected on 12/09/15

SDG# OSP22

GROUP	SAMPLE NUMBERS
1615773	8167916-8167920

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **03/30/2016**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Kaitlin Plasterer at (717) 556-7323.

2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

Table of Contents for SDG# OSP22

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Reference List for SDG Number OSP22
with a Data Package Type of NYSDEC B

12577 - Reliance Environmental, Inc.
Project: Oceanside Plaza

Lab Sample Number	Client Sample ID	Collection Date	Date Received
8167916	BKO-MW5	12/09/2015 10:12	12/09/2015 15:06
8167917	BKO-MW4	12/09/2015 10:55	12/09/2015 15:06
8167918	BKO-DUP	12/09/2015 11:00	12/09/2015 15:06
8167919	BKO-FB	12/09/2015 10:00	12/09/2015 15:06
8167920	BKO-TB	12/09/2015 00:00	12/09/2015 15:06

eurofins | Lancaster Laboratories Environmental

Sample pH Log

SDG: OSP22

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	Res. Cl. Present?	Corrective Substance	CS Lot #
8167916	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
8167917	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
8167918	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
8167919	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
8167920	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA

Check Code Key
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 · 717-656-2300 Fax: 717-656-2681 · www.lancasterlabs.com

01163 GC/MS VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

11997 VOCs- 5ml Water by 8260C

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

Analysis Reports / Field Chain of Custody

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

December 17, 2015

Project: Oceanside Plaza

Submittal Date: 12/09/2015
Group Number: 1615773
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LL) #
BKO-MW5 Grab Groundwater	8167916
BKO-MW4 Grab Groundwater	8167917
BKO-DUP Grab Groundwater	8167918
BKO-FB Grab Water	8167919
BKO-TB Water	8167920

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO Reliance Environmental, Inc. Attn: Mark Zunich

Respectfully Submitted,

Kaitlin N. Plasterer

Kaitlin N. Plasterer
Specialist

(717) 556-7323

Sample Description: BKO-MW5 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167916
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:12 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW5 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167916
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:12 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 05:26	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 05:26	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW4 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167917
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:55 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW4 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167917
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:55 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 05:47	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 05:47	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-DUP Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167918
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 11:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFD

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-DUP Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167918
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 11:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFD

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:08	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:08	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-FB Grab Water
Oceanside Plaza

LL Sample # WW 8167919
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-FB Grab Water
Oceanside Plaza

LL Sample # WW 8167919
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:29	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:29	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-TB Water
Oceanside Plaza

LL Sample # WW 8167920
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-TB Water
Oceanside Plaza

LL Sample # WW 8167920
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:50	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:50	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Reliance Environmental, Inc. Group Number: 1615773
Reported: 12/17/2015 12:56

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: Y153501AA	Sample number(s): 8167916-8167920								
Acetone	N.D.	6.	20	ug/l	87	109	58-138	23	30
Benzene	N.D.	0.5	1	ug/l	101	101	78-120	0	30
Bromodichloromethane	N.D.	0.5	1	ug/l	104	104	73-120	0	30
Bromoform	N.D.	0.5	4	ug/l	93	93	61-121	0	30
Bromomethane	N.D.	0.5	1	ug/l	85	84	53-130	2	30
2-Butanone	N.D.	3.	10	ug/l	81	82	62-131	1	30
Carbon Disulfide	N.D.	1.	5	ug/l	60	58	58-126	3	30
Carbon Tetrachloride	N.D.	0.5	1	ug/l	109	108	74-130	1	30
Chlorobenzene	N.D.	0.5	1	ug/l	105	105	80-120	1	30
Chloroethane	N.D.	0.5	1	ug/l	78	79	56-120	1	30
Chloroform	N.D.	0.5	1	ug/l	108	109	80-120	1	30
Chloromethane	N.D.	0.5	1	ug/l	111	98	65-129	12	30
Cyclohexane	N.D.	2.	5	ug/l	90	90	60-129	1	30
1,2-Dibromo-3-chloropropane	N.D.	2.	5	ug/l	86	87	55-131	1	30
Dibromochloromethane	N.D.	0.5	1	ug/l	109	110	72-120	1	30
1,2-Dibromoethane	N.D.	0.5	1	ug/l	107	107	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	5	ug/l	109	108	80-120	0	30
1,3-Dichlorobenzene	N.D.	1.	5	ug/l	108	107	80-120	1	30
1,4-Dichlorobenzene	N.D.	1.	5	ug/l	109	108	80-120	1	30
Dichlorodifluoromethane	N.D.	0.5	1	ug/l	87	84	55-127	3	30
1,1-Dichloroethane	N.D.	0.5	1	ug/l	87	99	80-120	12	30
1,2-Dichloroethane	N.D.	0.5	1	ug/l	106	106	72-127	0	30
1,1-Dichloroethene	N.D.	0.5	1	ug/l	116	135*	76-124	15	30
cis-1,2-Dichloroethene	N.D.	0.5	1	ug/l	105	106	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.5	1	ug/l	103	103	80-120	0	30
1,2-Dichloropropane	N.D.	0.5	1	ug/l	100	101	80-120	1	30
cis-1,3-Dichloropropene	N.D.	0.5	1	ug/l	101	101	80-120	1	30
trans-1,3-Dichloropropene	N.D.	0.5	1	ug/l	101	102	76-120	0	30
Ethylbenzene	N.D.	0.5	1	ug/l	106	104	78-120	1	30
Freon 113	N.D.	2.	10	ug/l	117	134*	67-127	14	30
2-Hexanone	N.D.	3.	10	ug/l	71	72	59-127	1	30
Isopropylbenzene	N.D.	1.	5	ug/l	105	104	80-120	0	30
Methyl Acetate	N.D.	1.	5	ug/l	82	82	64-131	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	1	ug/l	99	98	75-120	1	30
4-Methyl-2-pentanone	N.D.	3.	10	ug/l	78	78	59-130	0	30
Methylcyclohexane	N.D.	1.	5	ug/l	99	99	66-126	0	30
Methylene Chloride	N.D.	2.	4	ug/l	98	97	77-121	2	30
Styrene	N.D.	1.	5	ug/l	103	103	80-120	0	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	1	ug/l	95	96	65-131	1	30
Tetrachloroethene	N.D.	0.5	1	ug/l	114	112	80-122	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Reliance Environmental, Inc. Group Number: 1615773
Reported: 12/17/2015 12:56

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toluene	N.D.	0.5	1	ug/l	102	103	80-120	0	30
1,2,4-Trichlorobenzene	N.D.	1.	5	ug/l	107	105	73-120	1	30
1,1,1-Trichloroethane	N.D.	0.5	1	ug/l	103	102	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.5	1	ug/l	101	102	80-120	1	30
Trichloroethene	N.D.	0.5	1	ug/l	109	109	80-120	0	30
Trichlorofluoromethane	N.D.	0.5	1	ug/l	112	116	60-142	3	30
Vinyl Chloride	N.D.	0.5	1	ug/l	113	107	69-120	6	30
Xylene (Total)	N.D.	0.5	1	ug/l	105	105	80-120	0	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: Y153501AA	Sample number(s): 8167916-8167920 UNSPK: P169918								
Acetone	87	100	58-138	13	30				
Benzene	107	107	78-120	0	30				
Bromodichloromethane	108	108	73-120	1	30				
Bromoform	94	93	61-121	1	30				
Bromomethane	93	90	53-130	4	30				
2-Butanone	80	80	62-131	0	30				
Carbon Disulfide	62	64	58-126	3	30				
Carbon Tetrachloride	122	123	74-130	0	30				
Chlorobenzene	108	109	80-120	0	30				
Chloroethane	90	85	56-120	5	30				
Chloroform	114	113	80-120	1	30				
Chloromethane	101	113	65-129	11	30				
Cyclohexane	112	113	60-129	1	30				
1,2-Dibromo-3-chloropropane	87	86	55-131	1	30				
Dibromochloromethane	112	109	72-120	2	30				
1,2-Dibromoethane	108	106	80-120	2	30				
1,2-Dichlorobenzene	110	111	80-120	1	30				
1,3-Dichlorobenzene	110	112	80-120	2	30				
1,4-Dichlorobenzene	111	113	80-120	1	30				
Dichlorodifluoromethane	109	110	55-127	1	30				
1,1-Dichloroethane	95	103	80-120	8	30				
1,2-Dichloroethane	109	108	72-127	1	30				
1,1-Dichloroethene	120	134*	76-124	11	30				
cis-1,2-Dichloroethene	108	111	80-120	2	30				
trans-1,2-Dichloroethene	110	111	80-120	1	30				
1,2-Dichloropropane	104	105	80-120	1	30				
cis-1,3-Dichloropropene	104	104	80-120	0	30				
trans-1,3-Dichloropropene	102	102	76-120	0	30				
Ethylbenzene	110	110	78-120	0	30				
Freon 113	138*	148*	67-127	7	30				
2-Hexanone	70	70	59-127	0	30				
Isopropylbenzene	111	111	80-120	0	30				
Methyl Acetate	80	83	64-131	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Reliance Environmental, Inc. Group Number: 1615773
Reported: 12/17/2015 12:56

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methyl Tertiary Butyl Ether	98	98	75-120	0	30				
4-Methyl-2-pentanone	77	77	59-130	0	30				
Methylcyclohexane	127*	126	66-126	0	30				
Methylene Chloride	101	101	77-121	0	30				
Styrene	106	106	80-120	0	30				
1,1,2,2-Tetrachloroethane	96	96	65-131	0	30				
Tetrachloroethene	123*	122	80-122	1	30				
Toluene	107	107	80-120	0	30				
1,2,4-Trichlorobenzene	108	109	73-120	0	30				
1,1,1-Trichloroethane	110	111	66-126	0	30				
1,1,2-Trichloroethane	102	102	80-120	0	30				
Trichloroethene	118	117	80-120	0	30				
Trichlorofluoromethane	142	145*	60-142	2	30				
Vinyl Chloride	118	120	69-120	1	30				
Xylene (Total)	109	109	80-120	0	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: Y153501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8167916	101	100	96	96
8167917	101	100	96	96
8167918	102	99	95	96
8167919	102	100	95	96
8167920	102	100	95	96
Blank	102	98	96	97
LCS	102	102	97	98
LCSD	102	103	97	99
MS	103	102	97	99
MSD	102	102	96	98
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories Environmental use only

Acct. # 12577 Group # 161773 Sample # 8167916-20

COC # 394385

Client Information

Client: Reliance Environmental
Acct. #:
Project Name/#: Oceanside Plaza
PWSID #:
Project Manager: Mark Zunich
P.O. #:
Sampler: APH
Quote #:
State where samples were collected: NY
For Compliance: Yes ☐ No ☐

Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Other: ____

Analysis Requested

Preservation Codes: H

For Lab Use Only
FSC:
SCR#: 181401

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOCs (8260)
BKO-MW5	12/9/15	10:12	X		3	3
BKO-MW4	↓	10:55	↓		3	3
BKO-DUP	↓	11:00	↓		3	3
BKO-FB	↓	10:00	↓		3	3
BKO-TB	↓	—	↓		2	2

Turnaround Time (TAT) Requested (please circle)
(Standard) Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____

E-mail address: _____

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP)
Type VI (Raw Data Only)
Type III (Reduced non-CLP)
TX TRRP-13
NYSDEC Category A or B
MA MCP
CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Bo Hallstorge	12/7/15	1424			
Alexander P. Hulen	12/9/15	15:06			
			Received by	12/9/15	1506

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.3 °C

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Sample Administration Receipt Documentation Log

Doc Log ID: 129177

Group Number(s): 615773

Client: Reliance

Delivery and Receipt Information

Delivery Method:	Client Drop Off	Arrival Timestamp:	12/09/2015 15:06
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Jordan Woods (6698) at 16:04 on 12/09/2015

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.3	DT	Wet	Y	Loose	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP22

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
8167916	BKO-MW5	X		1	
8167917	BKO-MW4	X		1	
8167918	BKO-DUP	X		1	Field Duplicate Sample
8167919	BKO-FB	X		1	Field Blank
8167920	BKO-TB	X		1	Trip Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

Batch#: Y153501AA (Sample number(s): 8167916-8167920)
The recovery for the LCSD exceeds the acceptance window indicating a positive bias in 1,1-Dichloroethene, Freon 113

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP22

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

(Sample number(s): 8167916-8167920: Analysis: 11997)
A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$Concentration\ (\mu g / L) = \frac{(Ax)(Is)(Df)}{(Ais)(RRF)}$$

Where:

Ax, Ais, and RRF are as given in 1. above
Is = Amount of internal standard added in parts per billion (µg/L)
Df = Dilution factor

5. % Recovery (% Rec)

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

6. Relative Percent Difference (RPD)

$$RPD = \frac{(MSR - MSRD)}{(1/2)(MSR + MSRD)} \times 100$$

Where:

MSR = Matrix spike recovery
MSRD = Matrix spike recovery duplicate

Quality Control and Calibration Summary Forms

Volatiles by GC/MS

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Reliance Environmental, Inc.
SDG: OSP22

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
VOCs- 5ml Water by 8260C	Y153501AA	VBLKY87	12/16/2015 01:56:00
		LCSY87	12/16/2015 02:17:00
		LCDY87	12/16/2015 02:39:00
		8167916	12/16/2015 05:26:00
		8167917	12/16/2015 05:47:00
		8167918	12/16/2015 06:08:00
		8167919	12/16/2015 06:29:00
		8167920	12/16/2015 06:50:00

Fraction: Volatiles by GC/MS

Y153501AA / VBLKY87 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	12/16/15	N.D.	ug/l	0.5	1
Chloromethane	12/16/15	N.D.	ug/l	0.5	1
Vinyl Chloride	12/16/15	N.D.	ug/l	0.5	1
Bromomethane	12/16/15	N.D.	ug/l	0.5	1
Chloroethane	12/16/15	N.D.	ug/l	0.5	1
Trichlorofluoromethane	12/16/15	N.D.	ug/l	0.5	1
1,1-Dichloroethene	12/16/15	N.D.	ug/l	0.5	1
Acetone	12/16/15	N.D.	ug/l	6	20
Freon 113	12/16/15	N.D.	ug/l	2	10
Carbon Disulfide	12/16/15	N.D.	ug/l	1	5
Methyl Acetate	12/16/15	N.D.	ug/l	1	5
Methylene Chloride	12/16/15	N.D.	ug/l	2	4
trans-1,2-Dichloroethene	12/16/15	N.D.	ug/l	0.5	1
Methyl Tertiary Butyl Ether	12/16/15	N.D.	ug/l	0.5	1
1,1-Dichloroethane	12/16/15	N.D.	ug/l	0.5	1
2-Butanone	12/16/15	N.D.	ug/l	3	10
cis-1,2-Dichloroethene	12/16/15	N.D.	ug/l	0.5	1
Chloroform	12/16/15	N.D.	ug/l	0.5	1
1,1,1-Trichloroethane	12/16/15	N.D.	ug/l	0.5	1
Carbon Tetrachloride	12/16/15	N.D.	ug/l	0.5	1
Benzene	12/16/15	N.D.	ug/l	0.5	1
1,2-Dichloroethane	12/16/15	N.D.	ug/l	0.5	1
Trichloroethene	12/16/15	N.D.	ug/l	0.5	1
1,2-Dichloropropane	12/16/15	N.D.	ug/l	0.5	1
Methylcyclohexane	12/16/15	N.D.	ug/l	1	5
Bromodichloromethane	12/16/15	N.D.	ug/l	0.5	1
cis-1,3-Dichloropropene	12/16/15	N.D.	ug/l	0.5	1
4-Methyl-2-pentanone	12/16/15	N.D.	ug/l	3	10
trans-1,3-Dichloropropene	12/16/15	N.D.	ug/l	0.5	1
Toluene	12/16/15	N.D.	ug/l	0.5	1
Tetrachloroethene	12/16/15	N.D.	ug/l	0.5	1
1,1,2-Trichloroethane	12/16/15	N.D.	ug/l	0.5	1
Dibromochloromethane	12/16/15	N.D.	ug/l	0.5	1
2-Hexanone	12/16/15	N.D.	ug/l	3	10
1,2-Dibromoethane	12/16/15	N.D.	ug/l	0.5	1
Chlorobenzene	12/16/15	N.D.	ug/l	0.5	1
Ethylbenzene	12/16/15	N.D.	ug/l	0.5	1
Xylene (Total)	12/16/15	N.D.	ug/l	0.5	1
Bromoform	12/16/15	N.D.	ug/l	0.5	4
Styrene	12/16/15	N.D.	ug/l	1	5
Isopropylbenzene	12/16/15	N.D.	ug/l	1	5
Cyclohexane	12/16/15	N.D.	ug/l	2	5
1,1,2,2-Tetrachloroethane	12/16/15	N.D.	ug/l	0.5	1
1,3-Dichlorobenzene	12/16/15	N.D.	ug/l	1	5
1,4-Dichlorobenzene	12/16/15	N.D.	ug/l	1	5

Fraction: Volatiles by GC/MS

Y153501AA / VBLKY87 **Analyte**	**Analysis Date**	**Blank Results**	**Units**	**MDL**	**LOQ**
1,2-Dichlorobenzene	12/16/15	N.D.	ug/l	1	5
1,2-Dibromo-3-chloropropane	12/16/15	N.D.	ug/l	2	5
1,2,4-Trichlorobenzene	12/16/15	N.D.	ug/l	1	5

Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: OSP22
Matrix: LIQUID

Fraction: Volatiles by GC/MS

Y153501AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLKY87	98	77 - 113	97	78 - 113	102	80 - 116	96	80 - 113
LCSY87	102	77 - 113	98	78 - 113	102	80 - 116	97	80 - 113
LCDY87	103	77 - 113	99	78 - 113	102	80 - 116	97	80 - 113
8167916	100	77 - 113	96	78 - 113	101	80 - 116	96	80 - 113
8167917	100	77 - 113	96	78 - 113	101	80 - 116	96	80 - 113
8167918	99	77 - 113	96	78 - 113	102	80 - 116	95	80 - 113
8167919	100	77 - 113	96	78 - 113	102	80 - 116	95	80 - 113
8167920	100	77 - 113	96	78 - 113	102	80 - 116	95	80 - 113

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: OSP22
Matrix: LIQUID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSY87 LCSD: LCDY87	Batch: **Y153501AA** (Sample number(s): 8167916-8167920)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	20	17.35	16.83	87	84	55-127	3	30
Chloromethane	20	22.16	19.55	111	98	65-129	12	30
Vinyl Chloride	20	22.69	21.41	113	107	69-120	6	30
Bromomethane	20	17.08	16.8	85	84	53-130	2	30
Chloroethane	20	15.63	15.71	78	79	56-120	1	30
Trichlorofluoromethane	20	22.44	23.13	112	116	60-142	3	30
1,1-Dichloroethene	20	23.24	26.91	116	135 *	76-124	15	30
Acetone	150	130.28	163.93	87	109	58-138	23	30
Freon 113	20	23.36	26.81	117	134 *	67-127	14	30
Carbon Disulfide	20	12.06	11.67	60	58	58-126	3	30
Methyl Acetate	20	16.5	16.48	82	82	64-131	0	30
Methylene Chloride	20	19.62	19.32	98	97	77-121	2	30
Methyl Tertiary Butyl Ether	20	19.75	19.56	99	98	75-120	1	30
trans-1,2-Dichloroethene	20	20.62	20.56	103	103	80-120	0	30
1,1-Dichloroethane	20	17.45	19.72	87	99	80-120	12	30
2-Butanone	150	121.15	122.66	81	82	62-131	1	30
cis-1,2-Dichloroethene	20	21	21.13	105	106	80-120	1	30
1,1,1-Trichloroethane	20	20.5	20.37	103	102	66-126	1	30
Chloroform	20	21.68	21.88	108	109	80-120	1	30
Carbon Tetrachloride	20	21.86	21.6	109	108	74-130	1	30
1,2-Dichloroethane	20	21.18	21.12	106	106	72-127	0	30
Benzene	20	20.19	20.28	101	101	78-120	0	30
Trichloroethene	20	21.81	21.83	109	109	80-120	0	30
1,2-Dichloropropane	20	20.07	20.28	100	101	80-120	1	30
Methylcyclohexane	20	19.86	19.87	99	99	66-126	0	30
Bromodichloromethane	20	20.85	20.76	104	104	73-120	0	30
cis-1,3-Dichloropropene	20	20.12	20.28	101	101	80-120	1	30
4-Methyl-2-pentanone	100	77.62	77.88	78	78	59-130	0	30
Toluene	20	20.45	20.54	102	103	80-120	0	30
trans-1,3-Dichloropropene	20	20.28	20.36	101	102	76-120	0	30
1,1,2-Trichloroethane	20	20.19	20.37	101	102	80-120	1	30
Tetrachloroethene	20	22.79	22.42	114	112	80-122	2	30
2-Hexanone	100	71.26	72.11	71	72	59-127	1	30
Dibromochloromethane	20	21.85	22.02	109	110	72-120	1	30
1,2-Dibromoethane	20	21.42	21.46	107	107	80-120	0	30
Chlorobenzene	20	21.04	20.93	105	105	80-120	1	30
Ethylbenzene	20	21.15	20.84	106	104	78-120	1	30
Xylene (Total)	60	62.87	62.99	105	105	80-120	0	30
Bromoform	20	18.59	18.55	93	93	61-121	0	30
Styrene	20	20.67	20.57	103	103	80-120	0	30
Isopropylbenzene	20	20.92	20.89	105	104	80-120	0	30
Cyclohexane	20	18.08	17.93	90	90	60-129	1	30

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSY87 LCSD: LCDY87 **Analyte**	Batch: **Y153501AA** (Sample number(s): 8167916-8167920)							
	Spike Added ug/l	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
1,1,2,2-Tetrachloroethane	20	19.05	19.18	95	96	65-131	1	30
1,3-Dichlorobenzene	20	21.62	21.41	108	107	80-120	1	30
1,4-Dichlorobenzene	20	21.82	21.68	109	108	80-120	1	30
1,2-Dichlorobenzene	20	21.79	21.69	109	108	80-120	0	30
1,2-Dibromo-3-chloropropane	20	17.27	17.44	86	87	55-131	1	30
1,2,4-Trichlorobenzene	20	21.32	21.06	107	105	73-120	1	30

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_OSP22___

Lab File ID: yn24t01.d BFB Injection Date: 11/24/15

Instrument ID: HP09355 BFB Injection Time: 00:07

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.23
75	30.0 - 60.0% of mass 95	45.78
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.60
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	76.63
175	5.0 - 9.0% of mass 174	5.53 (7.21)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.17 (96.78)1
177	5.0 - 9.0% of mass 176	4.84 (6.52)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD300	yn24i01.d	11/24/15	00:49
02	VSTD100	yn24i02.d	11/24/15	01:10
03	VSTD50	yn24i03.d	11/24/15	01:31
04	VSTD20	yn24i04.d	11/24/15	01:52
05	VSTD10	yn24i05.d	11/24/15	02:13
06	VSTD4	yn24i06.d	11/24/15	02:35
07	VSTD1	yn24i07.d	11/24/15	02:56
08	MDL0.5 - MDL0.5	yn24m01.d	11/24/15	03:17
09	YLGICV	yn24v01.d	11/24/15	03:38

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_OSP22___

Lab File ID: yd16t01.d BFB Injection Date: 12/16/15

Instrument ID: HP09355 BFB Injection Time: 00:56

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.13
75	30.0 - 60.0% of mass 95	45.57
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.52
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	89.39
175	5.0 - 9.0% of mass 174	6.49 (7.26)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.69 (95.86)1
177	5.0 - 9.0% of mass 176	5.67 (6.62)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	yd16c01.d	12/16/15	01:35
02	VBLKY87	yd16b01.d	12/16/15	01:56
03	LCSY87	yd16l01.d	12/16/15	02:17
04	LCDY87	yd16l02.d	12/16/15	02:39
05	MDL0.5 - MDL0.5	yd16m01.d	12/16/15	03:00
06	8169918	yd16s02.d	12/16/15	04:01
07	8169918MS	yd16s03.d	12/16/15	04:22
08	8169918MSD	yd16s04.d	12/16/15	04:43
09	8169930	yd16s05.d	12/16/15	05:04
10	8167916	yd16s06.d	12/16/15	05:26
11	8167917	yd16s07.d	12/16/15	05:47
12	8167918	yd16s08.d	12/16/15	06:08
13	8167919	yd16s09.d	12/16/15	06:29
14	8167920	yd16s10.d	12/16/15	06:50
15	8172998	yd16s11.d	12/16/15	07:11
16	8172999	yd16s12.d	12/16/15	07:32
17	8172999DL	yd16s13.d	12/16/15	07:53
18	8173000	yd16s14.d	12/16/15	08:14
19	8173000DL	yd16s15.d	12/16/15	08:35
20	8173001	yd16s16.d	12/16/15	08:56
21	8173001DL	yd16s17.d	12/16/15	09:21
22	8173002	yd16s18.d	12/16/15	09:41

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_OSP22___

Lab File ID: yd16t01.d BFB Injection Date: 12/16/15

Instrument ID: HP09355 BFB Injection Time: 00:56

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.13
75	30.0 - 60.0% of mass 95	45.57
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.52
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	89.39
175	5.0 - 9.0% of mass 174	6.49 (7.26)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.69 (95.86)1
177	5.0 - 9.0% of mass 176	5.67 (6.62)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	8173003	yd16s19.d	12/16/15	10:02
24	8173003DL	yd16s20.d	12/16/15	10:23
25	8165082	yd16s21.d	12/16/15	10:44
26	8165083	yd16s22.d	12/16/15	11:05

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date(s): 11/24/15 11/24/15

Heated Purge: (Y/N) Y Calibration Times: 00:49 02:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = yn24i07.d RRF 4 = yn24i06.d RRF 10= yn24i05.d
RRF 20= yn24i04.d RRF 50= yn24i03.d RRF100= yn24i02.d RRF300= yn24i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
Dichlorodifluoromethane	#0.2154	0.2936	0.2009	0.2900	0.3036	0.3042	0.2953	0.2719	16	AVG #
Chloromethane	#0.2940	0.3348	0.2718	0.3257	0.3298	0.3268	0.2823	0.3093	8	AVG #
1,3-Butadiene	0.1877	0.1892	0.1186	0.1422	0.1263	0.1262	0.1136	0.1434	22	2NDDEG
Vinyl Chloride	#0.2518	0.3035	0.2375	0.3041	0.2918	0.2845	0.2457	0.2741	10	AVG #
Bromomethane	#0.1830	0.2039	0.1745	0.2078	0.1965	0.1886	0.1647	0.1884	8	AVG #
Chloroethane	#0.1495	0.1669	0.1382	0.1718	0.1604	0.1530	0.1289	0.1527	10	AVG #
Dichlorofluoromethane	0.3040	0.3664	0.3201	0.3867	0.3646	0.3605	0.3131	0.3450	9	AVG
n-Pentane		0.2931	0.2015	0.2722	0.3012	0.3016	0.2468	0.2694	15	AVG
Trichlorofluoromethane	#0.2507	0.3384	0.2515	0.3402	0.3281	0.3336	0.3030	0.3065	13	AVG #
Ethyl ether		0.2006	0.1918	0.2090	0.2008	0.2009	0.1728	0.1960	6	AVG
Freon 123a		0.2426	0.2006	0.2538	0.2355	0.2407	0.2007	0.2290	10	AVG
Acrolein	1.4842	1.4762	1.4935	1.6032	1.5033	1.6257	1.4145	1.5144	5	AVG
1,1-Dichloroethene	#0.1558	0.1871	0.1577	0.2005	0.1924	0.1969	0.1708	0.1802	10	AVG #
1,1-Dichloroethene(2)	#0.0803	0.0915	0.0783	0.0976	0.0940	0.0954	0.0823	0.0885	9	AVG #<-
Acetone	#0.7050	0.7885	0.7699	0.8293	0.7824	0.7830	0.7292	0.7696	5	AVG #
Freon 113	#	0.1673	0.1307	0.1836	0.1897	0.1942	0.1781	0.1739	13	AVG #
2-Propanol	0.5523	0.4988	0.5240	0.4944	0.3959	0.4041	0.3279	0.4568	18	AVG
Methyl Iodide	0.2973	0.3458	0.3146	0.3771	0.3659	0.3693	0.3311	0.3430	9	AVG
Carbon Disulfide	#	0.6585	0.5800	0.7436	0.7361	0.7568	0.6706	0.6909	10	AVG #
Allyl Chloride		0.2569	0.2340	0.2879	0.2788	0.2801	0.2454	0.2639	8	AVG
Methyl Acetate	#	0.3133	0.3037	0.3191	0.3020	0.3109	0.2737	0.3038	5	AVG #
Methylene Chloride	#0.2018	0.2127	0.2019	0.2270	0.2222	0.2225	0.1982	0.2123	6	AVG #
t-Butyl alcohol	1.0586	1.0885	1.0614	1.0975	1.1065	1.1893	1.1640	1.1094	4	AVG
Acrylonitrile		0.1793	0.1883	0.1873	0.1780	0.1750	0.1527	0.1768	7	AVG
trans-1,2-Dichloroethene	#0.1811	0.2085	0.1869	0.2247	0.2190	0.2232	0.2061	0.2071	8	AVG #
Methyl Tertiary Butyl Ether	#0.6813	0.7151	0.7095	0.7603	0.7403	0.7466	0.7009	0.7220	4	AVG #
n-Hexane		0.2768	0.3626	0.3244	0.3558	0.3728	0.3764	0.3448	11	AVG
1,1-Dichloroethane	#0.3690	0.4173	0.3884	0.4558	0.4460	0.4497	0.4225	0.4212	8	AVG #
di-Isopropyl ether	0.7884	0.8345	0.7663	0.8499	0.8294	0.8208	0.7642	0.8076	4	AVG
2-Chloro-1,3-butadiene		0.3281	0.2913	0.3632	0.3557	0.3612	0.3375	0.3395	8	AVG
Ethyl t-butyl ether	0.7332	0.7902	0.7585	0.8210	0.7999	0.8048	0.7593	0.7810	4	AVG
cis-1,2-Dichloroethene	#0.2254	0.2511	0.2352	0.2703	0.2678	0.2718	0.2579	0.2542	7	AVG #
2-Butanone	#0.3159	0.3000	0.3355	0.3371	0.3003	0.3033	0.2562	0.3069	9	AVG #
2,2-Dichloropropane	0.2335	0.2827	0.2619	0.3305	0.3301	0.3407	0.3241	0.3005	14	AVG
Propionitrile	1.2263	1.2388	1.2336	1.2746	1.2471	1.2426	1.4035	1.2666	5	AVG
Methacrylonitrile	0.1807	0.1837	0.1870	0.1926	0.1883	0.1883	0.1775	0.1855	3	AVG
Bromochloromethane		0.1262	0.1214	0.1367	0.1334	0.1342	0.1327	0.1308	4	AVG
Tetrahydrofuran	1.2306	1.1773	1.2726	1.3365	1.3347	1.3682	1.4572	1.3110	7	AVG
Chloroform	#0.3358	0.3806	0.3603	0.4136	0.4103	0.4162	0.3966	0.3876	8	AVG #
1,1,1-Trichloroethane	#0.3448	0.4012	0.3139	0.3931	0.3690	0.3791	0.3691	0.3672	8	AVG #
Cyclohexane	#	0.3752	0.3093	0.4096	0.4195	0.4331	0.4237	0.3951	12	AVG #
Cyclohexane(2)	#	0.3673	0.2549	0.4002	0.4070	0.4222	0.4137	0.3775	17	AVG #
Cyclohexane(3)	#	0.1138	0.0911	0.1243	0.1295	0.1336	0.1316	0.1206	13	AVG #
1,1-Dichloropropene	0.2858	0.3256	0.2863	0.3494	0.3447	0.3556	0.3377	0.3264	9	AVG
Carbon Tetrachloride	#0.1957	0.2517	0.2232	0.2938	0.3001	0.3175	0.3133	0.2707	18	AVG #
Isobutyl Alcohol	0.3636	0.3637	0.3601	0.3720	0.3578	0.3858	0.3611	0.3663	3	AVG
Benzene	#0.9008	0.9648	0.8919	1.0331	1.0161	1.0235	0.9587	0.9699	6	AVG #
1,2-Dichloroethane	#0.3622	0.3365	0.3291	0.3519	0.3462	0.3483	0.3293	0.3433	4	AVG #
1,2-Dichloroethane(2)	#0.0211	0.0308	0.0306	0.0331	0.0328	0.0332	0.0322	0.0306	14	AVG #<-
t-Amyl methyl ether	0.6643	0.7226	0.7123	0.7769	0.7683	0.7810	0.7511	0.7395	6	AVG
n-Heptane		0.3727	0.3290	0.4022	0.4145	0.4333	0.4681	0.4033	12	AVG
n-Butanol	0.2790	0.3015	0.3186	0.3332	0.3336	0.3557	0.3295	0.3216	8	AVG

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date(s): 11/24/15 11/24/15

Heated Purge: (Y/N) Y Calibration Times: 00:49 02:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = yn24i07.d RRF 4 = yn24i06.d RRF 10= yn24i05.d
RRF 20= yn24i04.d RRF 50= yn24i03.d RRF100= yn24i02.d RRF300= yn24i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD	
Trichloroethene	#0.2180	0.2424	0.2214	0.2644	0.2613	0.2657	0.2547	0.2468	8	AVG	#
Methylcyclohexane	#	0.3739	0.2840	0.3953	0.4234	0.4294	0.4488	0.3925	15	AVG	#
Methylcyclohexane(2)	#	0.1724	0.1266	0.1775	0.1881	0.1920	0.2007	0.1762	15	AVG	#
1,2-Dichloropropane	#0.2251	0.2449	0.2337	0.2685	0.2671	0.2690	0.2560	0.2520	7	AVG	#
Dibromomethane	0.1401	0.1564	0.1557	0.1711	0.1702	0.1745	0.1693	0.1625	8	AVG	
1,4-Dioxane	0.0572	0.0839	0.0858	0.0855	0.0882	0.0895	0.1048	0.0850	17	AVG	
Methyl Methacrylate		0.2639	0.2757	0.2935	0.2935	0.3025	0.2923	0.2869	5	AVG	
Bromodichloromethane	#0.1976	0.2422	0.2457	0.2934	0.3071	0.3228	0.3192	0.2754	17	AVG	#
2-Nitropropane	0.1067	0.1076	0.1372	0.1515	0.1327	0.1480	0.1232	0.1295	14	AVG	
2-Chloroethyl Vinyl Ether		0.2060	0.2154	0.2412	0.2364	0.2432	0.2315	0.2290	7	AVG	
cis-1,3-Dichloropropene	#0.2816	0.3374	0.3492	0.4129	0.4234	0.4367	0.4222	0.3805	15	AVG	#
4-Methyl-2-pentanone	#0.5032	0.5227	0.6845	0.7062	0.5435	0.6235	0.4781	0.5802	16	AVG	#
Toluene	#0.7488	0.8325	0.7612	0.8859	0.8714	0.8791	0.8228	0.8288	7	AVG	#
trans-1,3-Dichloropropene	#0.3308	0.3952	0.4254	0.5006	0.5250	0.5509	0.5336	0.4659	18	AVG	#
Ethyl Methacrylate		0.5213	0.5531	0.6075	0.6179	0.6361	0.6021	0.5897	7	AVG	
1,1,2-Trichloroethane	#0.2960	0.3223	0.3225	0.3495	0.3440	0.3514	0.3325	0.3311	6	AVG	#
Tetrachloroethene	#0.2946	0.3450	0.3067	0.3798	0.3679	0.3757	0.3625	0.3474	10	AVG	#
1,3-Dichloropropane	0.5211	0.5483	0.5473	0.5971	0.5916	0.5983	0.5678	0.5674	5	AVG	
2-Hexanone	#0.5710	0.6211	0.7815	0.8041	0.5967	0.7312	0.5377	0.6633	16	AVG	#
Dibromochloromethane	#0.2091	0.2571	0.2769	0.3303	0.3550			0.2857	20	AVG	#
1,2-Dibromoethane	#0.2966	0.3449	0.3543	0.3805	0.3812	0.3898	0.3753	0.3604	9	AVG	#
1-Chlorohexane		0.4060	0.3764	0.4758	0.4660	0.4791	0.4610	0.4440	10	AVG	
Chlorobenzene	#0.8353	0.9379	0.8846	1.0129	0.9922	1.0047	0.9428	0.9444	7	AVG	#
1,1,1,2-Tetrachloroethane	0.2159	0.2612	0.2716	0.3169	0.3264	0.3400	0.3316	0.2948	16	AVG	
Ethylbenzene	#1.3260	1.5415	1.4323	1.6898	1.6741	1.6970	1.5546	1.5593	9	AVG	#
m+p-Xylene	#0.5201	0.6025	0.5699	0.6755	0.6655	0.6715	0.6001	0.6150	10	AVG	#
o-Xylene	#0.5215	0.6004	0.5742	0.6643	0.6595	0.6618	0.6059	0.6125	9	AVG	#
Styrene	#	0.9328	0.9396	1.1008	1.1042	1.1200	1.0113	1.0348	8	AVG	#
Bromoform	#	0.1747	0.1980	0.2362	0.2627	0.2917	0.2914	0.2424	20	AVG	#
Isopropylbenzene	#	1.4886	1.4146	1.6855	1.6532	1.6712	1.5011	1.5690	7	AVG	#
Cyclohexanone		0.4440	0.4062	0.4577	0.4829	0.4555	0.5691	0.4692	12	AVG	
Bromobenzene		0.7525	0.7204	0.7996	0.7888	0.8063	0.7802	0.7746	4	AVG	
1,1,2,2-Tetrachloroethane	#0.9507	1.0465	1.0649	1.1160	1.1160	1.1562	1.0766	1.0753	6	AVG	#
1,2,3-Trichloropropane		0.3332	0.3371	0.3439	0.3460	0.3610	0.3393	0.3434	3	AVG	
trans-1,4-Dichloro-2-butene		0.3310	0.3431	0.3645	0.3624	0.3813	0.3507	0.3555	5	AVG	
n-Propylbenzene		3.4558	3.1944	3.7809	3.6852	3.7541	3.2632	3.5222	7	AVG	
2-Chlorotoluene		0.7291	0.6742	0.7707	0.7655	0.7838	0.7509	0.7457	5	AVG	
4-Chlorotoluene		0.7466	0.7219	0.8183	0.8098	0.8312	0.7740	0.7836	6	AVG	
1,3,5-Trimethylbenzene		2.4633	2.3669	2.7637	2.7365	2.7546	2.4974	2.5971	7	AVG	
tert-Butylbenzene		0.5402	0.5224	0.6186	0.6071	0.6177	0.5837	0.5816	7	AVG	
Pentachloroethane		0.3503	0.3817	0.4330	0.4362	0.4658	0.4714	0.4231	11	AVG	
1,2,4-Trimethylbenzene		2.4828	2.4399	2.8502	2.7908	2.8112	2.5630	2.6563	7	AVG	
sec-Butylbenzene		3.1288	2.9623	3.5286	3.4275	3.4316	3.0199	3.2498	7	AVG	
1,3-Dichlorobenzene	#	1.4349	1.3811	1.5584	1.5336	1.5551	1.4747	1.4896	5	AVG	#
p-Isopropyltoluene		2.7680	2.6531	3.1597	3.0881	3.0660	2.6699	2.9008	8	AVG	
1,4-Dichlorobenzene	#	1.5037	1.4189	1.5991	1.5801	1.5880	1.4295	1.5199	5	AVG	#
1,2,3-Trimethylbenzene		2.6613	2.6365	2.9627	2.7975	2.7906	2.5699	2.7364	5	AVG	
Benzyl Chloride		1.4479	1.6733	1.9559	2.1315	2.2976	2.1466	1.9421	17	AVG	
1,3-Diethylbenzene		1.6854	1.6013	1.8793	1.8103	1.7989	1.7208	1.7493	6	AVG	
1,4-Diethylbenzene		1.7814	1.6654	1.9668	1.8914	1.8829	1.7507	1.8231	6	AVG	
1,2-Dichlorobenzene	#	1.4332	1.3822	1.5182	1.4889	1.5107	1.3634	1.4494	5	AVG	#
n-Butylbenzene		1.3866	1.3350	1.5648	1.5223	1.5265	1.4146	1.4583	6	AVG	

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date(s): 11/24/15 11/24/15

Heated Purge: (Y/N) Y Calibration Times: 00:49 02:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

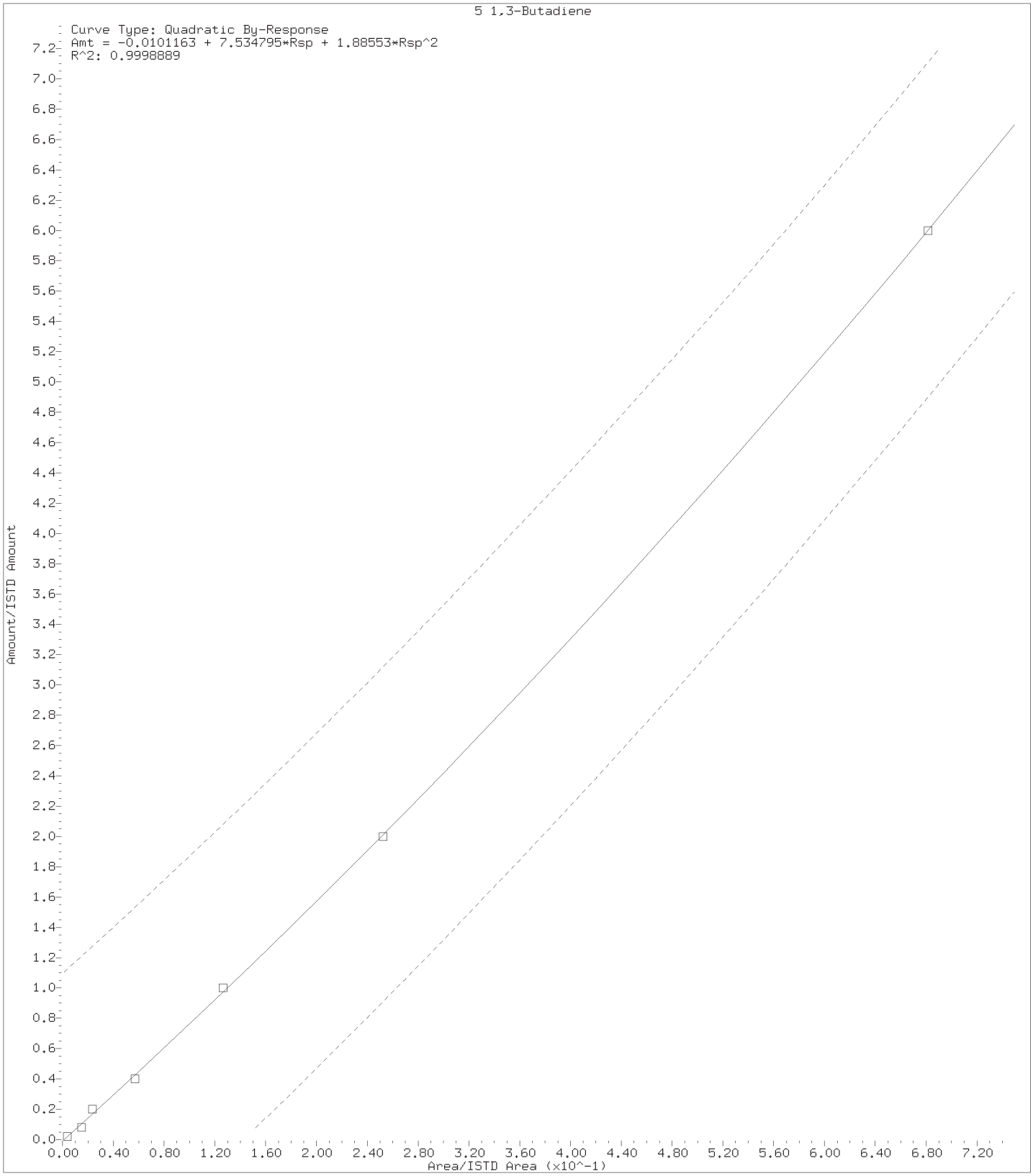
LAB FILE ID: RRF 1 = yn24i07.d RRF 4 = yn24i06.d RRF 10= yn24i05.d
RRF 20= yn24i04.d RRF 50= yn24i03.d RRF100= yn24i02.d RRF300= yn24i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD	
1,2-Diethylbenzene		1.4236	1.3521	1.5521	1.4843	1.4789	1.4315	1.4537	5	AVG	
1,2-Dibromo-3-chloropropane	#	0.2390	0.2573	0.2798	0.3000	0.3156	0.3060	0.2830	11	AVG	#
1,3,5-Trichlorobenzene		1.1011	1.0646	1.1871	1.1803	1.1692	1.1284	1.1384	4	AVG	
1,2,4-Trichlorobenzene	#	1.0569	1.0443	1.1449	1.1315	1.1196	1.0803	1.0963	4	AVG	#
Hexachlorobutadiene		0.4789	0.4684	0.5251	0.5169	0.5107	0.5194	0.5032	5	AVG	
Naphthalene		3.6280	3.7068	3.9235	3.9266	3.8741		3.8118	4	AVG	
1,2,3-Trichlorobenzene		1.0312	1.0087	1.0879	1.0744	1.0527	1.0098	1.0441	3	AVG	
2-Methylnaphthalene		2.1286	2.3167	2.4350	2.3332	2.3163		2.3060	5	AVG	
Dibromofluoromethane		0.2310	0.2310	0.2324	0.2341	0.2366	0.2386	0.2384	0.2346	1	AVG
Dibromofluoromethane(2)		0.2380	0.2386	0.2399	0.2405	0.2421	0.2423	0.2402	1	AVG	
1,2-Dichloroethane-d4		0.0609	0.0610	0.0615	0.0619	0.0600	0.0603	0.0602	0.0608	1	AVG
1,2-Dichloroethane-d4(2)		0.2835	0.2870	0.2895	0.2805	0.2803	0.2806	0.2836	1	AVG	
1,2-Dichloroethane-d4(3)		0.0386	0.0384	0.0391	0.0385	0.0387	0.0389	0.0387	1	AVG	
Toluene-d8		1.3491	1.3458	1.3479	1.3459	1.3452	1.3472	1.3470	1.3469	0	AVG
Toluene-d8(2)		0.8770	0.8763	0.8777	0.8866	0.8922	0.9280	0.8896	2	AVG	
4-Bromofluorobenzene		0.5048	0.5053	0.5057	0.5062	0.5061	0.5014	0.5066	0.5052	0	AVG
4-Bromofluorobenzene(2)		0.4045	0.4083	0.4039	0.4067	0.4071	0.4054	0.4060	0	AVG	

Average %RSD 8

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA



Digitally signed by Stephanie A. Selis on 11/30/2015 at 22:50.
Target 3.5 esignature user ID: sas00403

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP09355.i/15nov24a.b/yn24i01.d	VSTD300
/chem2/HP09355.i/15nov24a.b/yn24i02.d	VSTD100
/chem2/HP09355.i/15nov24a.b/yn24i03.d	VSTD050
/chem2/HP09355.i/15nov24a.b/yn24i04.d	VSTD020
/chem2/HP09355.i/15nov24a.b/yn24i05.d	VSTD010
/chem2/HP09355.i/15nov24a.b/yn24i06.d	VSTD004
/chem2/HP09355.i/15nov24a.b/yn24i07.d	VSTD001

Area Summary

File ID:

Internal Standard Name	yn24i01.d	yn24i02.d	yn24i03.d	yn24i04.d	yn24i05.d	yn24i06.d	yn24i07.d	Avg. Area	%RSD	In Spec
t-Butyl alcohol-d10	376947	452104	455169	465177	490281	475815	475892	455912	8	Yes
Fluorobenzene	1488206	1498718	1468903	1456753	1469835	1468806	1451688	1471844	1	Yes
Chlorobenzene-d5	1119945	1119841	1097843	1089856	1091103	1082242	1069809	1095806	2	Yes
1,4-Dichlorobenzene-d4	585595	595542	589043	585355	579041	571349	567913	581977	2	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	yn24i01.d	yn24i02.d	yn24i03.d	yn24i04.d	yn24i05.d	yn24i06.d	yn24i07.d	Avg. RT
t-Butyl alcohol-d10	1.877	1.865	1.865	1.865	1.871	1.871	1.871	1.869
Fluorobenzene	3.891	3.885	3.878	3.872	3.879	3.879	3.879	3.880
Chlorobenzene-d5	7.066	7.060	7.054	7.054	7.054	7.054	7.054	7.057
1,4-Dichlorobenzene-d4	9.159	9.159	9.153	9.153	9.153	9.153	9.153	9.155

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 11/24/2015 at 05:12.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 ICV Date: 11/24/15 Time: 03:38

Lab File ID: yn24v01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
# Dichlorodifluoromethane	0.2719	0.2212	16.27	20	-19	#
# Chloromethane	0.3093	0.2827	18.28	20	-9	#
1,3-Butadiene	0.1434	0.0788	11.47	20	-43	<-
# Vinyl Chloride	0.2741	0.2578	18.81	20	-6	#
# Bromomethane	0.1884	0.1461	15.51	20	-22	#
# Chloroethane	0.1527	0.1152	15.09	20	-25	#
Dichlorofluoromethane	0.3450	0.3240	18.78	20	-6	
n-Pentane	0.2694	0.2212	16.42	20	-18	
# Trichlorofluoromethane	0.3065	0.2727	17.79	20	-11	#
Ethyl ether	0.1960	0.1617	16.50	20	-18	
Freon 123a	0.2290	0.2141	18.70	20	-7	
Acrolein	1.5144	1.3177	130.52	150	-13	
# 1,1-Dichloroethene	0.1802	0.1731	19.21	20	-4	#
# Acetone	0.7696	0.6832	133.16	150	-11	#
# Freon 113	0.1739	0.1714	19.71	20	-1	#
2-Propanol	0.4568	0.4778	156.92	150	5	
Methyl Iodide	0.3430	0.3431	20.01	20	0	
# Carbon Disulfide	0.6909	0.5744	16.63	20	-17	#
Allyl Chloride	0.2639	0.2521	19.11	20	-4	
# Methyl Acetate	0.3038	0.3189	21.00	20	5	#
# Methylene Chloride	0.2123	0.2056	19.36	20	-3	#
t-Butyl alcohol	1.1094	1.2283	221.43	200	11	
Acrylonitrile	0.1768	0.1468	83.02	100	-17	
# trans-1,2-Dichloroethene	0.2071	0.2110	20.37	20	2	#
# Methyl Tertiary Butyl Ether	0.7220	0.7205	19.96	20	0	#
n-Hexane	0.3448	0.3103	18.00	20	-10	
# 1,1-Dichloroethane	0.4212	0.4368	20.74	20	4	#
di-Isopropyl ether	0.8076	0.8812	21.82	20	9	
2-Chloro-1,3-butadiene	0.3395	0.3407	20.07	20	0	
Ethyl t-butyl ether	0.7810	0.8273	21.19	20	6	
# cis-1,2-Dichloroethene	0.2542	0.2727	21.46	20	7	#
# 2-Butanone	0.3069	0.2887	141.10	150	-6	#
2,2-Dichloropropane	0.3005	0.3081	20.50	20	3	
Propionitrile	1.2666	1.5005	177.69	150	18	
Methacrylonitrile	0.1855	0.2000	161.77	150	8	
Bromochloromethane	0.1308	0.1387	21.21	20	6	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 ICV Date: 11/24/15 Time: 03:38

Lab File ID: yn24v01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
Tetrahydrofuran	1.3110	1.4662	111.84	100	12	
# Chloroform	0.3876	0.4156	21.44	20	7	#
# 1,1,1-Trichloroethane	0.3672	0.3759	20.47	20	2	#
# Cyclohexane	0.3951	0.4100	20.75	20	4	#
1,1-Dichloropropene	0.3264	0.3290	20.16	20	1	
# Carbon Tetrachloride	0.2707	0.2823	20.85	20	4	#
Isobutyl Alcohol	0.3663	0.4187	571.58	500	14	
# Benzene	0.9699	1.0325	21.29	20	6	#
# 1,2-Dichloroethane	0.3433	0.3555	20.71	20	4	#
t-Amyl methyl ether	0.7395	0.7863	21.27	20	6	
n-Heptane	0.4033	0.4035	20.01	20	0	
n-Butanol	0.3216	0.3723	1157.58	1000	16	
# Trichloroethene	0.2468	0.2693	21.82	20	9	#
# Methylcyclohexane	0.3925	0.4404	22.44	20	12	#
# 1,2-Dichloropropane	0.2520	0.2764	21.93	20	10	#
Dibromomethane	0.1625	0.1728	21.27	20	6	
1,4-Dioxane	0.0850	0.1116	656.60	500	31	<-
Methyl Methacrylate	0.2869	0.2987	20.82	20	4	
# Bromodichloromethane	0.2754	0.2859	20.76	20	4	#
2-Nitropropane	0.1295	0.1061	16.38	20	-18	
2-Chloroethyl Vinyl Ether	0.2290	0.2399	20.95	20	5	
# cis-1,3-Dichloropropene	0.3805	0.4074	21.41	20	7	#
# 4-Methyl-2-pentanone	0.5802	0.5268	90.79	100	-9	#
# Toluene	0.8288	0.8959	21.62	20	8	#
# trans-1,3-Dichloropropene	0.4659	0.5059	21.72	20	9	#
Ethyl Methacrylate	0.5897	0.6328	21.46	20	7	
# 1,1,2-Trichloroethane	0.3311	0.3582	21.63	20	8	#
# Tetrachloroethene	0.3474	0.3780	21.76	20	9	#
1,3-Dichloropropane	0.5674	0.6067	21.39	20	7	
# 2-Hexanone	0.6633	0.5772	87.02	100	-13	#
# Dibromochloromethane	0.2857	0.3210	22.47	20	12	#
# 1,2-Dibromoethane	0.3604	0.3955	21.95	20	10	#
1-Chlorohexane	0.4440	0.4689	21.12	20	6	
# Chlorobenzene	0.9444	1.0382	21.99	20	10	#
1,1,1,2-Tetrachloroethane	0.2948	0.3187	21.62	20	8	
# Ethylbenzene	1.5593	1.7209	22.07	20	10	#

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 ICV Date: 11/24/15 Time: 03:38

Lab File ID: yn24v01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
# m+p-Xylene	0.6150	0.6891	44.82	40	12	#
# o-Xylene	0.6125	0.6724	21.96	20	10	#
# Styrene	1.0348	1.1342	21.92	20	10	#
# Bromoform	0.2424	0.2240	18.48	20	-8	#
# Isopropylbenzene	1.5690	1.7344	22.11	20	11	#
Cyclohexanone	0.4692	0.4076	434.29	500	-13	
Bromobenzene	0.7746	0.8344	21.54	20	8	
# 1,1,2,2-Tetrachloroethane	1.0753	1.1591	21.56	20	8	#
1,2,3-Trichloropropane	0.3434	0.3713	21.63	20	8	
trans-1,4-Dichloro-2-butene	0.3555	0.3760	105.75	100	6	
n-Propylbenzene	3.5222	3.8952	22.12	20	11	
2-Chlorotoluene	0.7457	0.8091	21.70	20	9	
4-Chlorotoluene	0.7836	0.8558	21.84	20	9	
1,3,5-Trimethylbenzene	2.5971	2.8128	21.66	20	8	
tert-Butylbenzene	0.5816	0.6322	21.74	20	9	
Pentachloroethane	0.4231	0.4400	20.80	20	4	
1,2,4-Trimethylbenzene	2.6563	2.8998	21.83	20	9	
sec-Butylbenzene	3.2498	3.6057	22.19	20	11	
# 1,3-Dichlorobenzene	1.4896	1.5973	21.45	20	7	#
p-Isopropyltoluene	2.9008	3.1658	21.83	20	9	
# 1,4-Dichlorobenzene	1.5199	1.6580	21.82	20	9	#
1,2,3-Trimethylbenzene	2.7364	2.9625	21.65	20	8	
Benzyl Chloride	1.9421	1.9664	20.25	20	1	
1,3-Diethylbenzene	1.7493	1.8960	21.68	20	8	
1,4-Diethylbenzene	1.8231	2.0412	22.39	20	12	
# 1,2-Dichlorobenzene	1.4494	1.5853	21.87	20	9	#
n-Butylbenzene	1.4583	1.5652	21.47	20	7	
1,2-Diethylbenzene	1.4537	1.6110	22.16	20	11	
# 1,2-Dibromo-3-chloropropane	0.2830	0.2809	19.86	20	-1	#
1,3,5-Trichlorobenzene	1.1384	1.2205	21.44	20	7	
# 1,2,4-Trichlorobenzene	1.0963	1.1573	21.11	20	6	#
Hexachlorobutadiene	0.5032	0.5054	20.09	20	0	
Naphthalene	3.8118	4.0160	21.07	20	5	
1,2,3-Trichlorobenzene	1.0441	1.0884	20.85	20	4	
2-Methylnaphthalene	2.3060	2.1748	18.86	20	-6	

Average %Drift 9

Compounds with required minimum RRF.
Maximum % Drift = 30 %

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Lancaster Laboratories

Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP09355.i/15nov24a.b/yn24i07.d
/chem2/HP09355.i/15nov24a.b/yn24i06.d
/chem2/HP09355.i/15nov24a.b/yn24i05.d
/chem2/HP09355.i/15nov24a.b/yn24i04.d
/chem2/HP09355.i/15nov24a.b/yn24i03.d
/chem2/HP09355.i/15nov24a.b/yn24i02.d
/chem2/HP09355.i/15nov24a.b/yn24i01.d

File /chem2/HP09355.i/15nov24a.b/yn24i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP09355.i/15dec16a.b/yd16c01.d

RT Summary

Internal Standard Name	File ID: yd16c01.d	ICAL RT	In Spec
t-Butyl alcohol-d10	1.877	1.865	Yes
Fluorobenzene	3.891	3.878	Yes
Chlorobenzene-d5	7.066	7.054	Yes
1,4-Dichlorobenzene-d4	9.165	9.153	Yes

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: yd16c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl alcohol-d10	359641	455169	227584	910338	Yes
Fluorobenzene	1124600	1468903	734452	2937806	Yes
Chlorobenzene-d5	874937	1097843	548922	2195686	Yes
1,4-Dichlorobenzene-d4	479722	589043	294522	1178086	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 12/16/2015 at 02:07

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date: 12/16/15 Time: 01:35

Lab File ID: yd16c01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.2719	0.2930	53.89	50	8	#
# Chloromethane	0.3093	0.3937	63.64	50	27	#<-
# Vinyl Chloride	0.2741	0.3545	64.65	50	29	#<-
# Bromomethane	0.1884	0.2318	61.52	50	23	#<-
# Chloroethane	0.1527	0.1862	60.99	50	22	#<-
Dichlorofluoromethane	0.3450	0.4108	59.53	50	19	
# Trichlorofluoromethane	0.3065	0.4175	68.10	50	36	#<-
Ethyl ether	0.1960	0.1455	37.12	50	-26	<-
Freon 123a	0.2290	0.2831	61.81	50	24	<-
Acrolein	1.5144	1.6942	559.38	500	12	
# 1,1-Dichloroethene	0.1802	0.1998	55.43	50	11	#
# 1,1-Dichloroethene(2)	0.0885	0.1008	56.97	50	14	#
# Acetone	0.7696	0.7926	102.98	100	3	#
# Freon 113	0.1739	0.1897	54.52	50	9	#
2-Propanol	0.4568	0.6877	376.39	250	51	<-
Methyl Iodide	0.3430	0.3740	54.52	50	9	
# Carbon Disulfide	0.6909	0.4482	32.44	50	-35	#<-
Allyl Chloride	0.2639	0.2668	50.56	50	1	
# Methyl Acetate	0.3038	0.2605	42.88	50	-14	#
# Methylene Chloride	0.2123	0.2130	50.17	50	0	#
t-Butyl alcohol	1.1094	1.3213	297.75	250	19	
Acrylonitrile	0.1768	0.1604	45.38	50	-9	
# trans-1,2-Dichloroethene	0.2071	0.2133	51.50	50	3	#
# Methyl Tertiary Butyl Ether	0.7220	0.7212	49.94	50	0	#
n-Hexane	0.3448	0.2426	35.18	50	-30	<-
# 1,1-Dichloroethane	0.4212	0.4407	52.31	50	5	#
di-Isopropyl ether	0.8076	0.7502	46.44	50	-7	
2-Chloro-1,3-butadiene	0.3395	0.3542	52.16	50	4	
Ethyl t-butyl ether	0.7810	0.7595	48.63	50	-3	
# cis-1,2-Dichloroethene	0.2542	0.2736	53.82	50	8	#
# 2-Butanone	0.3069	0.3116	101.54	100	2	#
2,2-Dichloropropane	0.3005	0.3139	52.23	50	4	
Propionitrile	1.2666	1.2115	239.12	250	-4	
Methacrylonitrile	0.1855	0.1793	120.87	125	-3	
Bromochloromethane	0.1308	0.1452	55.50	50	11	
Tetrahydrofuran	1.3110	1.3260	101.15	100	1	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date: 12/16/15 Time: 01:35

Lab File ID: yd16c01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Chloroform	0.3876	0.4373	56.41	50	13	#
# 1,1,1-Trichloroethane	0.3672	0.3684	50.17	50	0	#
# Cyclohexane	0.3951	0.3565	45.12	50	-10	#
# Cyclohexane(2)	0.3775	0.3163	41.89	50	-16	#
# Cyclohexane(3)	0.1206	0.1122	46.52	50	-7	#
1,1-Dichloropropene	0.3264	0.3517	53.87	50	8	
# Carbon Tetrachloride	0.2707	0.3247	59.96	50	20	#
Isobutyl Alcohol	0.3663	0.4379	747.25	625	20	
# Benzene	0.9699	1.0030	51.71	50	3	#
# 1,2-Dichloroethane	0.3433	0.3779	55.03	50	10	#
# 1,2-Dichloroethane(2)	0.0306	0.0341	55.84	50	12	#<-
t-Amyl methyl ether	0.7395	0.7461	50.45	50	1	
n-Heptane	0.4033	0.3076	38.13	50	-24	<-
n-Butanol	0.3216	0.3864	1502.03	1250	20	
# Trichloroethene	0.2468	0.2737	55.44	50	11	#
# Methylcyclohexane	0.3925	0.3858	49.15	50	-2	#
# Methylcyclohexane(2)	0.1762	0.1771	50.26	50	1	#
# 1,2-Dichloropropane	0.2520	0.2591	51.41	50	3	#
Dibromomethane	0.1625	0.1821	56.04	50	12	
1,4-Dioxane	0.0850	0.0925	679.94	625	9	
Methyl Methacrylate	0.2869	0.2932	51.09	50	2	
# Bromodichloromethane	0.2754	0.3318	60.24	50	20	#
2-Nitropropane	0.1295	0.1722	132.93	100	33	<-
2-Chloroethyl Vinyl Ether	0.2290	0.2262	49.39	50	-1	
# cis-1,3-Dichloropropene	0.3805	0.4269	56.10	50	12	#
# 4-Methyl-2-pentanone	0.5802	0.6646	114.55	100	15	#
# Toluene	0.8288	0.8523	51.42	50	3	#
# trans-1,3-Dichloropropene	0.4659	0.5249	56.34	50	13	#
Ethyl Methacrylate	0.5897	0.6059	51.38	50	3	
# 1,1,2-Trichloroethane	0.3311	0.3558	53.72	50	7	#
# Tetrachloroethene	0.3474	0.4000	57.56	50	15	#
1,3-Dichloropropane	0.5674	0.5920	52.17	50	4	
# 2-Hexanone	0.6633	0.7355	110.89	100	11	#
# Dibromochloromethane	0.2857	0.3795	66.42	50	33	#<-
# 1,2-Dibromoethane	0.3604	0.4025	55.84	50	12	#
1-Chlorohexane	0.4440	0.4641	52.26	50	5	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date: 12/16/15 Time: 01:35

Lab File ID: yd16c01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT	
#	Chlorobenzene	0.9444	1.0261	54.33	50	9	#
	1,1,1,2-Tetrachloroethane	0.2948	0.3522	59.74	50	19	
#	Ethylbenzene	1.5593	1.6997	54.50	50	9	#
#	m+p-Xylene	0.6150	0.6747	109.70	100	10	#
#	o-Xylene	0.6125	0.6634	54.16	50	8	#
#	Styrene	1.0348	1.1300	54.60	50	9	#
#	Bromoform	0.2424	0.2978	61.42	50	23	#<-
#	Isopropylbenzene	1.5690	1.7001	54.18	50	8	#
	Cyclohexanone	0.4692	0.3135	417.55	625	-33	<-
	Bromobenzene	0.7746	0.8776	56.65	50	13	
#	1,1,2,2-Tetrachloroethane	1.0753	1.1260	52.36	50	5	#
	1,2,3-Trichloropropane	0.3434	0.3678	53.55	50	7	
	trans-1,4-Dichloro-2-butene	0.3555	0.3607	126.82	125	1	
	n-Propylbenzene	3.5222	3.6747	52.16	50	4	
	2-Chlorotoluene	0.7457	0.8009	53.70	50	7	
	4-Chlorotoluene	0.7836	0.8511	54.30	50	9	
	1,3,5-Trimethylbenzene	2.5971	2.7549	53.04	50	6	
	tert-Butylbenzene	0.5816	0.6231	53.56	50	7	
	Pentachloroethane	0.4231	0.4886	57.74	50	15	
	1,2,4-Trimethylbenzene	2.6563	2.8700	54.02	50	8	
	sec-Butylbenzene	3.2498	3.4483	53.05	50	6	
#	1,3-Dichlorobenzene	1.4896	1.6801	56.39	50	13	#
	p-Isopropyltoluene	2.9008	3.1448	54.21	50	8	
#	1,4-Dichlorobenzene	1.5199	1.7083	56.20	50	12	#
	1,2,3-Trimethylbenzene	2.7364	2.8791	52.61	50	5	
	Benzyl Chloride	1.9421	2.1446	55.21	50	10	
	1,3-Diethylbenzene	1.7493	1.8575	53.09	50	6	
	1,4-Diethylbenzene	1.8231	1.9411	53.24	50	6	
#	1,2-Dichlorobenzene	1.4494	1.6372	56.48	50	13	#
	n-Butylbenzene	1.4583	1.5229	52.22	50	4	
	1,2-Diethylbenzene	1.4537	1.5332	52.73	50	5	
#	1,2-Dibromo-3-chloropropane	0.2830	0.3054	53.96	50	8	#
	1,3,5-Trichlorobenzene	1.1384	1.3085	57.47	50	15	
#	1,2,4-Trichlorobenzene	1.0963	1.2581	57.38	50	15	#
	Hexachlorobutadiene	0.5032	0.5542	55.07	50	10	
	Naphthalene	3.8118	4.1012	53.80	50	8	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP09355 Calibration Date: 12/16/15 Time: 01:35

Lab File ID: yd16c01.d Init. Calib. Date(s): 11/24/15 11/24/15

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,2,3-Trichlorobenzene	1.0441	1.1791	56.46	50	13
2-Methylnaphthalene	2.3060	2.2130	47.98	50	-4
Dibromofluoromethane	0.2346	0.2443	52.07	50	4
Dibromofluoromethane(2)	0.2402	0.2487	51.76	50	4
1,2-Dichloroethane-d4	0.0608	0.0648	53.26	50	7
1,2-Dichloroethane-d4(2)	0.2836	0.3130	55.18	50	10
1,2-Dichloroethane-d4(3)	0.0387	0.0389	50.21	50	0
Toluene-d8	1.3469	1.2932	48.01	50	-4
Toluene-d8(2)	0.8896	0.8546	48.03	50	-4
4-Bromofluorobenzene	0.5052	0.5017	49.66	50	-1
4-Bromofluorobenzene(2)	0.4060	0.4363	53.73	50	7

Average %Drift 11

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_OSP22___

Lab File ID (Standard): yd16c01.d Date Analyzed: 12/16/15

Instrument ID: HP09355 Time Analyzed: 01:35

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	359641	1.877	1124600	3.891	874937	7.066	479722	9.165
UPPER LIMIT	719282	2.377	2249200	4.391	1749874	7.566	959444	9.665
LOWER LIMIT	179820	1.377	562300	3.391	437468	6.566	239861	8.665
LAB SAMPLE ID								
01 VBLKY87	366635	1.883	1137187	3.891	861346	7.060	455884	9.159
02 LCSY87	367231	1.883	1129150	3.891	863484	7.060	466765	9.159
03 LCDY87	359124	1.871	1142794	3.878	874662	7.054	473085	9.159
04 MDL0.5 - MD	367166	1.871	1130507	3.885	857181	7.054	460126	9.159
05 8169918	357268	1.877	1093888	3.891	834092	7.060	446815	9.159
06 8169918MS	345070	1.883	1116950	3.891	857664	7.060	465390	9.159
07 8169918MSD	344845	1.883	1141491	3.884	880536	7.060	471756	9.159
08 8169930	357702	1.877	1134688	3.885	861693	7.054	459588	9.159
09 8167916	364220	1.871	1127342	3.885	862419	7.054	459268	9.159
10 8167917	350938	1.877	1119879	3.885	851258	7.054	452131	9.159
11 8167918	327402	1.883	1083560	3.885	826264	7.054	438823	9.159
12 8167919	336364	1.877	1084840	3.884	829946	7.054	442942	9.159
13 8167920	339263	1.877	1087153	3.885	828449	7.054	442169	9.159
14 8172998	336813	1.877	1087159	3.885	838565	7.054	450150	9.159
15 8172999	363102	1.871	1099509	3.885	852186	7.054	461822	9.159
16 8172999DL	360853	1.883	1141142	3.885	864473	7.054	464744	9.159
17 8173000	376459	1.871	1140975	3.884	881946	7.060	474134	9.159
18 8173000DL	346500	1.877	1181689	3.885	887283	7.054	476604	9.159
19 8173001	355830	1.883	1191113	3.891	912086	7.060	486382	9.159
20 8173001DL	388045	1.877	1246387	3.885	931315	7.054	494052	9.159
21 8173002	396831	1.877	1245488	3.891	943457	7.060	497761	9.159
22 8173003	376138	1.883	1250513	3.891	946086	7.060	501860	9.159

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_OSP22___

Lab File ID (Standard): yd16c01.d Date Analyzed: 12/16/15

Instrument ID: HP09355 Time Analyzed: 01:35

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	359641	1.877	1124600	3.891	874937	7.066	479722	9.165
UPPER LIMIT	719282	2.377	2249200	4.391	1749874	7.566	959444	9.665
LOWER LIMIT	179820	1.377	562300	3.391	437468	6.566	239861	8.665
LAB SAMPLE ID								
23 8173003DL	390739	1.877	1268183	3.885	951071	7.060	510253	9.159
24 8165082	611687	1.859	1269654	3.891	957111	7.060	513251	9.159
25 8165083	816788 *	1.841	1316091	3.885	995374	7.060	530142	9.159

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

Sample Data

Volatiles by GC/MS

Fraction: Volatiles by GC/MS

11997: VOCs- 5ml Water by 8260C Analyte Name	Default MDL	Default LOQ	Units
Dichlorodifluoromethane	0.5	1	ug/l
Chloromethane	0.5	1	ug/l
Vinyl Chloride	0.5	1	ug/l
Bromomethane	0.5	1	ug/l
Chloroethane	0.5	1	ug/l
Trichlorofluoromethane	0.5	1	ug/l
1,1-Dichloroethene	0.5	1	ug/l
Acetone	6	20	ug/l
Freon 113	2	10	ug/l
Carbon Disulfide	1	5	ug/l
Methyl Acetate	1	5	ug/l
Methylene Chloride	2	4	ug/l
trans-1,2-Dichloroethene	0.5	1	ug/l
Methyl Tertiary Butyl Ether	0.5	1	ug/l
1,1-Dichloroethane	0.5	1	ug/l
2-Butanone	3	10	ug/l
cis-1,2-Dichloroethene	0.5	1	ug/l
Chloroform	0.5	1	ug/l
1,1,1-Trichloroethane	0.5	1	ug/l
Carbon Tetrachloride	0.5	1	ug/l
Benzene	0.5	1	ug/l
1,2-Dichloroethane	0.5	1	ug/l
Trichloroethene	0.5	1	ug/l
Methylcyclohexane	1	5	ug/l
1,2-Dichloropropane	0.5	1	ug/l
Bromodichloromethane	0.5	1	ug/l
cis-1,3-Dichloropropene	0.5	1	ug/l
4-Methyl-2-pentanone	3	10	ug/l
Toluene	0.5	1	ug/l
trans-1,3-Dichloropropene	0.5	1	ug/l
1,1,2-Trichloroethane	0.5	1	ug/l
Tetrachloroethene	0.5	1	ug/l
2-Hexanone	3	10	ug/l
Dibromochloromethane	0.5	1	ug/l
1,2-Dibromoethane	0.5	1	ug/l
Chlorobenzene	0.5	1	ug/l
Ethylbenzene	0.5	1	ug/l
Xylene (Total)	0.5	1	ug/l
Styrene	1	5	ug/l
Bromoform	0.5	4	ug/l
Isopropylbenzene	1	5	ug/l
Cyclohexane	2	5	ug/l
1,1,2,2-Tetrachloroethane	0.5	1	ug/l
1,3-Dichlorobenzene	1	5	ug/l
1,4-Dichlorobenzene	1	5	ug/l
1,2-Dichlorobenzene	1	5	ug/l
1,2-Dibromo-3-chloropropane	2	5	ug/l

Fraction: Volatiles by GC/MS

11997: VOCs- 5ml Water by 8260C Analyte Name	Default MDL	Default LOQ	Units
1,2,4-Trichlorobenzene	1	5	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKO05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167916

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s06.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	20	U
76-13-1	Freon 113	10	U
75-15-0	Carbon Disulfide	5	U
79-20-9	Methyl Acetate	5	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
110-82-7	Cyclohexane	5	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
108-87-2	Methylcyclohexane	5	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKO05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167916

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s06.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	3	
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U

Data file: /chem2/HP09355.i/15dec16a.b/yd16s06.d Injection date and time: **16-DEC-2015 05:26**
Data file Sample Info. Line: BKO05;8167916;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:9274

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.871(0.006)	212	65	364220 (1)	250.00	
66) Fluorobenzene	3.885(0.006)	543	96	1127342 (0)	50.00	
100) Chlorobenzene-d5	7.054(0.012)	1064	117	862419 (-1)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159(0.006)	1410	152	459268 (-4)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.246(0.002)	113	267560	50.585	101%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.550(0.002)	102	68489	49.940	100%		77 - 113
83) Toluene-d8	(3)	5.491(0.000)	98	1110957	47.822	96%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222(-0.001)	95	417083	47.867	96%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)			Not Detected					0.5	1
4) Chloromethane	(2)			Not Detected					0.5	1
6) Vinyl Chloride	(2)			Not Detected					0.5	1
8) Bromomethane	(2)			Not Detected					0.5	1
9) Chloroethane	(2)			Not Detected					0.5	1
12) Trichlorofluoromethane	(2)			Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)			Not Detected					0.5	1
18) Acetone	(1)			Not Detected					6	20
19) Freon 113	(2)			Not Detected					2	10
23) Carbon Disulfide	(2)			Not Detected					1	5
27) Methyl Acetate	(2)			Not Detected					1	5
28) Methylene Chloride	(2)			Not Detected					2	4
32) trans-1,2-Dichloroethene	(2)			Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)			Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)			Not Detected					0.5	1
44) 2-Butanone	(2)			Not Detected					3	10
51) Chloroform	(2)			Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)			Not Detected					0.5	1
54) Cyclohexane	(2)			Not Detected					2	5
56) Carbon Tetrachloride	(2)			Not Detected					0.5	1
60) Benzene	(2)			Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)			Not Detected					0.5	1
71) Trichloroethene	(2)			Not Detected					0.5	1
72) Methylcyclohexane	(2)			Not Detected					1	5
73) 1,2-Dichloropropane	(2)			Not Detected					0.5	1
78) Bromodichloromethane	(2)			Not Detected					0.5	1
81) cis-1,3-Dichloropropene	(2)			Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)			Not Detected					3	10
88) Toluene	(3)			Not Detected					0.5	1

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16s06.d Injection date and time: **16-DEC-2015 05:26**
Data file Sample Info. Line: BKO05;8167916;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

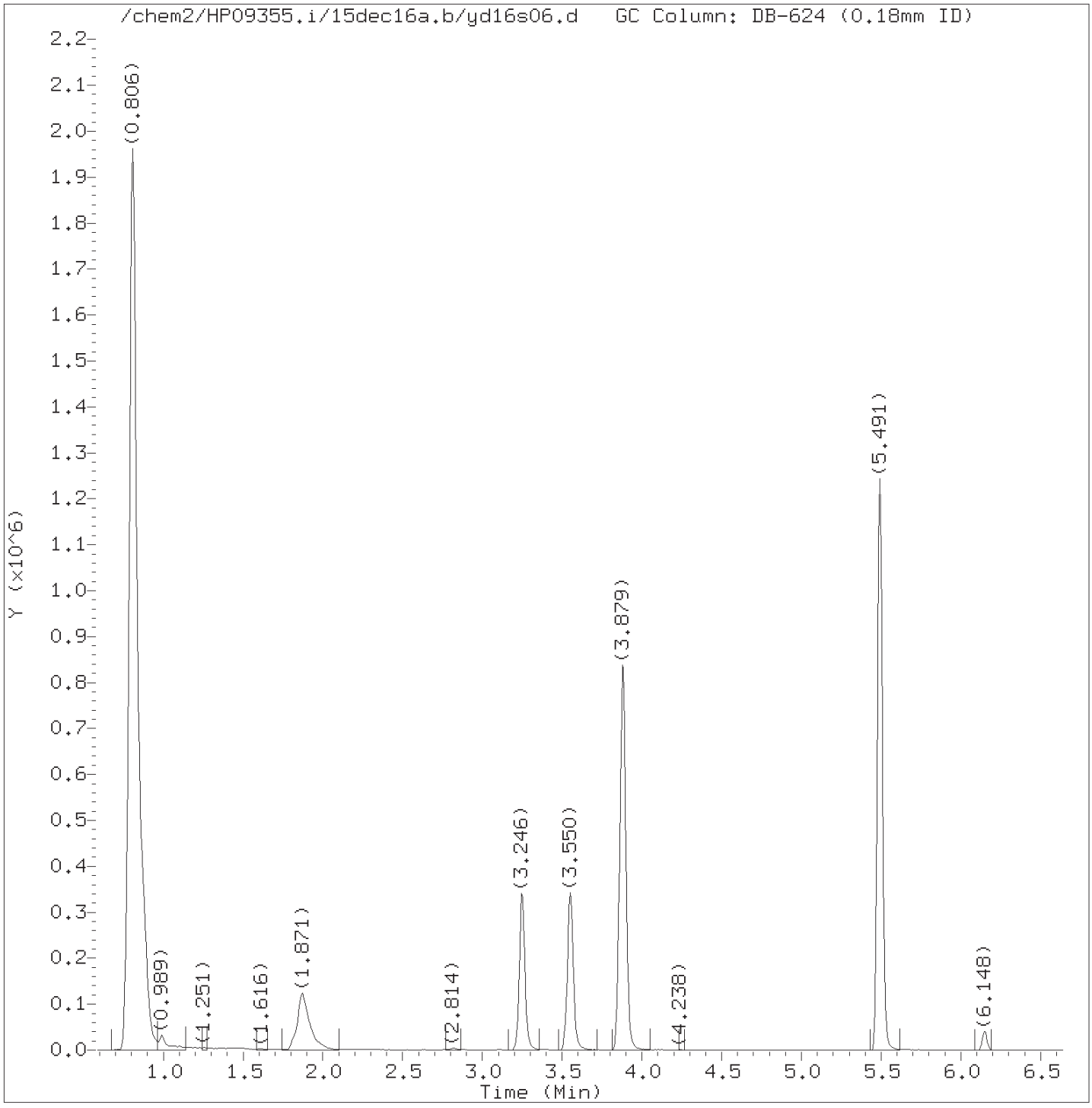
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
89) trans-1,3-Dichloropropene	(3)			Not Detected					0.5	1
92) 1,1,2-Trichloroethane	(3)			Not Detected					0.5	1
93) Tetrachloroethene	(3)	6.148(0.000)	166	15076A	2.516	2.52			0.5	1
96) 2-Hexanone	(3)			Not Detected					3	10
97) Dibromochloromethane	(3)			Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)			Not Detected					0.5	1
102) Chlorobenzene	(3)			Not Detected					0.5	1
104) Ethylbenzene	(3)			Not Detected					0.5	1
106) m+p-Xylene	(3)			Not Detected					0.5	1
107) o-Xylene	(3)			Not Detected					0.5	1
108) Xylene (Total)	(3)			Not Detected					0.5	1
109) Styrene	(3)			Not Detected					1	5
110) Bromoform	(3)			Not Detected					0.5	4
111) Isopropylbenzene	(3)			Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)			Not Detected					0.5	1
129) 1,3-Dichlorobenzene	(4)			Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)			Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)			Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)			Not Detected					2	5
146) 1,2,4-Trichlorobenzene	(4)			Not Detected					1	5

A = User selected an alternate peak.

Total number of targets = 50

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

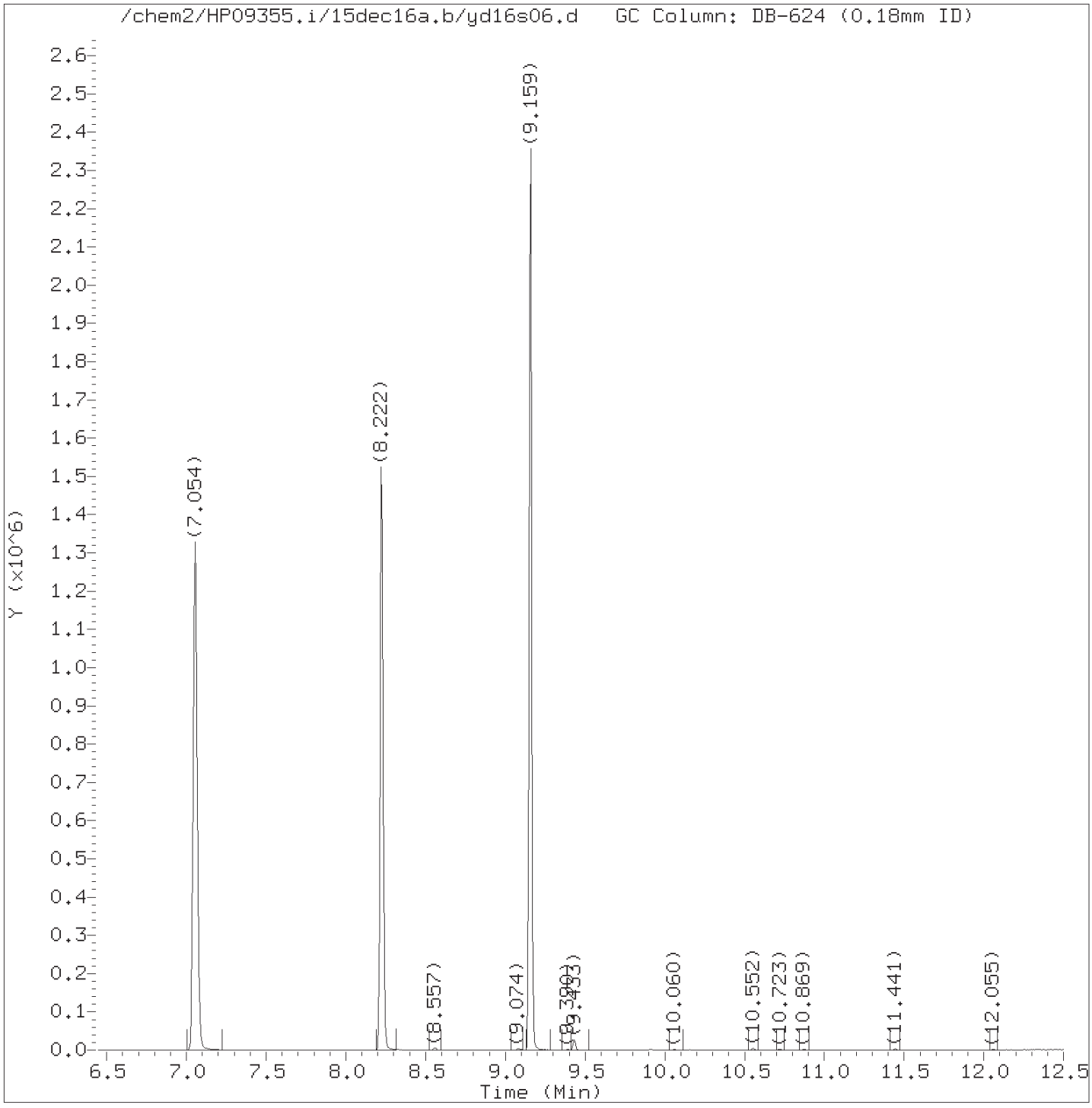
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Sample Name: BKO05 Lab Sample ID: 8167916

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Sample Name: BKO05 Lab Sample ID: 8167916

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

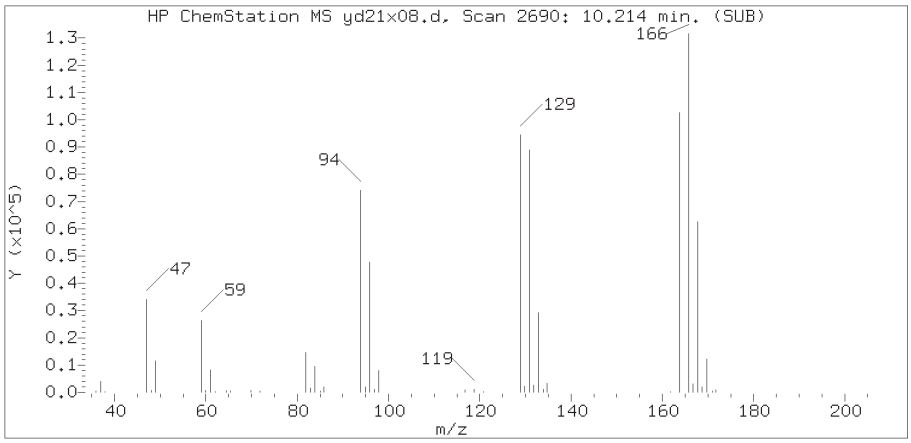
Sample Name: BKO05 Lab Sample ID: 8167916

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.871	65	364220	250.000
52)$Dibromofluoromethane	(2)	3.246	113	267560	50.585
57)$1,2-Dichloroethane-d4	(2)	3.550	102	68489	49.940
66)*Fluorobenzene	(2)	3.885	96	1127342	50.000
83)$Toluene-d8	(3)	5.491	98	1110957	47.822
93) Tetrachloroethene	(3)	6.148	166	15076A	2.516
100)*Chlorobenzene-d5	(3)	7.054	117	862419	50.000
114)$4-Bromofluorobenzene	(3)	8.222	95	417083	47.867
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	459268	50.000

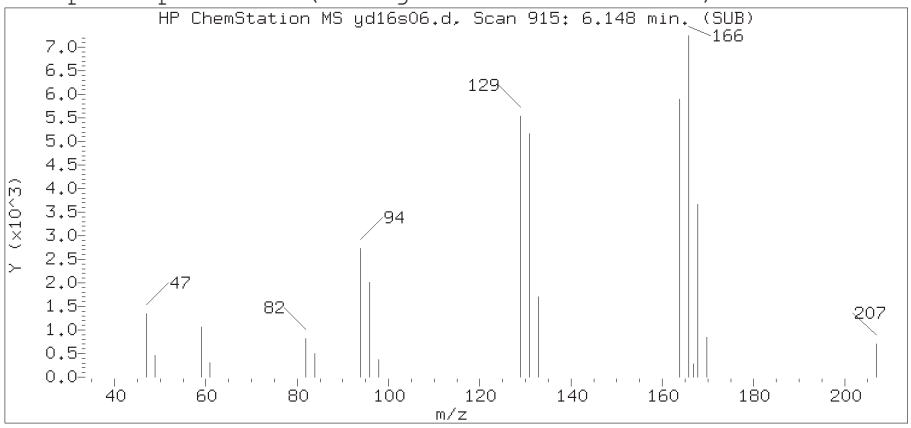
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

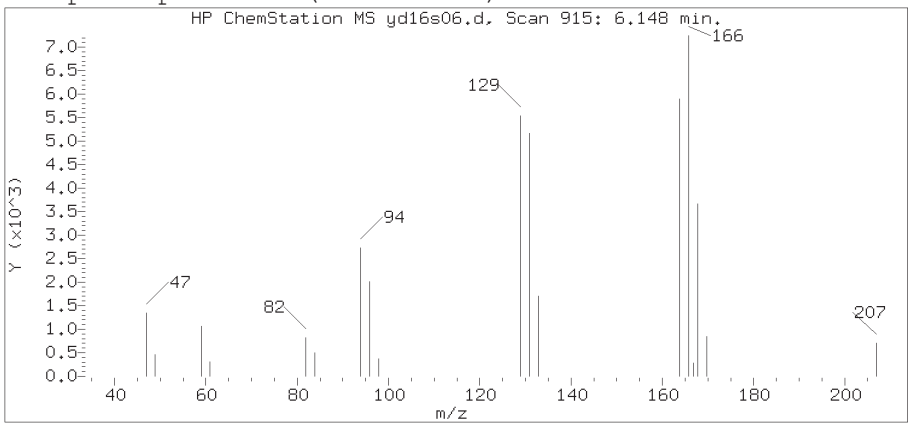
Reference Standard Spectrum for Tetrachloroethene

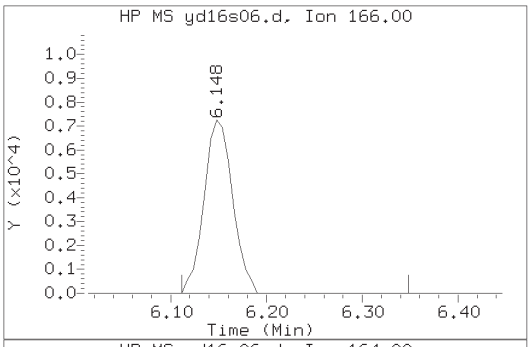


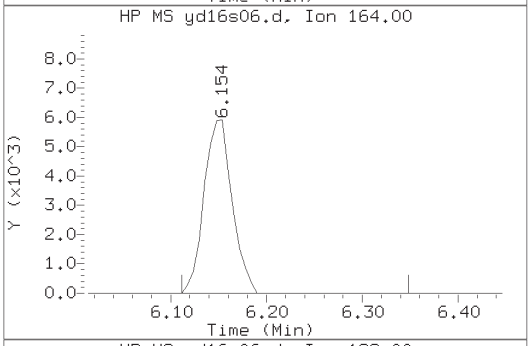
Sample Spectrum (Background Subtracted)

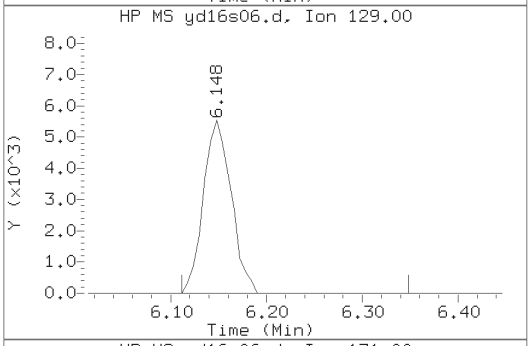


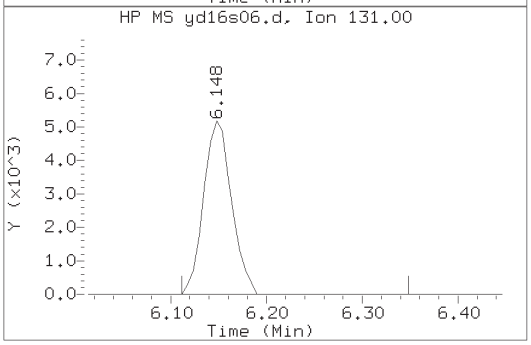
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

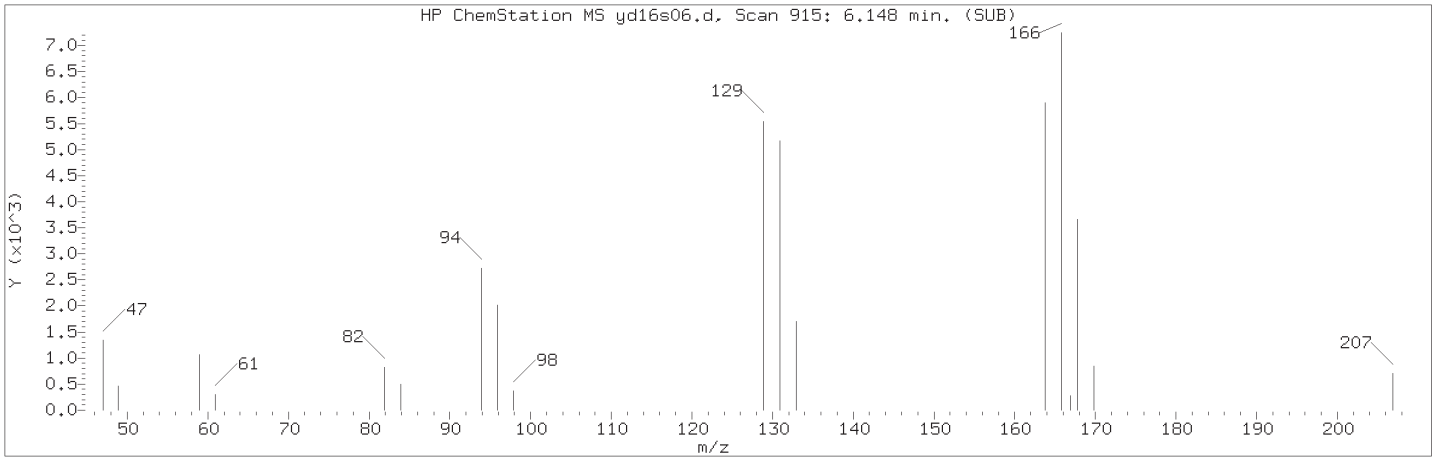
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Sample Name: BKO05 Lab Sample ID: 8167916

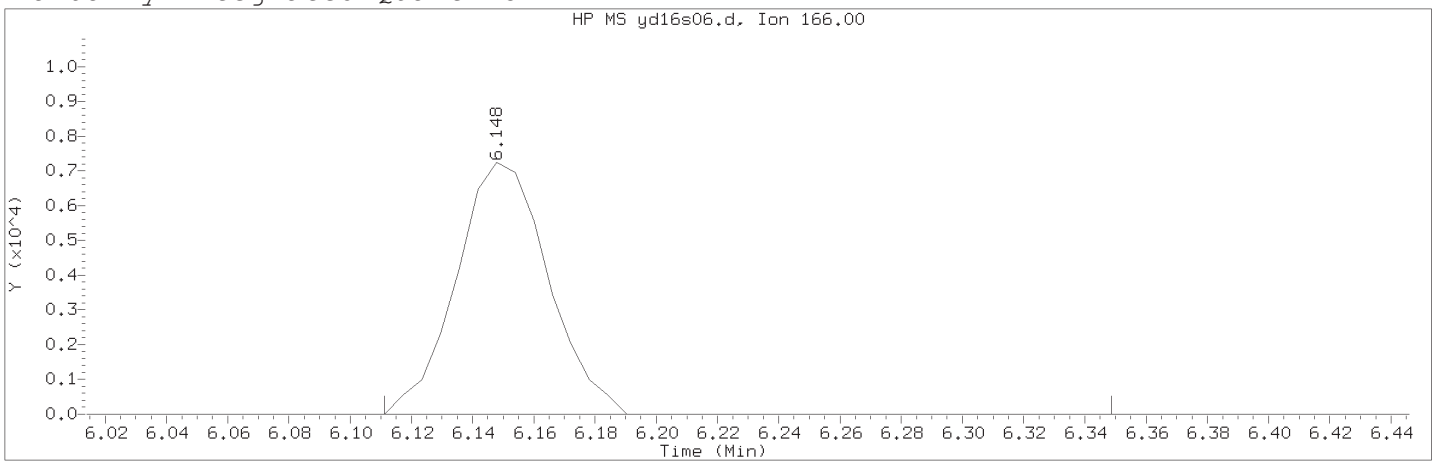
Compound Number	: 93
Compound Name	: Tetrachloroethene
Scan Number	: 915
Retention Time (minutes)	: 6.148
Relative Retention Time	: 0.00022
Quant Ion	: 166.00
Area (flag)	: 15076A
On-Column Amount (ng)	: 2.5156

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01.
Target 3.5 esignature ID: dhh02035

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:41 dhh02035

Sample Name: BKO05 Lab Sample ID: 8167916

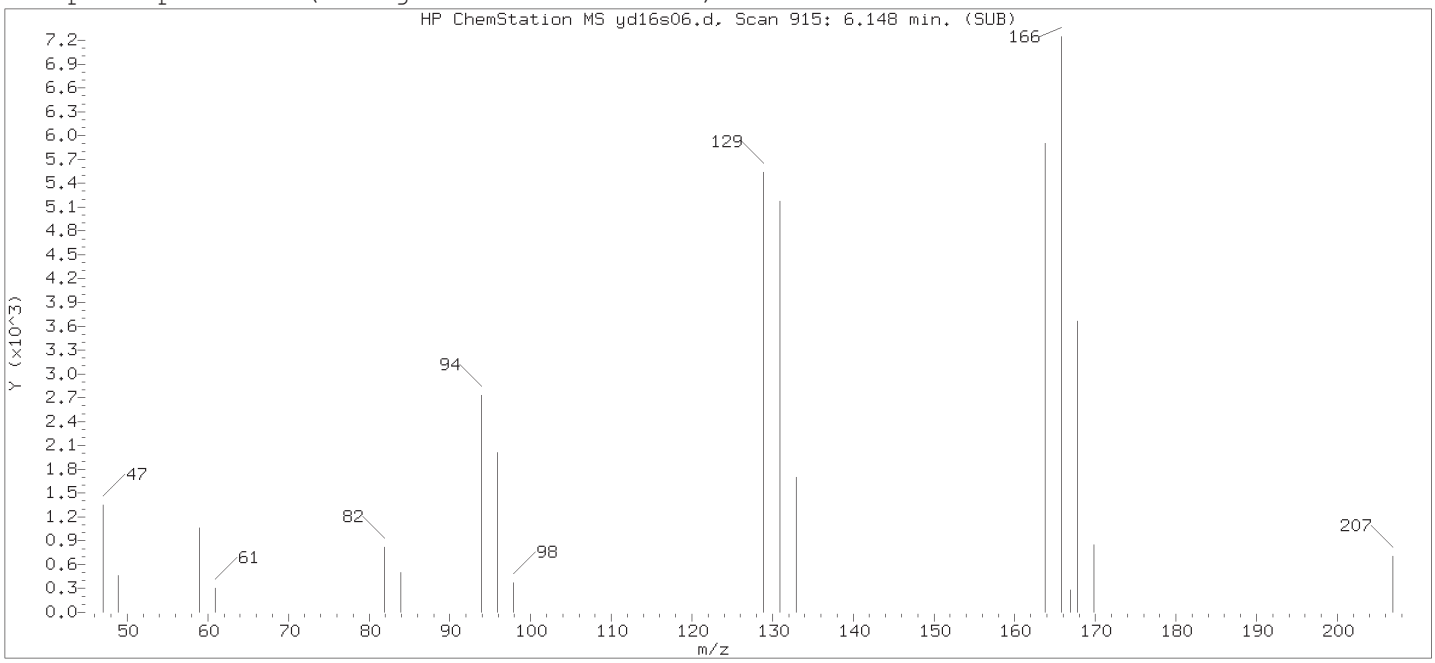
Compound Number : 93
Compound Name : Tetrachloroethene
Scan Number : 915
Retention Time (minutes): 6.148
Quant Ion : 166.00
Area (flag) : 15076A
On-Column Amount (ng) : 2.5156
Integration start scan : 908 Integration stop scan: 947
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

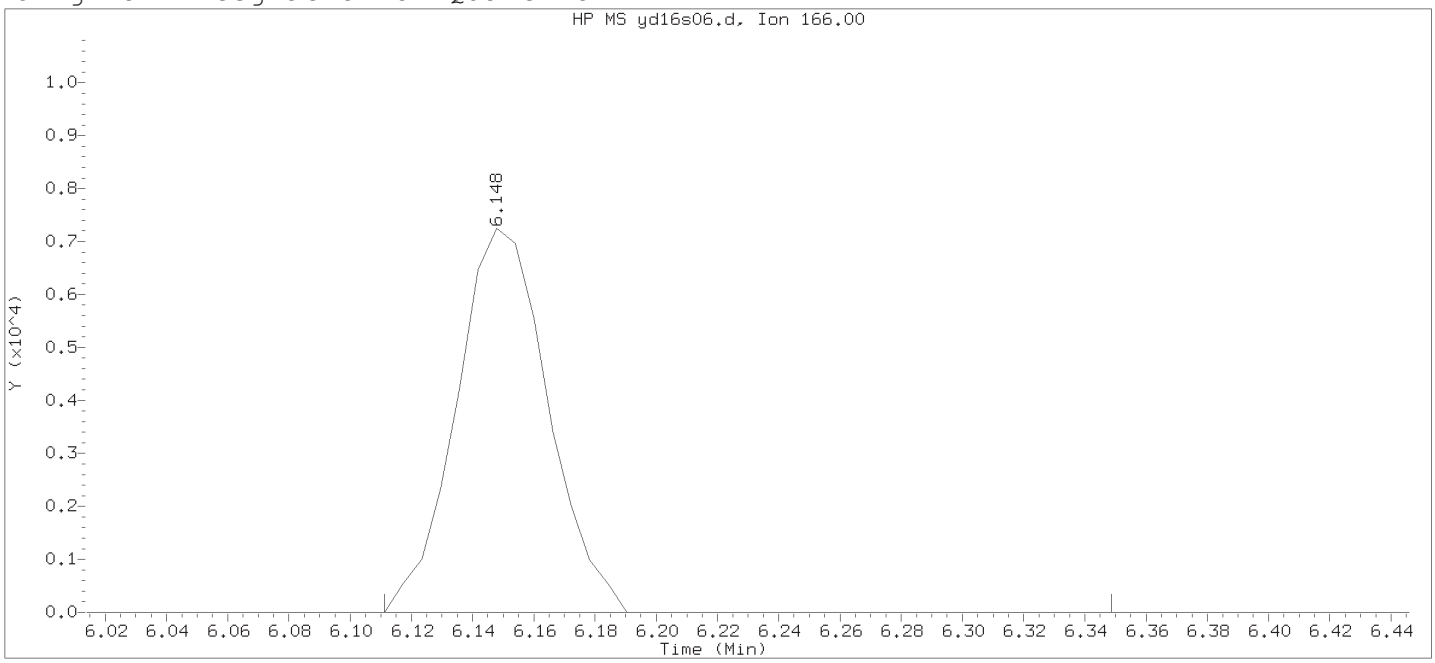
Analyst responsible for change: Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16s06.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 05:41 Automation

Sample Name: BKO05 Lab Sample ID: 8167916

Compound Number : 93
Compound Name : Tetrachloroethene
Scan Number : 915
Retention Time (minutes): 6.148
Quant Ion : 166.00
Area : 15076
On-column Amount (ng) : 2.5157
Integration start scan : 908 Integration stop scan: 947
Y at integration start : 0 Y at integration end: 0

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKO04

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167917

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s07.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	20	U
76-13-1	Freon 113	10	U
75-15-0	Carbon Disulfide	5	U
79-20-9	Methyl Acetate	5	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
110-82-7	Cyclohexane	5	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
108-87-2	Methylcyclohexane	5	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKO04

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167917

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s07.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	3	
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U

Data file: /chem2/HP09355.i/15dec16a.b/yd16s07.d Injection date and time: **16-DEC-2015 05:47**
Data file Sample Info. Line: BKO04;8167917;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:9274

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.877(0.000)	213	65	350938 (-2)	250.00	
66) Fluorobenzene	3.885(0.006)	543	96	1119879 (0)	50.00	
100) Chlorobenzene-d5	7.054(0.012)	1064	117	851258 (-3)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159(0.006)	1410	152	452131 (-6)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.252(0.000)	113	266133	50.651	101%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.556(0.000)	102	67809	49.773	100%		77 - 113
83) Toluene-d8	(3)	5.491(0.000)	98	1097954	47.882	96%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222(-0.001)	95	412969	48.016	96%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)			Not Detected					0.5	1
4) Chloromethane	(2)			Not Detected					0.5	1
6) Vinyl Chloride	(2)			Not Detected					0.5	1
8) Bromomethane	(2)			Not Detected					0.5	1
9) Chloroethane	(2)			Not Detected					0.5	1
12) Trichlorofluoromethane	(2)			Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)			Not Detected					0.5	1
18) Acetone	(1)			Not Detected					6	20
19) Freon 113	(2)			Not Detected					2	10
23) Carbon Disulfide	(2)			Not Detected					1	5
27) Methyl Acetate	(2)			Not Detected					1	5
28) Methylene Chloride	(2)			Not Detected					2	4
32) trans-1,2-Dichloroethene	(2)			Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)			Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)			Not Detected					0.5	1
44) 2-Butanone	(2)			Not Detected					3	10
51) Chloroform	(2)			Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)			Not Detected					0.5	1
54) Cyclohexane	(2)			Not Detected					2	5
56) Carbon Tetrachloride	(2)			Not Detected					0.5	1
60) Benzene	(2)			Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)			Not Detected					0.5	1
71) Trichloroethene	(2)			Not Detected					0.5	1
72) Methylcyclohexane	(2)			Not Detected					1	5
73) 1,2-Dichloropropane	(2)			Not Detected					0.5	1
78) Bromodichloromethane	(2)			Not Detected					0.5	1
81) cis-1,3-Dichloropropene	(2)			Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)			Not Detected					3	10
88) Toluene	(3)			Not Detected					0.5	1

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/15dec16a.b/yd16s07.d Injection date and time: **16-DEC-2015 05:47**
Data file Sample Info. Line: BKO04;8167917;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

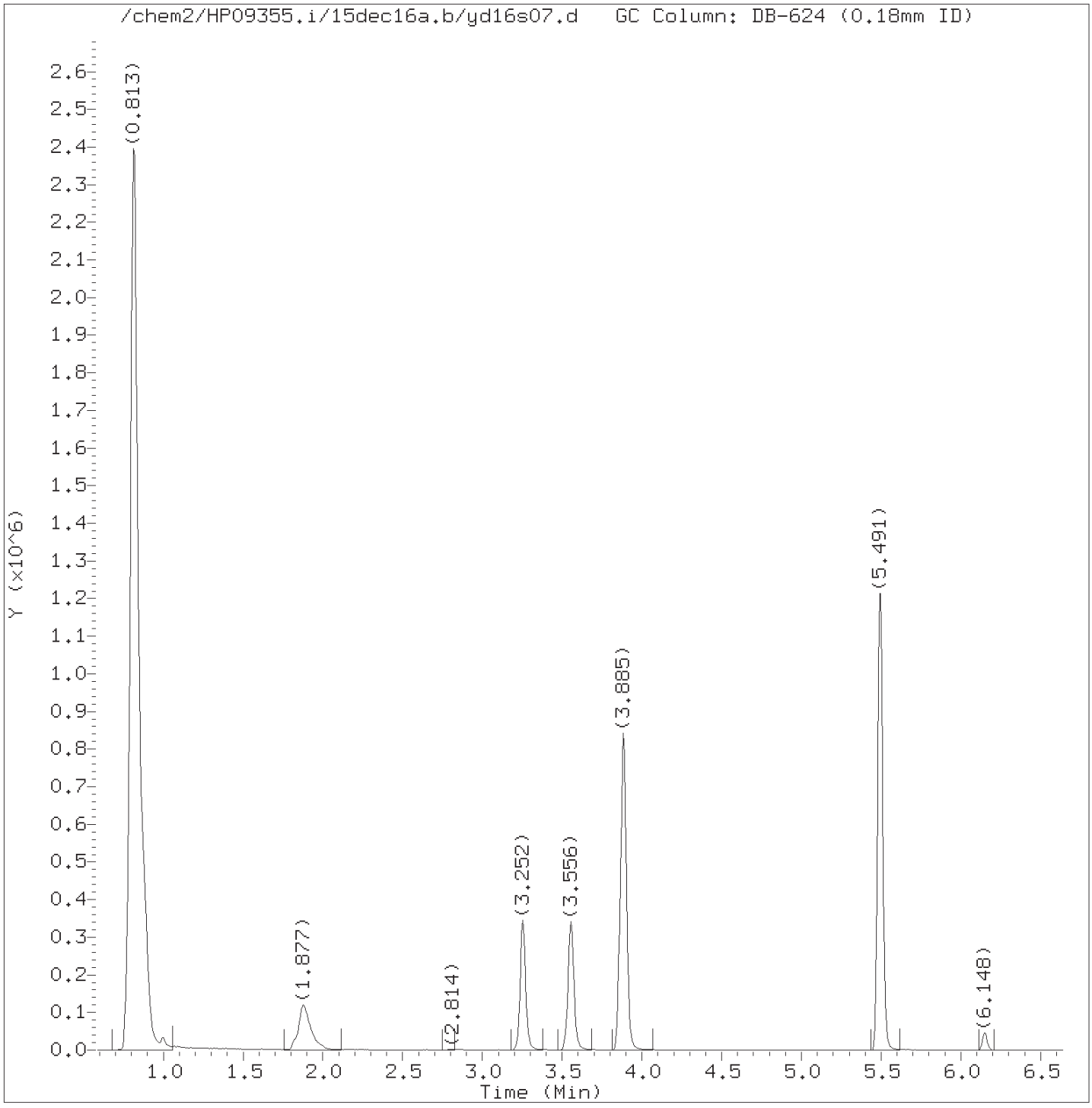
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
89) trans-1,3-Dichloropropene	(3)			Not Detected					0.5	1
92) 1,1,2-Trichloroethane	(3)			Not Detected					0.5	1
93) Tetrachloroethene	(3)	6.148(0.000)	166	17455	2.951	2.95			0.5	1
96) 2-Hexanone	(3)			Not Detected					3	10
97) Dibromochloromethane	(3)			Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)			Not Detected					0.5	1
102) Chlorobenzene	(3)			Not Detected					0.5	1
104) Ethylbenzene	(3)			Not Detected					0.5	1
106) m+p-Xylene	(3)			Not Detected					0.5	1
107) o-Xylene	(3)			Not Detected					0.5	1
108) Xylene (Total)	(3)			Not Detected					0.5	1
109) Styrene	(3)			Not Detected					1	5
110) Bromoform	(3)			Not Detected					0.5	4
111) Isopropylbenzene	(3)			Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)			Not Detected					0.5	1
129) 1,3-Dichlorobenzene	(4)			Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)			Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)			Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)			Not Detected					2	5
146) 1,2,4-Trichlorobenzene	(4)			Not Detected					1	5

Total number of targets = 50

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

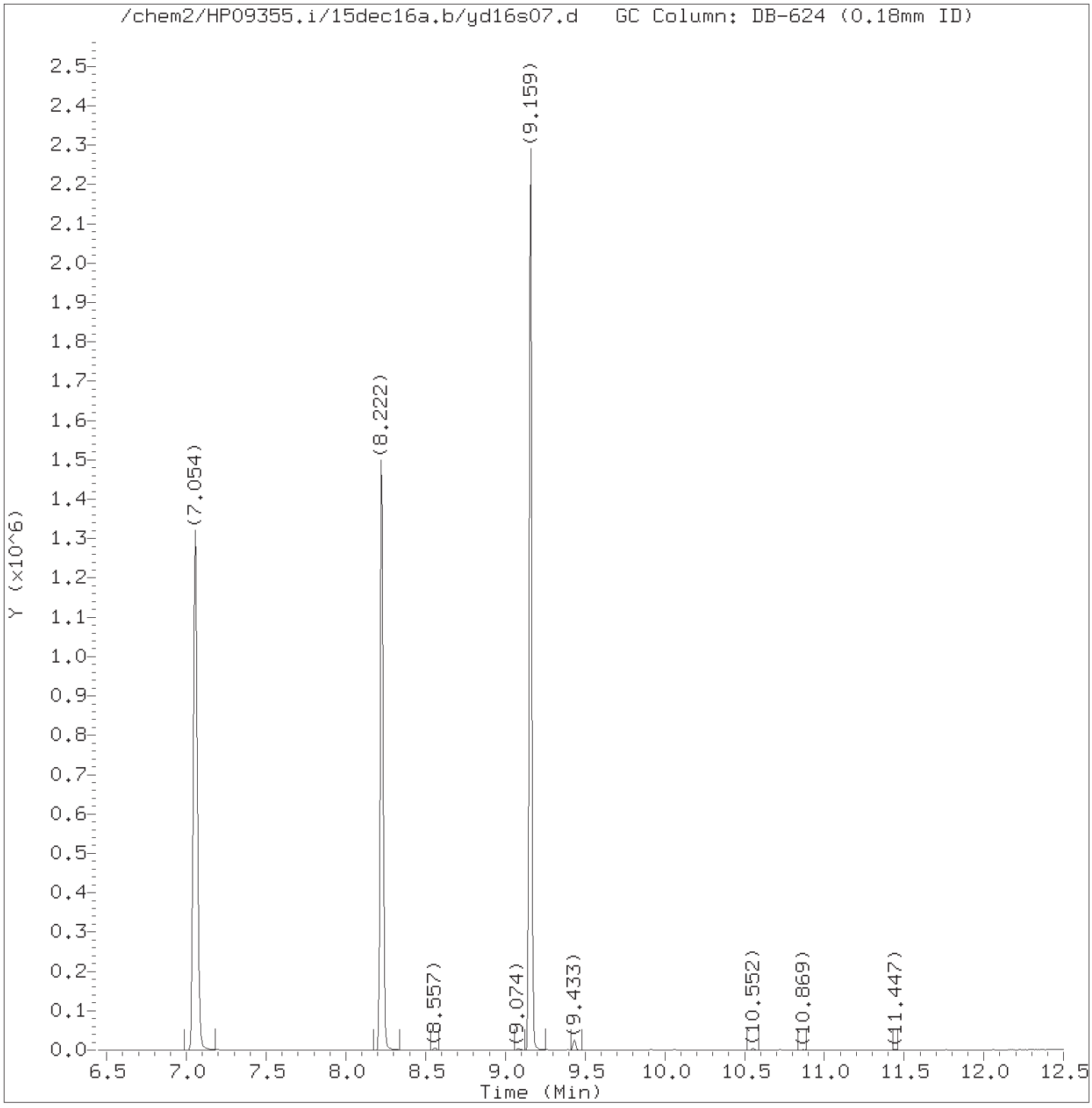
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s07.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:47 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKO04 Lab Sample ID: 8167917

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s07.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:47 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKO04 Lab Sample ID: 8167917

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s07.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:47 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

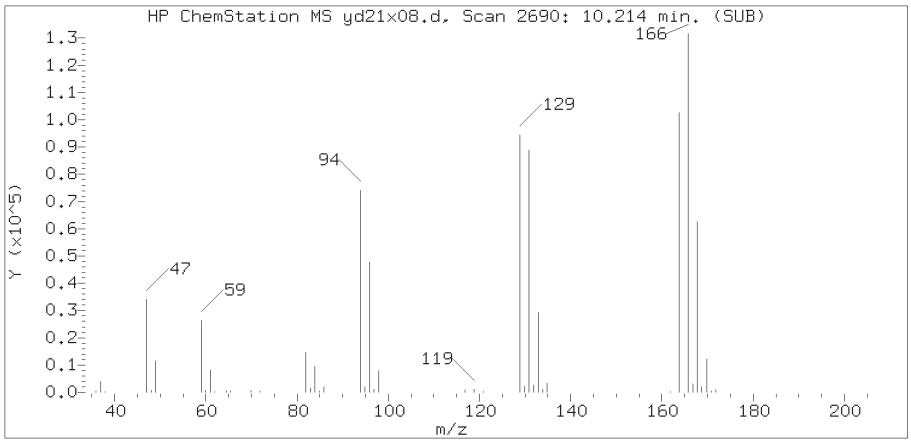
Sample Name: BKO04 Lab Sample ID: 8167917

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.877	65	350938	250.000
52)$Dibromofluoromethane	(2)	3.252	113	266133	50.651
57)$1,2-Dichloroethane-d4	(2)	3.556	102	67809	49.773
66)*Fluorobenzene	(2)	3.885	96	1119879	50.000
83)$Toluene-d8	(3)	5.491	98	1097954	47.882
93) Tetrachloroethene	(3)	6.148	166	17455	2.951
100)*Chlorobenzene-d5	(3)	7.054	117	851258	50.000
114)$4-Bromofluorobenzene	(3)	8.222	95	412969	48.016
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	452131	50.000

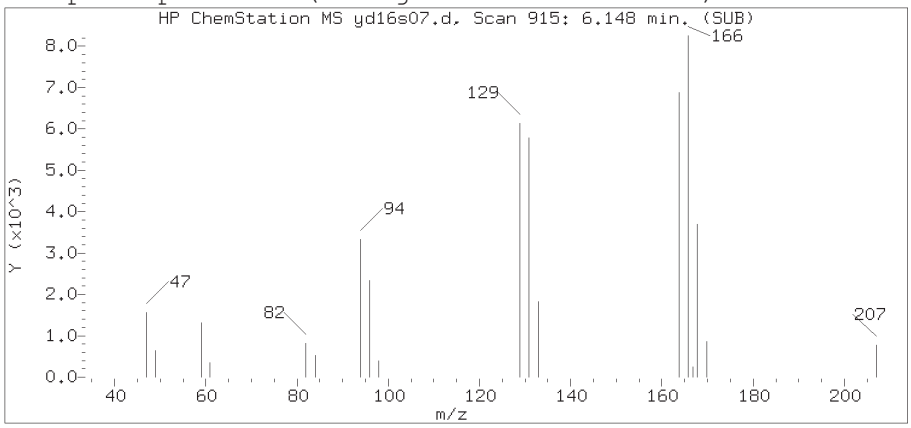
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

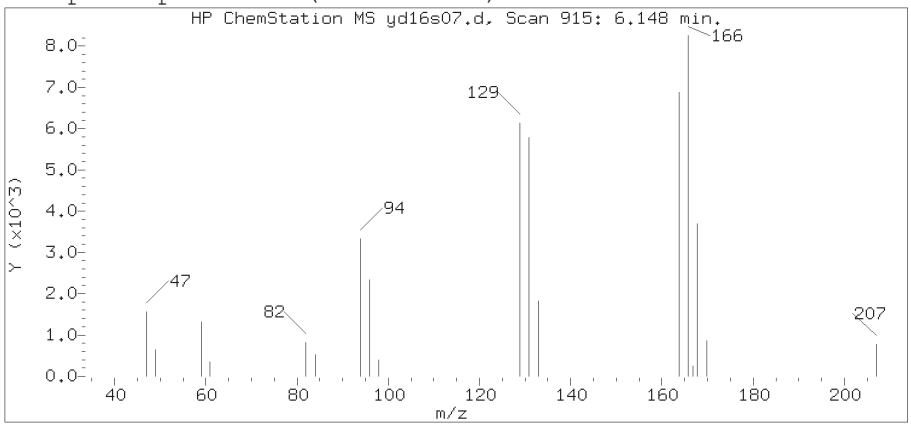
Reference Standard Spectrum for Tetrachloroethene

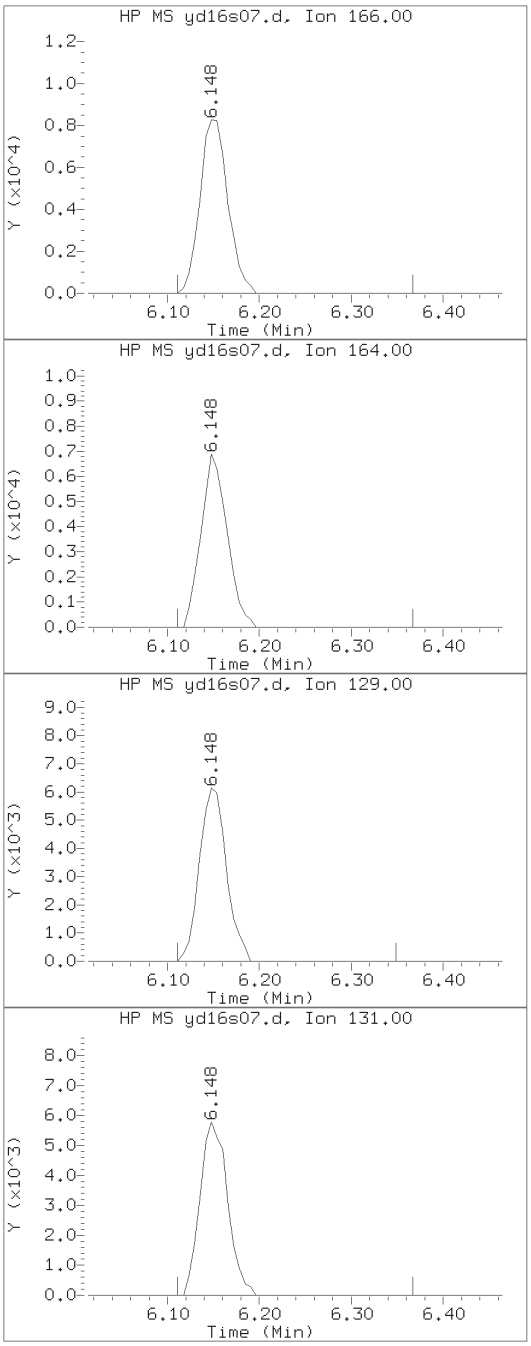


Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)





Data File: /chem2/HP09355.i/15dec16a.b/yd16s07.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 05:47 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKO04 Lab Sample ID: 8167917

Compound Number	: 93
Compound Name	: Tetrachloroethene
Scan Number	: 915
Retention Time (minutes)	: 6.148
Relative Retention Time	: 0.00022
Quant Ion	: 166.00
Area (flag)	: 17455
On-Column Amount (ng)	: 2.9508

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01.
Target 3.5 esignature ID: dhh02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOFD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167918

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s08.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	20	U
76-13-1	Freon 113	10	U
75-15-0	Carbon Disulfide	5	U
79-20-9	Methyl Acetate	5	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
110-82-7	Cyclohexane	5	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
108-87-2	Methylcyclohexane	5	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOFD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167918

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s08.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	3	
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U

BKOFD

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

8167918

Data file: /chem2/HP09355.i/15dec16a.b/yd16s08.d
Data file Sample Info. Line: BKOFD;8167918;1;0;;;;;yd16b01;
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Injection date and time: **16-DEC-2015 06:08**
Instrument ID: **HP09355.i** Batch: **Y153501AA**

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:9274

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.883(-0.006)	214	65	327402 (-9)	250.00	
66) Fluorobenzene	3.885(0.006)	543	96	1083560 (-4)	50.00	
100) Chlorobenzene-d5	7.054(0.012)	1064	117	826264 (-6)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159(0.006)	1410	152	438823 (-9)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.252(0.000)	113	260447	51.230	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.556(0.000)	102	65207	49.468	99%		77 - 113
83) Toluene-d8	(3)	5.497(0.000)	98	1060546	47.650	95%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222(-0.001)	95	402020	48.157	96%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)			Not Detected					0.5	1
4) Chloromethane	(2)			Not Detected					0.5	1
6) Vinyl Chloride	(2)			Not Detected					0.5	1
8) Bromomethane	(2)			Not Detected					0.5	1
9) Chloroethane	(2)			Not Detected					0.5	1
12) Trichlorofluoromethane	(2)			Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)			Not Detected					0.5	1
18) Acetone	(1)			Not Detected					6	20
19) Freon 113	(2)			Not Detected					2	10
23) Carbon Disulfide	(2)			Not Detected					1	5
27) Methyl Acetate	(2)			Not Detected					1	5
28) Methylene Chloride	(2)			Not Detected					2	4
32) trans-1,2-Dichloroethene	(2)			Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)			Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)			Not Detected					0.5	1
44) 2-Butanone	(2)			Not Detected					3	10
51) Chloroform	(2)			Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)			Not Detected					0.5	1
54) Cyclohexane	(2)			Not Detected					2	5
56) Carbon Tetrachloride	(2)			Not Detected					0.5	1
60) Benzene	(2)			Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)			Not Detected					0.5	1
71) Trichloroethene	(2)			Not Detected					0.5	1
72) Methylcyclohexane	(2)			Not Detected					1	5
73) 1,2-Dichloropropane	(2)			Not Detected					0.5	1
78) Bromodichloromethane	(2)			Not Detected					0.5	1
81) cis-1,3-Dichloropropene	(2)			Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)			Not Detected					3	10
88) Toluene	(3)			Not Detected					0.5	1

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16s08.d Injection date and time: **16-DEC-2015 06:08**
Data file Sample Info. Line: BKOFD;8167918;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

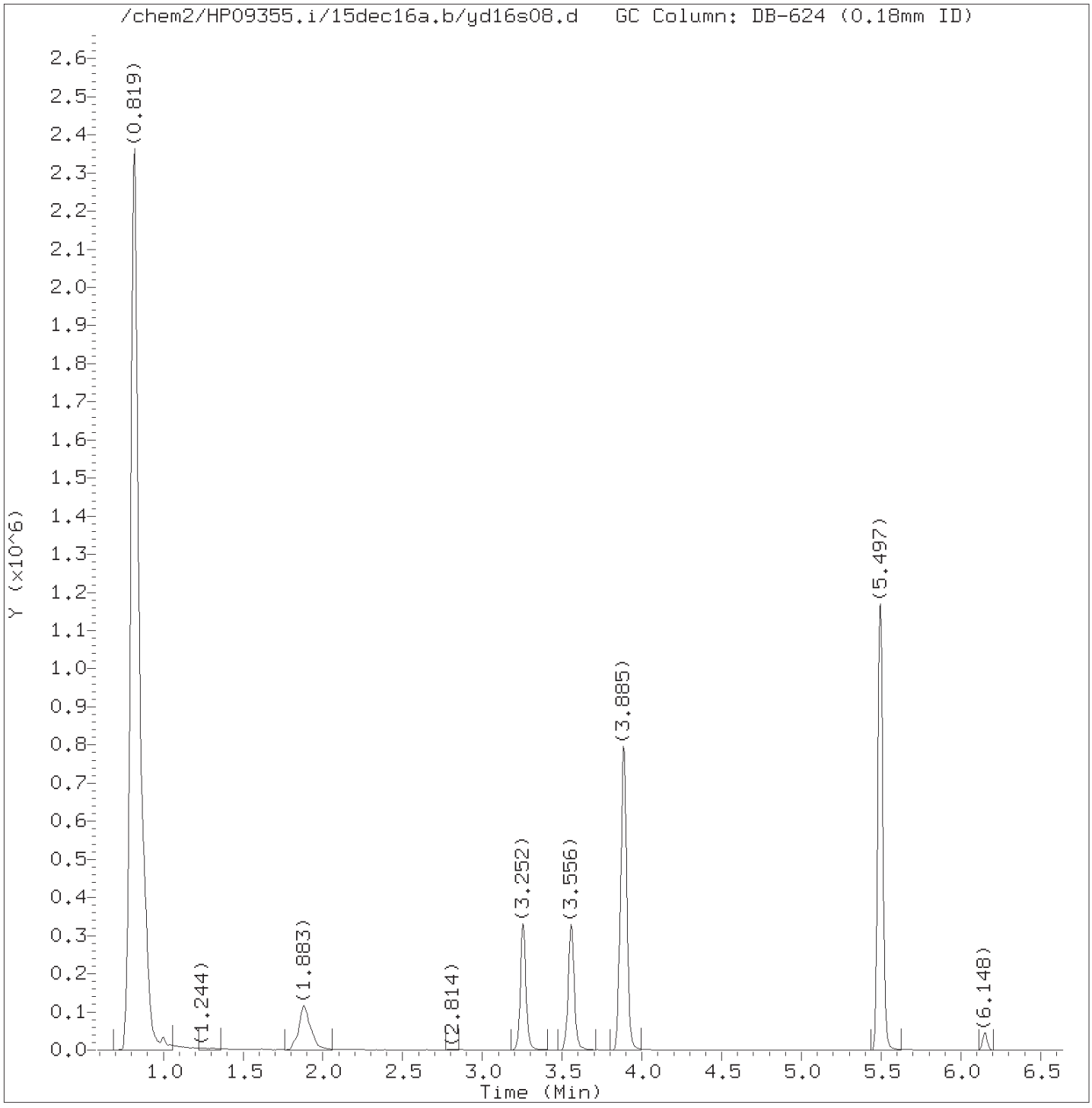
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
89) trans-1,3-Dichloropropene	(3)			Not Detected					0.5	1
92) 1,1,2-Trichloroethane	(3)			Not Detected					0.5	1
93) Tetrachloroethene	(3)	6.148(0.000)	166	17202	2.996	3.00			0.5	1
96) 2-Hexanone	(3)			Not Detected					3	10
97) Dibromochloromethane	(3)			Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)			Not Detected					0.5	1
102) Chlorobenzene	(3)			Not Detected					0.5	1
104) Ethylbenzene	(3)			Not Detected					0.5	1
106) m+p-Xylene	(3)			Not Detected					0.5	1
107) o-Xylene	(3)			Not Detected					0.5	1
108) Xylene (Total)	(3)			Not Detected					0.5	1
109) Styrene	(3)			Not Detected					1	5
110) Bromoform	(3)			Not Detected					0.5	4
111) Isopropylbenzene	(3)			Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)			Not Detected					0.5	1
129) 1,3-Dichlorobenzene	(4)			Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)			Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)			Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)			Not Detected					2	5
146) 1,2,4-Trichlorobenzene	(4)			Not Detected					1	5

Total number of targets = 50

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

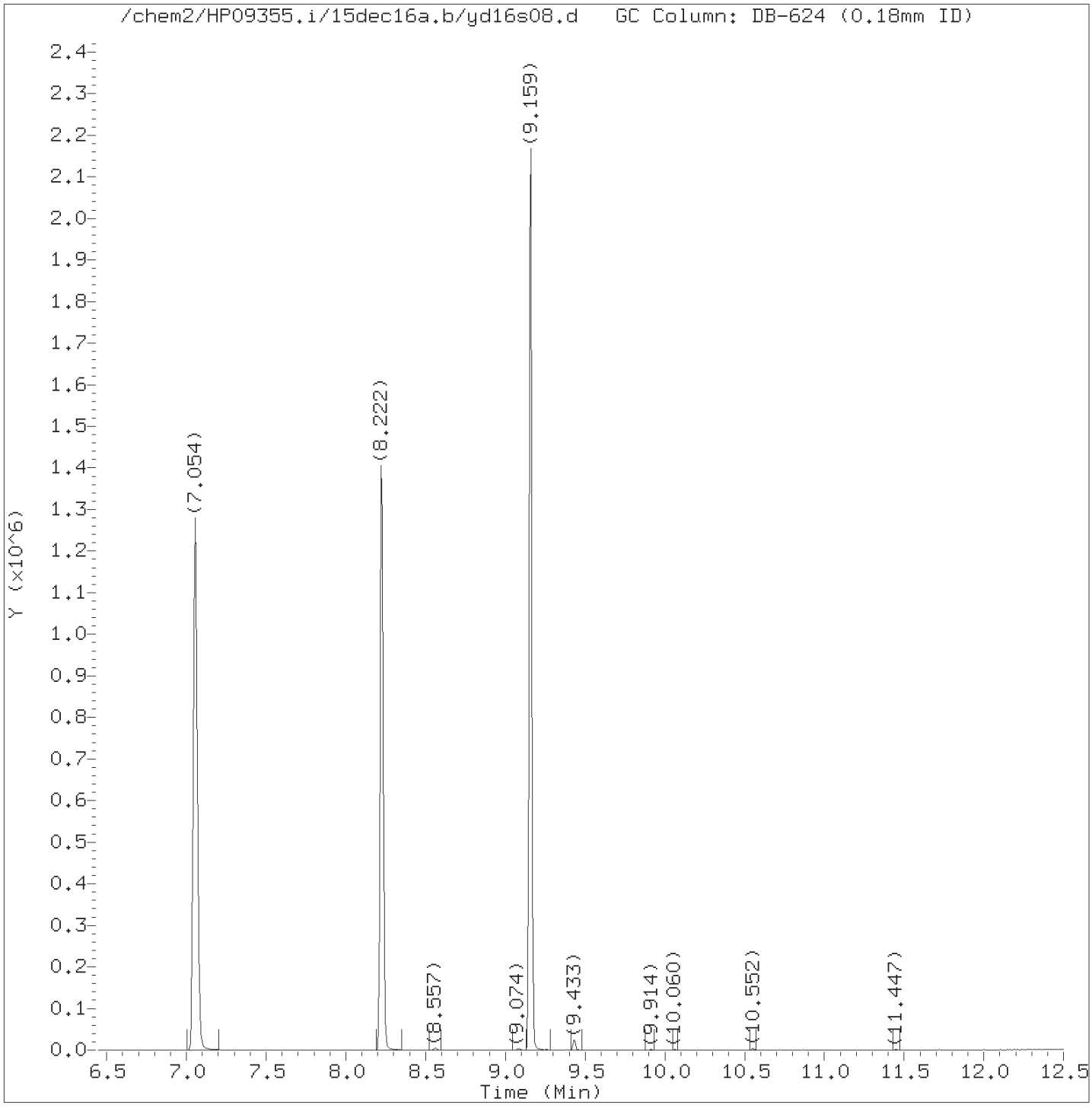
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s08.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:08 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFD Lab Sample ID: 8167918

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s08.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:08 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFD Lab Sample ID: 8167918

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s08.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:08 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

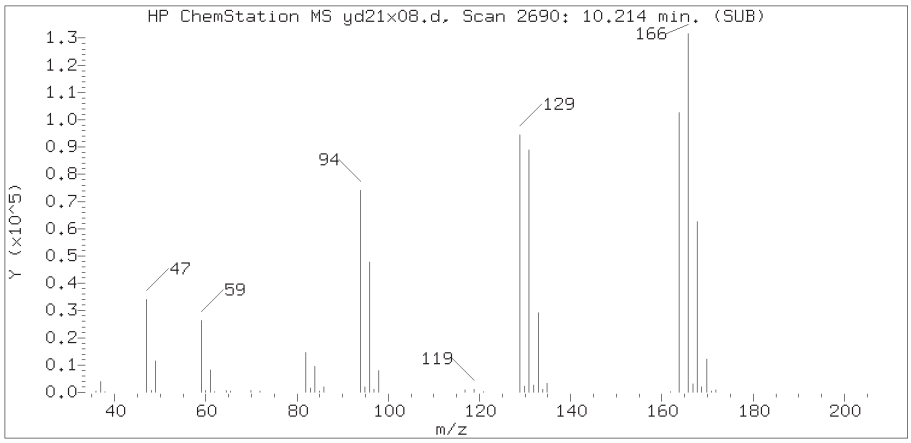
Sample Name: BKOFD Lab Sample ID: 8167918

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.883	65	327402	250.000
52)$Dibromofluoromethane	(2)	3.252	113	260447	51.230
57)$1,2-Dichloroethane-d4	(2)	3.556	102	65207	49.468
66)*Fluorobenzene	(2)	3.885	96	1083560	50.000
83)$Toluene-d8	(3)	5.497	98	1060546	47.650
93) Tetrachloroethene	(3)	6.148	166	17202	2.996
100)*Chlorobenzene-d5	(3)	7.054	117	826264	50.000
114)$4-Bromofluorobenzene	(3)	8.222	95	402020	48.157
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	438823	50.000

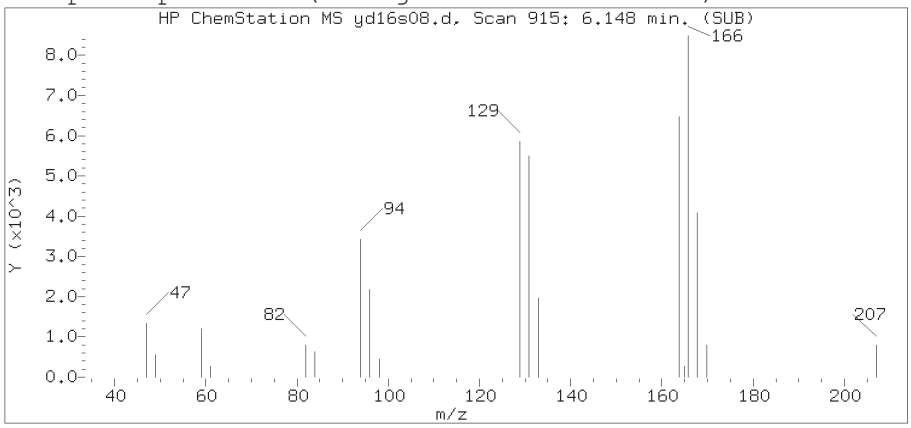
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

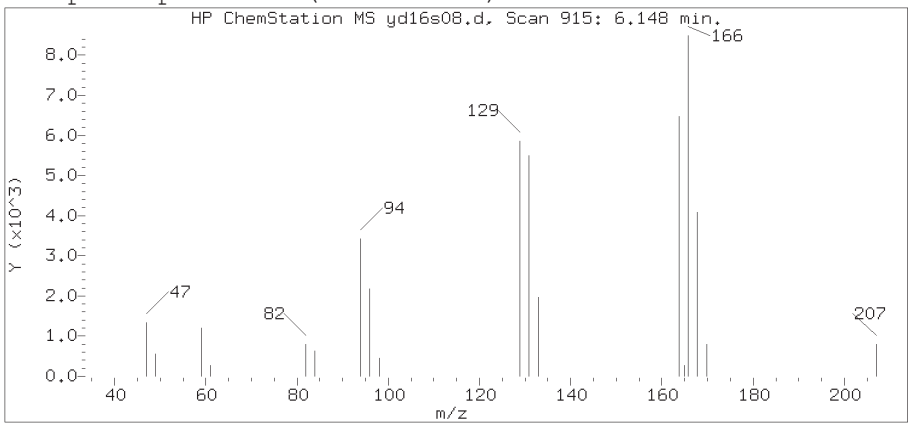
Reference Standard Spectrum for Tetrachloroethene

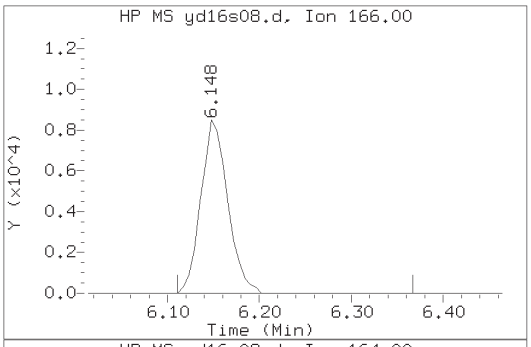


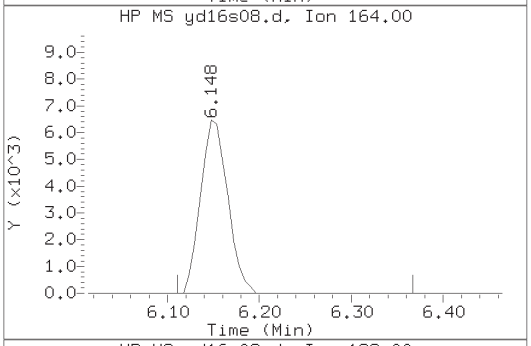
Sample Spectrum (Background Subtracted)

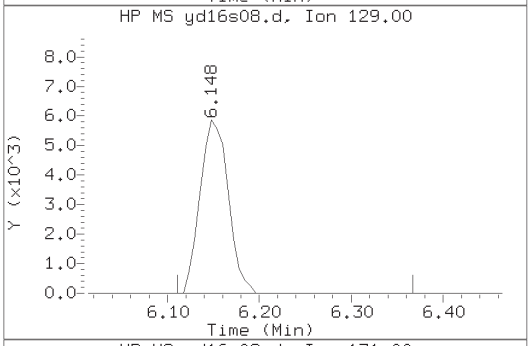


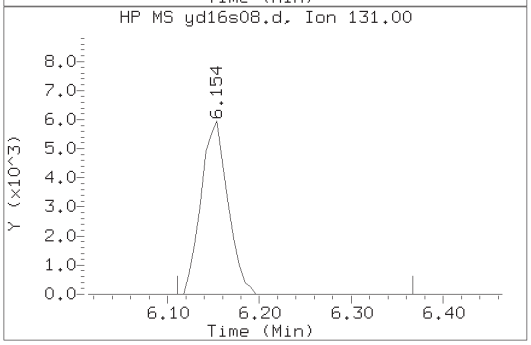
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/15dec16a.b/yd16s08.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:08 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFD Lab Sample ID: 8167918

Compound Number	: 93
Compound Name	: Tetrachloroethene
Scan Number	: 915
Retention Time (minutes)	: 6.148
Relative Retention Time	: 0.00022
Quant Ion	: 166.00
Area (flag)	: 17202
On-Column Amount (ng)	: 2.9960

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01.
Target 3.5 esignature ID: dhh02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOFB

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167919

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s09.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	20	U
76-13-1	Freon 113	10	U
75-15-0	Carbon Disulfide	5	U
79-20-9	Methyl Acetate	5	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
110-82-7	Cyclohexane	5	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
108-87-2	Methylcyclohexane	5	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOFB

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167919

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s09.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U

BKOFB

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

8167919

Data file: /chem2/HP09355.i/15dec16a.b/yd16s09.d
Injection date and time: **16-DEC-2015 06:29**
Data file Sample Info. Line: BKOFB;8167919;1;0;;;;;yd16b01;
Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:9274

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.877(0.000)	213	65	336364 (-6)	250.00	
66) Fluorobenzene	3.885(0.006)	543	96	1084840 (-4)	50.00	
100) Chlorobenzene-d5	7.054(0.012)	1064	117	829946 (-5)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159(0.006)	1410	152	442942 (-8)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.252(0.000)	113	260488	51.178	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.556(0.000)	102	66274	50.218	100%		77 - 113
83) Toluene-d8	(3)	5.497(0.000)	98	1063886	47.588	95%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222(-0.001)	95	401229	47.849	96%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)			Not Detected					0.5	1
4) Chloromethane	(2)			Not Detected					0.5	1
6) Vinyl Chloride	(2)			Not Detected					0.5	1
8) Bromomethane	(2)			Not Detected					0.5	1
9) Chloroethane	(2)			Not Detected					0.5	1
12) Trichlorofluoromethane	(2)			Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)			Not Detected					0.5	1
18) Acetone	(1)			Not Detected					6	20
19) Freon 113	(2)			Not Detected					2	10
23) Carbon Disulfide	(2)			Not Detected					1	5
27) Methyl Acetate	(2)			Not Detected					1	5
28) Methylene Chloride	(2)			Not Detected					2	4
32) trans-1,2-Dichloroethene	(2)			Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)			Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)			Not Detected					0.5	1
44) 2-Butanone	(2)			Not Detected					3	10
51) Chloroform	(2)			Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)			Not Detected					0.5	1
54) Cyclohexane	(2)			Not Detected					2	5
56) Carbon Tetrachloride	(2)			Not Detected					0.5	1
60) Benzene	(2)			Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)			Not Detected					0.5	1
71) Trichloroethene	(2)			Not Detected					0.5	1
72) Methylcyclohexane	(2)			Not Detected					1	5
73) 1,2-Dichloropropane	(2)			Not Detected					0.5	1
78) Bromodichloromethane	(2)			Not Detected					0.5	1
81) cis-1,3-Dichloropropene	(2)			Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)			Not Detected					3	10
88) Toluene	(3)			Not Detected					0.5	1

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16s09.d Injection date and time: **16-DEC-2015 06:29**
Data file Sample Info. Line: BKOFB;8167919;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

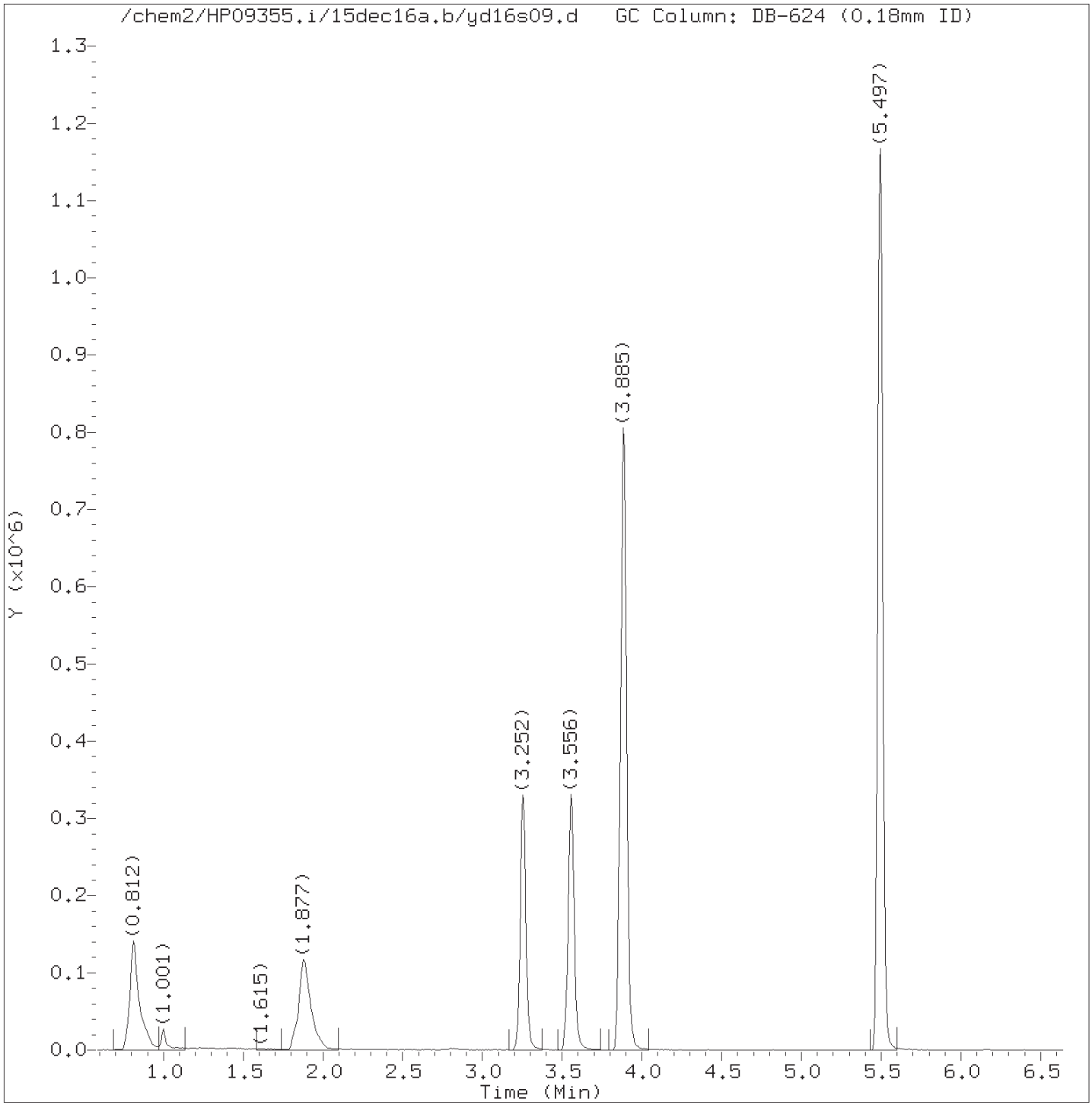
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
89) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
92) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
93) Tetrachloroethene	(3)				Not Detected					0.5	1
96) 2-Hexanone	(3)				Not Detected					3	10
97) Dibromochloromethane	(3)				Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)				Not Detected					0.5	1
102) Chlorobenzene	(3)				Not Detected					0.5	1
104) Ethylbenzene	(3)				Not Detected					0.5	1
106) m+p-Xylene	(3)				Not Detected					0.5	1
107) o-Xylene	(3)				Not Detected					0.5	1
108) Xylene (Total)	(3)				Not Detected					0.5	1
109) Styrene	(3)				Not Detected					1	5
110) Bromoform	(3)				Not Detected					0.5	4
111) Isopropylbenzene	(3)				Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
129) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)				Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)				Not Detected					2	5
146) 1,2,4-Trichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 50

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

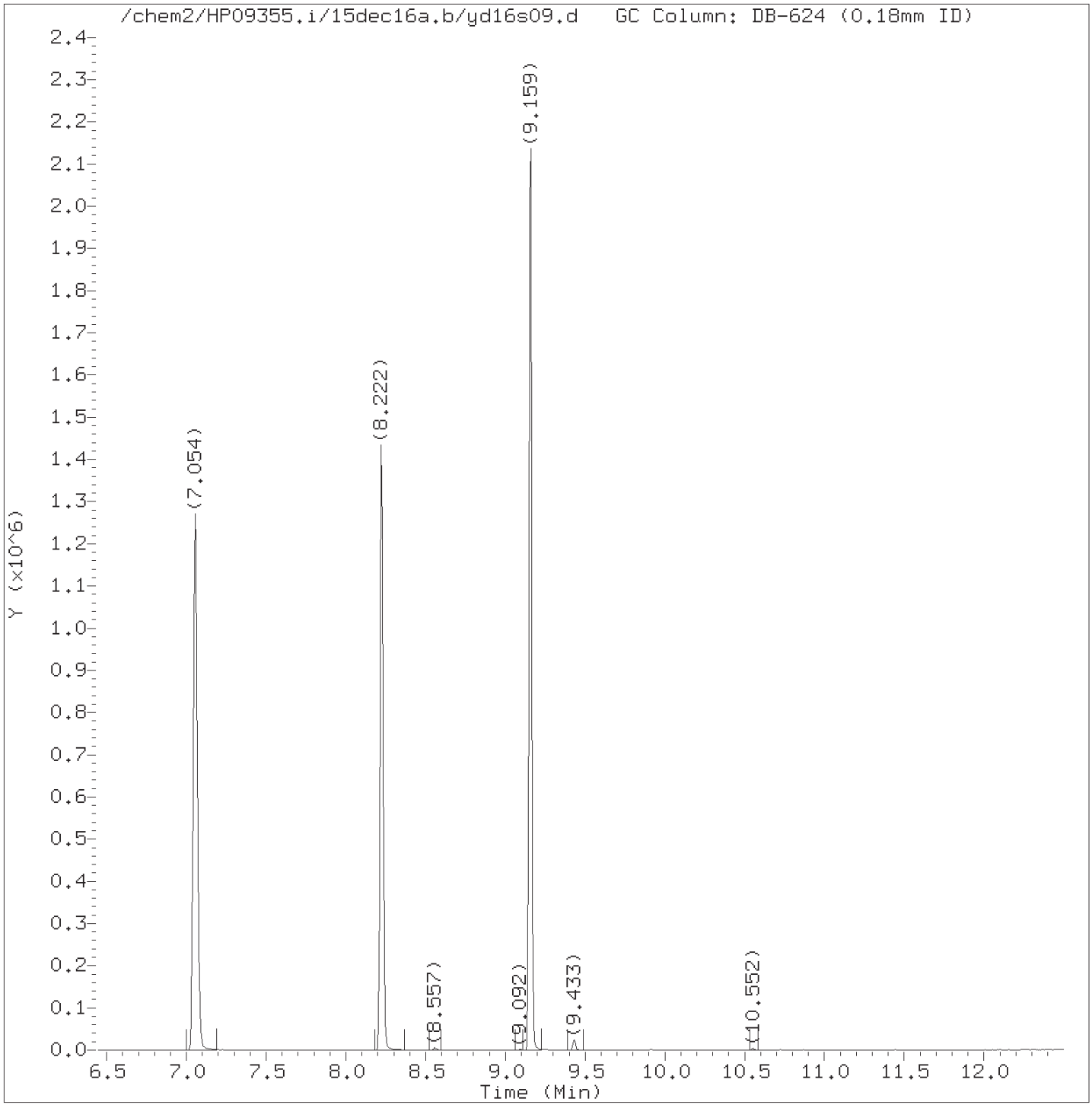
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s09.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:29 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFB Lab Sample ID: 8167919

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s09.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:29 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFB Lab Sample ID: 8167919

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s09.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:29 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:42 dhh02035

Sample Name: BKOFB Lab Sample ID: 8167919

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.877	65	336364	250.000
52)$Dibromofluoromethane	(2)	3.252	113	260488	51.178
57)$1,2-Dichloroethane-d4	(2)	3.556	102	66274	50.218
66)*Fluorobenzene	(2)	3.885	96	1084840	50.000
83)$Toluene-d8	(3)	5.497	98	1063886	47.588
100)*Chlorobenzene-d5	(3)	7.054	117	829946	50.000
114)$4-Bromofluorobenzene	(3)	8.222	95	401229	47.849
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	442942	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOTB

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167920

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s10.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	20	U
76-13-1	Freon 113	10	U
75-15-0	Carbon Disulfide	5	U
79-20-9	Methyl Acetate	5	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
110-82-7	Cyclohexane	5	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
108-87-2	Methylcyclohexane	5	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKOTB

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 8167920

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16s10.d

Level: (low/med) LOW Date Received: 12/09/15

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U

Data file: /chem2/HP09355.i/15dec16a.b/yd16s10.d Injection date and time: **16-DEC-2015 06:50**
Data file Sample Info. Line: BKOTB;8167920;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:43 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:9274

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.877(0.000)	213	65	339263 (-6)	250.00	
66) Fluorobenzene	3.885(0.006)	543	96	1087153 (-3)	50.00	
100) Chlorobenzene-d5	7.054(0.012)	1064	117	828449 (-5)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159(0.006)	1410	152	442169 (-8)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.252(0.000)	113	261043	51.177	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.556(0.000)	102	66238	50.084	100%		77 - 113
83) Toluene-d8	(3)	5.497(0.000)	98	1065537	47.748	95%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222(-0.001)	95	400247	47.818	96%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)			Not Detected					0.5	1
4) Chloromethane	(2)			Not Detected					0.5	1
6) Vinyl Chloride	(2)			Not Detected					0.5	1
8) Bromomethane	(2)			Not Detected					0.5	1
9) Chloroethane	(2)			Not Detected					0.5	1
12) Trichlorofluoromethane	(2)			Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)			Not Detected					0.5	1
18) Acetone	(1)			Not Detected					6	20
19) Freon 113	(2)			Not Detected					2	10
23) Carbon Disulfide	(2)			Not Detected					1	5
27) Methyl Acetate	(2)			Not Detected					1	5
28) Methylene Chloride	(2)			Not Detected					2	4
32) trans-1,2-Dichloroethene	(2)			Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)			Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)			Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)			Not Detected					0.5	1
44) 2-Butanone	(2)			Not Detected					3	10
51) Chloroform	(2)			Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)			Not Detected					0.5	1
54) Cyclohexane	(2)			Not Detected					2	5
56) Carbon Tetrachloride	(2)			Not Detected					0.5	1
60) Benzene	(2)			Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)			Not Detected					0.5	1
71) Trichloroethene	(2)			Not Detected					0.5	1
72) Methylcyclohexane	(2)			Not Detected					1	5
73) 1,2-Dichloropropane	(2)			Not Detected					0.5	1
78) Bromodichloromethane	(2)			Not Detected					0.5	1
81) cis-1,3-Dichloropropene	(2)			Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)			Not Detected					3	10
88) Toluene	(3)			Not Detected					0.5	1

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16s10.d Injection date and time: **16-DEC-2015 06:50**
Data file Sample Info. Line: BKOTB;8167920;1;0;;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 12:43 dhh02035

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **12374**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

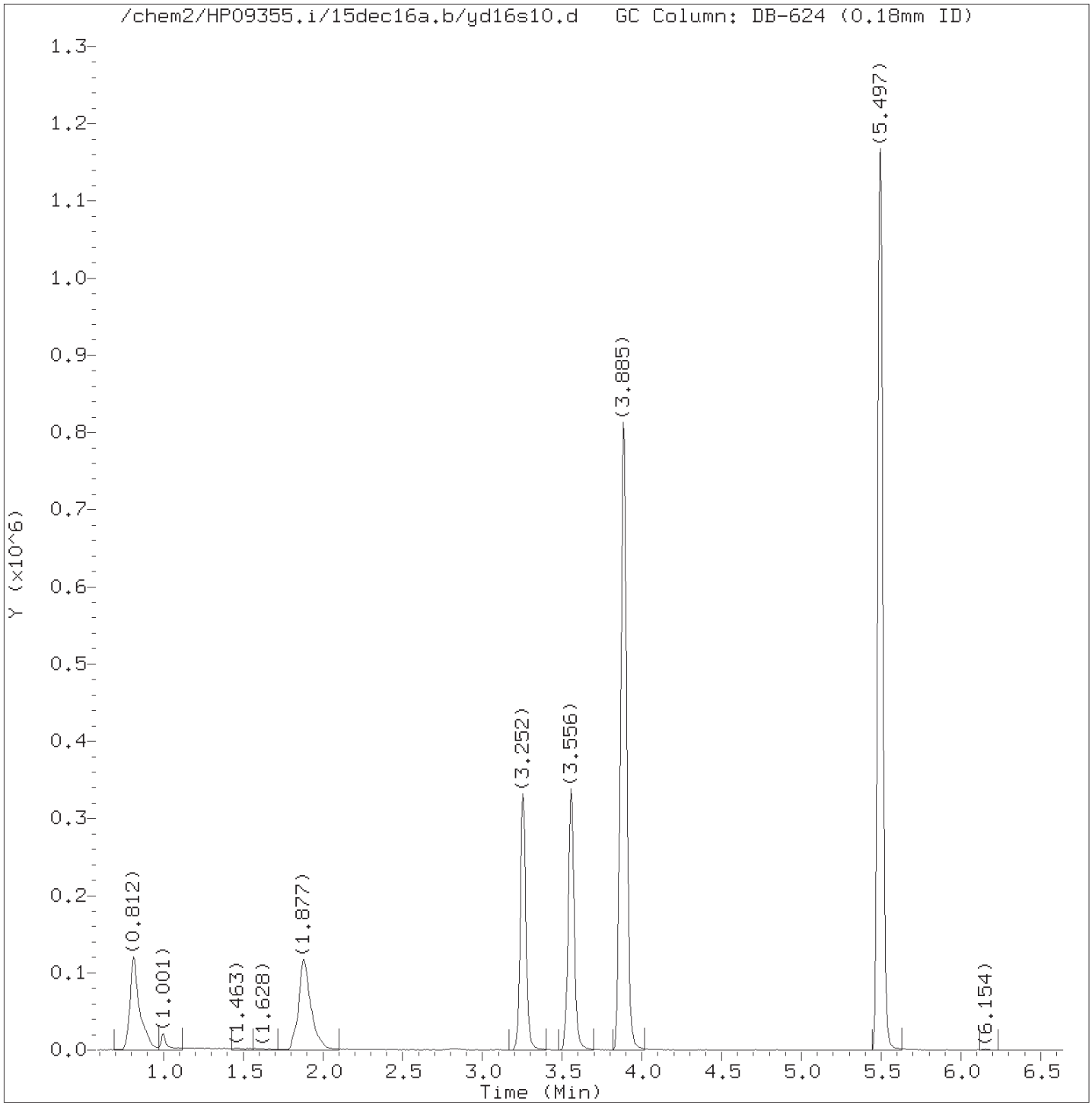
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
89) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
92) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
93) Tetrachloroethene	(3)				Not Detected					0.5	1
96) 2-Hexanone	(3)				Not Detected					3	10
97) Dibromochloromethane	(3)				Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)				Not Detected					0.5	1
102) Chlorobenzene	(3)				Not Detected					0.5	1
104) Ethylbenzene	(3)				Not Detected					0.5	1
106) m+p-Xylene	(3)				Not Detected					0.5	1
107) o-Xylene	(3)				Not Detected					0.5	1
108) Xylene (Total)	(3)				Not Detected					0.5	1
109) Styrene	(3)				Not Detected					1	5
110) Bromoform	(3)				Not Detected					0.5	4
111) Isopropylbenzene	(3)				Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
129) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)				Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)				Not Detected					2	5
146) 1,2,4-Trichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 50

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:01. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:48. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

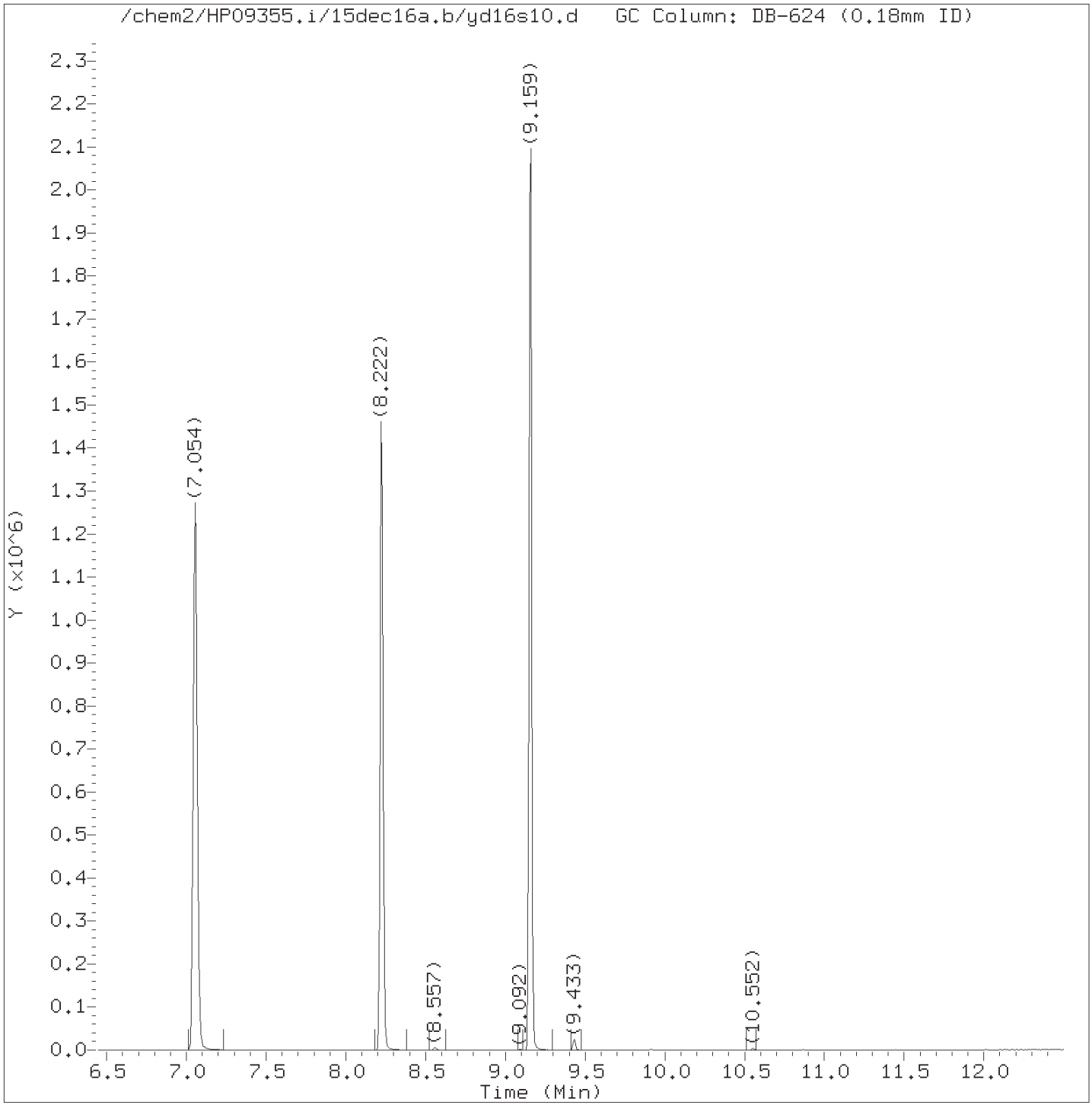
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s10.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:50 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:43 dhh02035

Sample Name: BKOTB Lab Sample ID: 8167920

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s10.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:50 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:43 dhh02035

Sample Name: BKOTB Lab Sample ID: 8167920

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16s10.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 06:50 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 12374
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 12:43 dhh02035

Sample Name: BKOTB Lab Sample ID: 8167920

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.877	65	339263	250.000
52)$Dibromofluoromethane	(2)	3.252	113	261043	51.177
57)$1,2-Dichloroethane-d4	(2)	3.556	102	66238	50.084
66)*Fluorobenzene	(2)	3.885	96	1087153	50.000
83)$Toluene-d8	(3)	5.497	98	1065537	47.748
100)*Chlorobenzene-d5	(3)	7.054	117	828449	50.000
114)$4-Bromofluorobenzene	(3)	8.222	95	400247	47.818
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	442169	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:01.
Target 3.5 esignature user ID: dhh02035

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP09355 **HP #20**

Data Directory Path is - c:\msdchem\1\data\15NOV24A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
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SAS00403	YN24X01.D	CBLK	11/24/2015	00:27		
SAS00403	YN24I01.D	VSTD300	11/24/2015	00:49		
SAS00403	YN24I02.D	VSTD100	11/24/2015	01:10		
SAS00403	YN24I03.D	VSTD050	11/24/2015	01:31		
SAS00403	YN24I04.D	VSTD020	11/24/2015	01:52		
SAS00403	YN24I05.D	VSTD010	11/24/2015	02:13		
SAS00403	YN24I06.D	VSTD004	11/24/2015	02:35		
SAS00403	YN24I07.D	VSTD001	11/24/2015	02:56		
SAS00403	YN24M01.D	MDL0.5	11/24/2015	03:17		
SAS00403	YN24V01.D	YLGICV	11/24/2015	03:38		
SAS00403	YN24V02.D	YLGICV	11/24/2015	03:59		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP09355 **HP #20**

Data Directory Path is - c:\msdchem\1\data\15DEC16A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
SAS00403	YD16T01.D	50 NG BFB	12/16/2015	00:56		
SAS00403	YD16X01.D	CBLK	12/16/2015	01:14	Y153501AA	
SAS00403	YD16C01.D	VSTD050	12/16/2015	01:35	Y153501AA	
SAS00403	YD16B01.D	VBLKY87	12/16/2015	01:56	Y153501AA	
SAS00403	YD16L01.D	LCSY87	12/16/2015	02:17	Y153501AA	
SAS00403	YD16L02.D	LCDY87	12/16/2015	02:39	Y153501AA	
SAS00403	YD16M01.D	MDL0.5	12/16/2015	03:00	Y153501AA	
SAS00403	YD16S01.D	8162730	12/16/2015	03:41	Y153501AA	500
SAS00403	YD16S02.D	8169918	12/16/2015	04:01	Y153501AA	20
SAS00403	YD16S03.D	8169918MS	12/16/2015	04:22	Y153501AA	20
SAS00403	YD16S04.D	8169918MSD	12/16/2015	04:43	Y153501AA	20
SAS00403	YD16S05.D	8169930	12/16/2015	05:04	Y153501AA	
SAS00403	YD16S06.D	8167916	12/16/2015	05:26	Y153501AA	
SAS00403	YD16S07.D	8167917	12/16/2015	05:47	Y153501AA	
SAS00403	YD16S08.D	8167918	12/16/2015	06:08	Y153501AA	
SAS00403	YD16S09.D	8167919	12/16/2015	06:29	Y153501AA	
SAS00403	YD16S10.D	8167920	12/16/2015	06:50	Y153501AA	
SAS00403	YD16S11.D	8172998	12/16/2015	07:11	Y153501AA	
SAS00403	YD16S12.D	8172999	12/16/2015	07:32	Y153501AA	5
SAS00403	YD16S13.D	8172999DL	12/16/2015	07:53	Y153501AA	50
SAS00403	YD16S14.D	8173000	12/16/2015	08:14	Y153501AA	
SAS00403	YD16S15.D	8173000DL	12/16/2015	08:35	Y153501AA	10
SAS00403	YD16S16.D	8173001	12/16/2015	08:56	Y153501AA	
SAS00403	YD16S17.D	8173001DL	12/16/2015	09:21	Y153501AA	10
SAS00403	YD16S18.D	8173002	12/16/2015	09:41	Y153501AA	
SAS00403	YD16S19.D	8173003	12/16/2015	10:02	Y153501AA	2
SAS00403	YD16S20.D	8173003DL	12/16/2015	10:23	Y153501AA	20
SAS00403	YD16S21.D	8165082	12/16/2015	10:44	Y153501AA	
SAS00403	YD16S22.D	8165083	12/16/2015	11:05	Y153501AA	

Data File: /chem2/HP09355.i/15nov24a.b/yn24t01.d

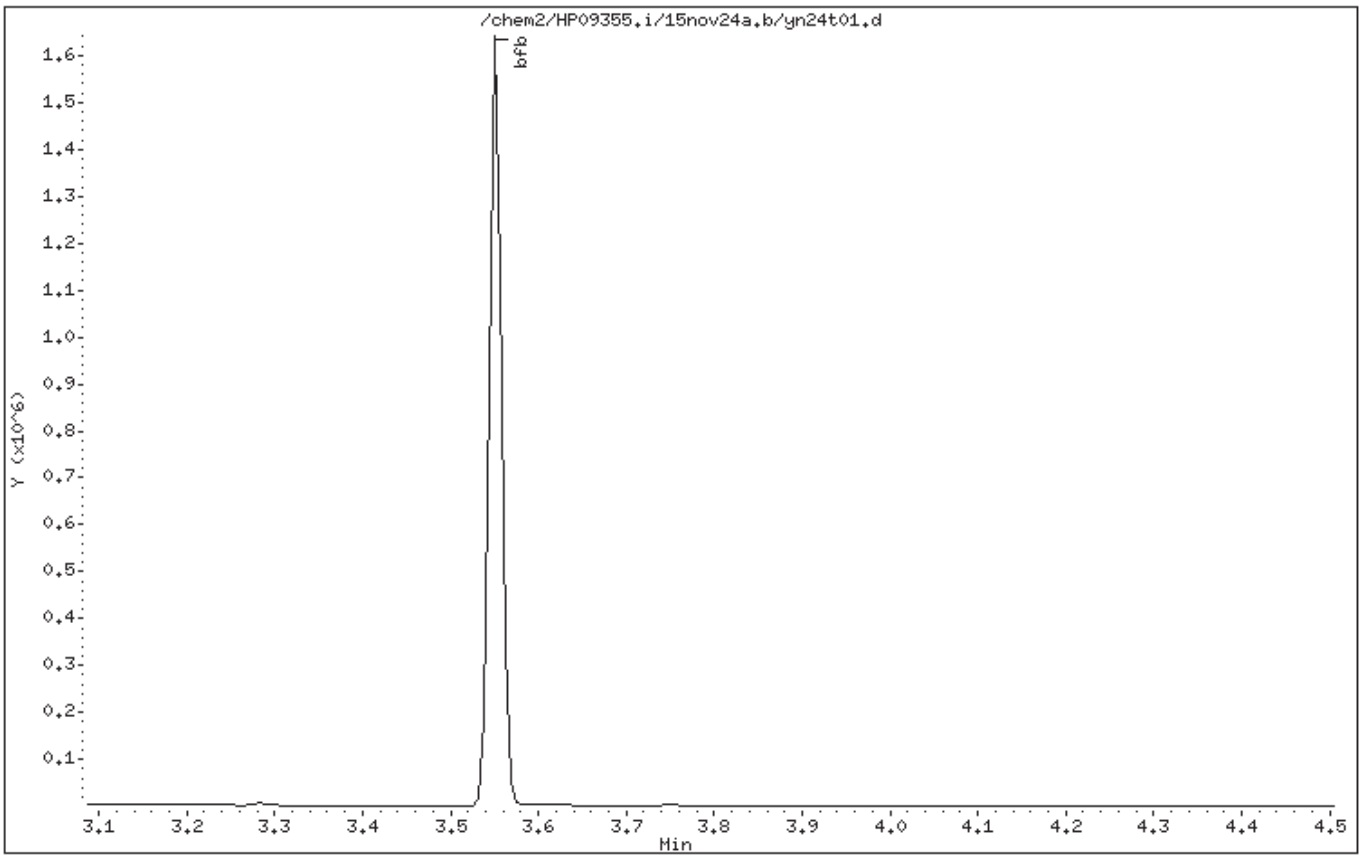
Date : 24-NOV-2015 00:07

Client ID: BFB AUG28-15 Instrument: HP09355.i

Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

Operator: SAS00403

Column phase: DB-624 Column diameter: 0.18



Digitally signed by Stephanie A. Selis on 11/24/2015 at 05:31.
Target 3.5 esignature user ID: sas00403

Data File: /chem2/HP09355.i/15nov24a.b/yn24t01.d

Date : 24-NOV-2015 00:07

Client ID: BFB AUG28-15

Instrument: HP09355.i

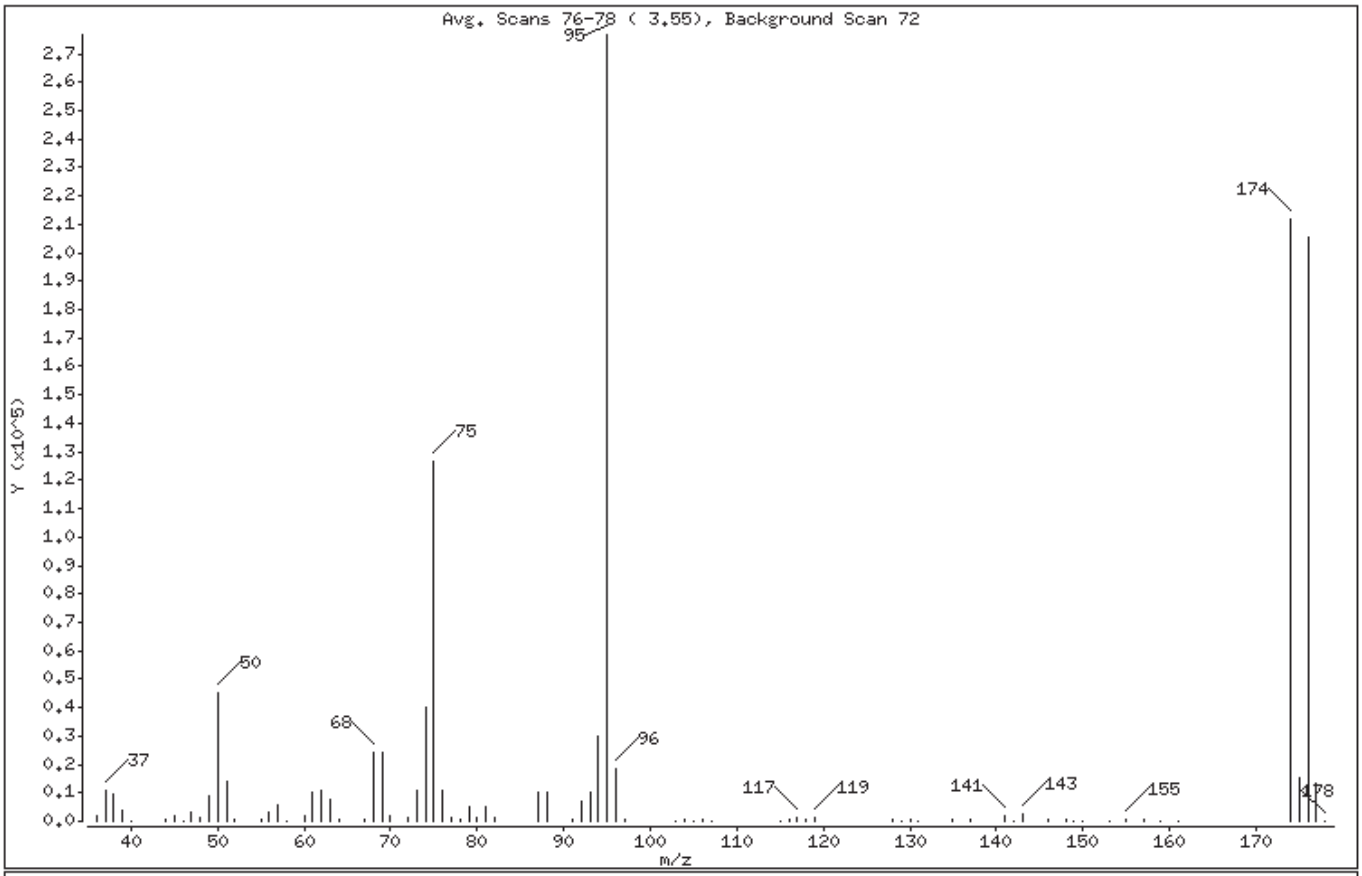
Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

Operator: SAS00403

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.23
75	30.00 - 60.00% of mass 95	45.78
96	5.00 - 9.00% of mass 95	6.60
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.63
175	5.00 - 9.00% of mass 174	5.53 (7.21)
176	95.00 - 101.00% of mass 174	74.17 (96.78)
177	5.00 - 9.00% of mass 176	4.84 (6.52)

Digitally signed by Stephanie A. Selis on 11/24/2015 at 05:31.
Target 3.5 esignature user ID: sas00403

Date : 24-NOV-2015 00:07

Client ID: BFB AUG28-15 Instrument: HP09355.i

Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

Operator: SAS00403

Column phase: DB-624 Column diameter: 0.18

Data File: yn24t01.d
Spectrum: Avg. Scans 76-78 (3.55), Background Scan 72
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1981	63.00	7668	93.00	9939	141.00	2178
37.00	10626	64.00	695	94.00	29768	142.00	204
38.00	9418	67.00	632	95.00	276736	143.00	2247
39.00	3924	68.00	24296	96.00	18264	146.00	401
40.00	104	69.00	24224	97.00	525	148.00	497
44.00	908	70.00	1875	103.00	84	149.00	84
45.00	1991	72.00	1252	104.00	886	150.00	230
46.00	97	73.00	10552	105.00	229	153.00	88
47.00	3216	74.00	40040	106.00	954	155.00	639
48.00	1256	75.00	126712	107.00	210	157.00	453
49.00	9119	76.00	10962	115.00	88	159.00	225
50.00	44912	77.00	1406	116.00	897	161.00	227
51.00	13920	78.00	903	117.00	1401	174.00	212096
52.00	640	79.00	4856	118.00	833	175.00	15293
55.00	588	80.00	1529	119.00	1089	176.00	205248
56.00	3223	81.00	4931	128.00	800	177.00	13386
57.00	5869	82.00	1145	129.00	304	178.00	280
58.00	184	87.00	10281	130.00	828		
60.00	1931	88.00	9996	131.00	256		
61.00	10047	91.00	727	135.00	395		
62.00	10694	92.00	7056	137.00	326		

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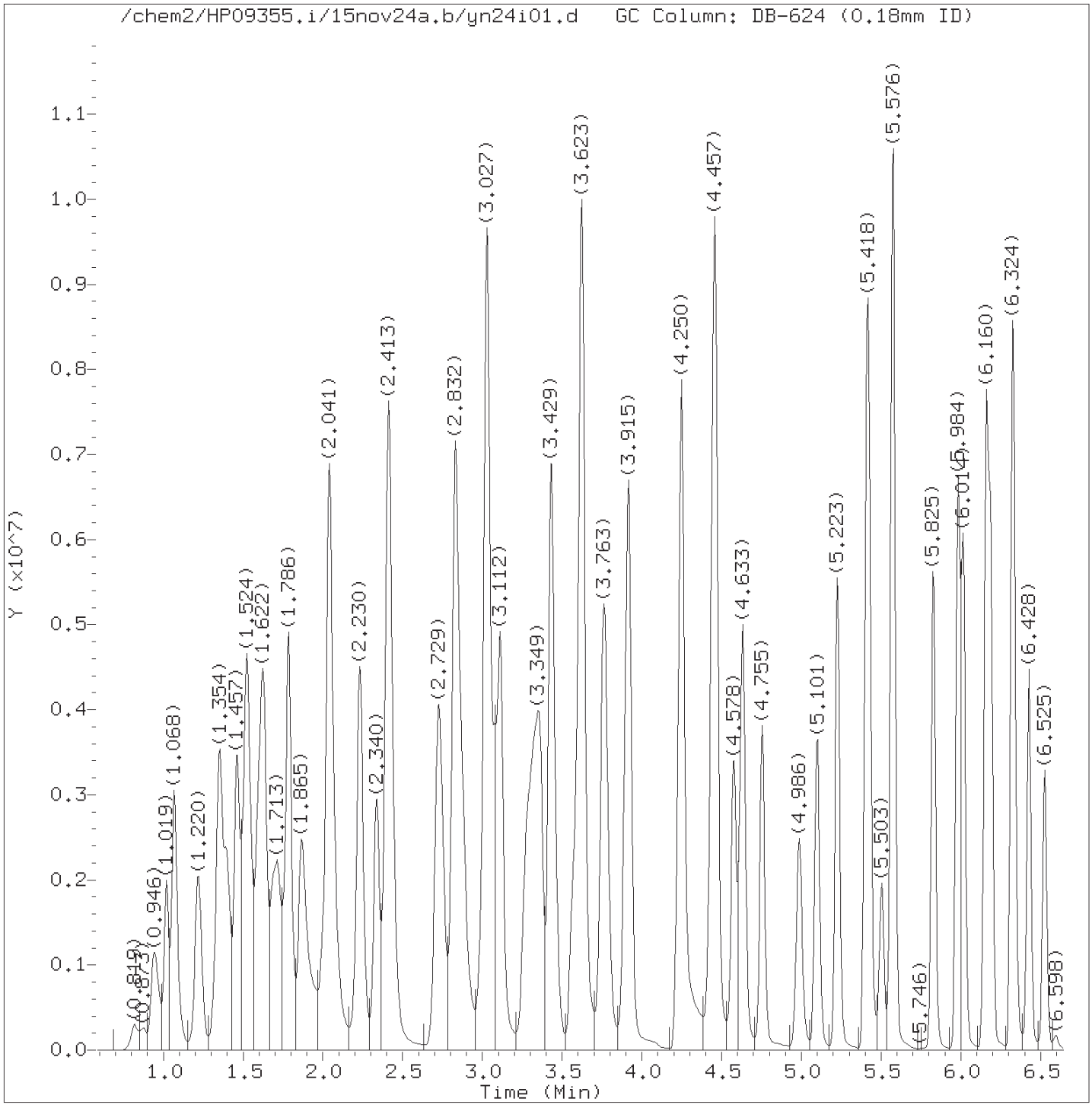
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

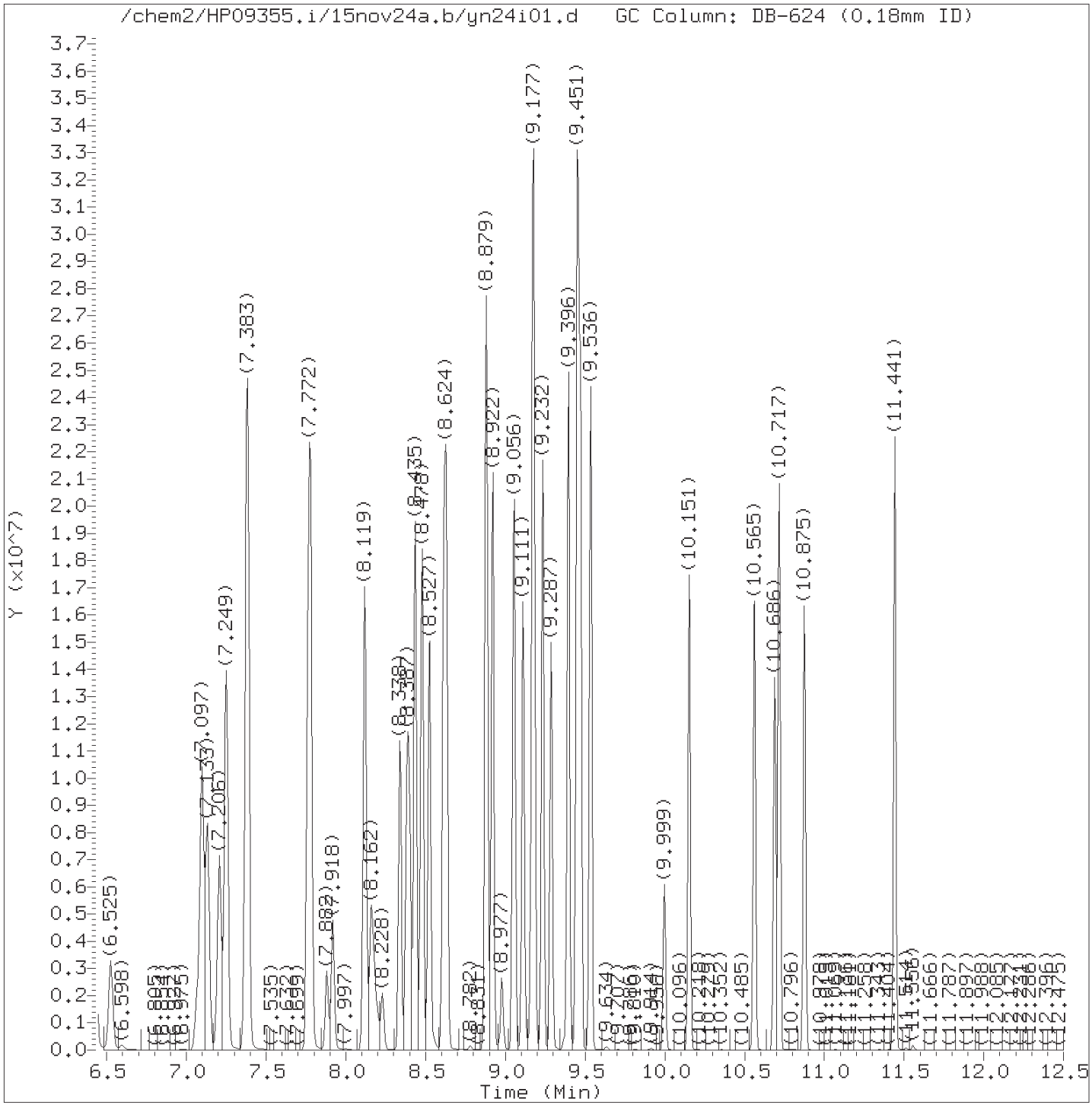
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.940	85	2637163	325.914
4) Chloromethane	(2)	1.019	50	2520806M	273.820
5) 1,3-Butadiene	(2)	1.062	39	1013999	299.956
6) Vinyl Chloride	(2)	1.080	62	2194001	268.898
8) Bromomethane	(2)	1.214	94	1470729	262.249
9) Chloroethane	(2)	1.232	64	1151336	253.359
10) Dichlorofluoromethane	(2)	1.342	67	2795851	272.240
11) n-Pentane	(2)	1.360	43	2203878M	274.843
12) Trichlorofluoromethane	(2)	1.397	101	2705378M	296.559
14) Ethyl ether	(2)	1.457	59	1542828	264.502
15) Freon 123a	(2)	1.494	67	1791975	262.925
16) Acrolein	(1)	1.524	56	6398088	2802.104
18) Acetone	(1)	1.603	58	659719	568.533
17) 1,1-Dichloroethene	(2)	1.609	96	1525022	284.341
17) 1,1-Dichloroethene	(2)	1.609	63	734759	279.033
19) Freon 113	(2)	1.634	101	1590706	307.245
21) 2-Propanol	(1)	1.676	45	741530M	1076.680
22) Methyl Iodide	(2)	1.695	142	2956126	289.555
23) Carbon Disulfide	(2)	1.762	76	5987880	291.173
25) Allyl Chloride	(2)	1.786	41	2191121	279.005
27) Methyl Acetate	(2)	1.792	43	2443538	270.245
28) Methylene Chloride	(2)	1.865	84	1770115	280.069
29)*t-Butyl alcohol-d10	(1)	1.877	65	376947	250.000
30) t-Butyl alcohol	(1)	1.926	59	2632605M	1573.850
31) Acrylonitrile	(2)	2.005	53	1363441	259.150
32) trans-1,2-Dichloroethene	(2)	2.035	96	1840443	298.601
33) Methyl Tertiary Butyl Ether	(2)	2.048	73	6258321	291.229
34) n-Hexane	(2)	2.230	57	3361285	327.517
36) 1,1-Dichloroethane	(2)	2.333	63	3772643	300.897
38) di-Isopropyl ether	(2)	2.413	45	6823841	283.869
39) 2-Chloro-1,3-butadiene	(2)	2.413	53	3013870	298.242
40) Ethyl t-butyl ether	(2)	2.729	59	6780093	291.669
42) cis-1,2-Dichloroethene	(2)	2.826	96	2303278	304.404
44) 2-Butanone	(2)	2.838	43	4575204	500.884
45) 2,2-Dichloropropane	(2)	2.851	77	2893963	323.553
43) 1,2-Dichloroethene (Total)	(2)		96	4143721	603.005
47) Propionitrile	(1)	2.881	54	3174346	1662.097
48) Methacrylonitrile	(2)	3.027	67	3962152	717.815

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.033	128	1184987	304.417
50) Tetrahydrofuran	(1)	3.082	71	1318298M	666.914
51) Chloroform	(2)	3.112	83	3541692	306.971
52)$Dibromofluoromethane	(2)	3.258	113	354796	50.813
52)$Dibromofluoromethane	(2)	3.258	111	360652	50.436
53) 1,1,1-Trichloroethane	(2)	3.289	97	3295719	301.571
54) Cyclohexane	(2)	3.356	56	3783169	321.731
54) Cyclohexane	(2)	3.356	84	3693975	328.736
54) Cyclohexane	(2)	3.356	69	1174811	327.204
55) 1,1-Dichloropropene	(2)	3.429	75	3015061	310.315
56) Carbon Tetrachloride	(2)	3.441	117	2797635	347.164
57)$1,2-Dichloroethane-d4	(2)	3.562	102	89604	49.493
57)$1,2-Dichloroethane-d4	(2)	3.562	65	417642	49.480
57)$1,2-Dichloroethane-d4	(2)	3.562	104	57936	50.308
58) Isobutyl Alcohol	(1)	3.587	41	2041464	3696.412
60) Benzene	(2)	3.617	78	8560843	296.563
61) 1,2-Dichloroethane	(2)	3.635	62	2940408	287.718
61) 1,2-Dichloroethane	(2)	3.635	98	287727	316.322
65) t-Amyl methyl ether	(2)	3.763	73	6706842	304.709
66)*Fluorobenzene	(2)	3.891	96	1488206	50.000
67) n-Heptane	(2)	3.915	43	4179488	348.166
69) n-Butanol	(1)	4.238	56	3726473	7685.386
71) Trichloroethene	(2)	4.250	95	2273998	309.514
72) Methylcyclohexane	(2)	4.451	83	4007341	343.064
72) Methylcyclohexane	(2)	4.451	98	1792428	341.736
73) 1,2-Dichloropropane	(2)	4.463	63	2285615	304.693
74) Dibromomethane	(2)	4.572	93	1511622	312.598
75) 1,4-Dioxane	(1)	4.603	88	592620M	4625.004
76) Methyl Methacrylate	(2)	4.633	69	2610273	305.680
78) Bromodichloromethane	(2)	4.755	83	2849851	347.645
79) 2-Nitropropane	(2)	4.986	41	2200038	570.569
80) 2-Chloroethyl Vinyl Ether	(2)	5.101	63	2067368M	303.353
81) cis-1,3-Dichloropropene	(2)	5.223	75	3770080	332.900
82) 4-Methyl-2-pentanone	(2)	5.418	43	8537858	494.375
83)$Toluene-d8	(3)	5.503	98	1508540	50.005
83)$Toluene-d8	(3)	5.503	100	1039358	52.159
88) Toluene	(3)	5.576	92	5529169	297.836
89) trans-1,3-Dichloropropene	(3)	5.825	75	3585493	343.570

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on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	7355573	676.469
91) Ethyl Methacrylate	(3)	5.984	69	4046041	306.331
92) 1,1,2-Trichloroethane	(3)	6.014	97	2234179	301.207
93) Tetrachloroethene	(3)	6.160	166	2435788	312.982
94) 1,3-Dichloropropane	(3)	6.190	76	3815684	300.242
96) 2-Hexanone	(3)	6.324	43	7225865	486.335
97) Dibromochloromethane	(3)	6.428	129	2539438	299.905
99) 1,2-Dibromoethane	(3)	6.525	107	2521909	312.420
100)*Chlorobenzene-d5	(3)	7.066	117	1119945	50.000
102) Chlorobenzene	(3)	7.097	112	6335609	299.519
101) 1-Chlorohexane	(3)	7.133	91	3097526	311.436
103) 1,1,1,2-Tetrachloroethane	(3)	7.206	131	2228527	337.489
104) Ethylbenzene	(3)	7.249	91	10446241	299.086
106) m+p-Xylene	(3)	7.383	106	8065435	585.487
107) o-Xylene	(3)	7.766	106	4071327	296.751
109) Styrene	(3)	7.778	104	6795718	293.196
108) Xylene (Total)	(3)		106	12136762	882.238
110) Bromoform	(3)	7.918	173	1958300	360.607
111) Isopropylbenzene	(3)	8.119	105	10087183	287.020
112) Cyclohexanone	(1)	8.162	55	3217605	4547.822
114)$4-Bromofluorobenzene	(3)	8.228	95	567417	50.146
114)$4-Bromofluorobenzene	(3)	8.228	174	454035	49.929
115) Bromobenzene	(4)	8.338	156	2741311	302.161
116) 1,1,2,2-Tetrachloroethane	(4)	8.381	83	3782788	300.380
117) 1,2,3-Trichloropropane	(4)	8.399	110	1192089	296.392
118) trans-1,4-Dichloro-2-butene	(4)	8.435	53	3080931	739.951
119) n-Propylbenzene	(4)	8.478	91	11465480	277.936
120) 2-Chlorotoluene	(4)	8.527	126	2638280	302.086
121) 4-Chlorotoluene	(4)	8.612	126	2719610	296.325
122) 1,3,5-Trimethylbenzene	(4)	8.630	105	8774645	288.483
125) Pentachloroethane	(4)	8.879	167	1656451	334.308
124) tert-Butylbenzene	(4)	8.885	134	2050859	301.074
126) 1,2,4-Trimethylbenzene	(4)	8.922	105	9005134	289.454
127) sec-Butylbenzene	(4)	9.056	105	10610730	278.779
129) 1,3-Dichlorobenzene	(4)	9.111	146	5181635	297.003
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	585595	50.000
130) p-Isopropyltoluene	(4)	9.171	119	9381020M	276.124
133) 1,4-Dichlorobenzene	(4)	9.184	146	5022820	282.166

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Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

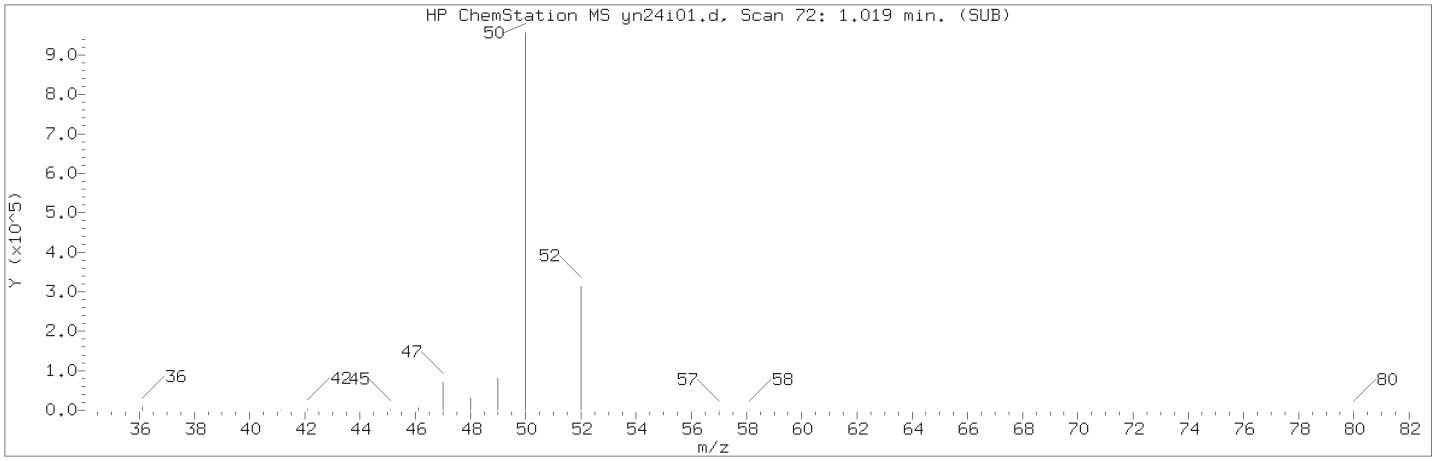
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

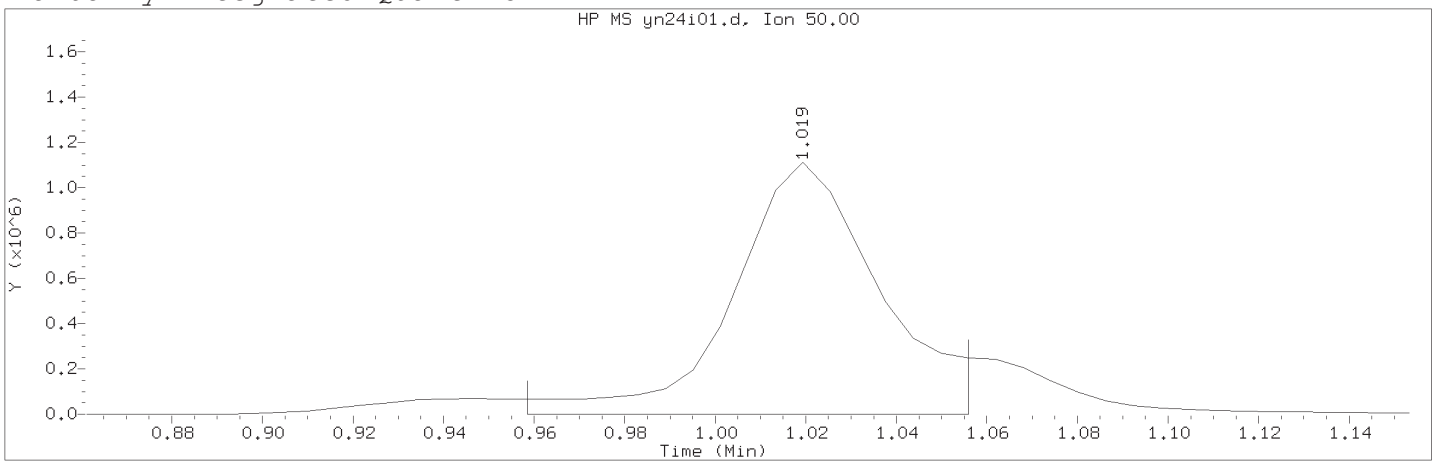
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.232	105	9029447	281.741
135) Benzyl Chloride	(4)	9.287	91	7542262	331.585
136) 1,3-Diethylbenzene	(4)	9.396	119	6046170	295.107
138) 1,2-Dichlorobenzene	(4)	9.451	146	4790392	282.191
137) 1,4-Diethylbenzene	(4)	9.457	119	6151159	288.081
139) n-Butylbenzene	(4)	9.469	92	4970152	291.001
140) 1,2-Diethylbenzene	(4)	9.536	119	5029587	295.409
141) Diethylbenzene (total)	(4)		100	17226916	878.598
142) 1,2-Dibromo-3-chloropropane	(4)	9.999	75	1075047	324.398
144) 1,3,5-Trichlorobenzene	(4)	10.151	180	3964806	297.362
146) 1,2,4-Trichlorobenzene	(4)	10.565	180	3795596	295.624
147) Hexachlorobutadiene	(4)	10.692	225	1824875	309.628
148) Naphthalene	(4)	10.717	128	10721670	240.162
149) 1,2,3-Trichlorobenzene	(4)	10.875	180	3548147	290.146
150) 2-Methylnaphthalene	(4)	11.441	142	7139469	264.353

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

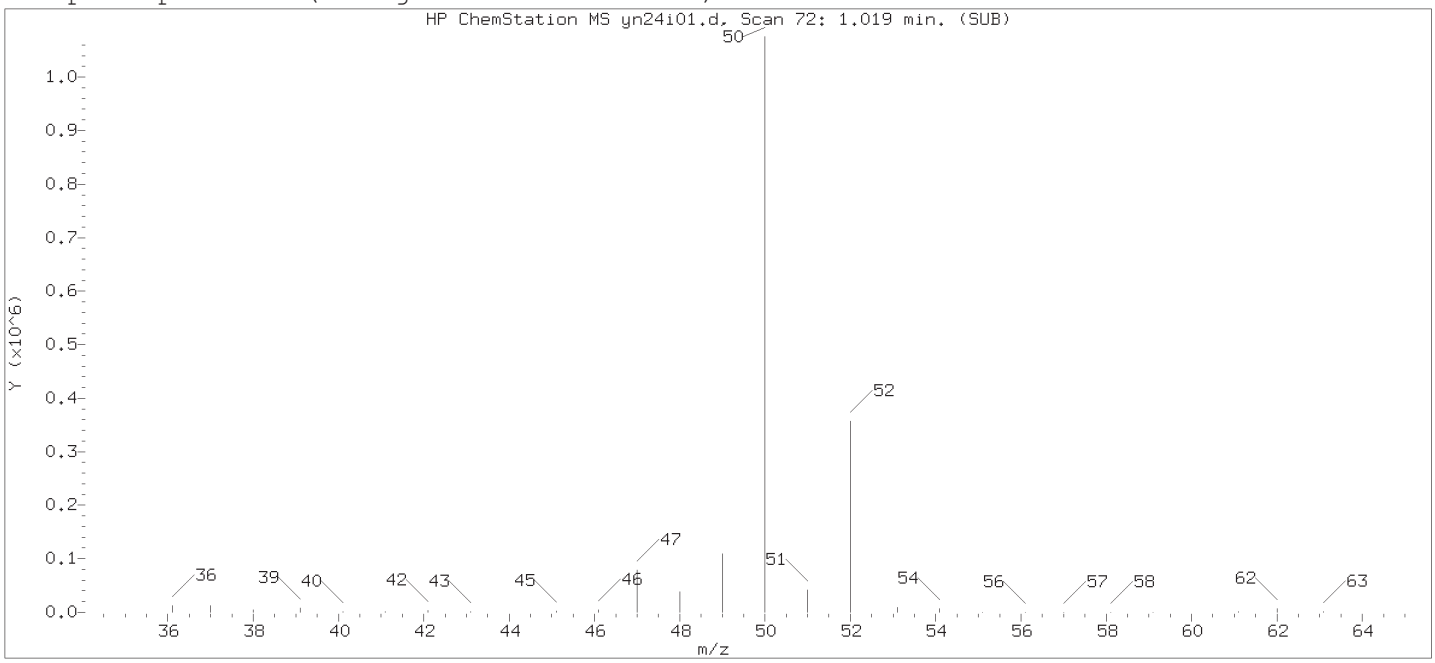
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 72
Retention Time (minutes): 1.019
Quant Ion : 50.00
Area (flag) : 2520806M
On-Column Amount (ng) : 273.8195
Integration start scan : 61 Integration stop scan: 77
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

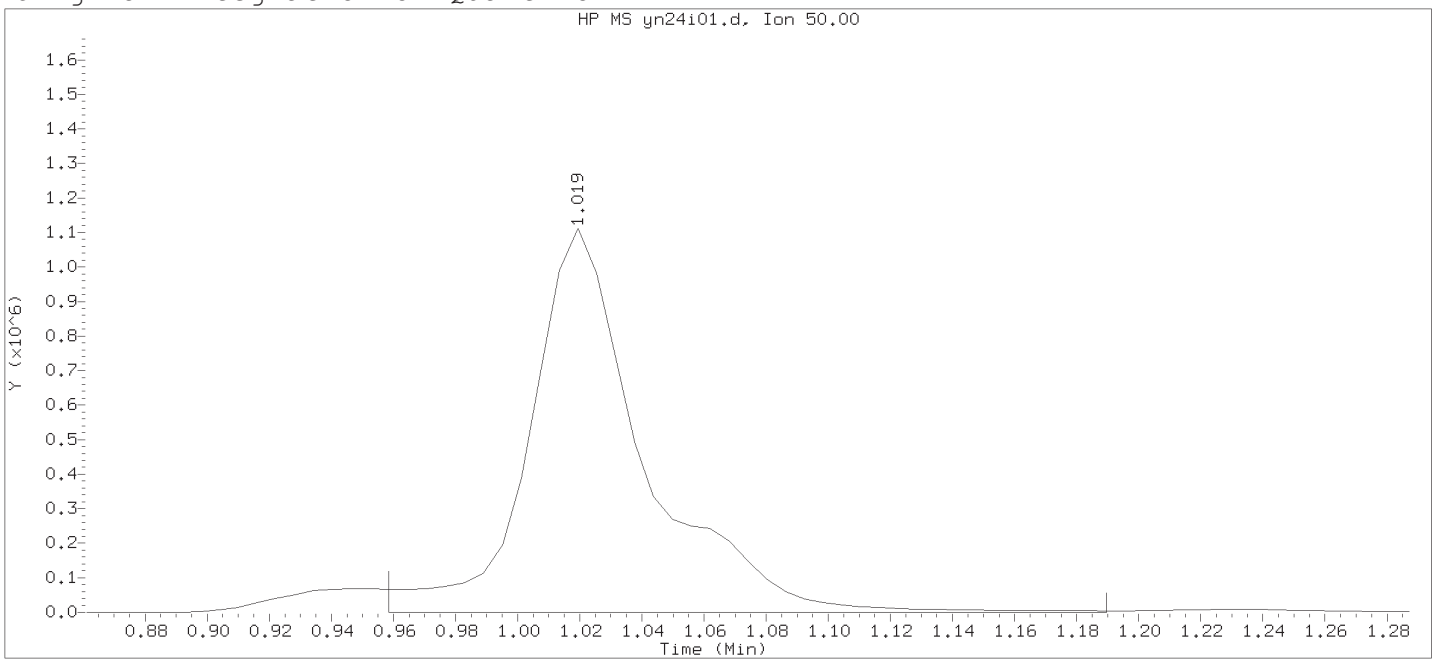
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

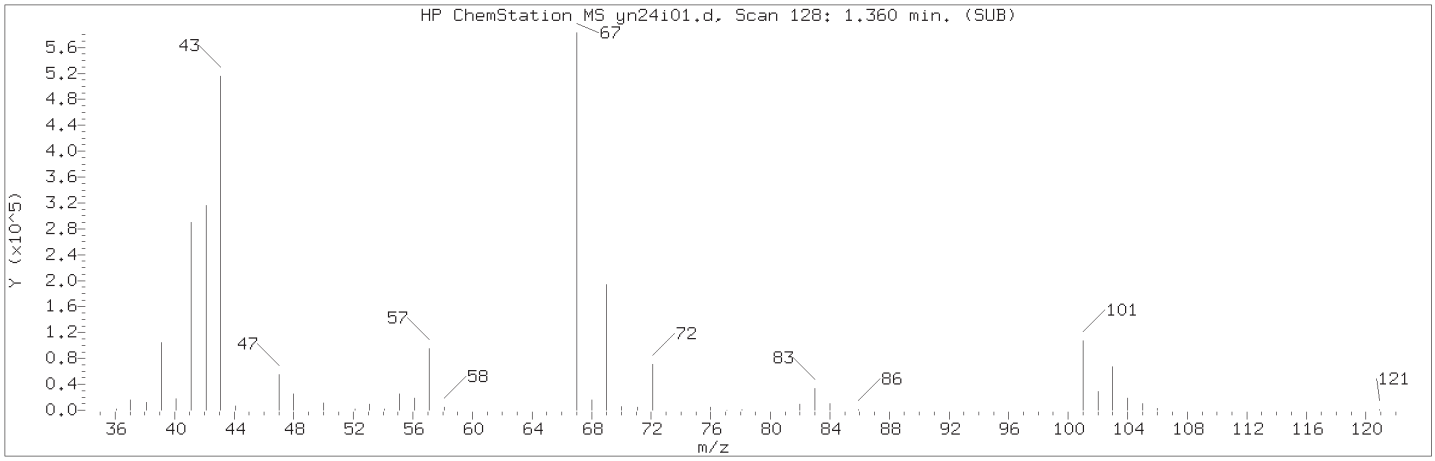
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

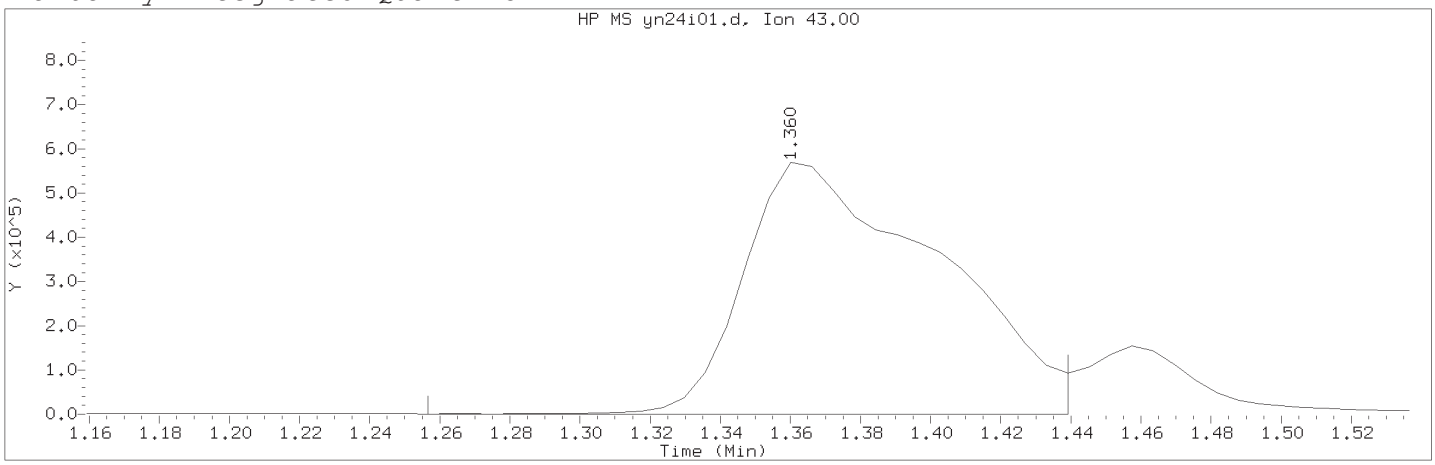
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 72
Retention Time (minutes): 1.019
Quant Ion : 50.00
Area : 2852340
On-column Amount (ng) : 330.6141
Integration start scan : 61 Integration stop scan: 99
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

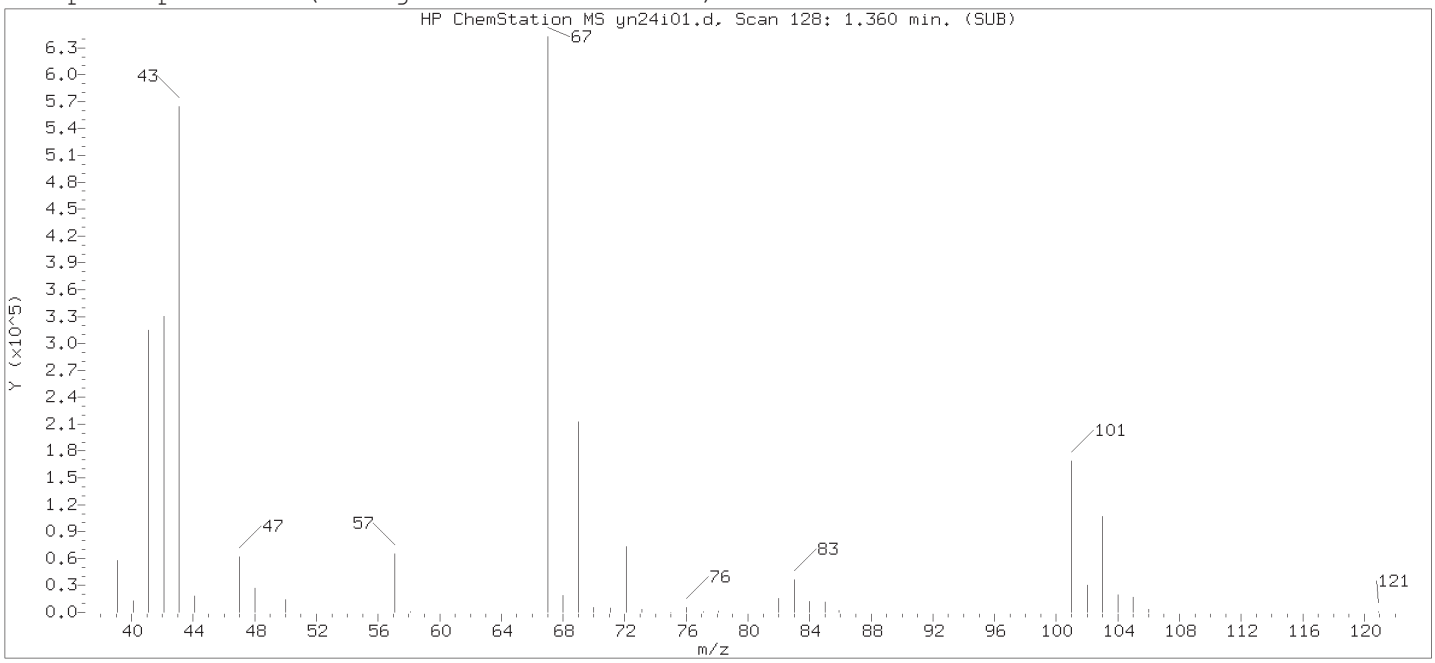
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 128
Retention Time (minutes): 1.360
Quant Ion : 43.00
Area (flag) : 2203878M
On-Column Amount (ng) : 274.8425
Integration start scan : 110 Integration stop scan: 140
Y at integration start : 665 Y at integration end: 665

Reason for manual integration: improper integration

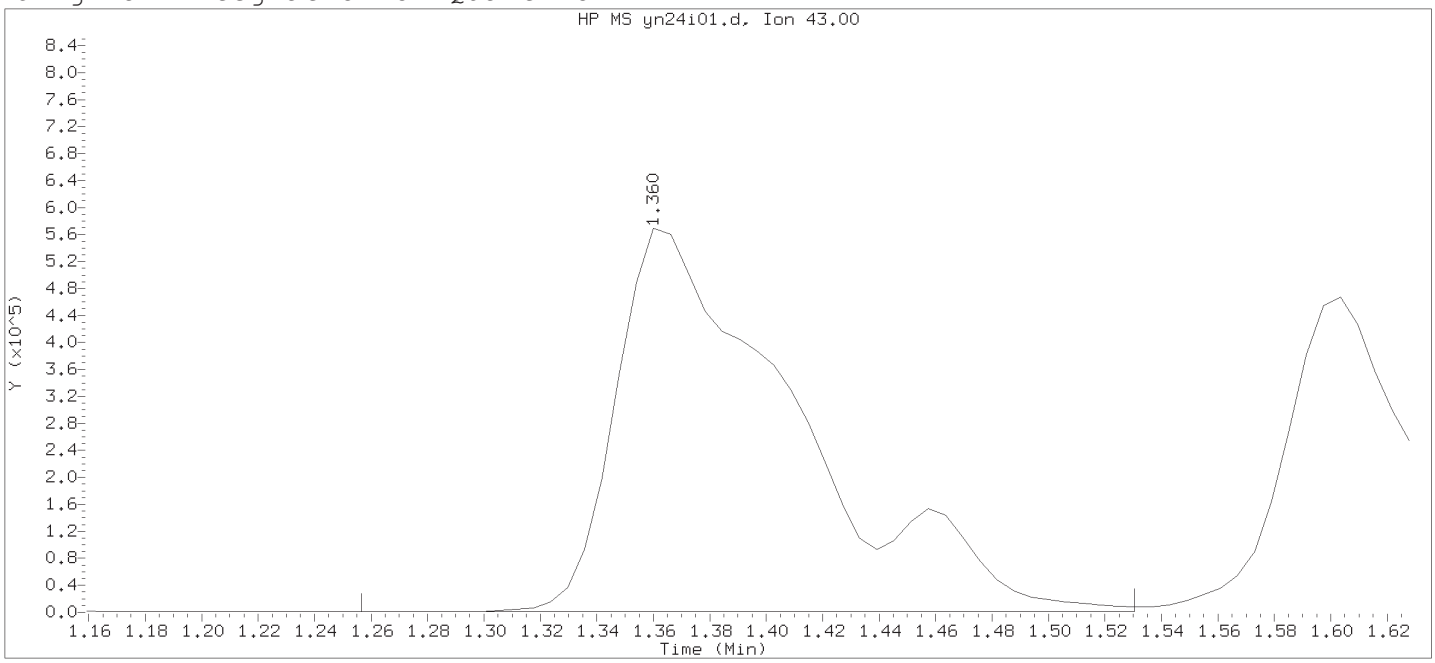
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

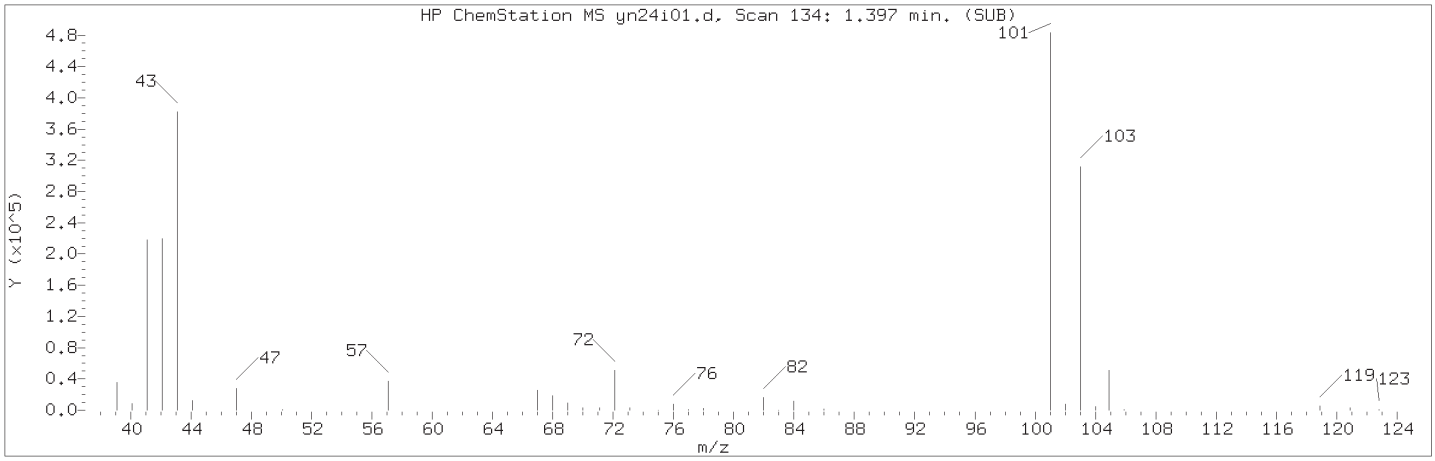
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

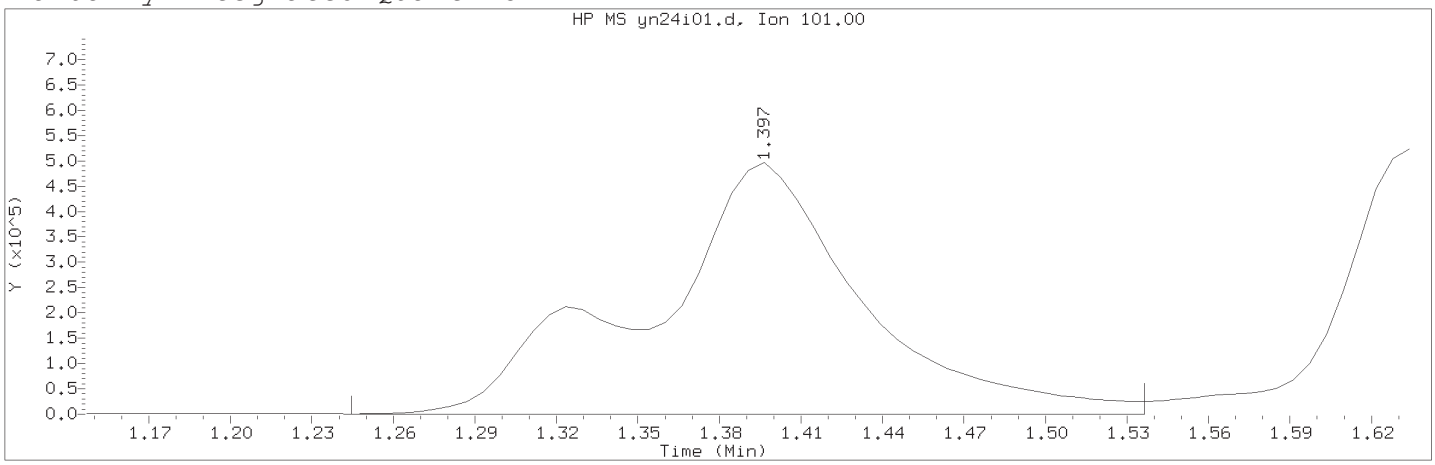
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 128
Retention Time (minutes): 1.360
Quant Ion : 43.00
Area : 2528876
On-column Amount (ng) : 292.3990
Integration start scan : 110 Integration stop scan: 155
Y at integration start : 665 Y at integration end: 665

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

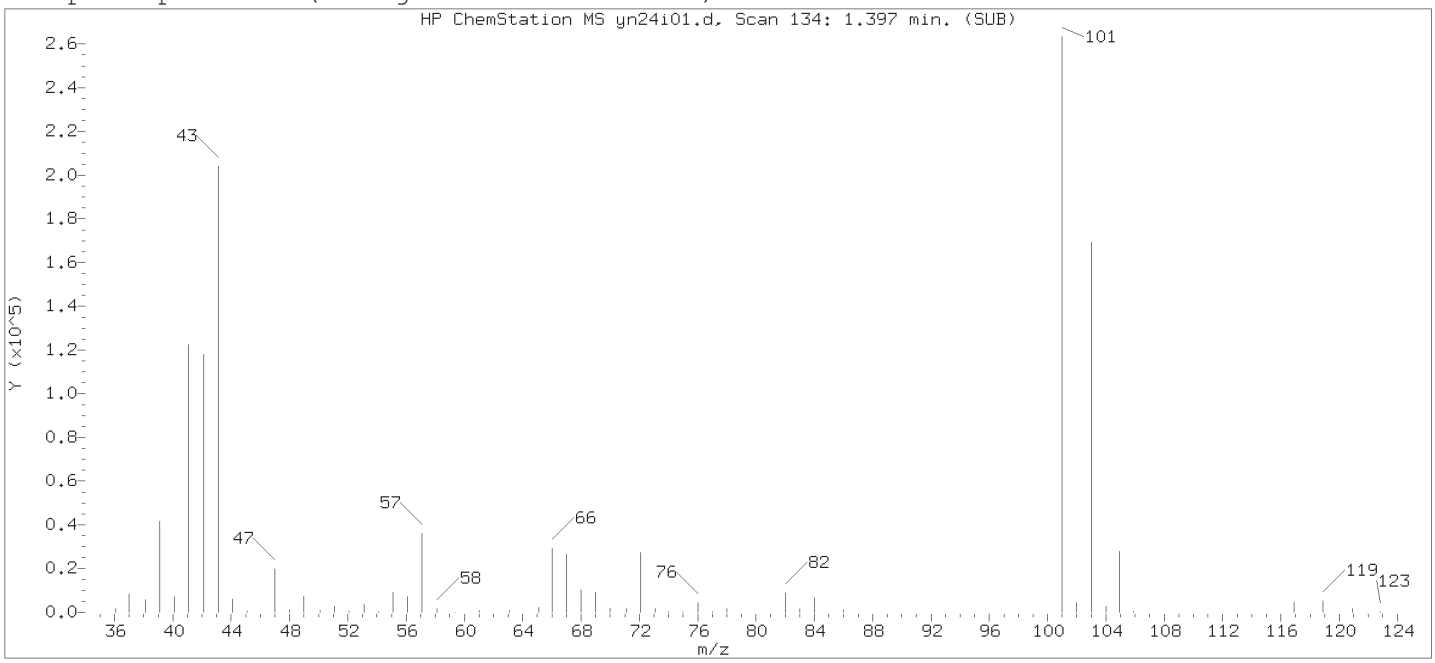
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 134
Retention Time (minutes): 1.397
Quant Ion : 101.00
Area (flag) : 2705378M
On-Column Amount (ng) : 296.5588
Integration start scan : 108 Integration stop scan: 156
Y at integration start : 585 Y at integration end: 585

Reason for manual integration: improper integration

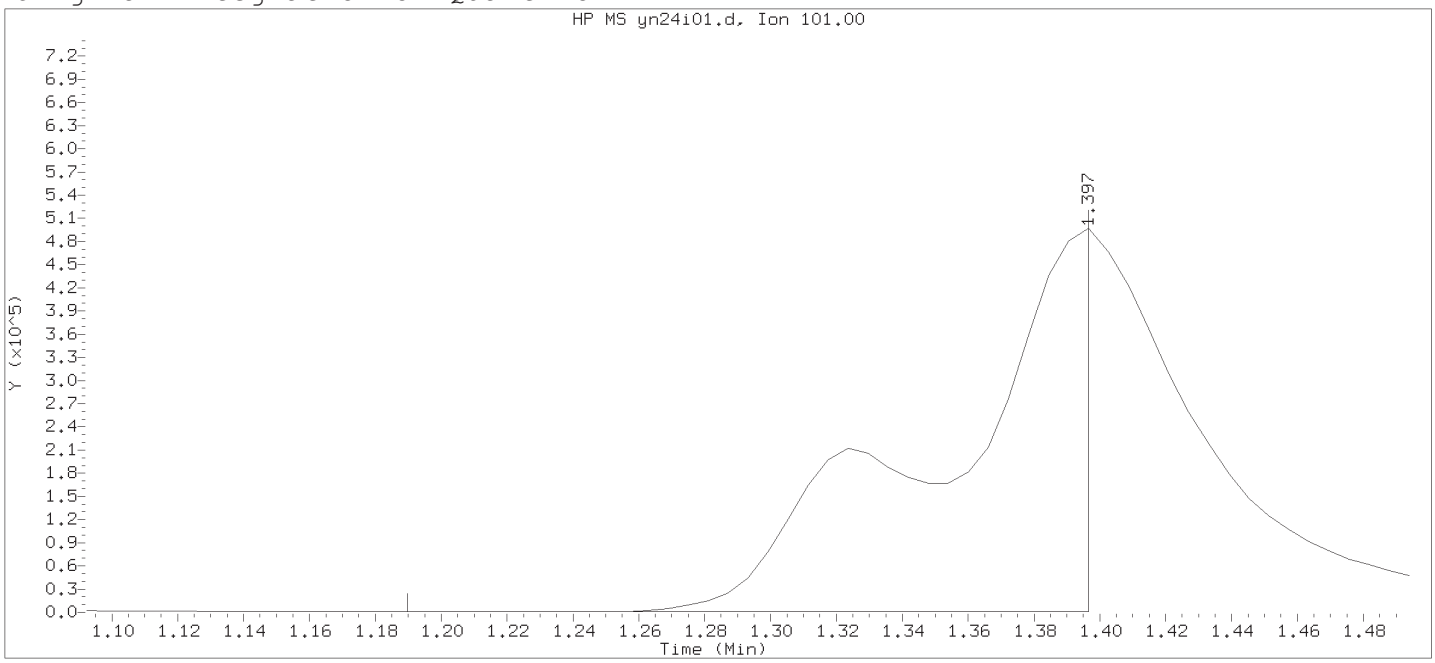
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

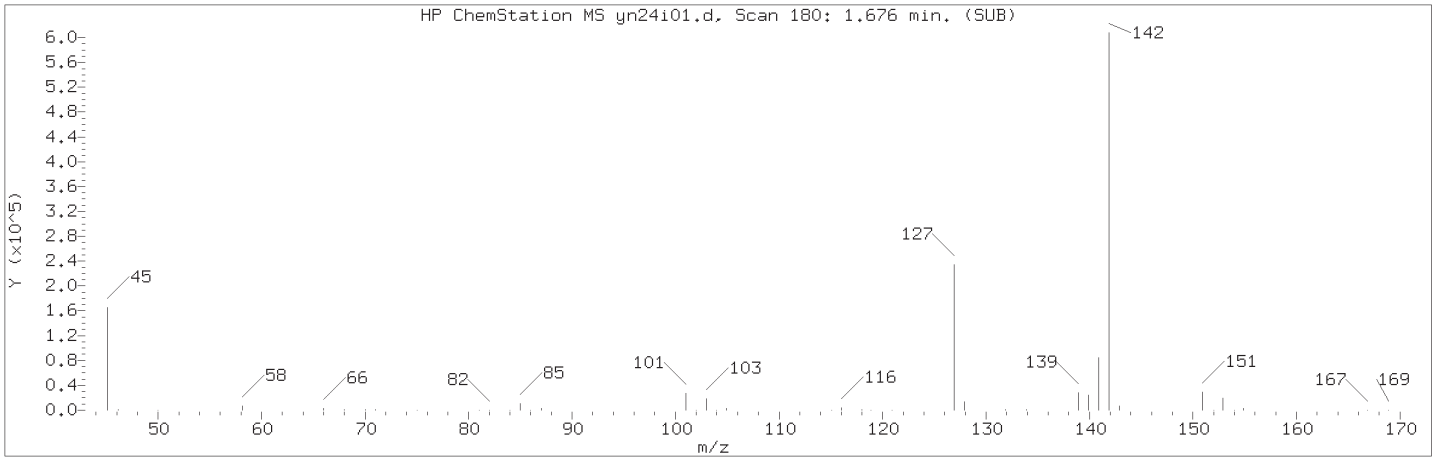
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

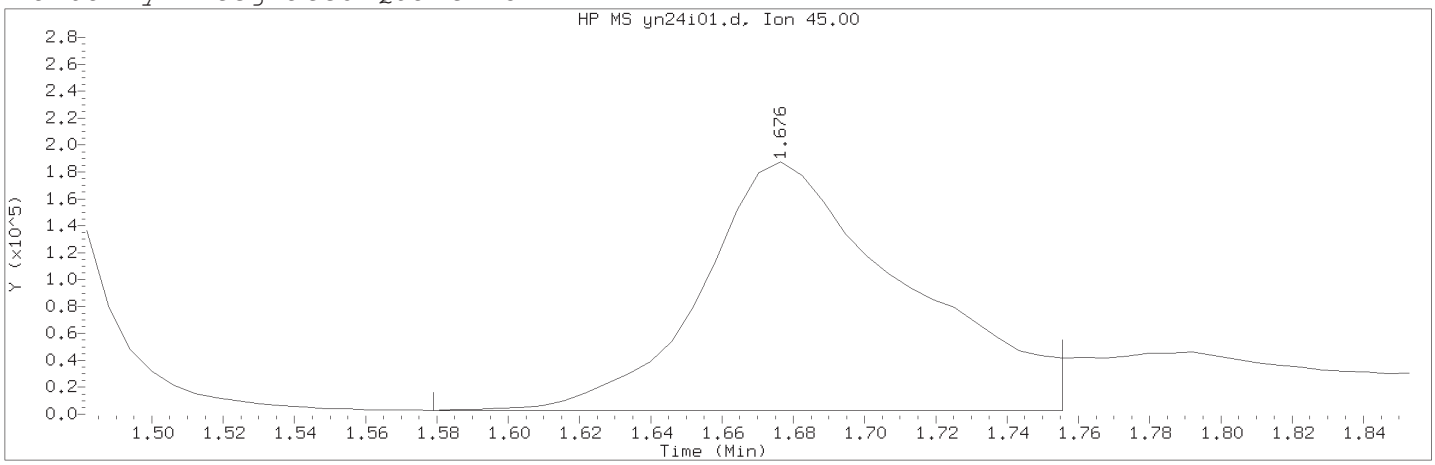
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 134
Retention Time (minutes): 1.397
Quant Ion : 101.00
Area : 1444342
On-column Amount (ng) : 172.3318
Integration start scan : 99 Integration stop scan: 133
Y at integration start : 609 Y at integration end: 609

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

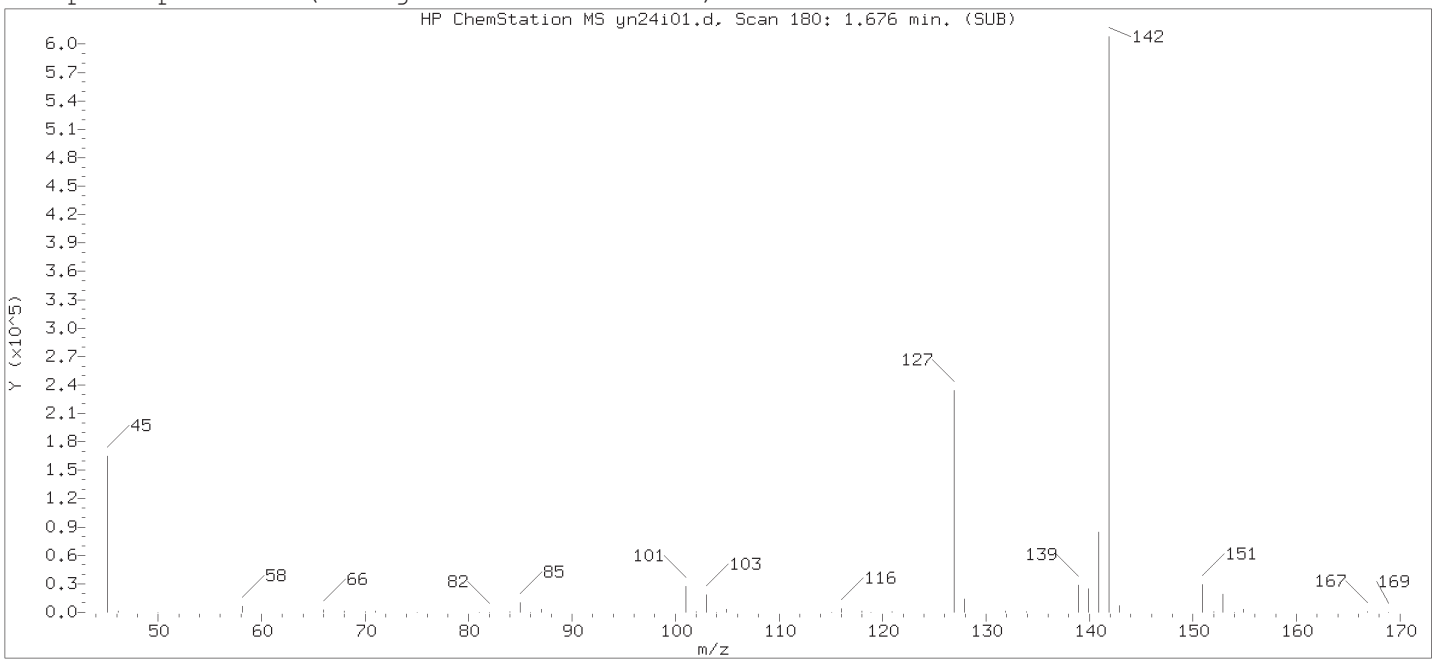
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 180
Retention Time (minutes): 1.676
Quant Ion : 45.00
Area (flag) : 741530M
On-Column Amount (ng) : 1076.6804
Integration start scan : 163 Integration stop scan: 192
Y at integration start : 2859 Y at integration end: 2859

Reason for manual integration: improper integration

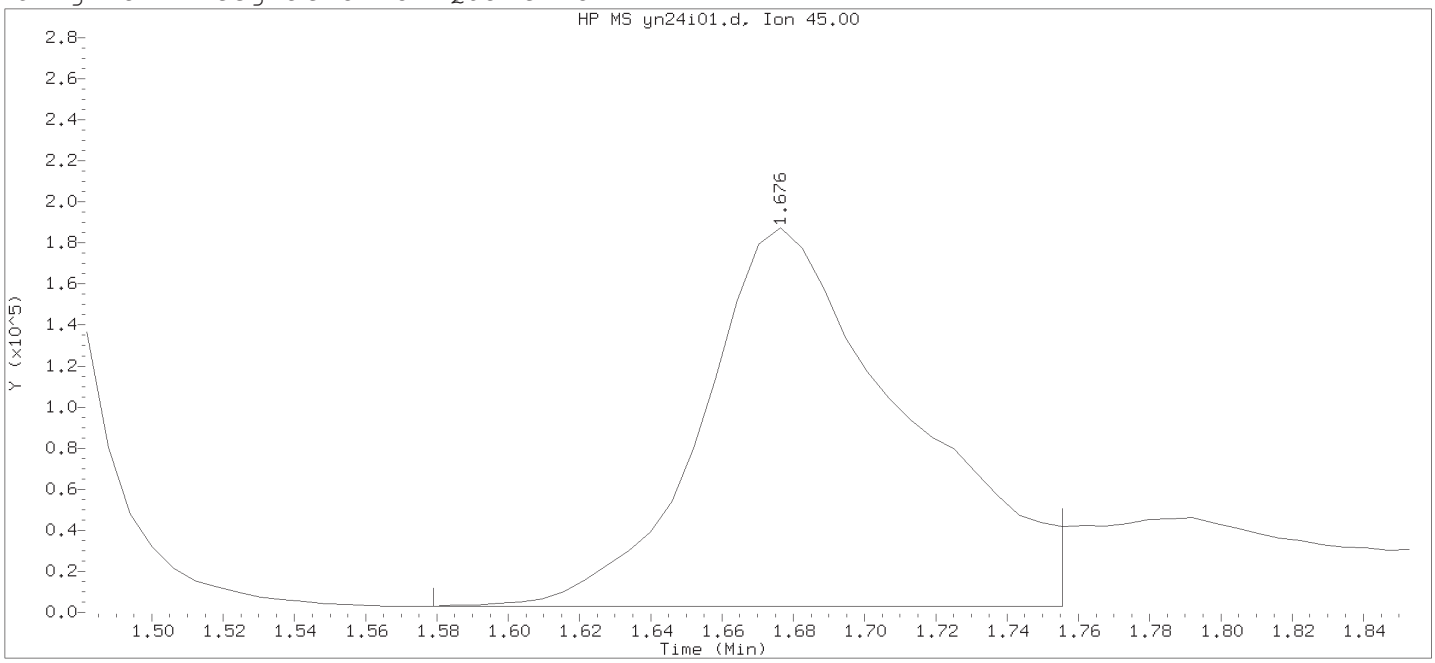
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

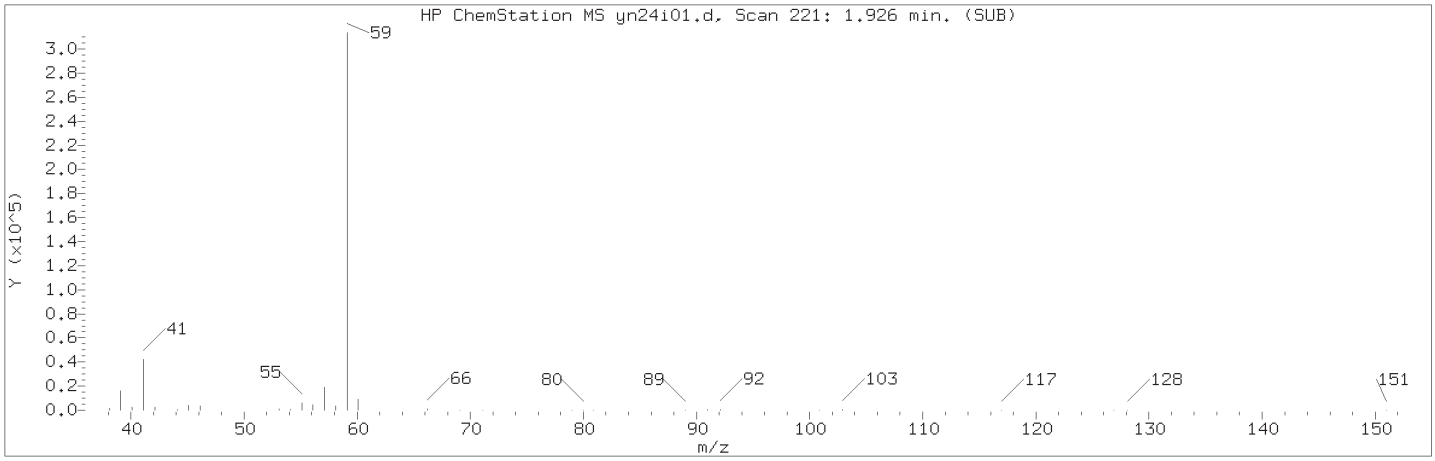
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

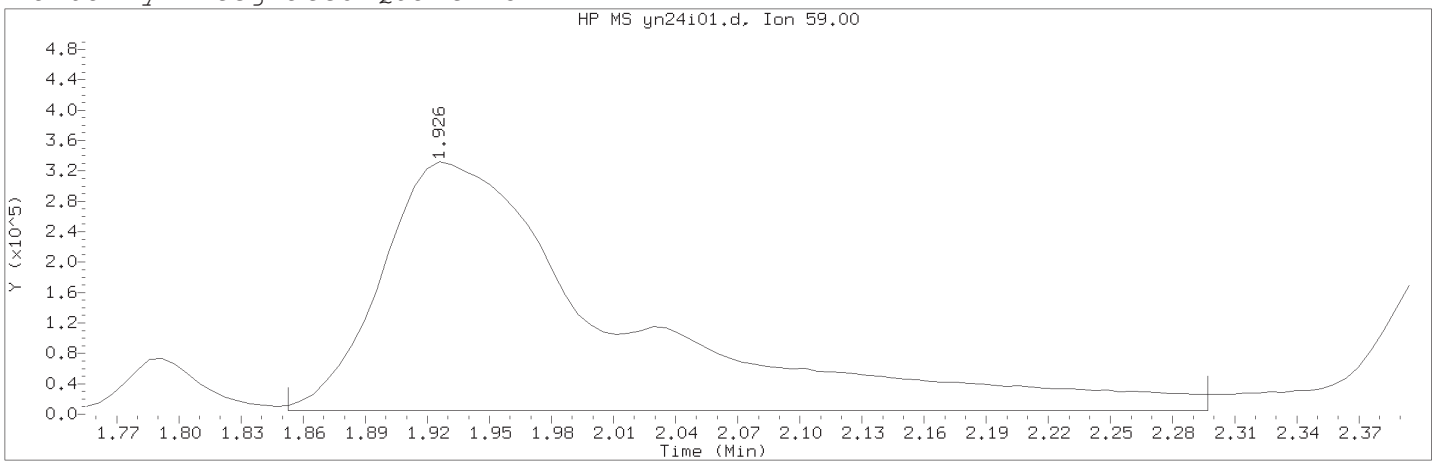
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 180
Retention Time (minutes): 1.676
Quant Ion : 45.00
Area : 734414
On-column Amount (ng) : 985.7466
Integration start scan : 163 Integration stop scan: 192
Y at integration start : 2862 Y at integration end: 2862

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

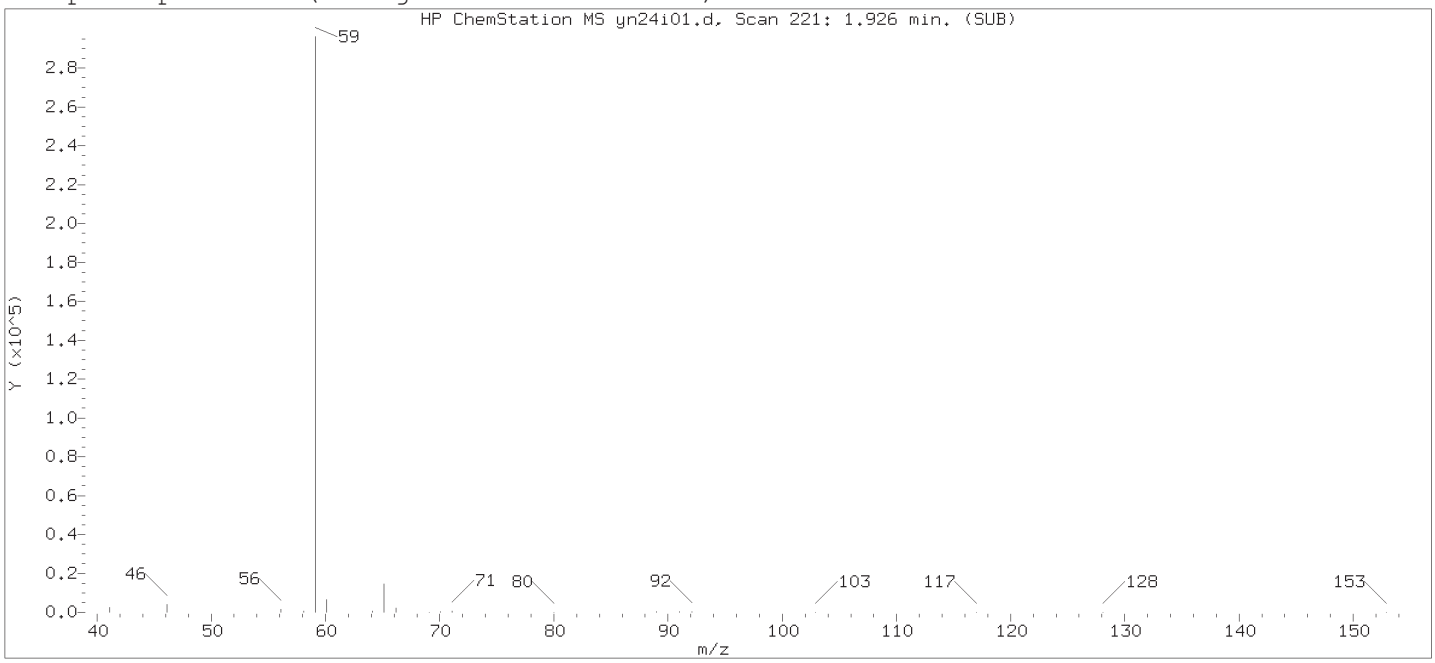
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 221
Retention Time (minutes): 1.926
Quant Ion : 59.00
Area (flag) : 2632605M
On-Column Amount (ng) : 1573.8502
Integration start scan : 208 Integration stop scan: 281
Y at integration start : 4752 Y at integration end: 4752

Reason for manual integration: improper integration

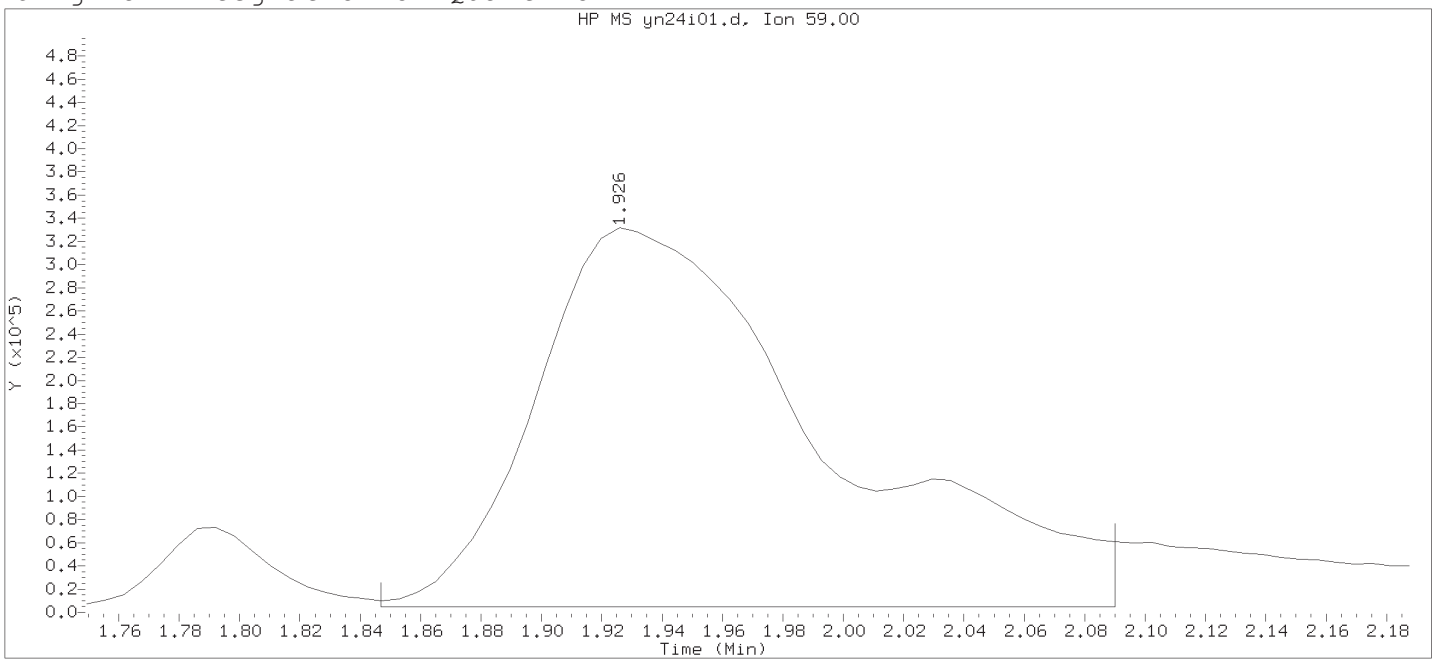
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

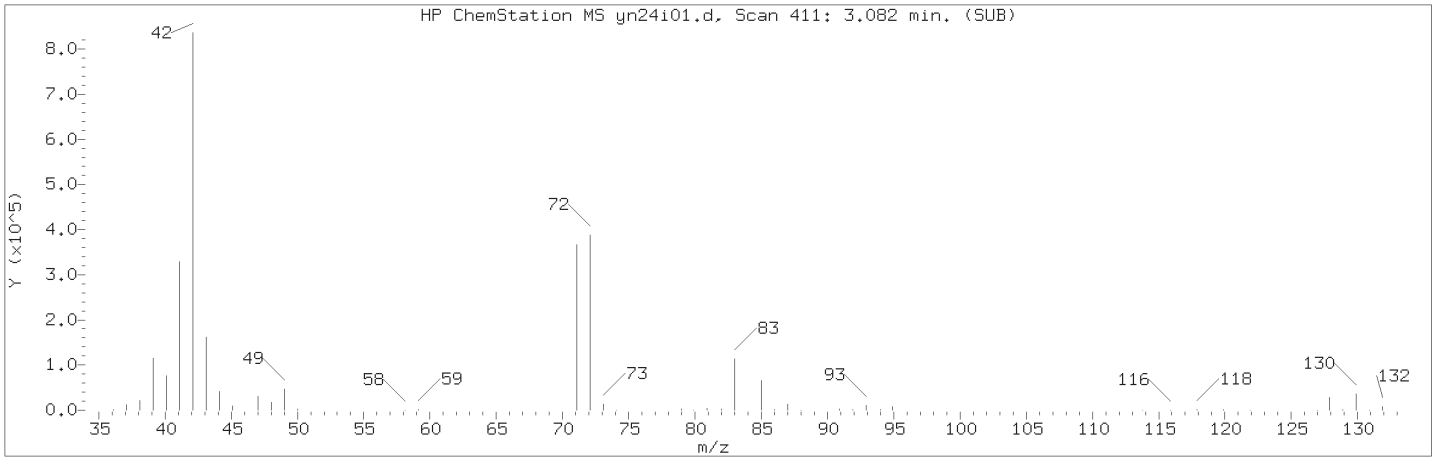
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

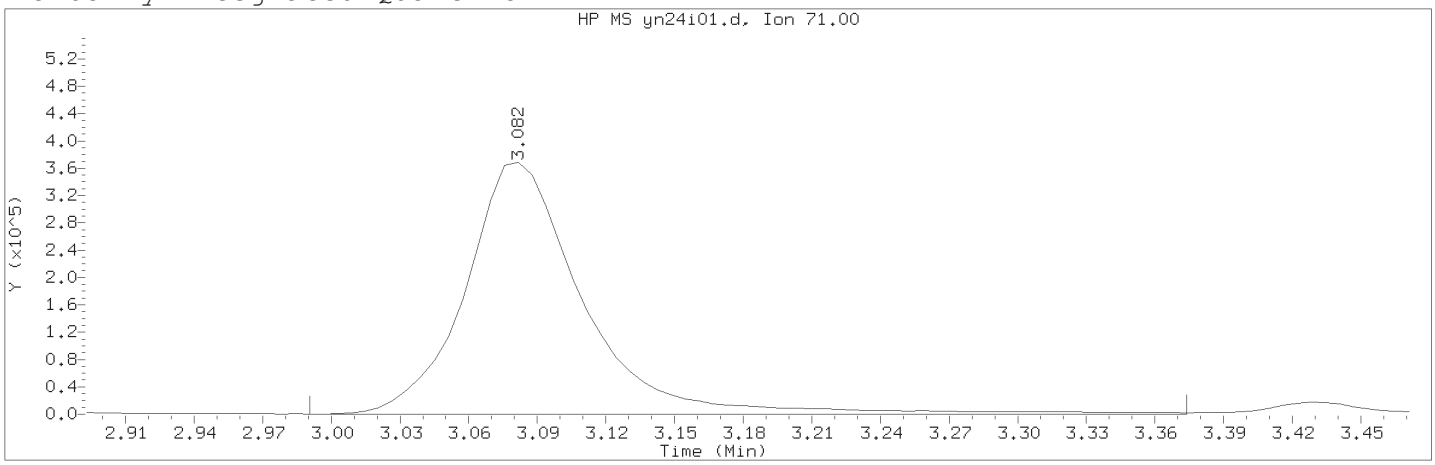
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 221
Retention Time (minutes): 1.926
Quant Ion : 59.00
Area : 2188446
On-column Amount (ng) : 1291.9062
Integration start scan : 207 Integration stop scan: 247
Y at integration start : 4754 Y at integration end: 4754

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

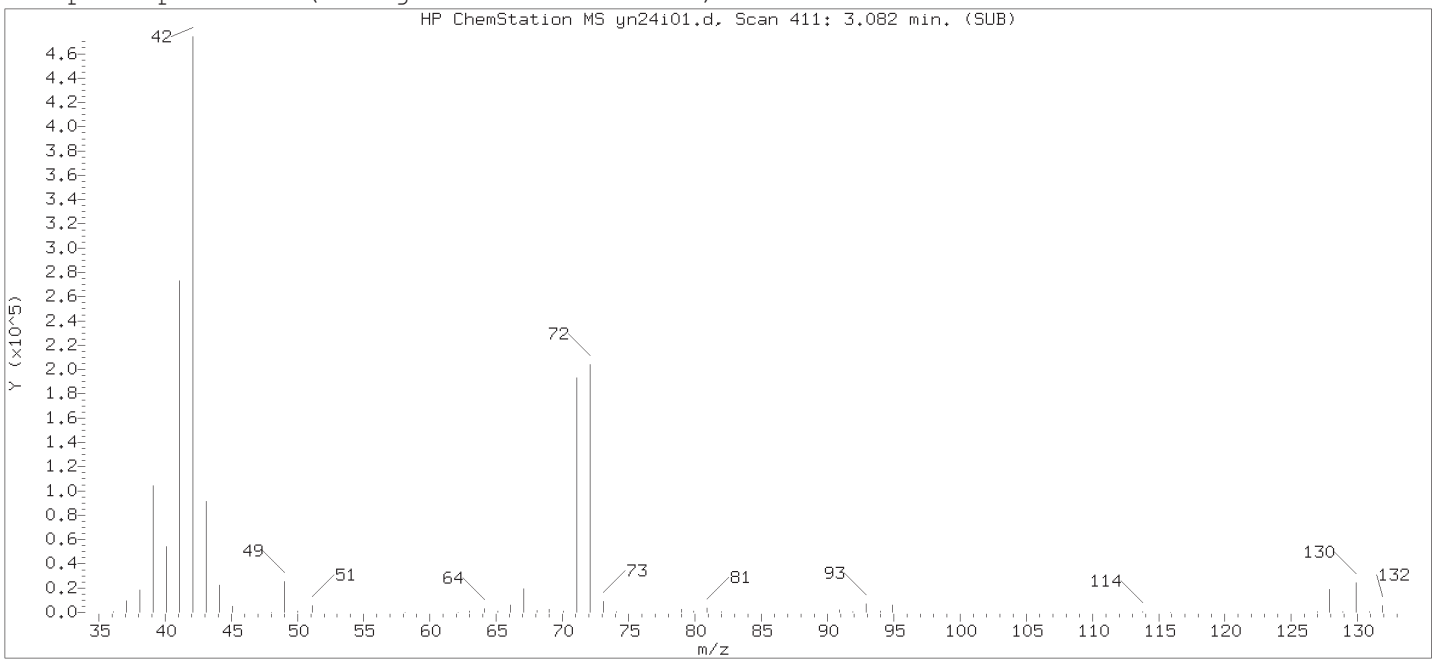
Compound Number : 50
Compound Name : Tetrahydrofuran
Scan Number : 411
Retention Time (minutes): 3.082
Quant Ion : 71.00
Area (flag) : 1318298M
On-Column Amount (ng) : 666.9135
Integration start scan : 395 Integration stop scan: 458
Y at integration start : 256 Y at integration end: 256

Reason for manual integration: improper integration

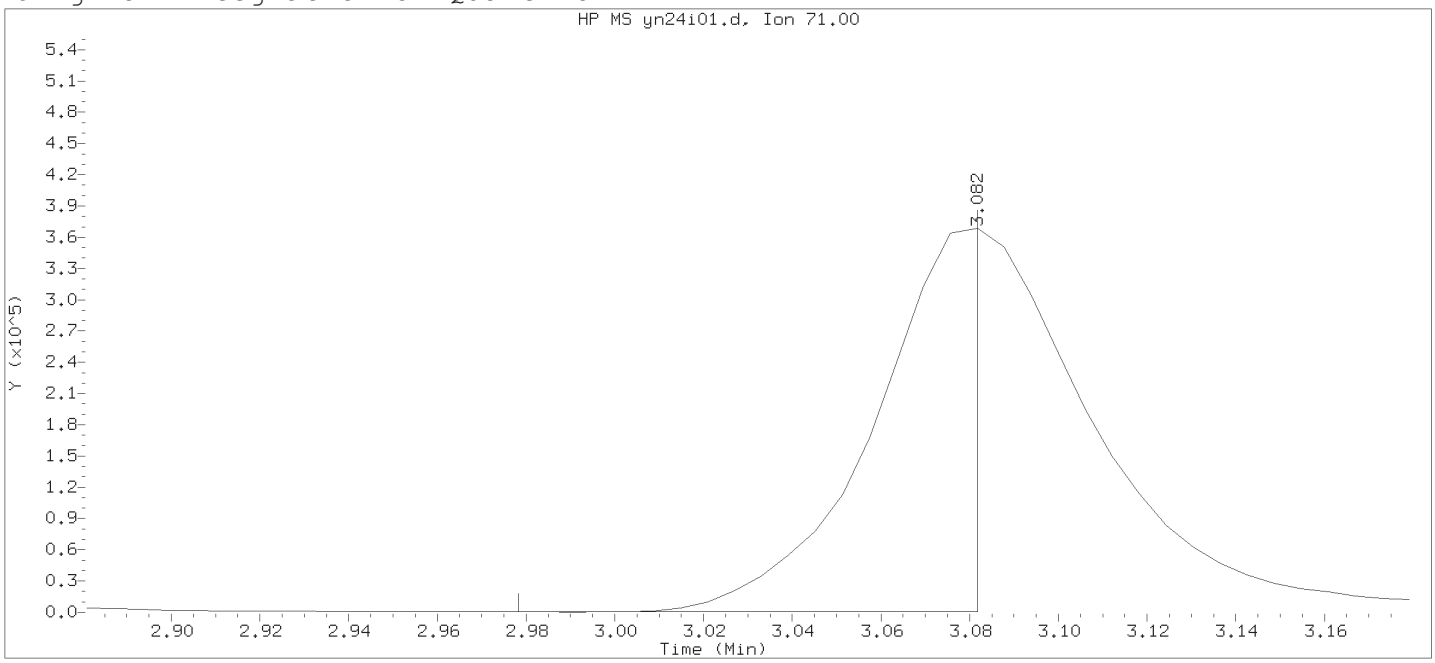
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

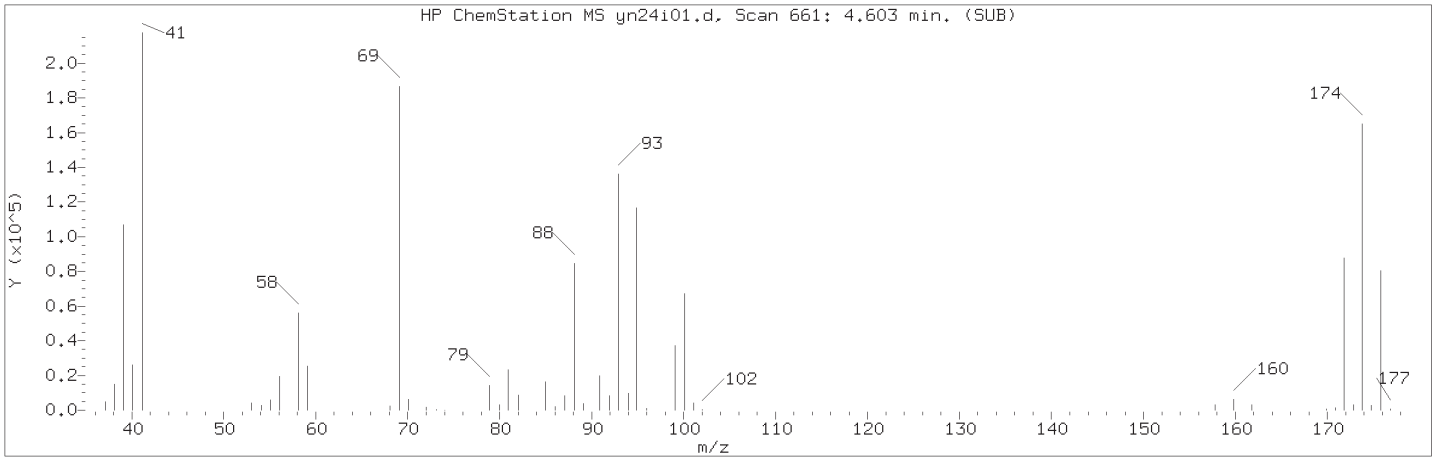
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

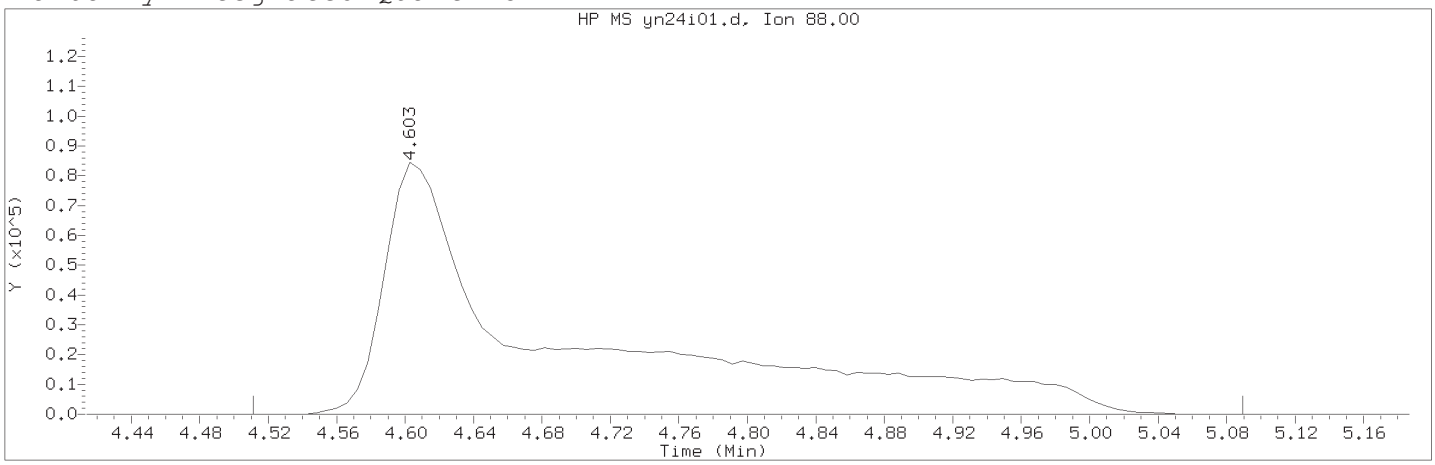
Compound Number : 50
Compound Name : Tetrahydrofuran
Scan Number : 411
Retention Time (minutes): 3.082
Quant Ion : 71.00
Area : 576878
On-column Amount (ng) : 303.5915
Integration start scan : 393 Integration stop scan: 410
Y at integration start : 423 Y at integration end: 423

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

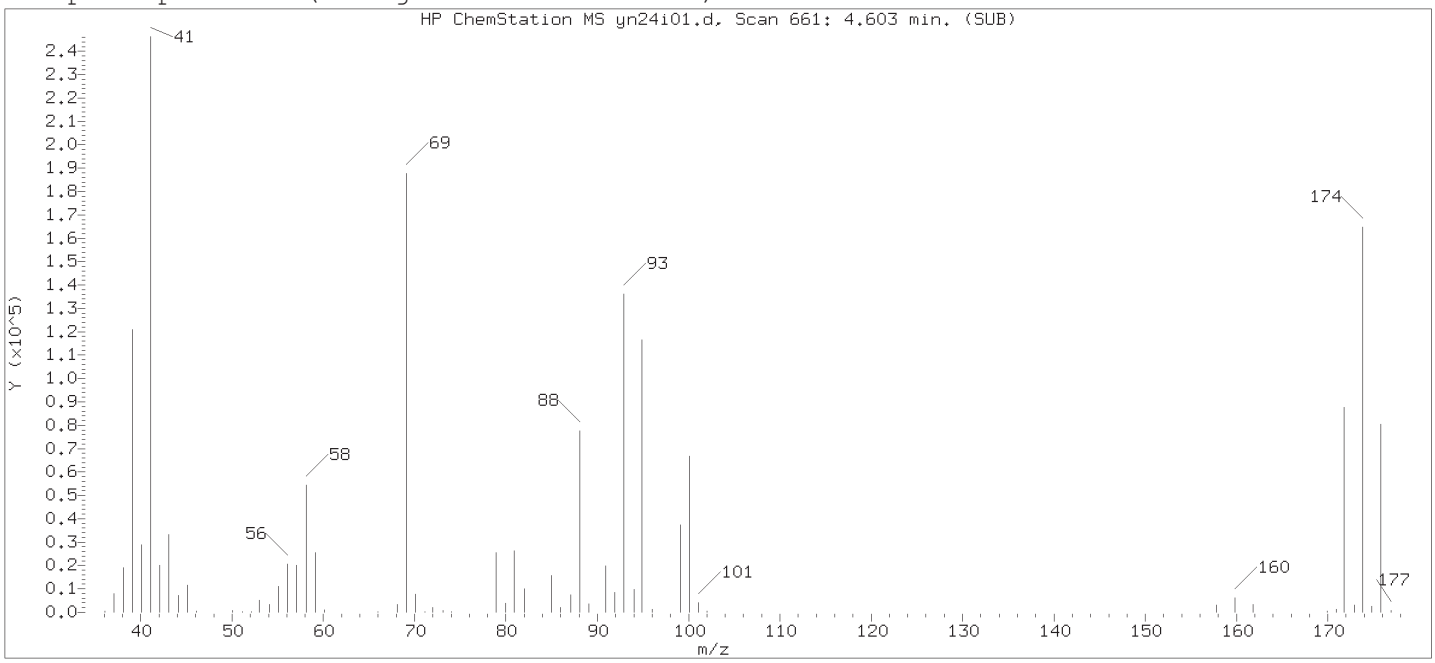
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 661
Retention Time (minutes): 4.603
Quant Ion : 88.00
Area (flag) : 592620M
On-Column Amount (ng) : 4625.0042
Integration start scan : 645 Integration stop scan: 740
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

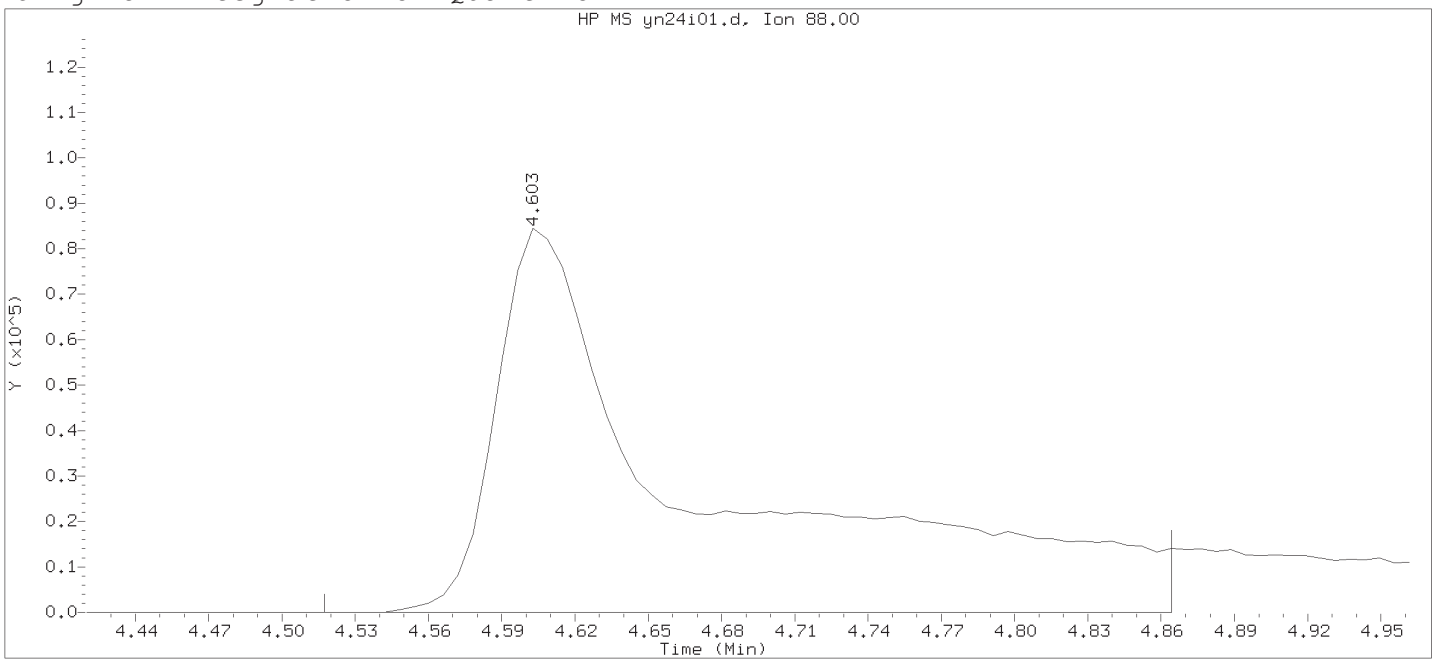
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

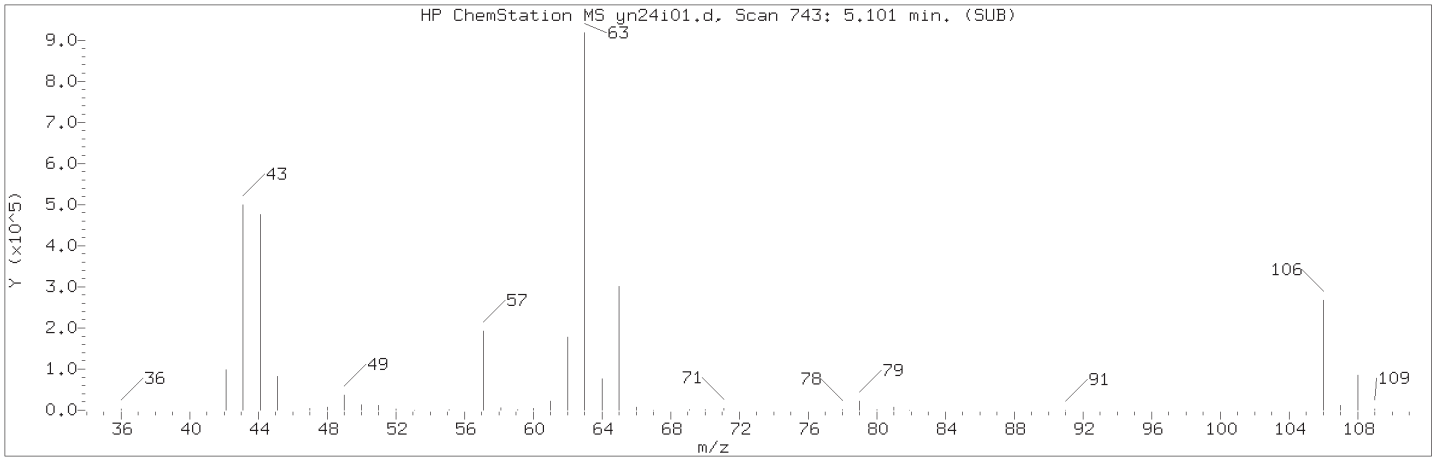
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

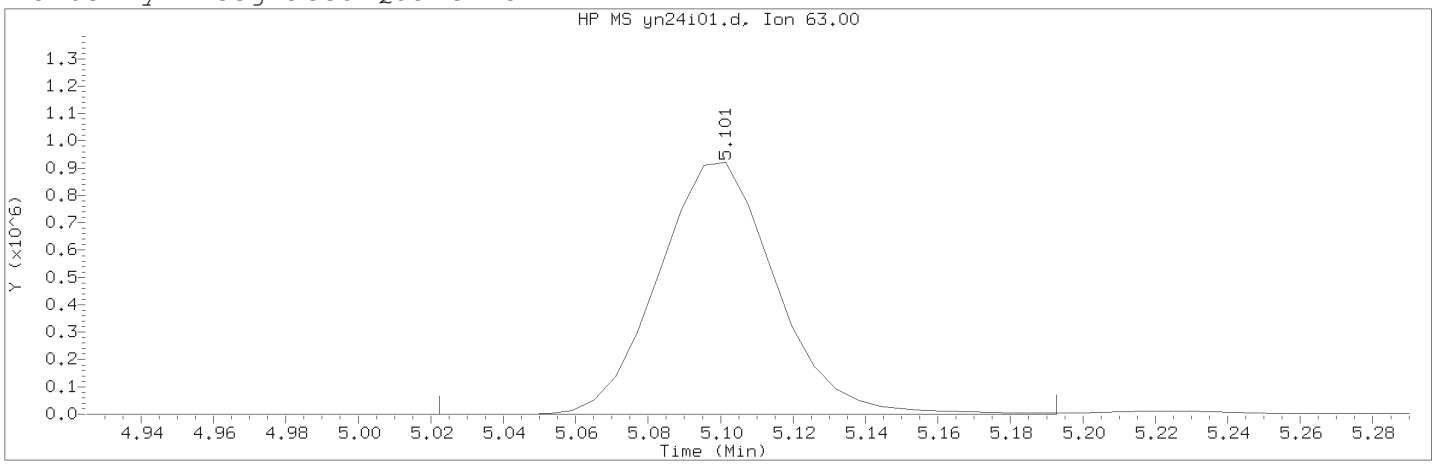
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 661
Retention Time (minutes): 4.603
Quant Ion : 88.00
Area : 494549
On-column Amount (ng) : 4039.4757
Integration start scan : 646 Integration stop scan: 703
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

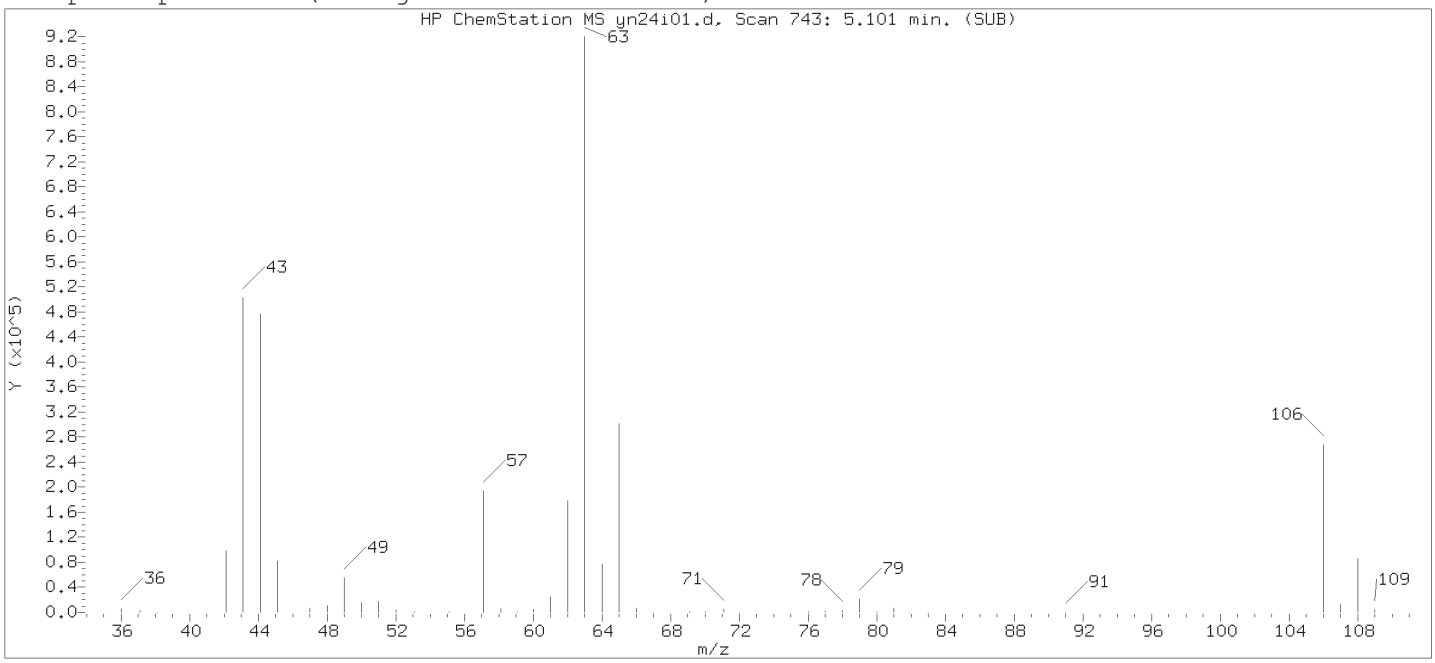
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 743
Retention Time (minutes): 5.101
Quant Ion : 63.00
Area (flag) : 2067368M
On-Column Amount (ng) : 303.3527
Integration start scan : 729 Integration stop scan: 757
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

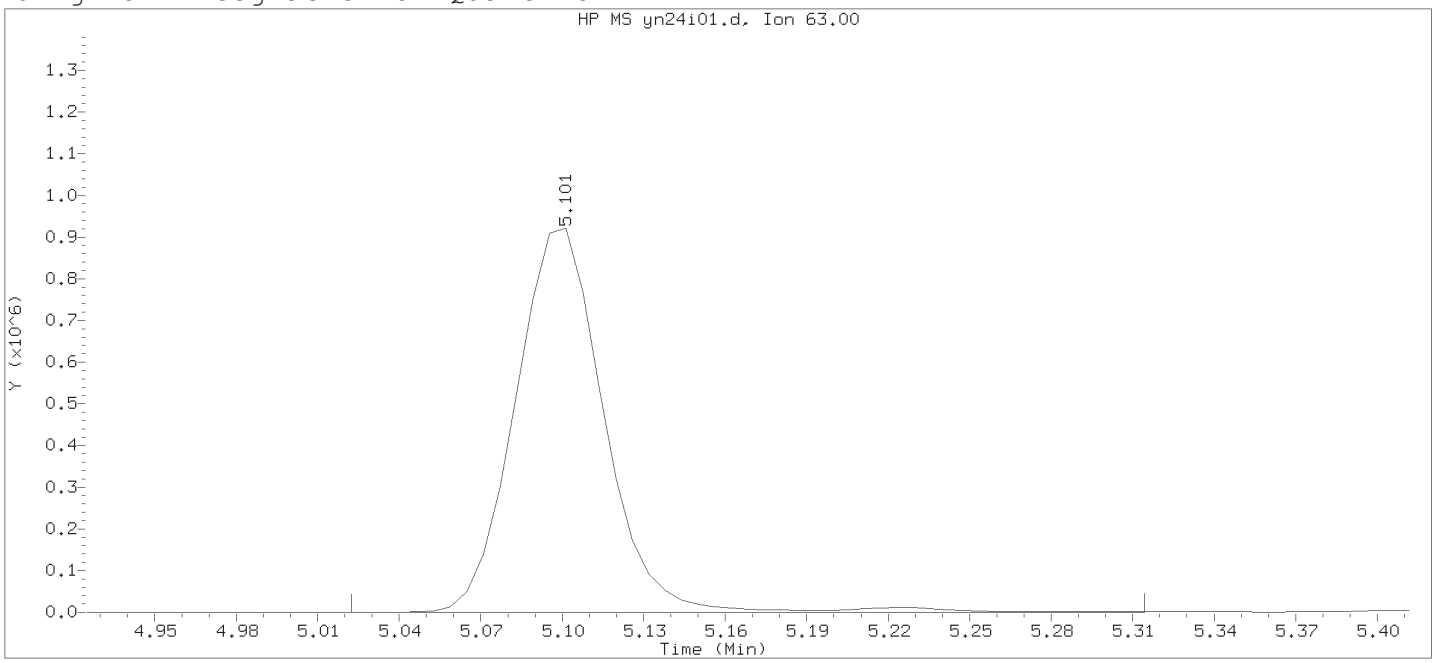
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

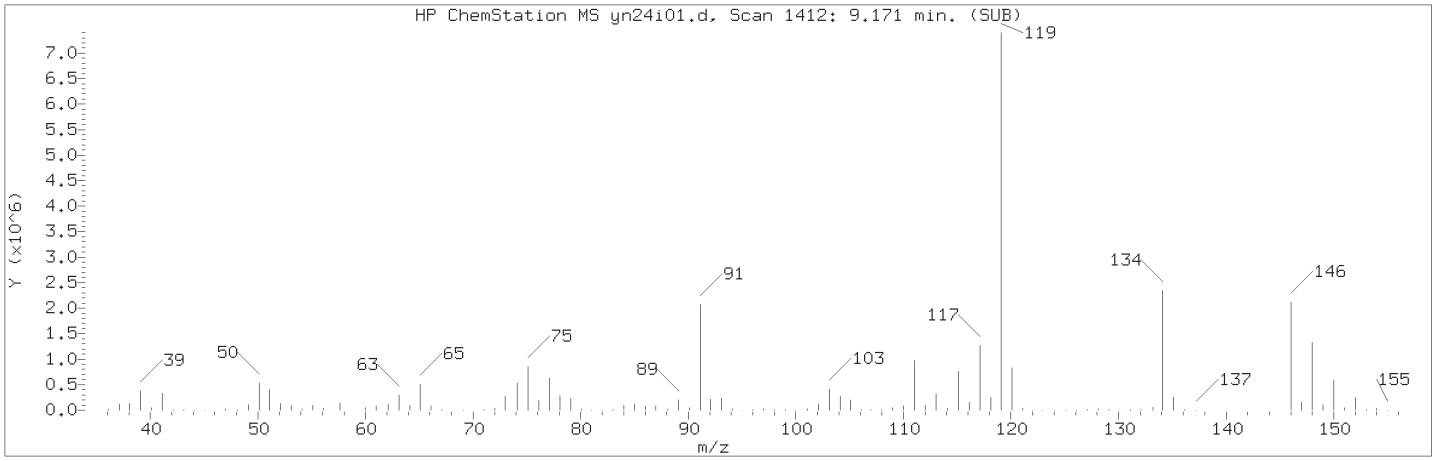
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

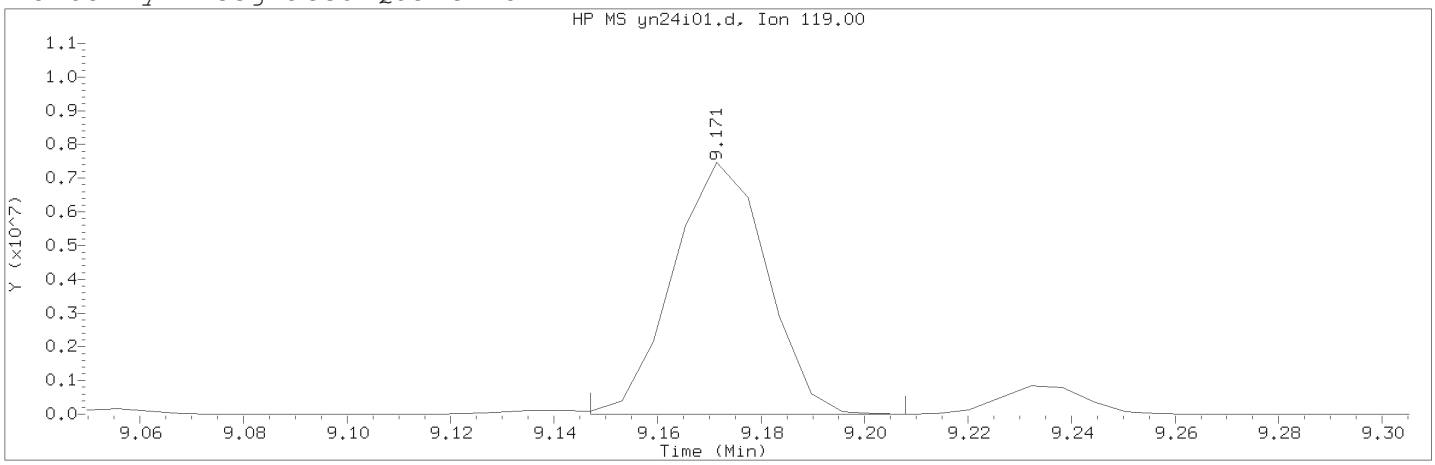
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 743
Retention Time (minutes): 5.101
Quant Ion : 63.00
Area : 2098918
On-column Amount (ng) : 327.3299
Integration start scan : 729 Integration stop scan: 777
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

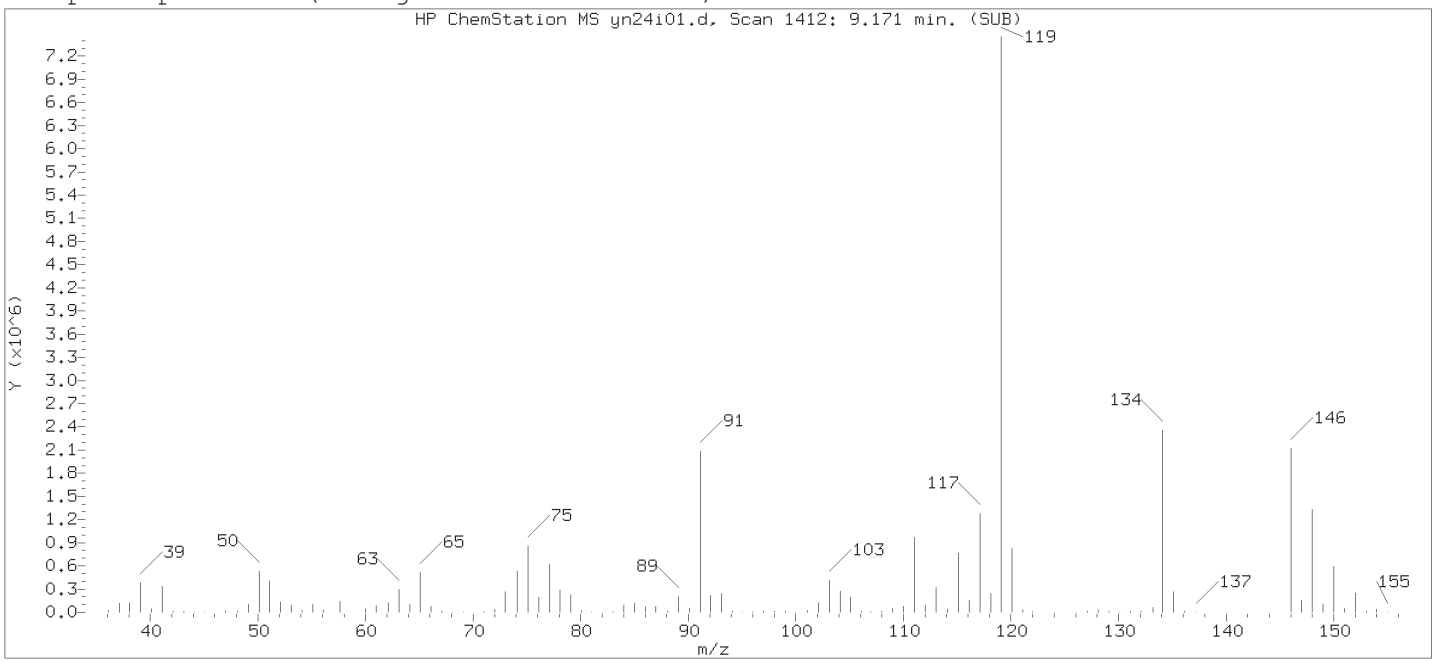
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1412
Retention Time (minutes): 9.171
Quant Ion : 119.00
Area (flag) : 9381020M
On-Column Amount (ng) : 276.1237
Integration start scan : 1407 Integration stop scan: 1417
Y at integration start : 364 Y at integration end: 364

Reason for manual integration: improper integration

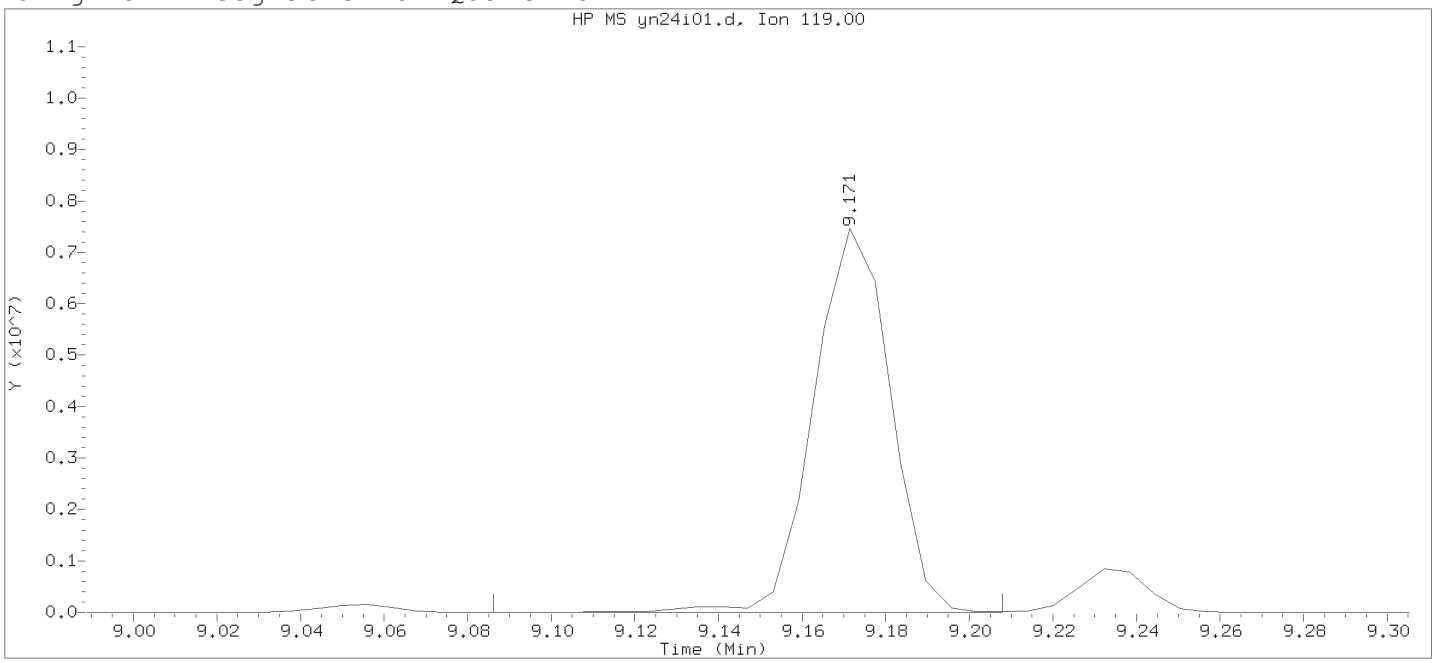
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



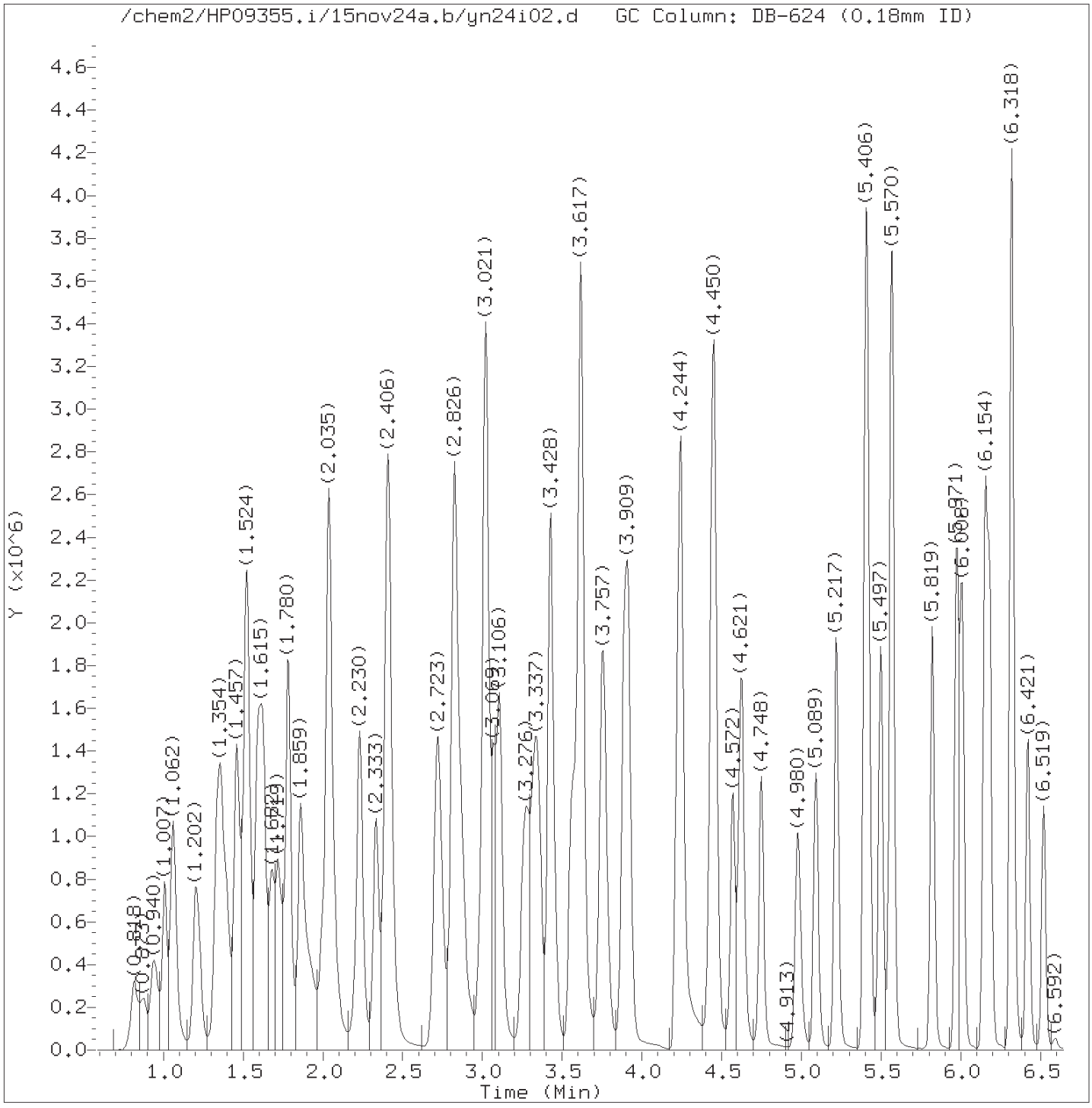
Data File: /chem2/HP09355.i/15nov24a.b/yn24i01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 00:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:04
Date, time and analyst ID of latest file update: 24-Nov-2015 01:04 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1412
Retention Time (minutes): 9.171
Quant Ion : 119.00
Area : 9490815
On-column Amount (ng) : 257.9018
Integration start scan : 1397 Integration stop scan: 1417
Y at integration start : 365 Y at integration end: 365

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri931



Total Ion Chromatogram (TIC)

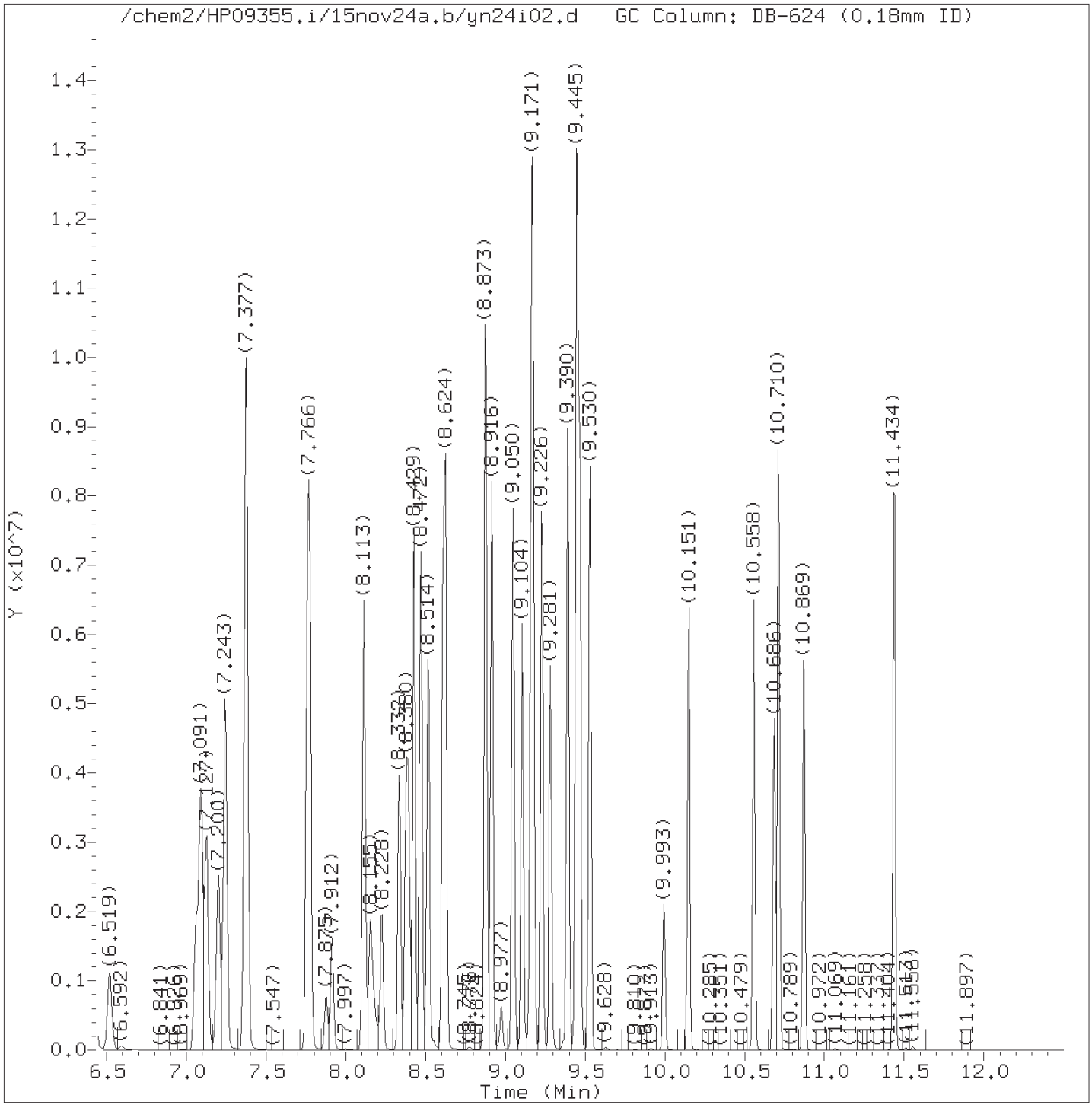
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.940	85	911879	111.904
4) Chloromethane	(2)	1.007	50	979415M	105.642
5) 1,3-Butadiene	(2)	1.050	39	378397	100.623
6) Vinyl Chloride	(2)	1.068	62	852812	103.788
8) Bromomethane	(2)	1.202	94	565275	100.088
9) Chloroethane	(2)	1.226	64	458550	100.199
10) Dichlorofluoromethane	(2)	1.336	67	1080460	104.469
11) n-Pentane	(2)	1.360	43	904139	111.963
12) Trichlorofluoromethane	(2)	1.390	101	999984	108.848
14) Ethyl ether	(2)	1.457	59	602082	102.497
15) Freon 123a	(2)	1.488	67	721463M	105.113
16) Acrolein	(1)	1.524	56	2939909	1073.519
17) 1,1-Dichloroethene	(2)	1.591	96	590332	109.296
17) 1,1-Dichloroethene	(2)	1.591	63	285837	107.788
18) Acetone	(1)	1.597	58	283181	203.471
19) Freon 113	(2)	1.628	101	582104	111.645
21) 2-Propanol	(1)	1.670	45	365424M	442.382
22) Methyl Iodide	(2)	1.688	142	1107103	107.681
23) Carbon Disulfide	(2)	1.725	76	2268525	109.538
25) Allyl Chloride	(2)	1.780	41	839642	106.165
27) Methyl Acetate	(2)	1.786	43	932029	102.355
28) Methylene Chloride	(2)	1.859	84	666873	104.773
29)*t-Butyl alcohol-d10	(1)	1.865	65	452104	250.000
30) t-Butyl alcohol	(1)	1.920	59	1075375M	536.018
31) Acrylonitrile	(2)	1.999	53	524445	98.982
32) trans-1,2-Dichloroethene	(2)	2.035	96	669168	107.807
33) Methyl Tertiary Butyl Ether	(2)	2.047	73	2237929	103.411
34) n-Hexane	(2)	2.230	57	1117460	108.119
36) 1,1-Dichloroethane	(2)	2.333	63	1347803	106.744
38) di-Isopropyl ether	(2)	2.406	45	2460399	101.634
39) 2-Chloro-1,3-butadiene	(2)	2.406	53	1082732	106.392
40) Ethyl t-butyl ether	(2)	2.723	59	2412487	103.054
42) cis-1,2-Dichloroethene	(2)	2.820	96	814726	106.920
44) 2-Butanone	(2)	2.832	43	1818317	197.669
45) 2,2-Dichloropropane	(2)	2.838	77	1021209	113.373
47) Propionitrile	(1)	2.875	54	1123542	490.494
43) 1,2-Dichloroethene (Total)	(2)		96	1483894	214.727
48) Methacrylonitrile	(2)	3.015	67	1410969	253.829

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.027	128	402224	102.605
50) Tetrahydrofuran	(1)	3.075	71	494839	208.719
51) Chloroform	(2)	3.112	83	1247648	107.380
52)$Dibromofluoromethane	(2)	3.252	113	357601	50.855
52)$Dibromofluoromethane	(2)	3.252	111	362852	50.388
53) 1,1,1-Trichloroethane	(2)	3.282	97	1136363	103.252
54) Cyclohexane	(2)	3.343	56	1298290	109.636
54) Cyclohexane	(2)	3.343	84	1265461	111.827
54) Cyclohexane	(2)	3.343	69	400484	110.759
55) 1,1-Dichloropropene	(2)	3.422	75	1066027	108.948
56) Carbon Tetrachloride	(2)	3.434	117	951552	117.252
57)$1,2-Dichloroethane-d4	(2)	3.556	102	90339	49.549
57)$1,2-Dichloroethane-d4	(2)	3.556	65	420064	49.418
57)$1,2-Dichloroethane-d4	(2)	3.556	104	57970	49.985
58) Isobutyl Alcohol	(1)	3.574	41	872209M	1316.743
60) Benzene	(2)	3.611	78	3067803	105.529
61) 1,2-Dichloroethane	(2)	3.629	62	1044125	101.451
61) 1,2-Dichloroethane	(2)	3.629	98	99524	108.647
65) t-Amyl methyl ether	(2)	3.757	73	2341053	105.614
66)*Fluorobenzene	(2)	3.885	96	1498718	50.000
67) n-Heptane	(2)	3.909	43	1298728	107.430
69) n-Butanol	(1)	4.225	56	1608004	2765.010
71) Trichloroethene	(2)	4.244	95	796353	107.632
72) Methylcyclohexane	(2)	4.444	83	1287059	109.411
72) Methylcyclohexane	(2)	4.444	98	575487	108.950
73) 1,2-Dichloropropane	(2)	4.456	63	806230	106.724
74) Dibromomethane	(2)	4.566	93	523087	107.414
75) 1,4-Dioxane	(1)	4.596	88	202260M	1316.097
76) Methyl Methacrylate	(2)	4.627	69	906682	105.434
78) Bromodichloromethane	(2)	4.748	83	967530	117.198
79) 2-Nitropropane	(2)	4.980	41	886967	228.417
80) 2-Chloroethyl Vinyl Ether	(2)	5.089	63	728954	106.212
81) cis-1,3-Dichloropropene	(2)	5.217	75	1308842	114.761
82) 4-Methyl-2-pentanone	(2)	5.406	43	3738005	214.927
83)$Toluene-d8	(3)	5.497	98	1508651	50.013
83)$Toluene-d8	(3)	5.497	100	999131	50.145
88) Toluene	(3)	5.570	92	1968927	106.069
89) trans-1,3-Dichloropropene	(3)	5.819	75	1233790	118.235

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	2542632	232.996
91) Ethyl Methacrylate	(3)	5.971	69	1424708	107.877
92) 1,1,2-Trichloroethane	(3)	6.008	97	786987	106.110
93) Tetrachloroethene	(3)	6.154	166	841417	108.126
94) 1,3-Dichloropropane	(3)	6.178	76	1340034	105.452
96) 2-Hexanone	(3)	6.318	43	3275432	220.472
97) Dibromochloromethane	(3)	6.421	129	850055	101.238
99) 1,2-Dibromoethane	(3)	6.519	107	873136	108.176
100)*Chlorobenzene-d5	(3)	7.060	117	1119841	50.000
102) Chlorobenzene	(3)	7.091	112	2250304	106.394
101) 1-Chlorohexane	(3)	7.127	91	1073102	107.903
103) 1,1,1,2-Tetrachloroethane	(3)	7.200	131	761391	115.316
104) Ethylbenzene	(3)	7.243	91	3800712	108.828
106) m+p-Xylene	(3)	7.377	106	3007678	218.354
107) o-Xylene	(3)	7.760	106	1482153	108.041
109) Styrene	(3)	7.772	104	2508372	108.232
108) Xylene (Total)	(3)		106	4489831	326.395
110) Bromoform	(3)	7.912	173	653237	120.300
111) Isopropylbenzene	(3)	8.113	105	3742888	106.510
112) Cyclohexanone	(1)	8.155	55	1029596	1213.332
114)$4-Bromofluorobenzene	(3)	8.222	95	561516	49.629
114)$4-Bromofluorobenzene	(3)	8.228	174	455938	50.142
115) Bromobenzene	(4)	8.338	156	960382	104.090
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	1377075	107.523
117) 1,2,3-Trichloropropane	(4)	8.393	110	429994	105.125
118) trans-1,4-Dichloro-2-butene	(4)	8.429	53	1135372	268.129
119) n-Propylbenzene	(4)	8.472	91	4471428	106.582
120) 2-Chlorotoluene	(4)	8.514	126	933588	105.111
121) 4-Chlorotoluene	(4)	8.605	126	990066	106.074
122) 1,3,5-Trimethylbenzene	(4)	8.624	105	3281014	106.068
125) Pentachloroethane	(4)	8.873	167	554783	110.097
124) tert-Butylbenzene	(4)	8.879	134	735760	106.208
126) 1,2,4-Trimethylbenzene	(4)	8.916	105	3348407	105.831
127) sec-Butylbenzene	(4)	9.050	105	4087315	105.594
129) 1,3-Dichlorobenzene	(4)	9.104	146	1852252	104.395
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	595542	50.000
130) p-Isopropyltoluene	(4)	9.165	119	3651817M	105.693
133) 1,4-Dichlorobenzene	(4)	9.177	146	1891435	104.480

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	3323836	101.980
135) Benzyl Chloride	(4)	9.281	91	2736659	118.304
136) 1,3-Diethylbenzene	(4)	9.390	119	2142657	102.834
138) 1,2-Dichlorobenzene	(4)	9.445	146	1799358	104.225
137) 1,4-Diethylbenzene	(4)	9.451	119	2242729	103.281
139) n-Butylbenzene	(4)	9.469	92	1818223	104.678
140) 1,2-Diethylbenzene	(4)	9.530	119	1761452	101.730
141) Diethylbenzene (total)	(4)		100	6146838	307.845
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	375941	111.546
144) 1,3,5-Trichlorobenzene	(4)	10.151	180	1392587	102.700
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	1333573	102.132
147) Hexachlorobutadiene	(4)	10.686	225	608274	101.482
148) Naphthalene	(4)	10.710	128	4614369	101.634
149) 1,2,3-Trichlorobenzene	(4)	10.875	180	1253912	100.825
150) 2-Methylnaphthalene	(4)	11.440	142	2758896	100.448

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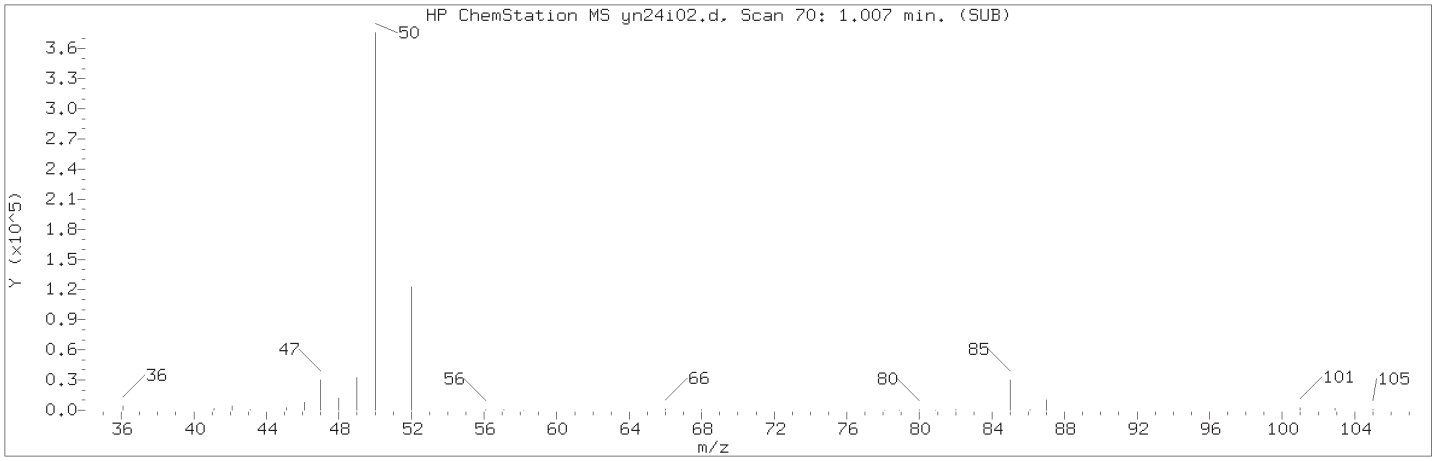
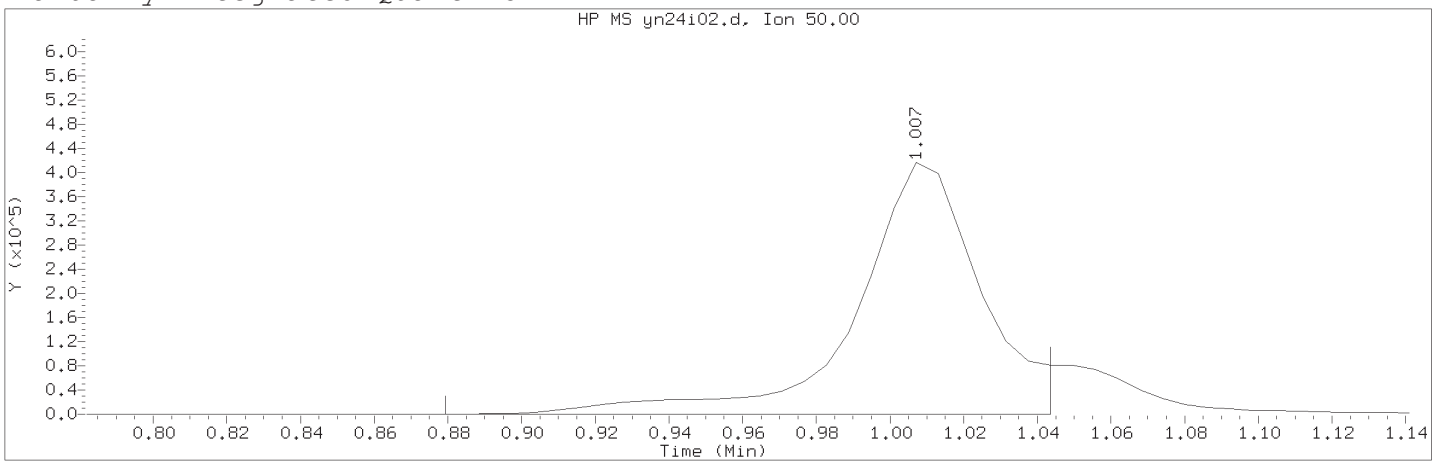
on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

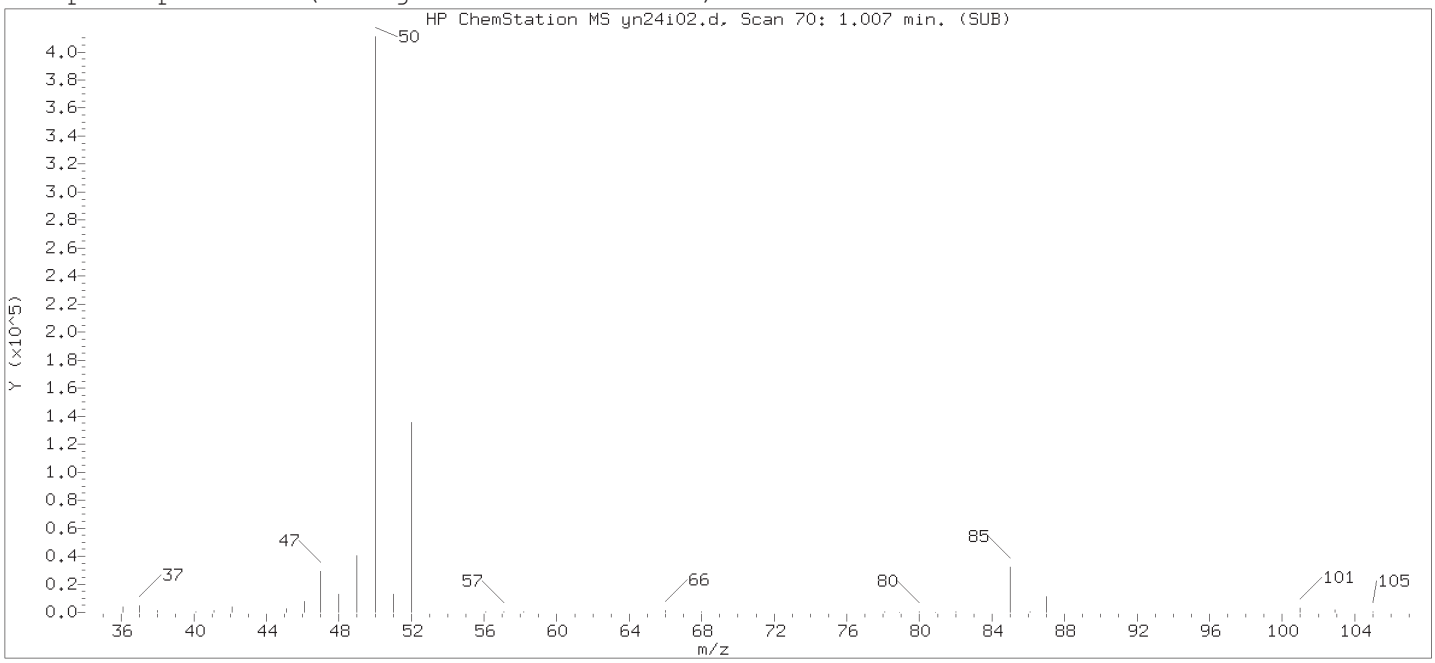
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 70
Retention Time (minutes): 1.007
Quant Ion : 50.00
Area (flag) : 979415M
On-Column Amount (ng) : 105.6416
Integration start scan : 48 Integration stop scan: 75
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

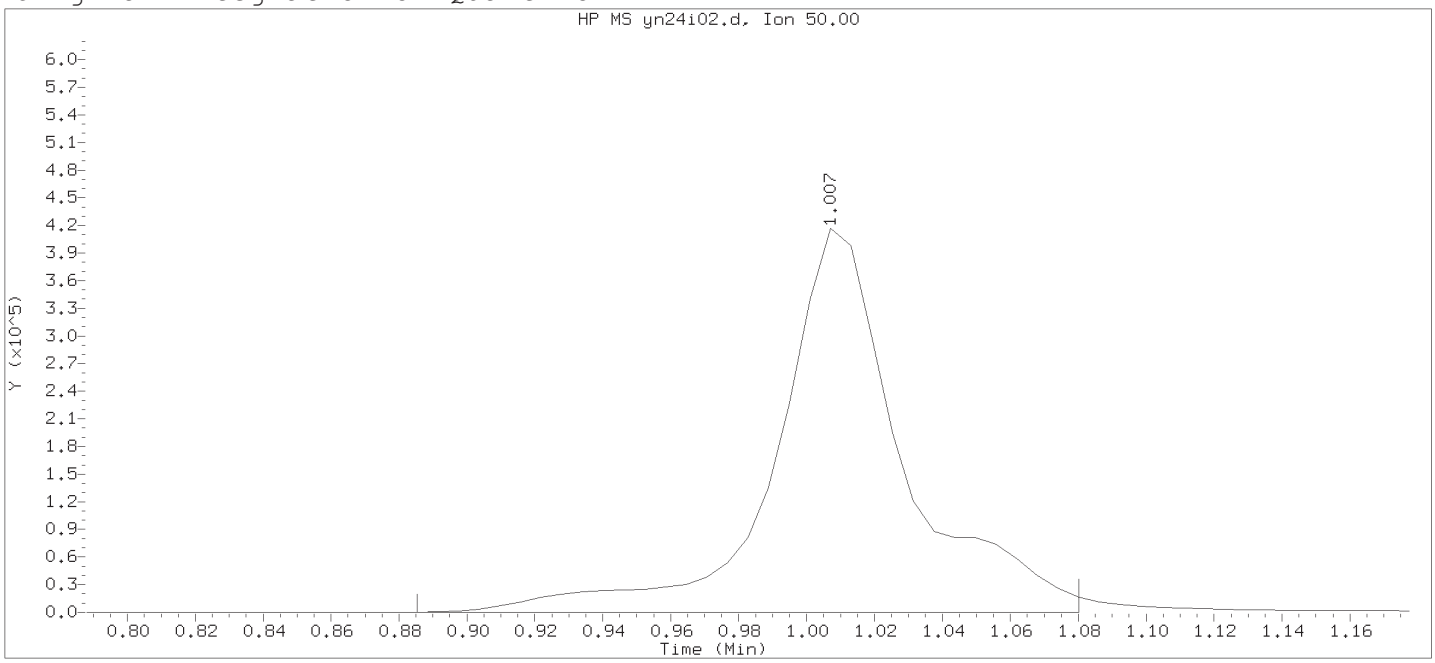
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

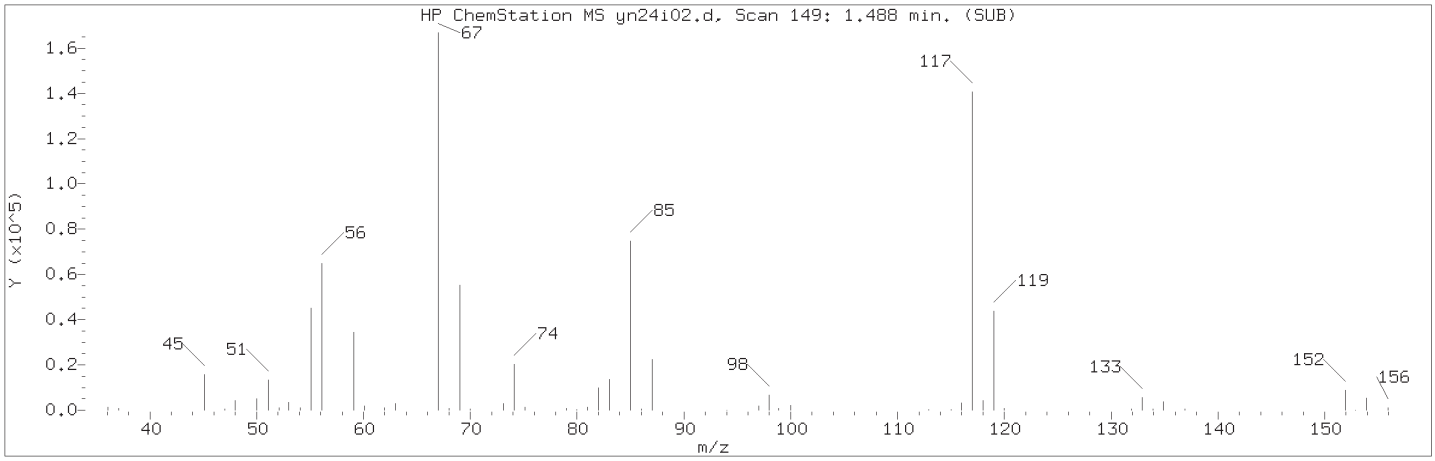
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

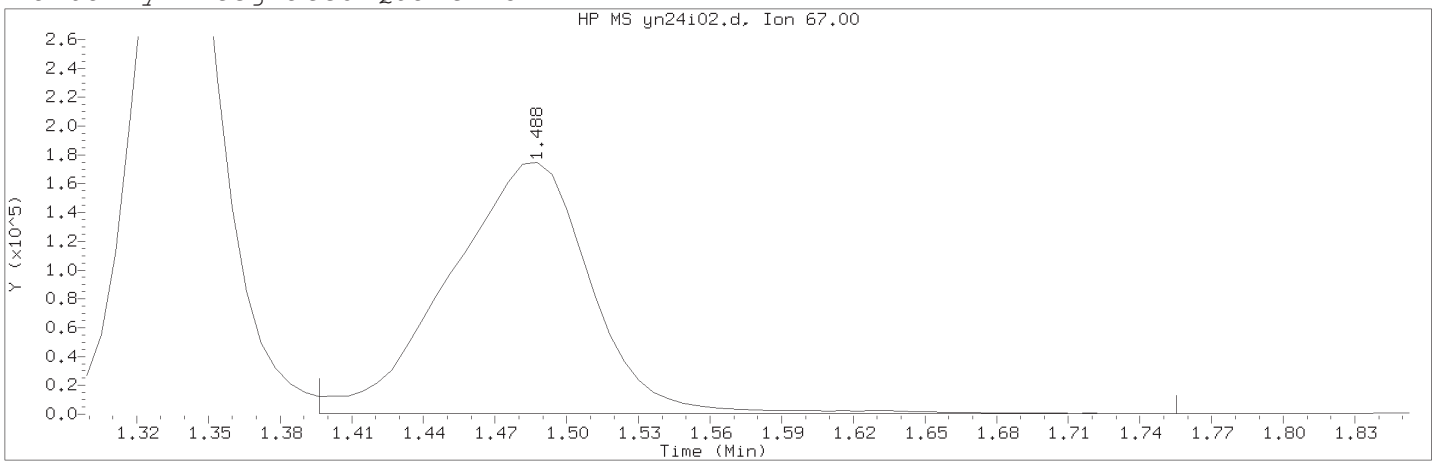
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 70
Retention Time (minutes): 1.007
Quant Ion : 50.00
Area : 1084622
On-column Amount (ng) : 120.6882
Integration start scan : 49 Integration stop scan: 81
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

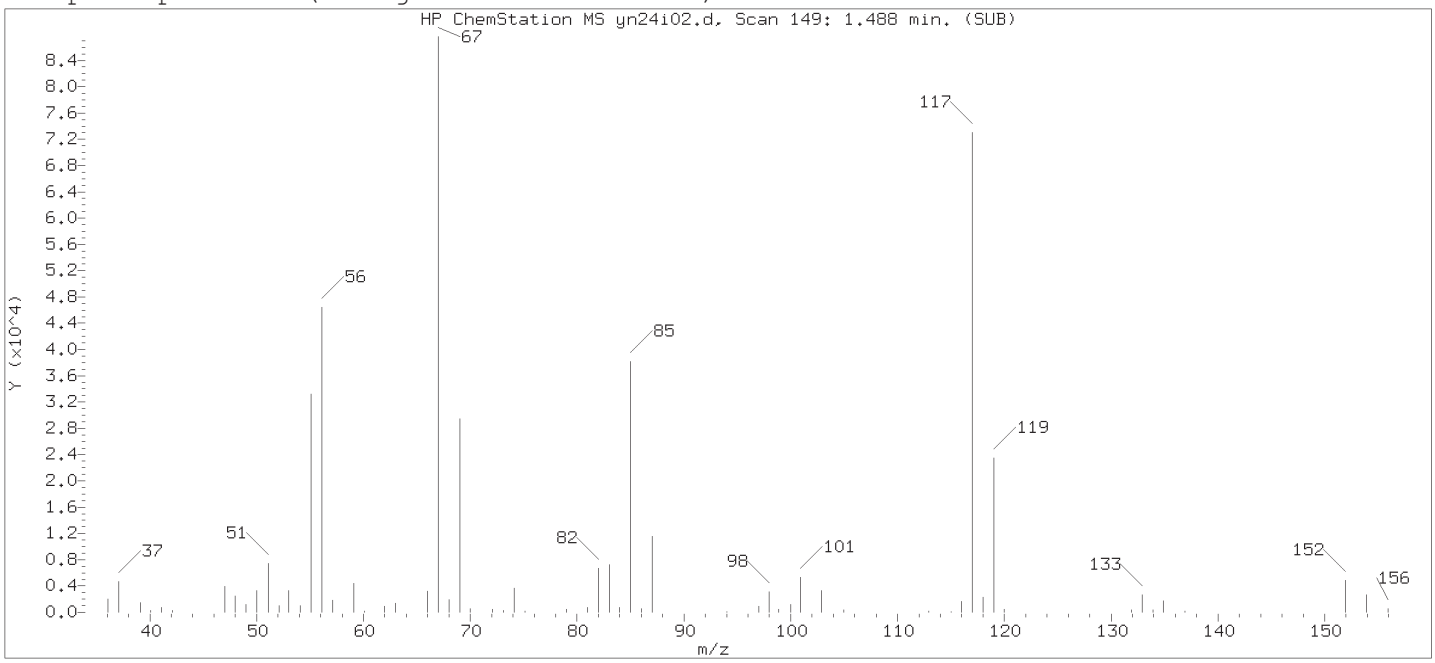
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 149
Retention Time (minutes): 1.488
Quant Ion : 67.00
Area (flag) : 721463M
On-Column Amount (ng) : 105.1132
Integration start scan : 133 Integration stop scan: 192
Y at integration start : 390 Y at integration end: 390

Reason for manual integration: improper integration

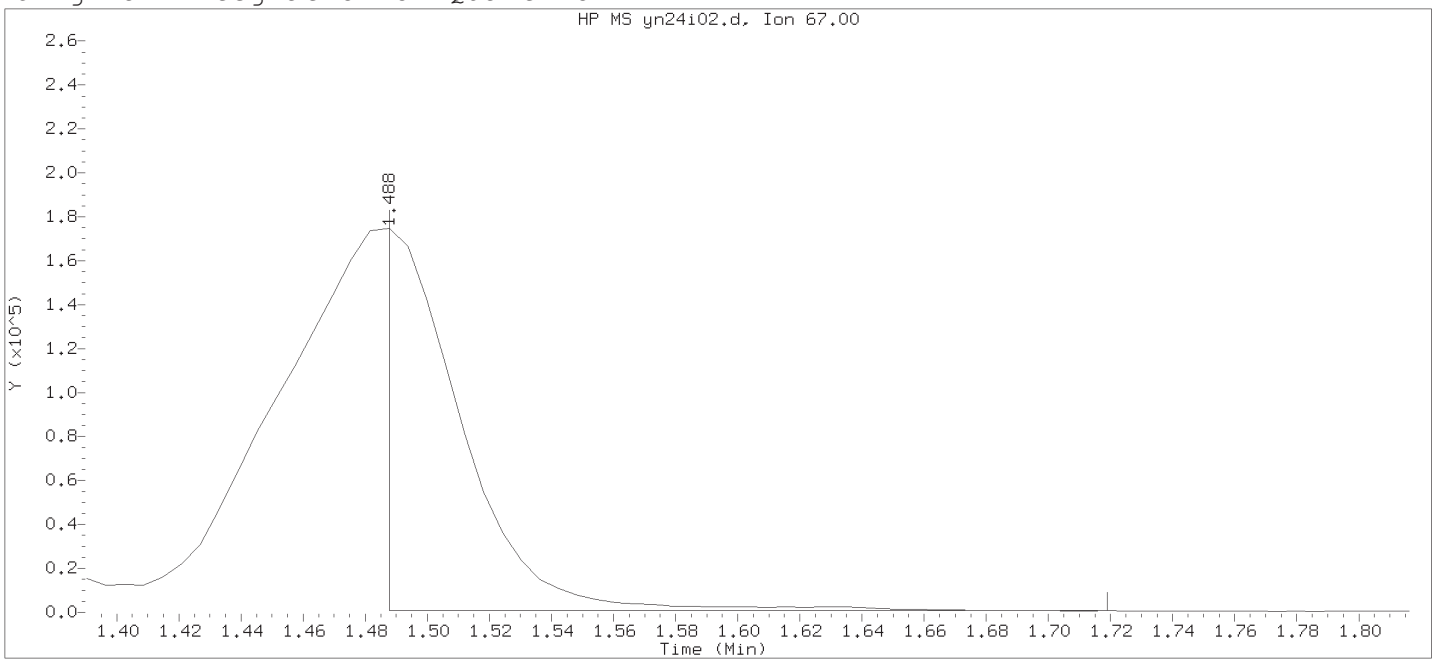
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

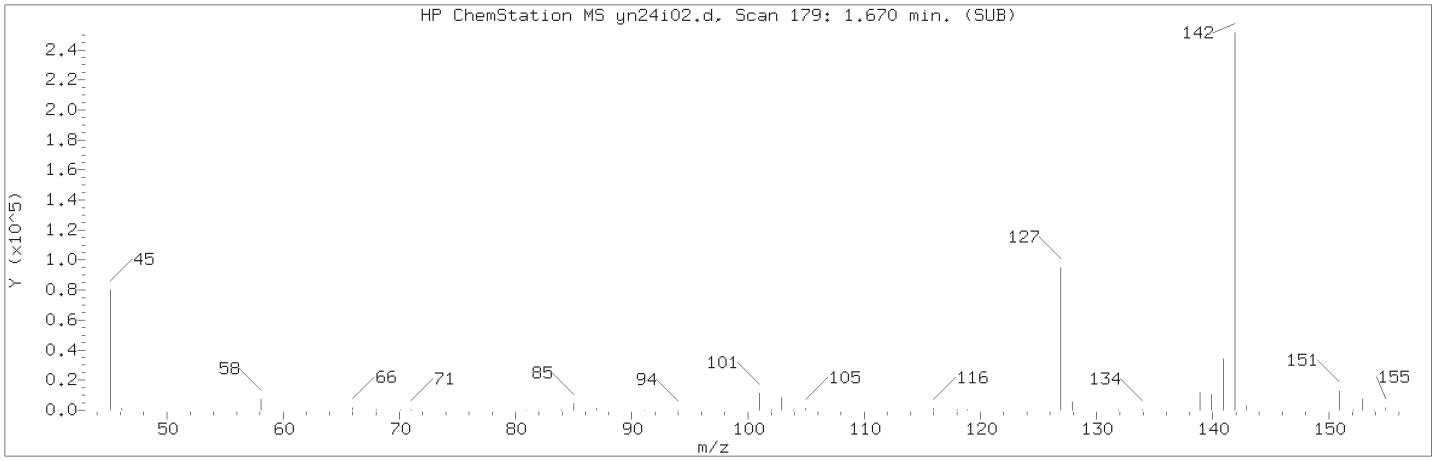
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

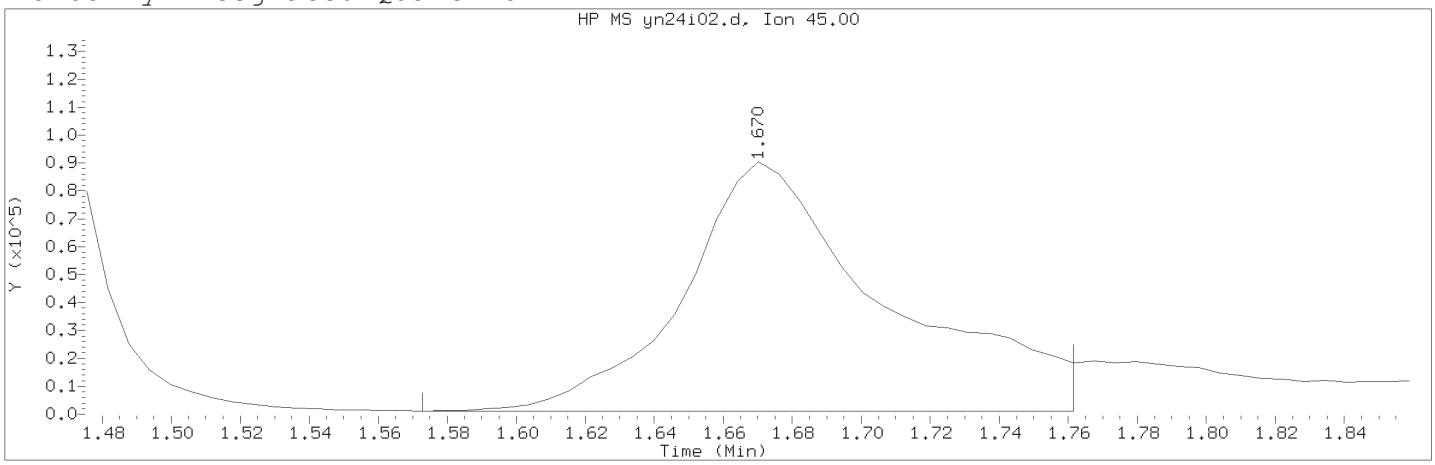
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 149
Retention Time (minutes): 1.488
Quant Ion : 67.00
Area : 279675
On-column Amount (ng) : 41.6107
Integration start scan : 148 Integration stop scan: 186
Y at integration start : 719 Y at integration end: 734

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asneeri0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

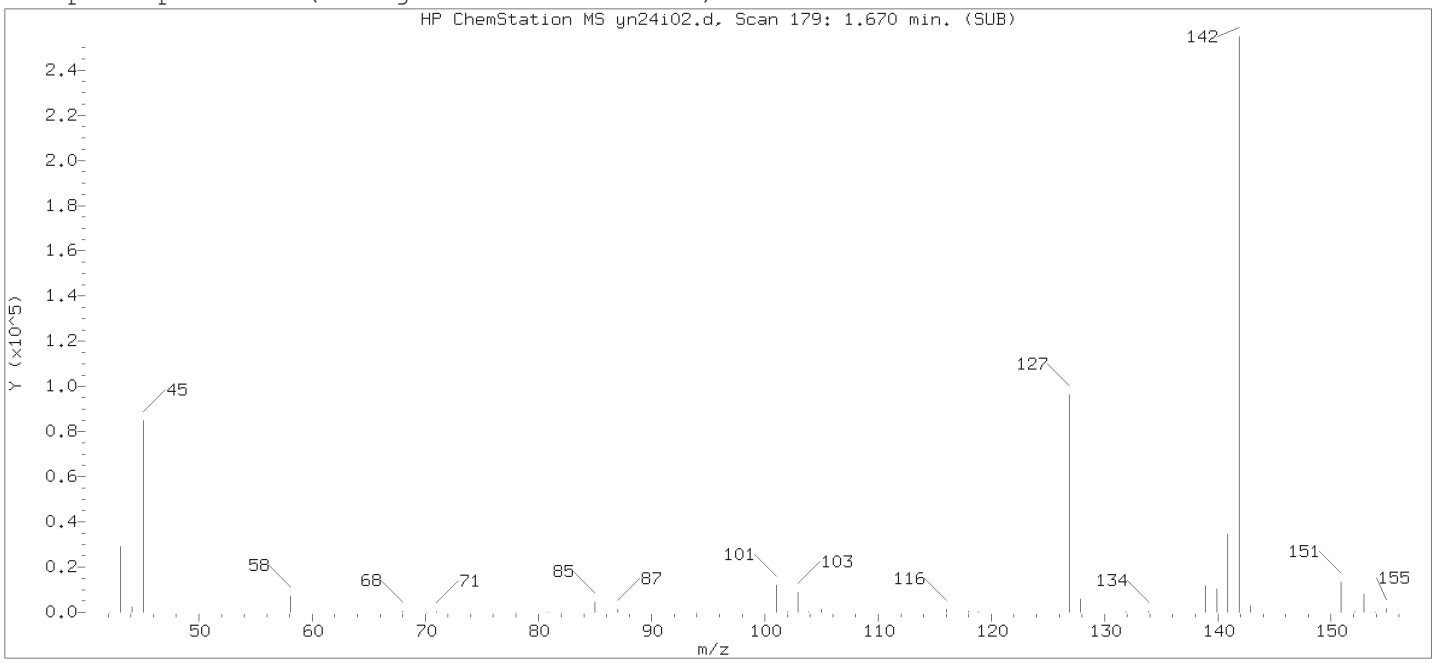
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 179
Retention Time (minutes): 1.670
Quant Ion : 45.00
Area (flag) : 365424M
On-Column Amount (ng) : 442.3817
Integration start scan : 162 Integration stop scan: 193
Y at integration start : 1111 Y at integration end: 1111

Reason for manual integration: improper integration

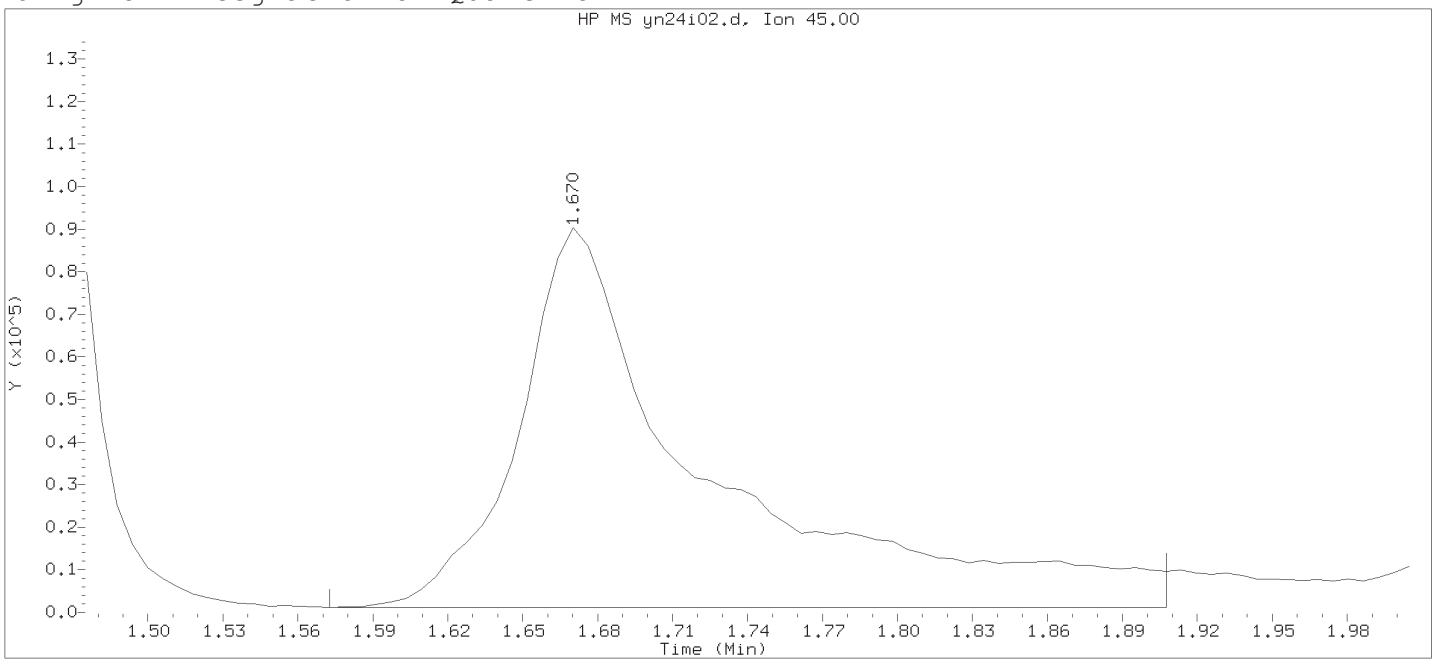
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

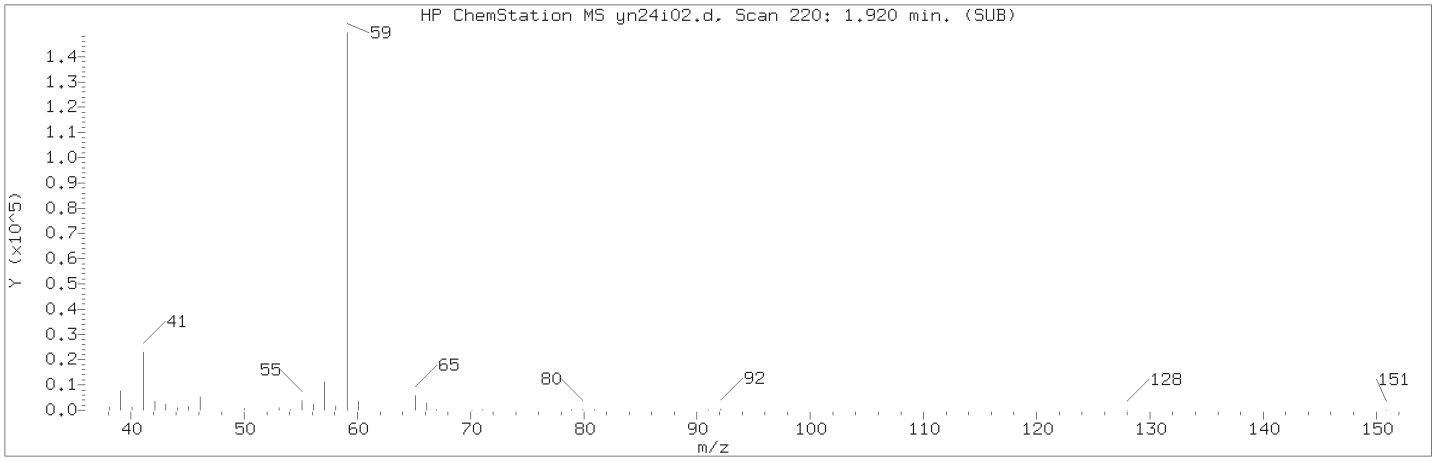
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

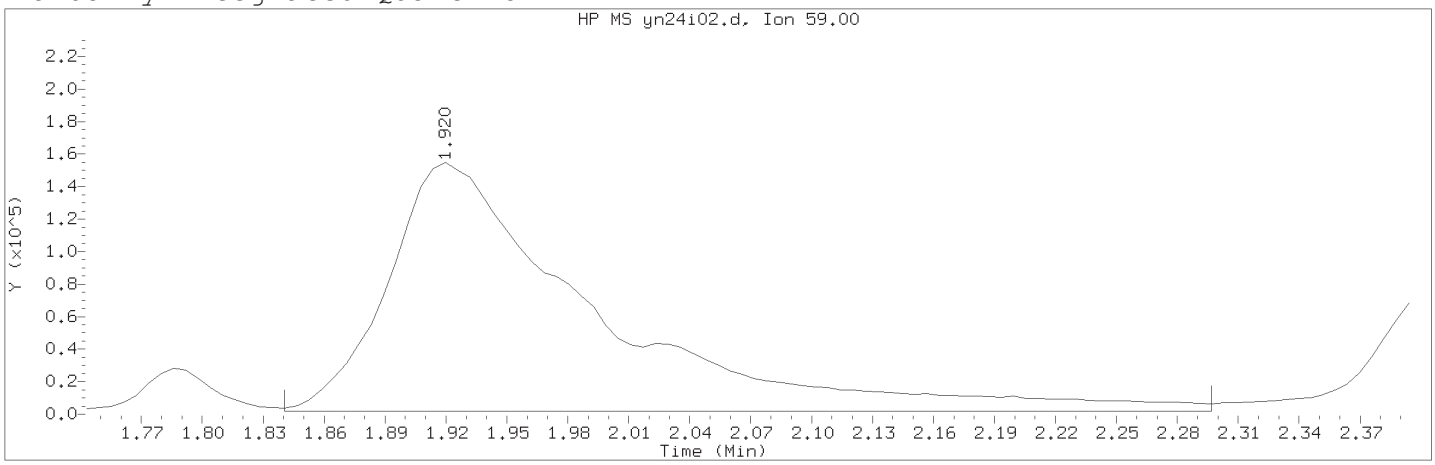
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 179
Retention Time (minutes): 1.670
Quant Ion : 45.00
Area : 469884
On-column Amount (ng) : 520.5191
Integration start scan : 162 Integration stop scan: 217
Y at integration start : 1112 Y at integration end: 1112

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

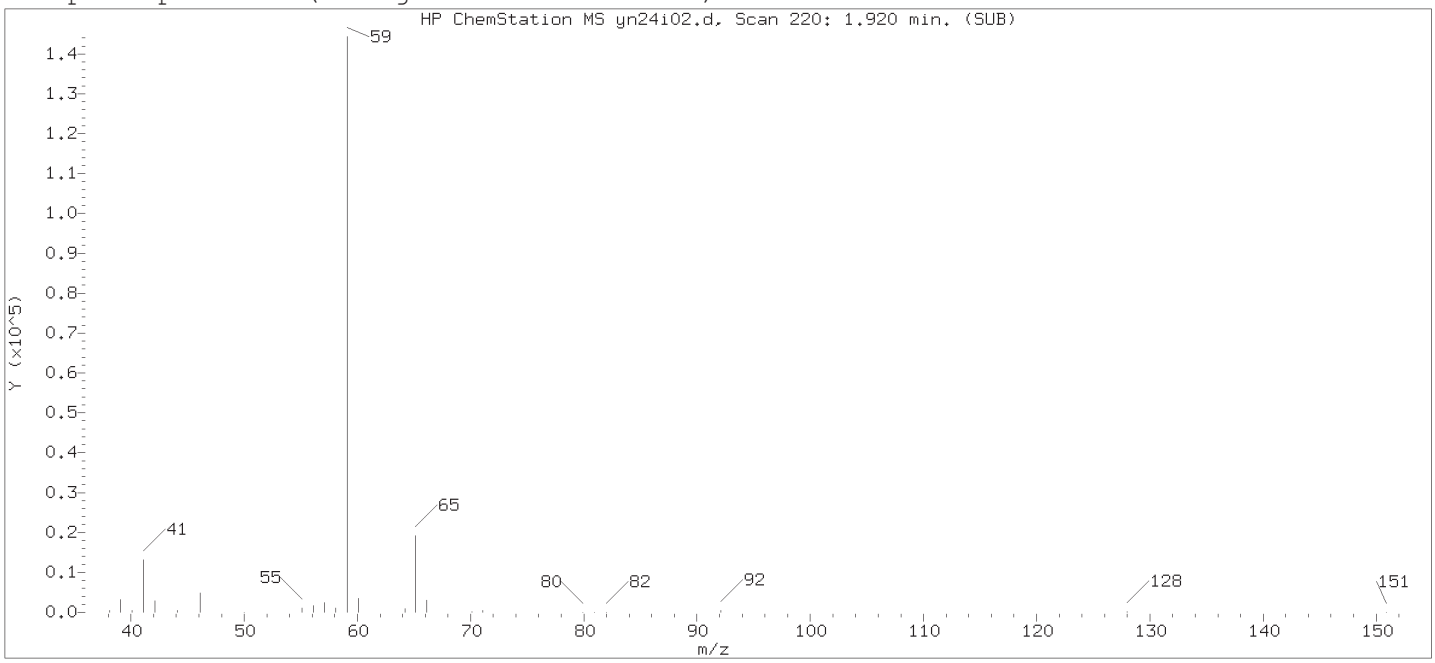
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 220
Retention Time (minutes): 1.920
Quant Ion : 59.00
Area (flag) : 1075375M
On-Column Amount (ng) : 536.0182
Integration start scan : 206 Integration stop scan: 281
Y at integration start : 1781 Y at integration end: 1781

Reason for manual integration: improper integration

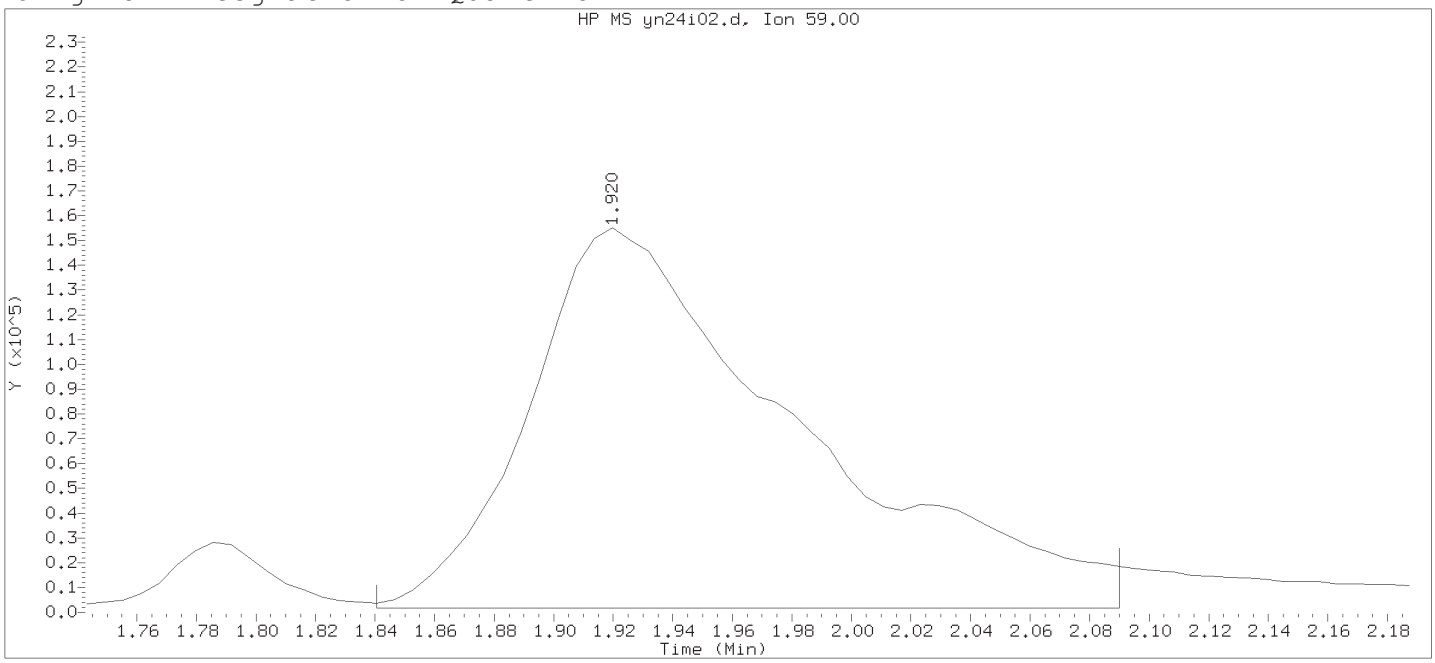
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

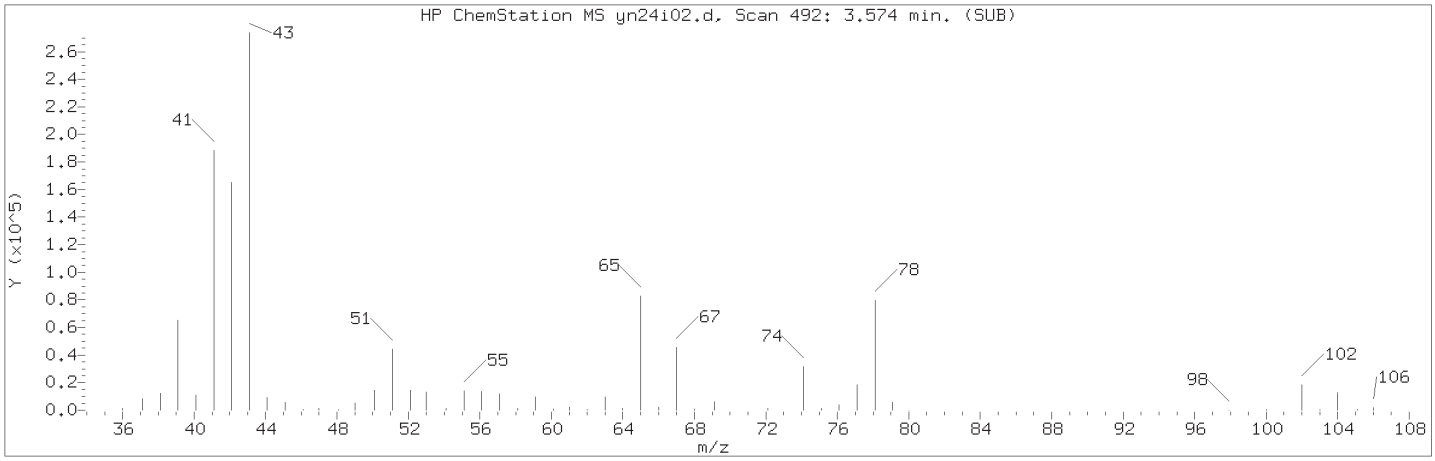
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

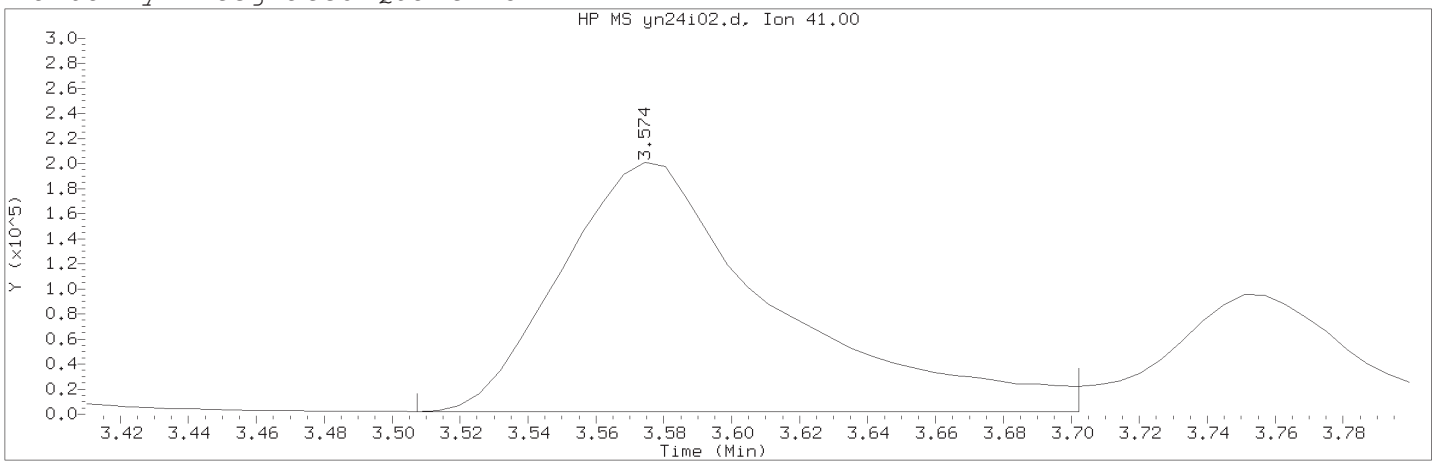
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 220
Retention Time (minutes): 1.920
Quant Ion : 59.00
Area : 959971
On-column Amount (ng) : 475.0057
Integration start scan : 206 Integration stop scan: 247
Y at integration start : 1782 Y at integration end: 1782

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

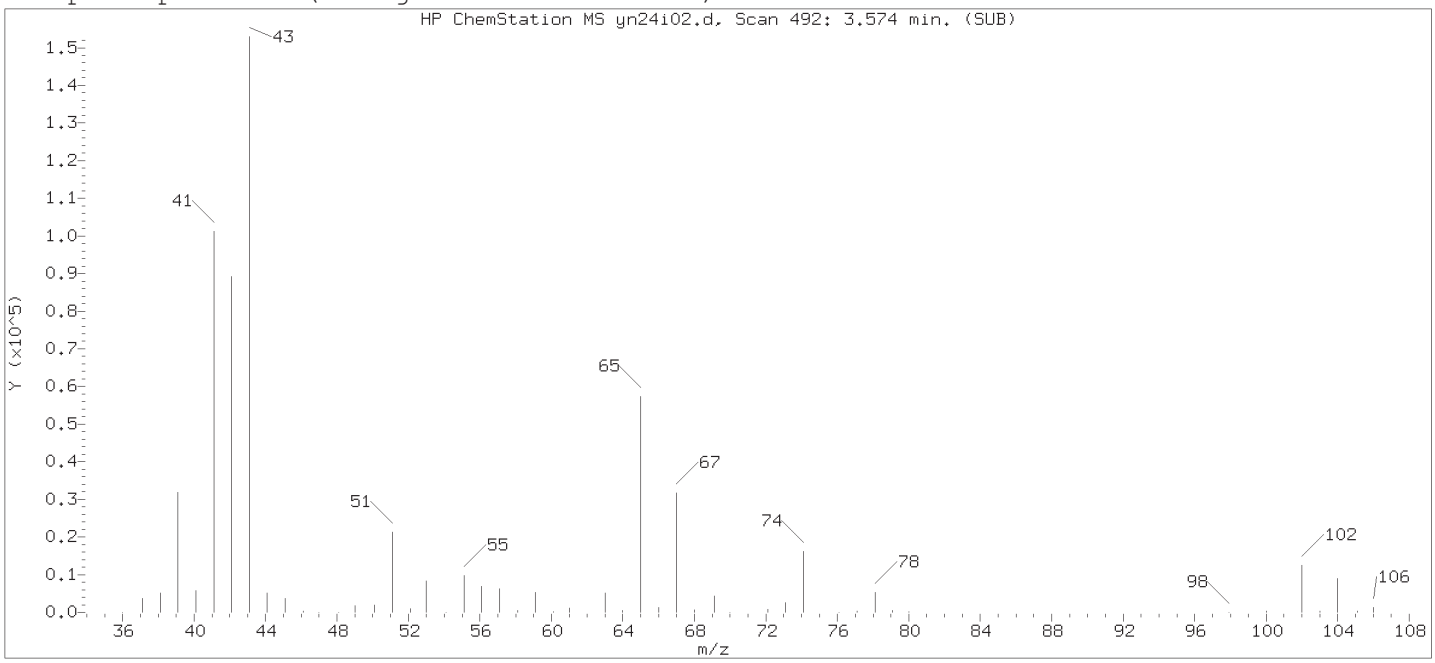
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 492
Retention Time (minutes): 3.574
Quant Ion : 41.00
Area (flag) : 872209M
On-Column Amount (ng) : 1316.7435
Integration start scan : 480 Integration stop scan: 512
Y at integration start : 2146 Y at integration end: 2146

Reason for manual integration: improper integration

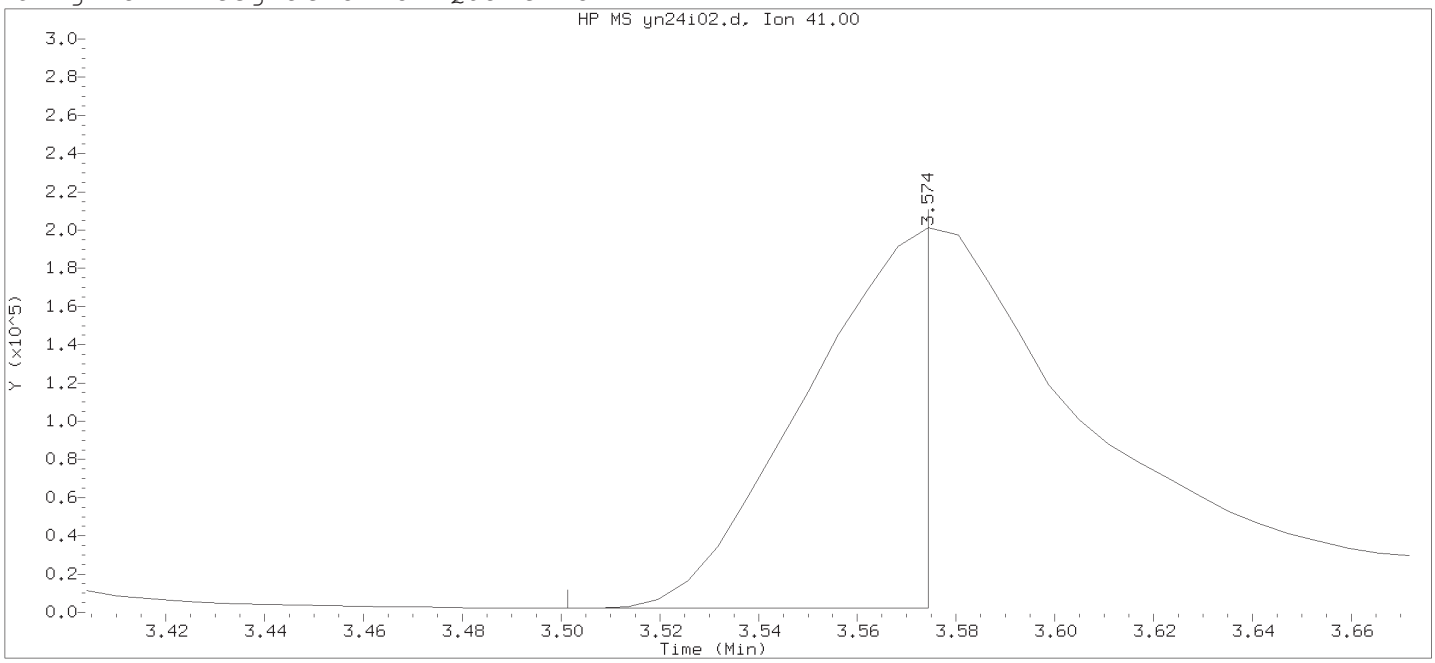
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

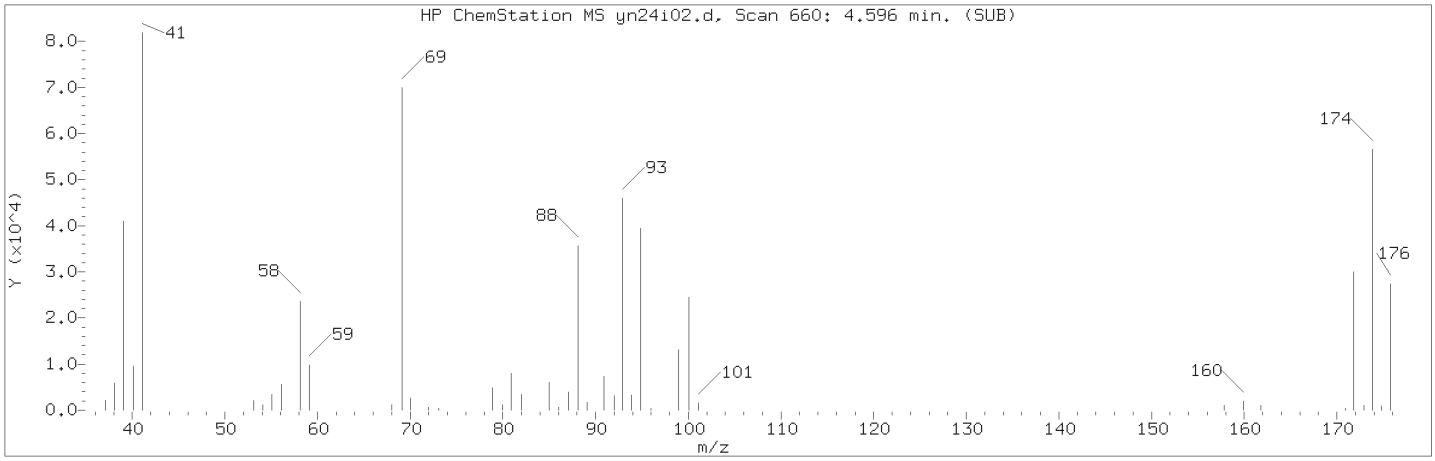
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

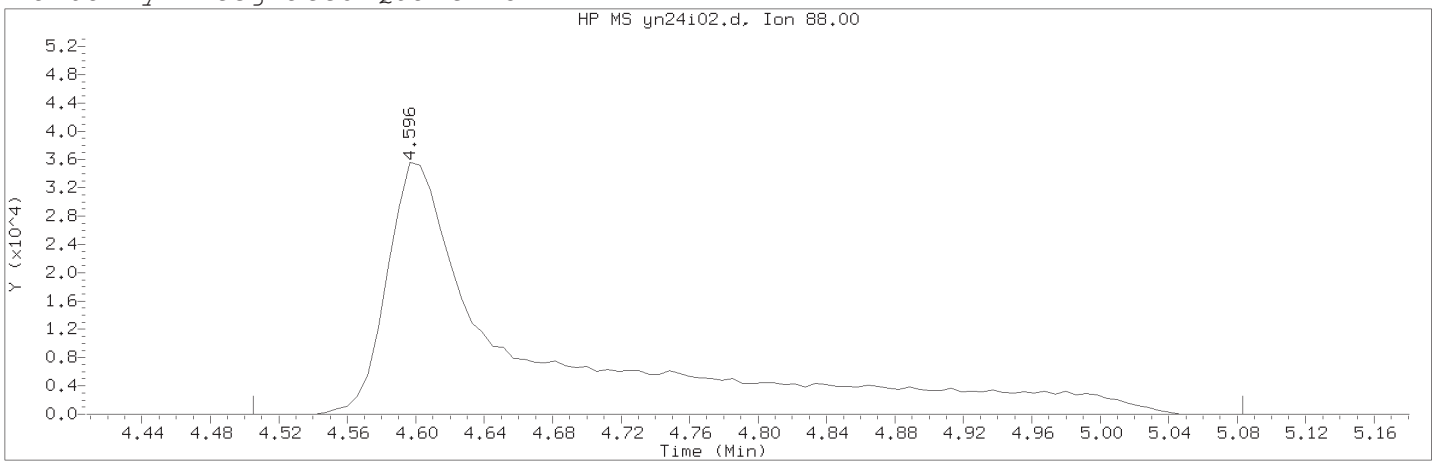
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 492
Retention Time (minutes): 3.574
Quant Ion : 41.00
Area : 331344
On-column Amount (ng) : 546.2848
Integration start scan : 479 Integration stop scan: 491
Y at integration start : 2235 Y at integration end: 2235

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

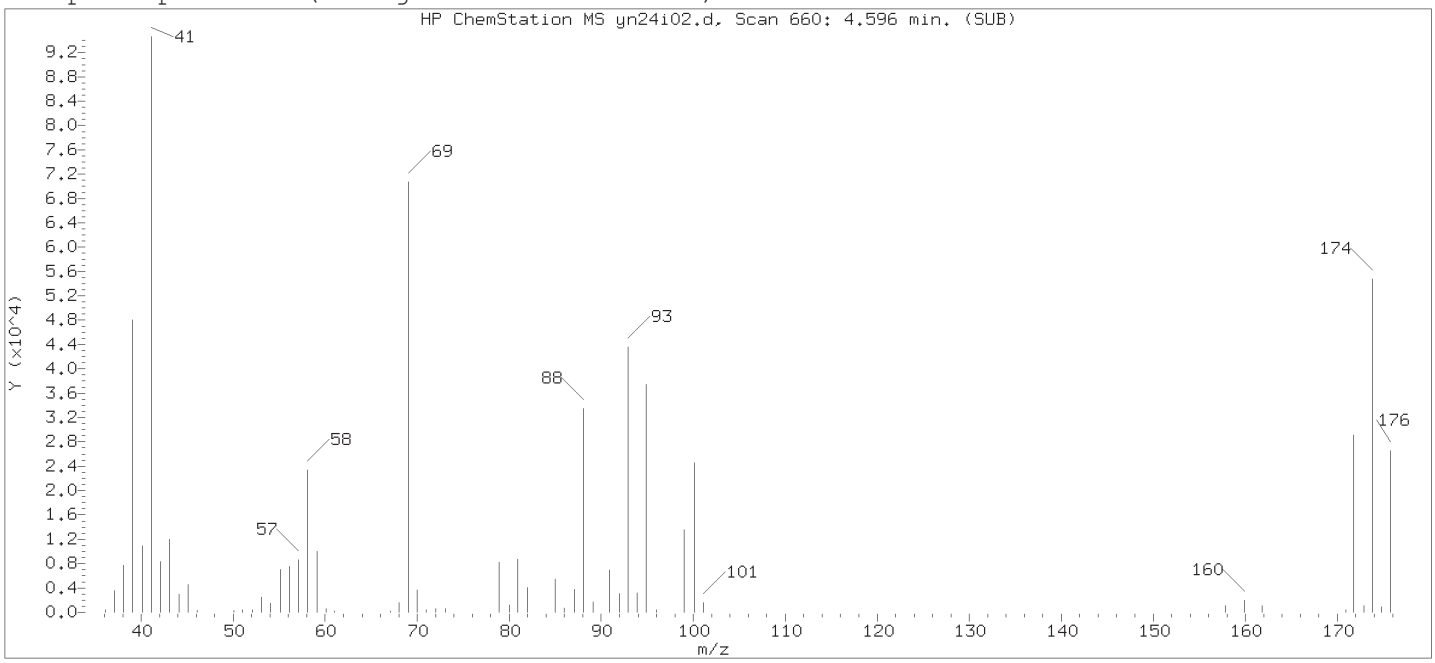
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area (flag) : 202260M
On-Column Amount (ng) : 1316.0966
Integration start scan : 644 Integration stop scan: 739
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

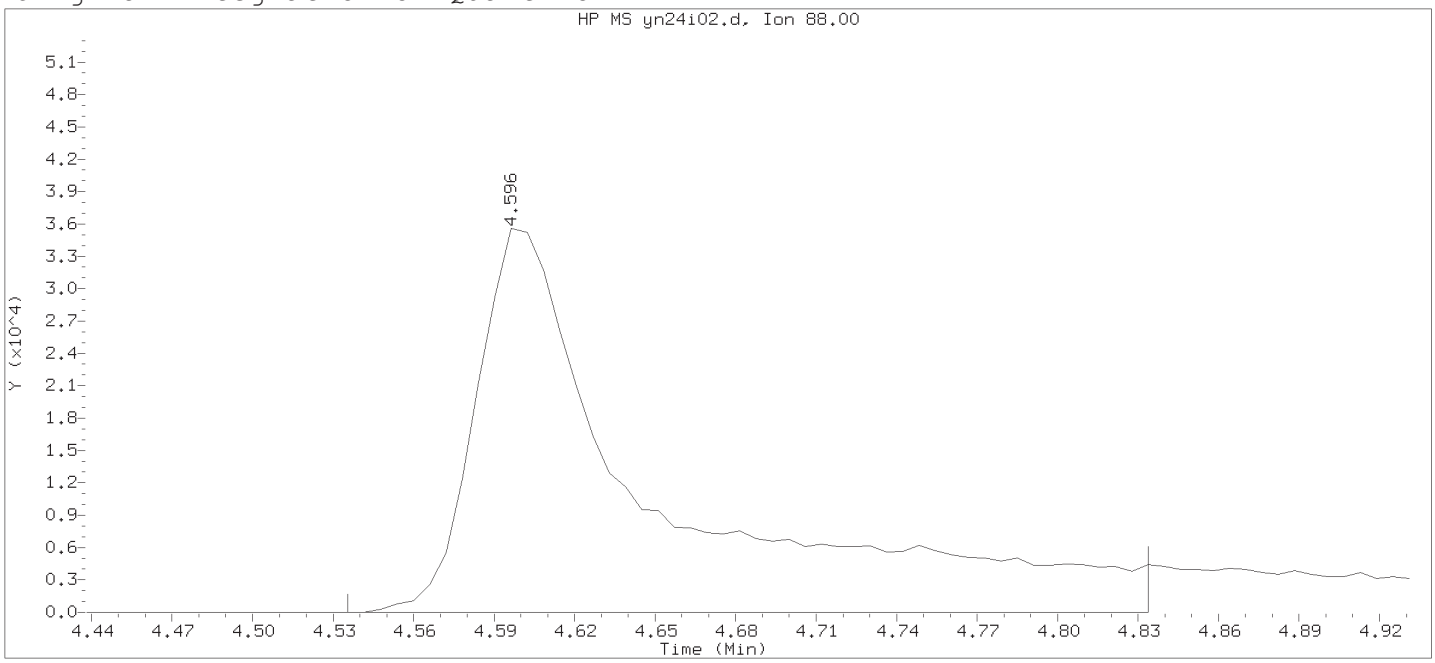
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

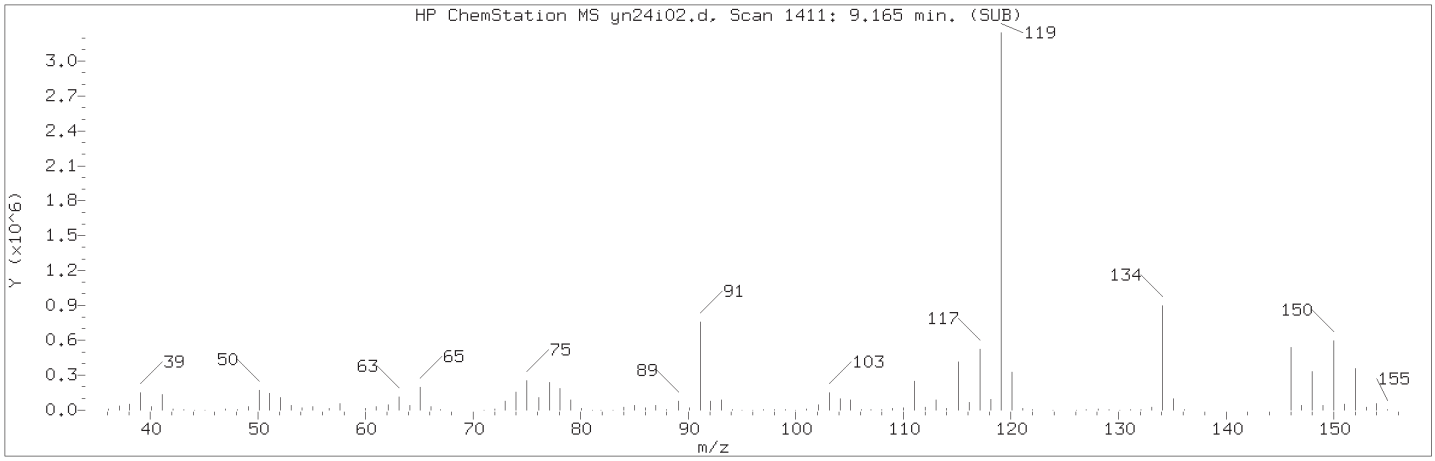
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

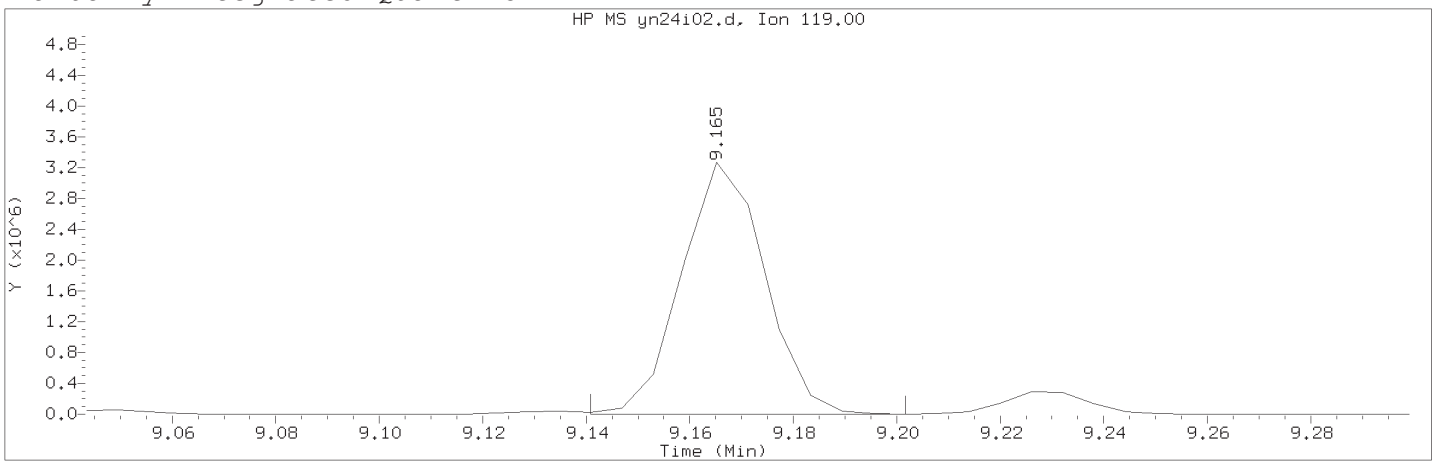
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area : 164803
On-column Amount (ng) : 1151.7827
Integration start scan : 649 Integration stop scan: 698
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

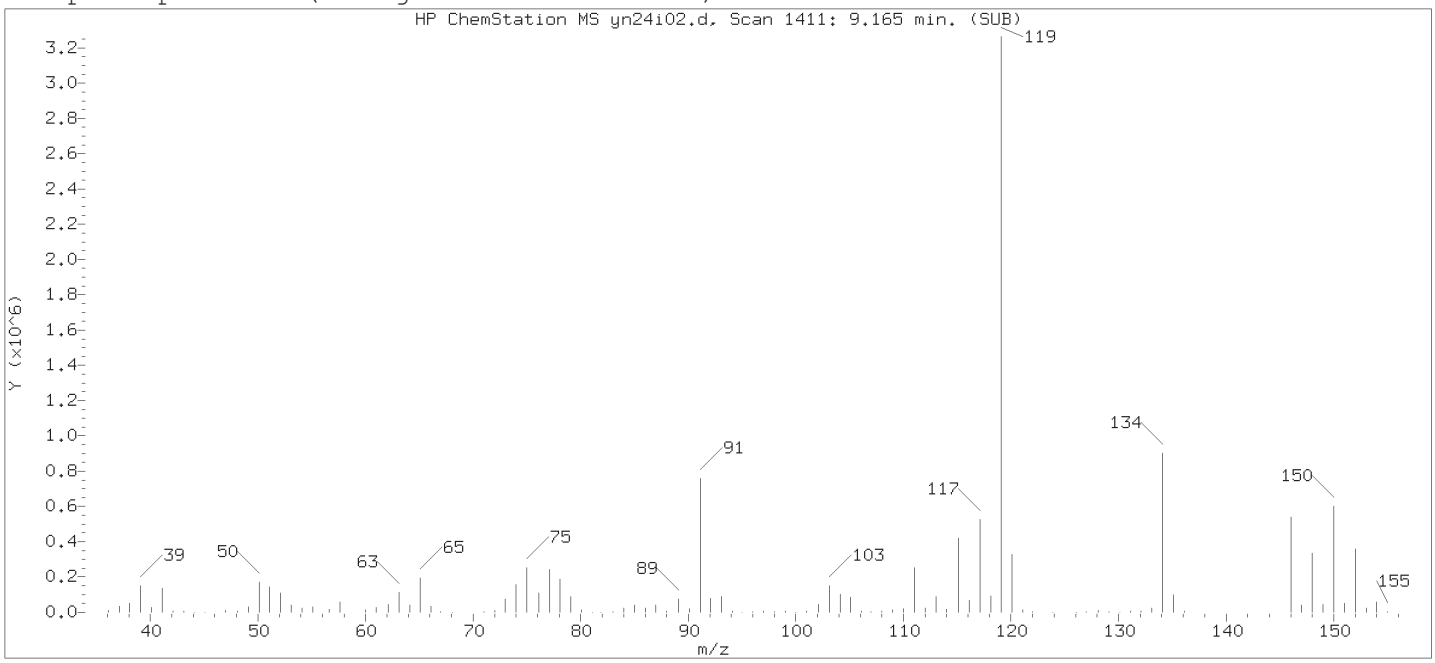
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area (flag) : 3651817M
On-Column Amount (ng) : 105.6933
Integration start scan : 1406 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

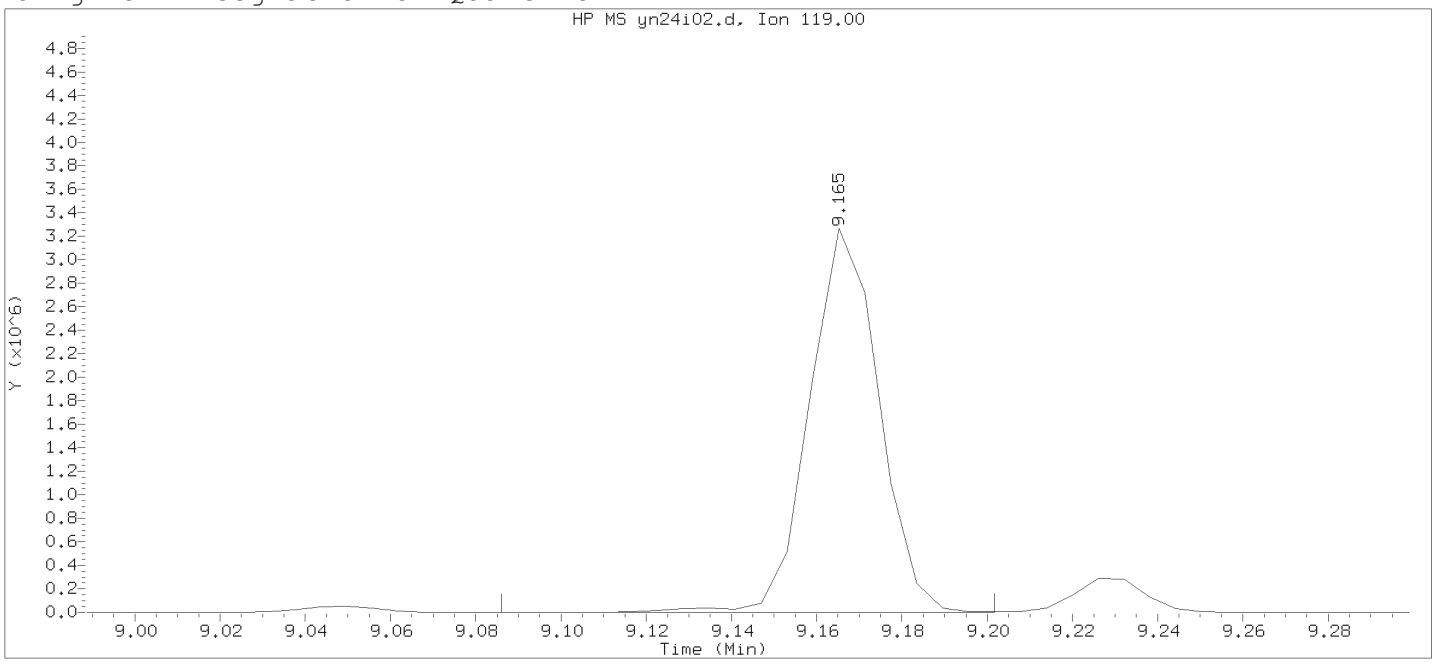
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



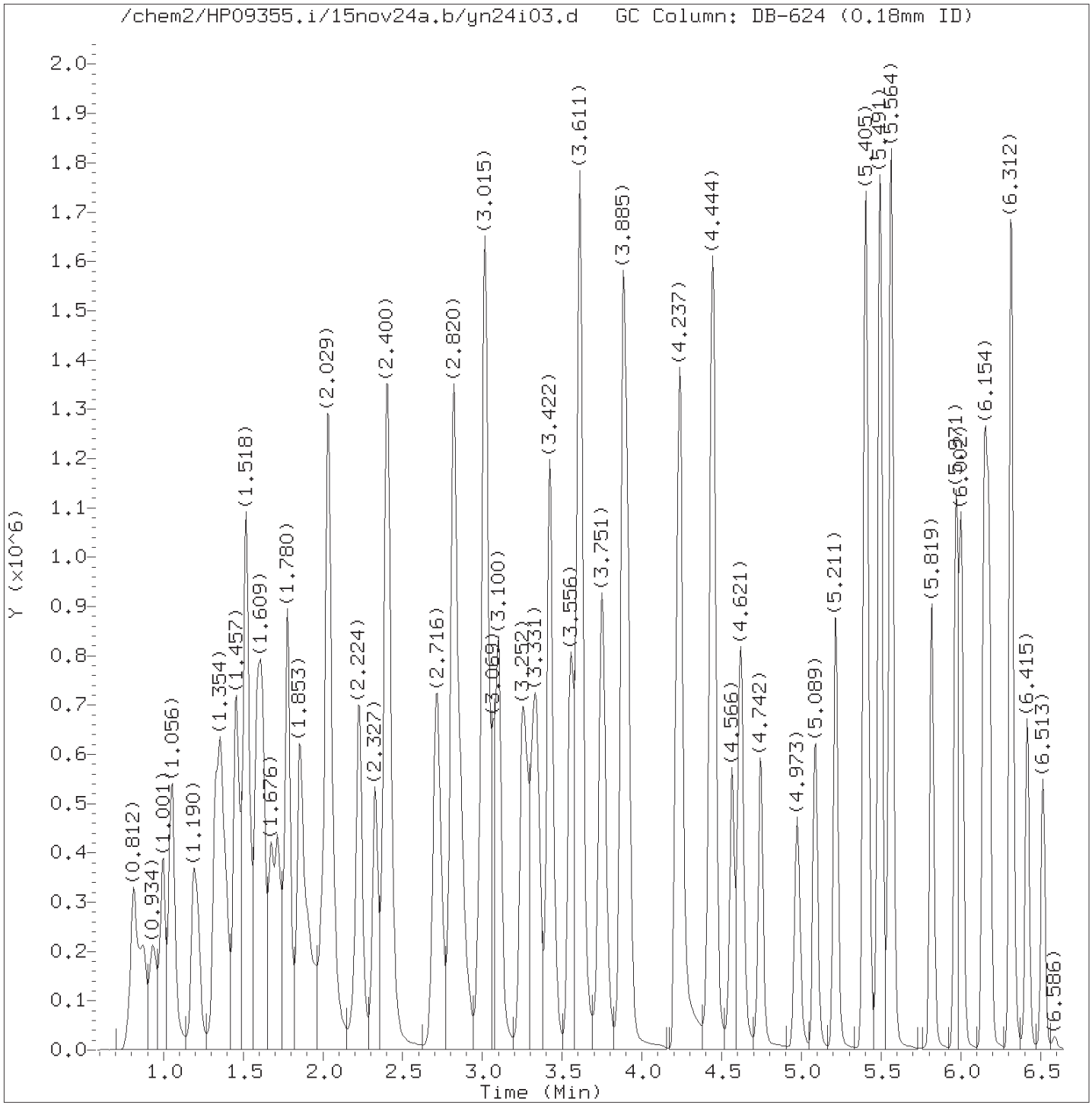
Data File: /chem2/HP09355.i/15nov24a.b/yn24i02.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:25
Date, time and analyst ID of latest file update: 24-Nov-2015 01:25 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area : 3685805
On-column Amount (ng) : 98.3417
Integration start scan : 1397 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:44.
Target 3.5 esignature user ID: asds1731



Total Ion Chromatogram (TIC)

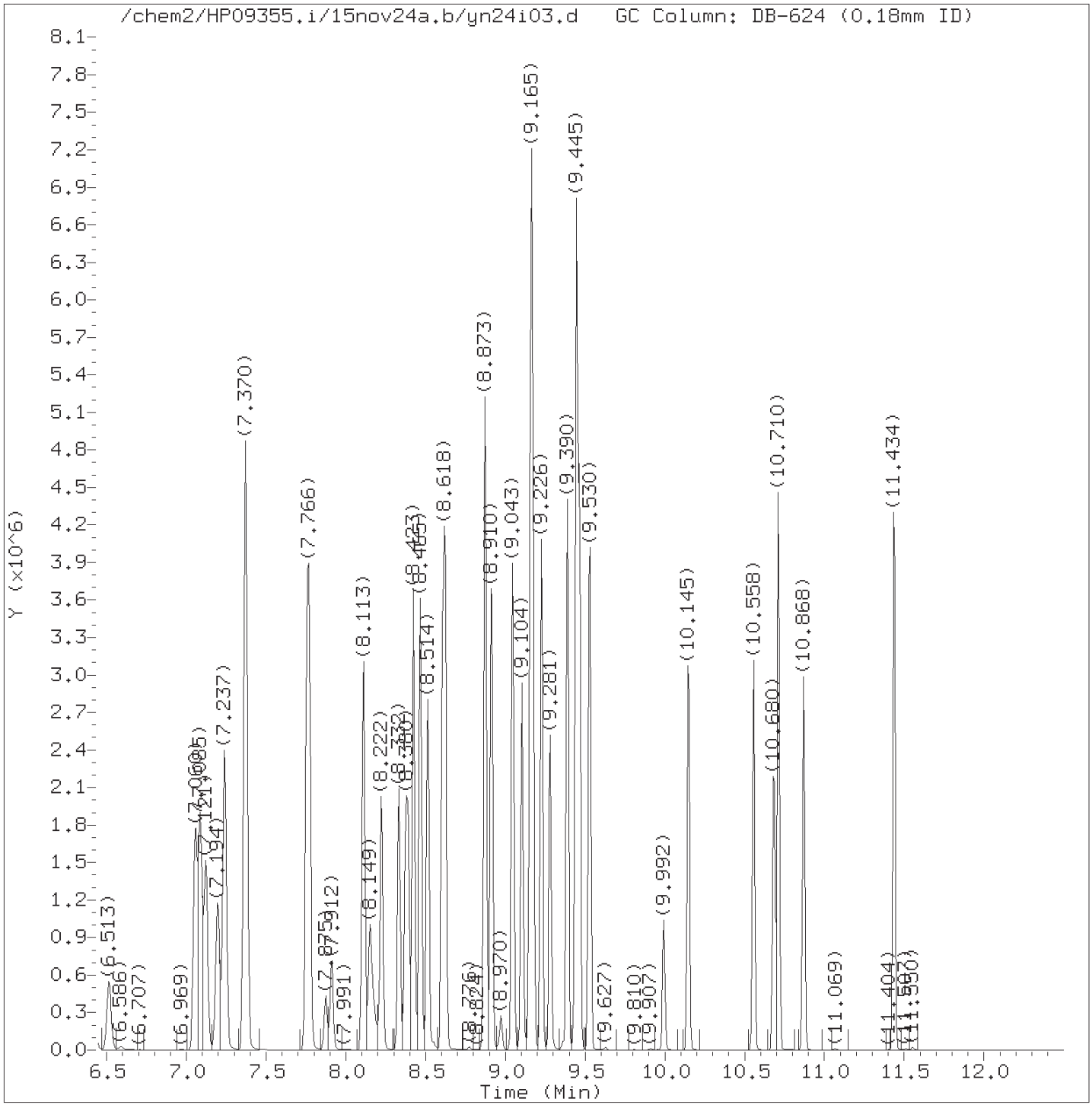
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.934	85	445968	55.839
4) Chloromethane	(2)	1.001	50	484411M	53.310
5) 1,3-Butadiene	(2)	1.044	39	185522	48.580
6) Vinyl Chloride	(2)	1.062	62	428592	53.219
8) Bromomethane	(2)	1.190	94	288671	52.150
9) Chloroethane	(2)	1.214	64	235646	52.537
10) Dichlorofluoromethane	(2)	1.329	67	535582	52.836
11) n-Pentane	(2)	1.360	43	442391	55.895
12) Trichlorofluoromethane	(2)	1.384	101	481944	53.524
14) Ethyl ether	(2)	1.451	59	294993	51.238
15) Freon 123a	(2)	1.482	67	345973	51.430
16) Acrolein	(1)	1.518	56	1368466	496.336
17) 1,1-Dichloroethene	(2)	1.585	96	282661	53.395
17) 1,1-Dichloroethene	(2)	1.585	63	138030	53.107
18) Acetone	(1)	1.597	58	142442	101.658
19) Freon 113	(2)	1.621	101	278713	54.541
21) 2-Propanol	(1)	1.664	45	180221M	216.706
22) Methyl Iodide	(2)	1.676	142	537449	53.335
23) Carbon Disulfide	(2)	1.719	76	1081190	53.266
25) Allyl Chloride	(2)	1.780	41	409510	52.830
27) Methyl Acetate	(2)	1.780	43	443656	49.711
28) Methylene Chloride	(2)	1.853	84	326421	52.325
29)*t-Butyl alcohol-d10	(1)	1.865	65	455169	250.000
30) t-Butyl alcohol	(1)	1.913	59	503623M	249.339
31) Acrylonitrile	(2)	1.999	53	261533	50.363
32) trans-1,2-Dichloroethene	(2)	2.029	96	321621	52.867
33) Methyl Tertiary Butyl Ether	(2)	2.041	73	1087372	51.265
34) n-Hexane	(2)	2.230	57	522684	51.599
36) 1,1-Dichloroethane	(2)	2.327	63	655093	52.935
38) di-Isopropyl ether	(2)	2.400	45	1218255	51.345
39) 2-Chloro-1,3-butadiene	(2)	2.406	53	522557	52.390
40) Ethyl t-butyl ether	(2)	2.716	59	1174987	51.210
42) cis-1,2-Dichloroethene	(2)	2.814	96	393435	52.680
44) 2-Butanone	(2)	2.826	43	882130	97.843
45) 2,2-Dichloropropane	(2)	2.832	77	484939	54.930
47) Propionitrile	(1)	2.869	54	567657	246.148
43) 1,2-Dichloroethene (Total)	(2)		96	715056	105.547
48) Methacrylonitrile	(2)	3.009	67	691563	126.935

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.021	128	195991	51.011
50) Tetrahydrofuran	(1)	3.069	71	243005	101.807
51) Chloroform	(2)	3.106	83	602678	52.923
52)$Dibromofluoromethane	(2)	3.246	113	347489	50.420
52)$Dibromofluoromethane	(2)	3.246	111	353289	50.056
53) 1,1,1-Trichloroethane	(2)	3.276	97	541985	50.245
54) Cyclohexane	(2)	3.337	56	616218	53.094
54) Cyclohexane	(2)	3.337	84	597858	53.904
54) Cyclohexane	(2)	3.331	69	190214	53.674
55) 1,1-Dichloropropene	(2)	3.422	75	506264	52.790
56) Carbon Tetrachloride	(2)	3.428	117	440804	55.419
57)$1,2-Dichloroethane-d4	(2)	3.550	102	88088	49.295
57)$1,2-Dichloroethane-d4	(2)	3.550	65	412026	49.456
57)$1,2-Dichloroethane-d4	(2)	3.550	104	56520	49.724
58) Isobutyl Alcohol	(1)	3.568	41	407096	610.440
60) Benzene	(2)	3.611	78	1492549	52.384
61) 1,2-Dichloroethane	(2)	3.623	62	508575	50.418
61) 1,2-Dichloroethane	(2)	3.623	98	48226	53.715
65) t-Amyl methyl ether	(2)	3.751	73	1128522	51.945
66)*Fluorobenzene	(2)	3.878	96	1468903	50.000
67) n-Heptane	(2)	3.909	43	608919	51.392
69) n-Butanol	(1)	4.219	56	759113	1296.528
71) Trichloroethene	(2)	4.243	95	383897	52.939
72) Methylcyclohexane	(2)	4.438	83	621892	53.939
72) Methylcyclohexane	(2)	4.438	98	276363	53.383
73) 1,2-Dichloropropane	(2)	4.450	63	392296	52.984
74) Dibromomethane	(2)	4.566	93	250008	52.380
75) 1,4-Dioxane	(1)	4.596	88	100341M	648.518
76) Methyl Methacrylate	(2)	4.621	69	431091	51.147
78) Bromodichloromethane	(2)	4.742	83	451148	55.757
79) 2-Nitropropane	(2)	4.973	41	389757	102.410
80) 2-Chloroethyl Vinyl Ether	(2)	5.089	63	347269M	51.626
81) cis-1,3-Dichloropropene	(2)	5.217	75	621976	55.642
82) 4-Methyl-2-pentanone	(2)	5.405	43	1596809	93.676
83)$Toluene-d8	(3)	5.491	98	1476843	49.939
83)$Toluene-d8	(3)	5.491	100	973298	49.827
88) Toluene	(3)	5.564	92	956611	52.567
89) trans-1,3-Dichloropropene	(3)	5.819	75	576329	56.337

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	1198305	111.979
91) Ethyl Methacrylate	(3)	5.971	69	678397	52.396
92) 1,1,2-Trichloroethane	(3)	6.002	97	377616	51.934
93) Tetrachloroethene	(3)	6.148	166	403915	52.945
94) 1,3-Dichloropropane	(3)	6.178	76	649501	52.136
96) 2-Hexanone	(3)	6.312	43	1310267	89.962
97) Dibromochloromethane	(3)	6.415	129	389695	48.325
99) 1,2-Dibromoethane	(3)	6.513	107	418500	52.889
100)*Chlorobenzene-d5	(3)	7.054	117	1097843	50.000
102) Chlorobenzene	(3)	7.085	112	1089242	52.531
101) 1-Chlorohexane	(3)	7.121	91	511548	52.468
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	358346	55.361
104) Ethylbenzene	(3)	7.237	91	1837892	53.680
106) m+p-Xylene	(3)	7.370	106	1461178	108.205
107) o-Xylene	(3)	7.754	106	724048	53.837
109) Styrene	(3)	7.772	104	1212284	53.356
108) Xylene (Total)	(3)		106	2185226	162.042
110) Bromoform	(3)	7.912	173	288437	54.183
111) Isopropylbenzene	(3)	8.113	105	1814986	52.683
112) Cyclohexanone	(1)	8.149	55	549534	643.240
114)$4-Bromofluorobenzene	(3)	8.222	95	555667	50.096
114)$4-Bromofluorobenzene	(3)	8.222	174	446480	50.086
115) Bromobenzene	(4)	8.332	156	464617	50.913
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	657376	51.895
117) 1,2,3-Trichloropropane	(4)	8.392	110	203838	50.384
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	533660	127.420
119) n-Propylbenzene	(4)	8.465	91	2170721	52.313
120) 2-Chlorotoluene	(4)	8.514	126	450901	51.326
121) 4-Chlorotoluene	(4)	8.605	126	476985	51.667
122) 1,3,5-Trimethylbenzene	(4)	8.624	105	1611897	52.684
124) tert-Butylbenzene	(4)	8.873	134	357616	52.192
125) Pentachloroethane	(4)	8.873	167	256927	51.550
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	1643912	52.531
127) sec-Butylbenzene	(4)	9.043	105	2018966	52.734
129) 1,3-Dichlorobenzene	(4)	9.104	146	903380	51.477
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	589043	50.000
130) p-Isopropyltoluene	(4)	9.165	119	1819035M	53.229
133) 1,4-Dichlorobenzene	(4)	9.171	146	930749	51.980

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

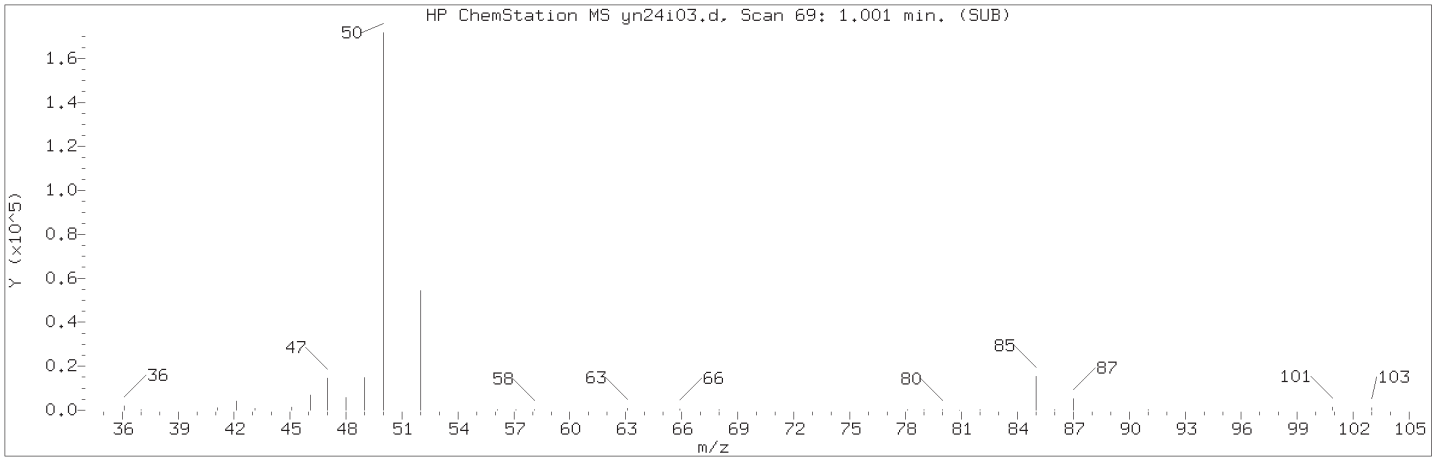
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

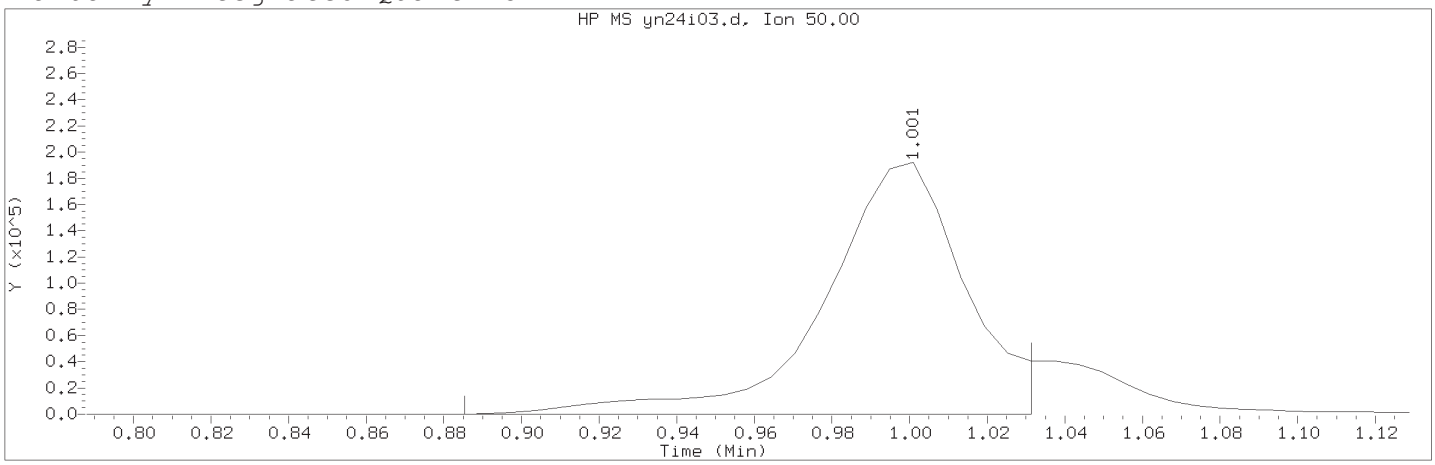
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	1647874	51.117
135) Benzyl Chloride	(4)	9.281	91	1255521	54.874
136) 1,3-Diethylbenzene	(4)	9.390	119	1066364	51.743
138) 1,2-Dichlorobenzene	(4)	9.439	146	877033	51.361
137) 1,4-Diethylbenzene	(4)	9.451	119	1114130	51.873
139) n-Butylbenzene	(4)	9.463	92	896683	52.193
140) 1,2-Diethylbenzene	(4)	9.530	119	874321	51.052
141) Diethylbenzene (total)	(4)		100	3054815	154.669
142) 1,2-Dibromo-3-chloropropane	(4)	9.992	75	176706	53.009
144) 1,3,5-Trichlorobenzene	(4)	10.151	180	695225	51.837
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	666486	51.606
147) Hexachlorobutadiene	(4)	10.686	225	304455	51.355
148) Naphthalene	(4)	10.710	128	2312938	51.506
149) 1,2,3-Trichlorobenzene	(4)	10.868	180	632840	51.447
150) 2-Methylnaphthalene	(4)	11.434	142	1374365	50.591

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

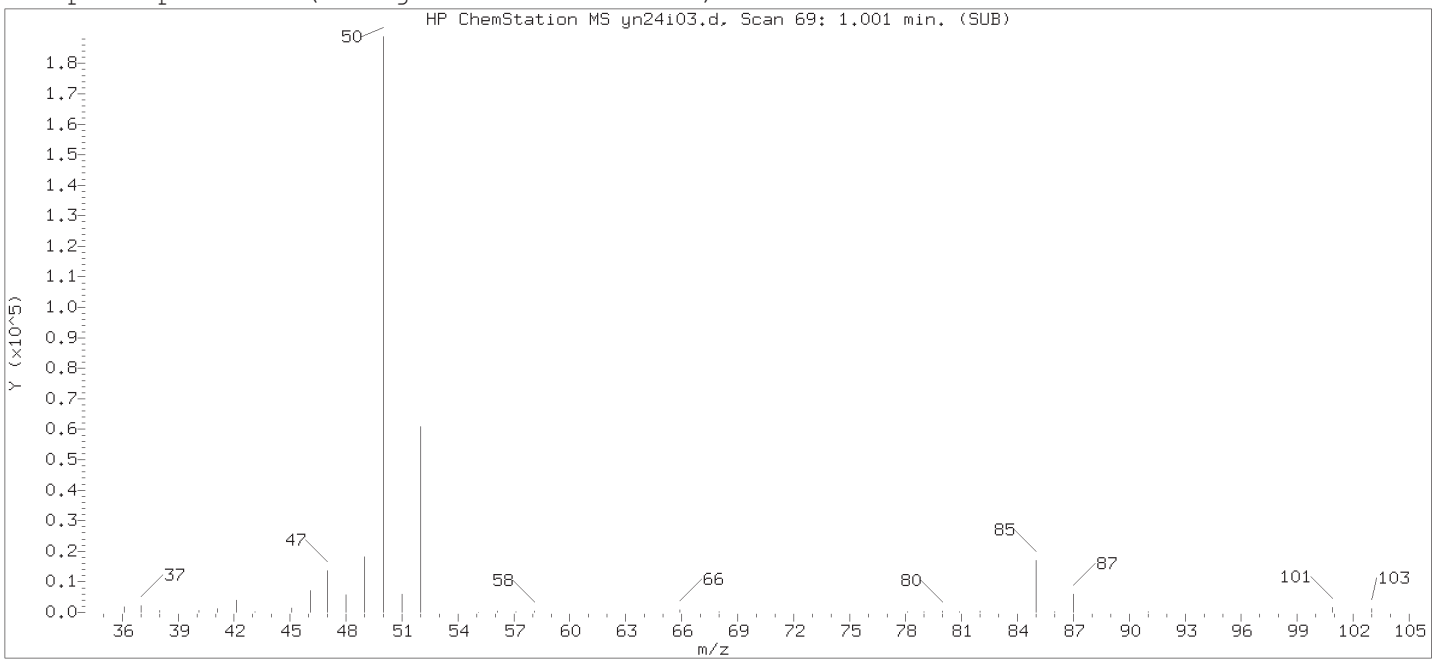
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 69
Retention Time (minutes): 1.001
Quant Ion : 50.00
Area (flag) : 484411M
On-Column Amount (ng) : 53.3100
Integration start scan : 49 Integration stop scan: 73
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

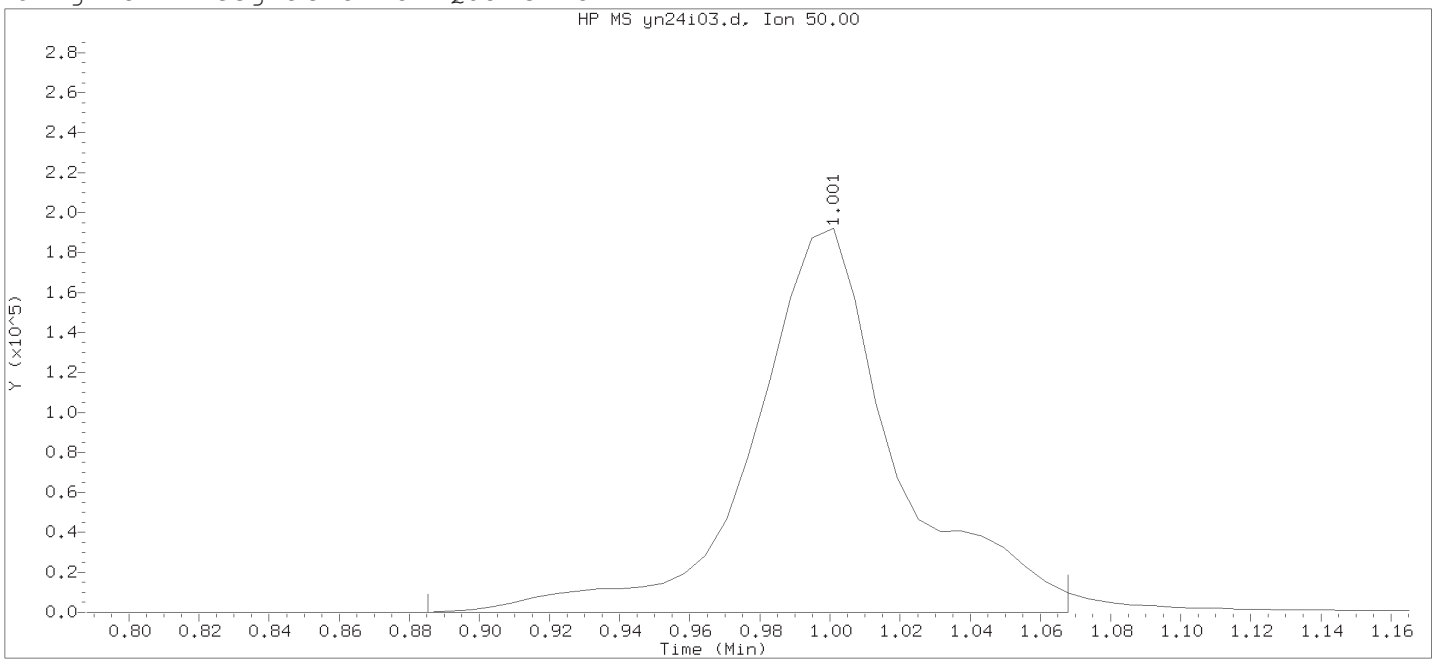
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

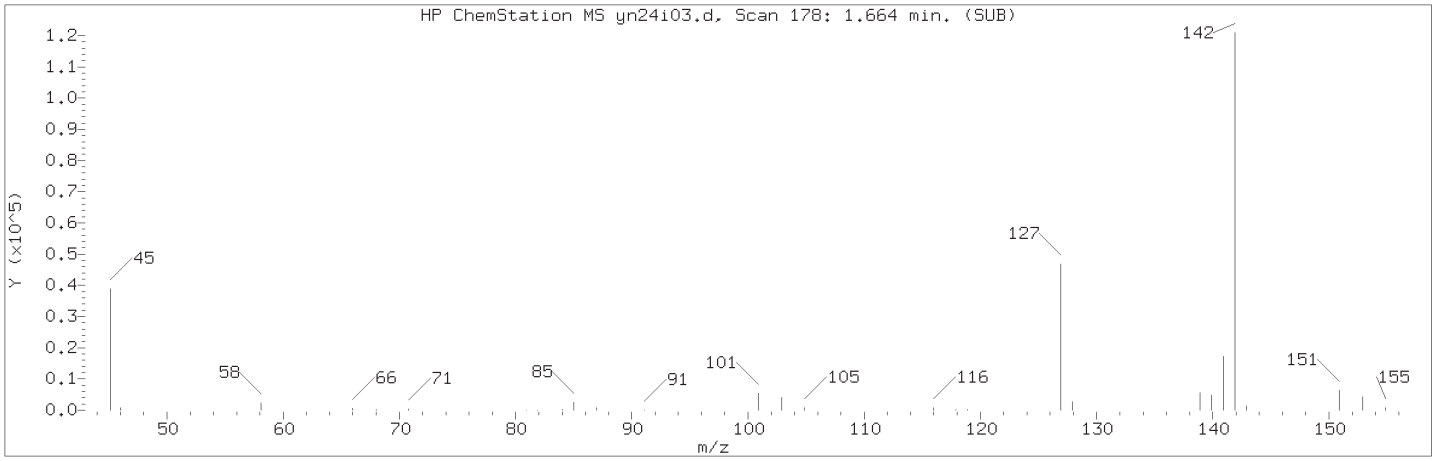
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

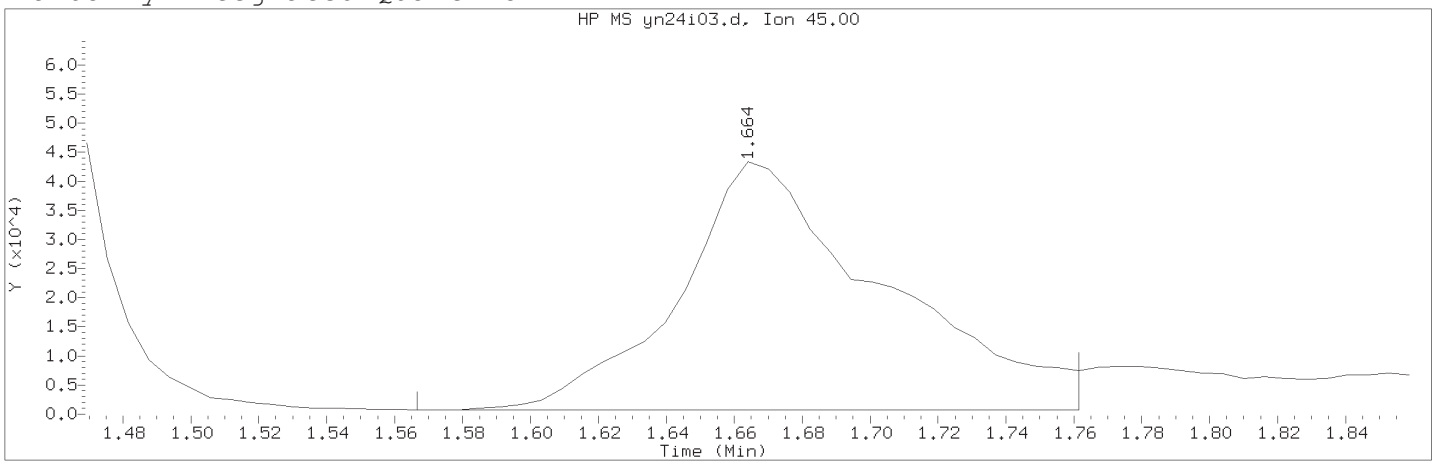
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 69
Retention Time (minutes): 1.001
Quant Ion : 50.00
Area : 540516
On-column Amount (ng) : 59.2945
Integration start scan : 49 Integration stop scan: 79
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

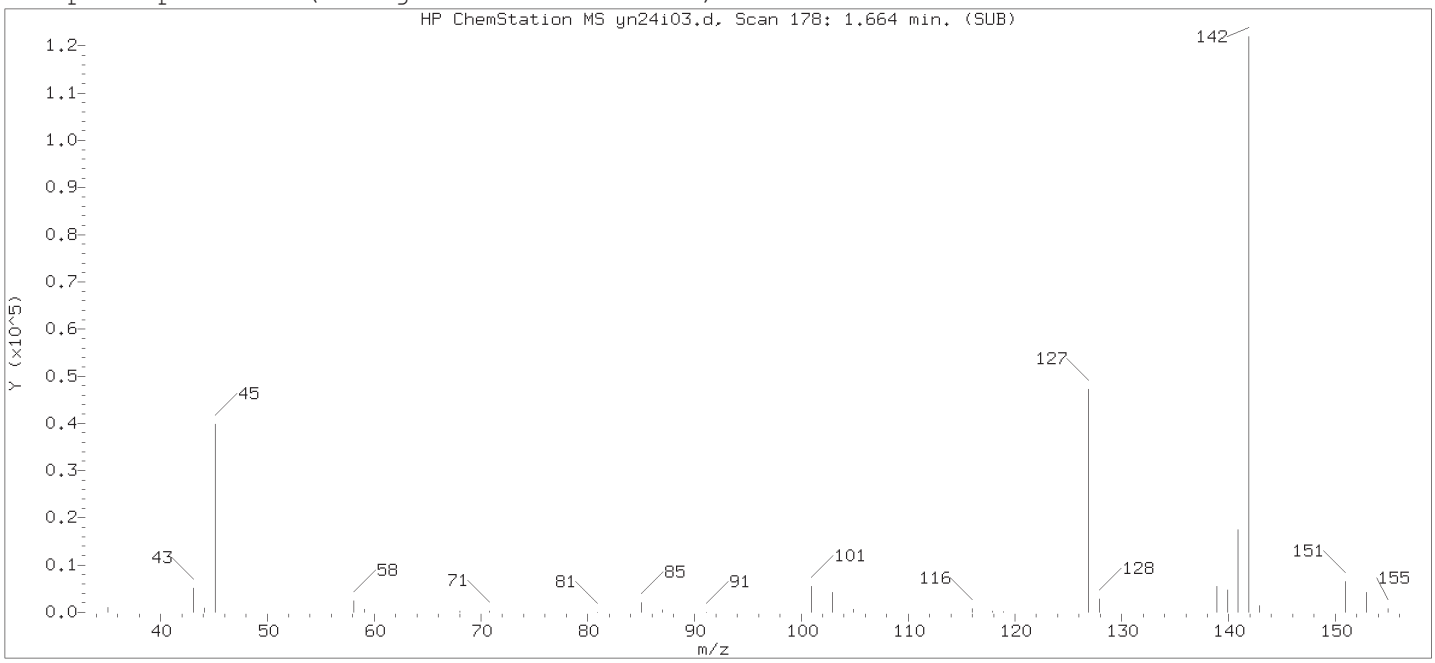
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 178
Retention Time (minutes): 1.664
Quant Ion : 45.00
Area (flag) : 180221M
On-Column Amount (ng) : 216.7061
Integration start scan : 161 Integration stop scan: 193
Y at integration start : 716 Y at integration end: 716

Reason for manual integration: improper integration

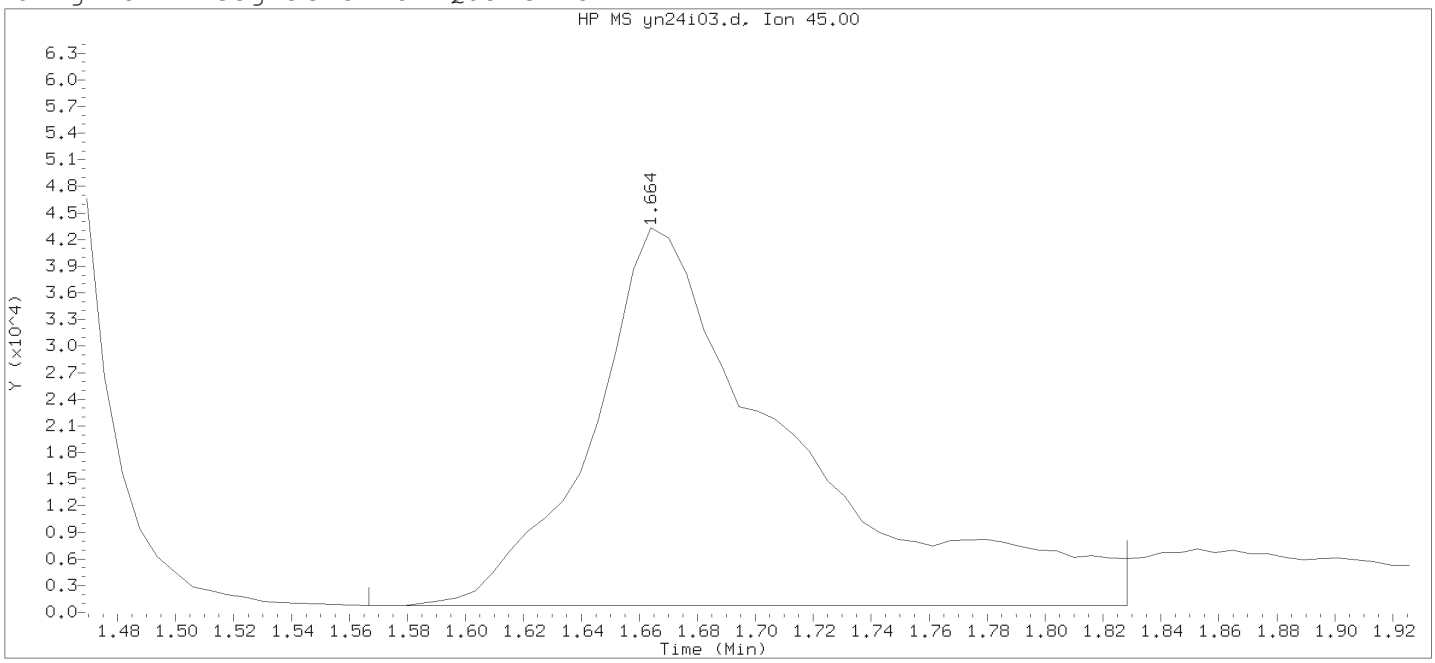
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

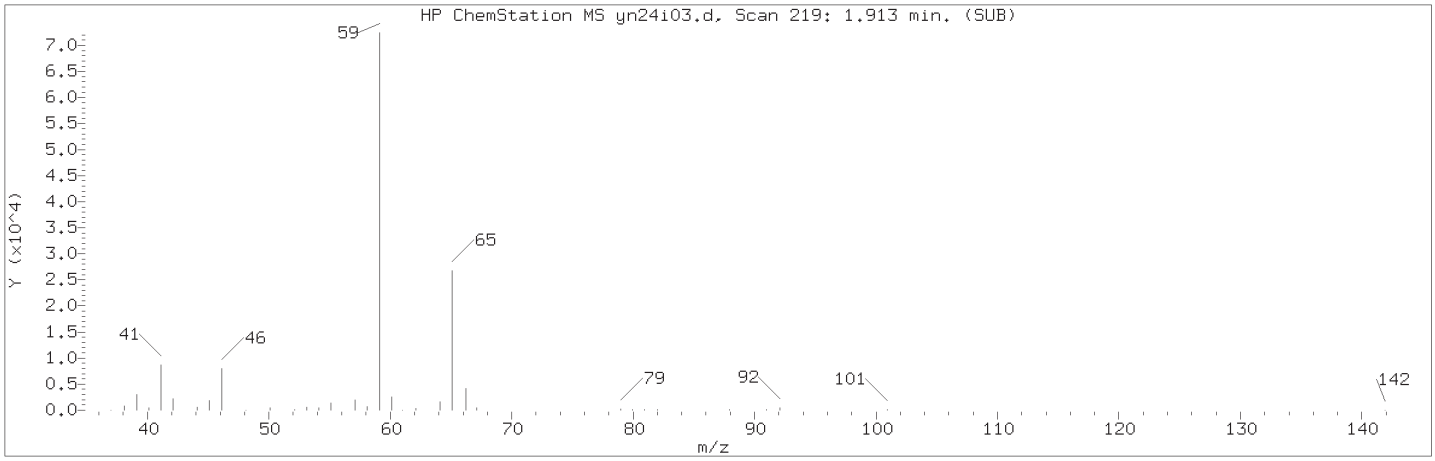
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

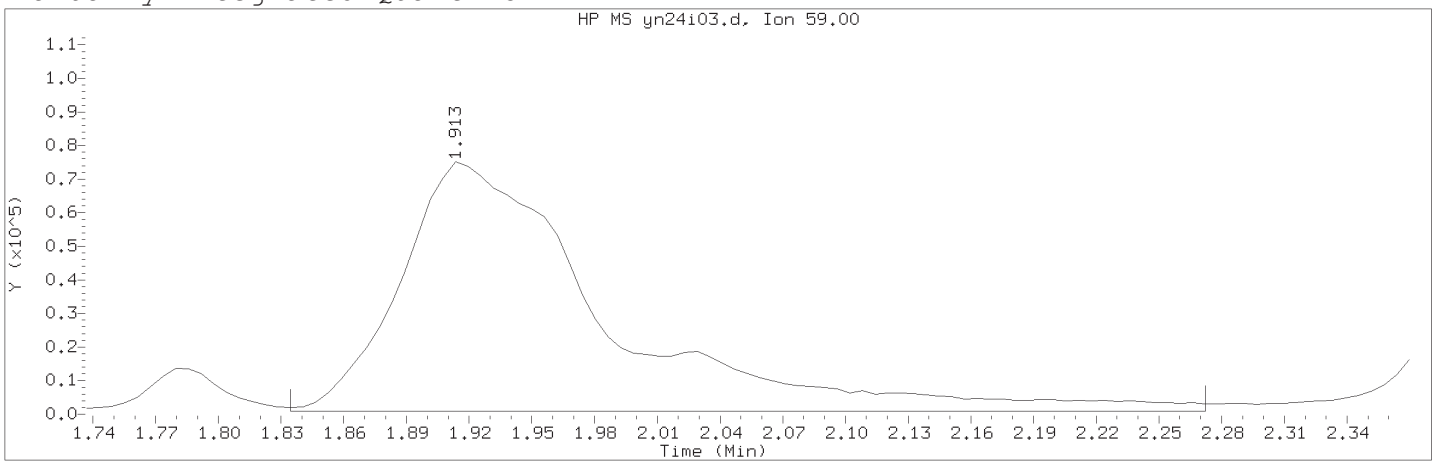
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 178
Retention Time (minutes): 1.664
Quant Ion : 45.00
Area : 204968
On-column Amount (ng) : 228.8282
Integration start scan : 161 Integration stop scan: 204
Y at integration start : 717 Y at integration end: 717

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

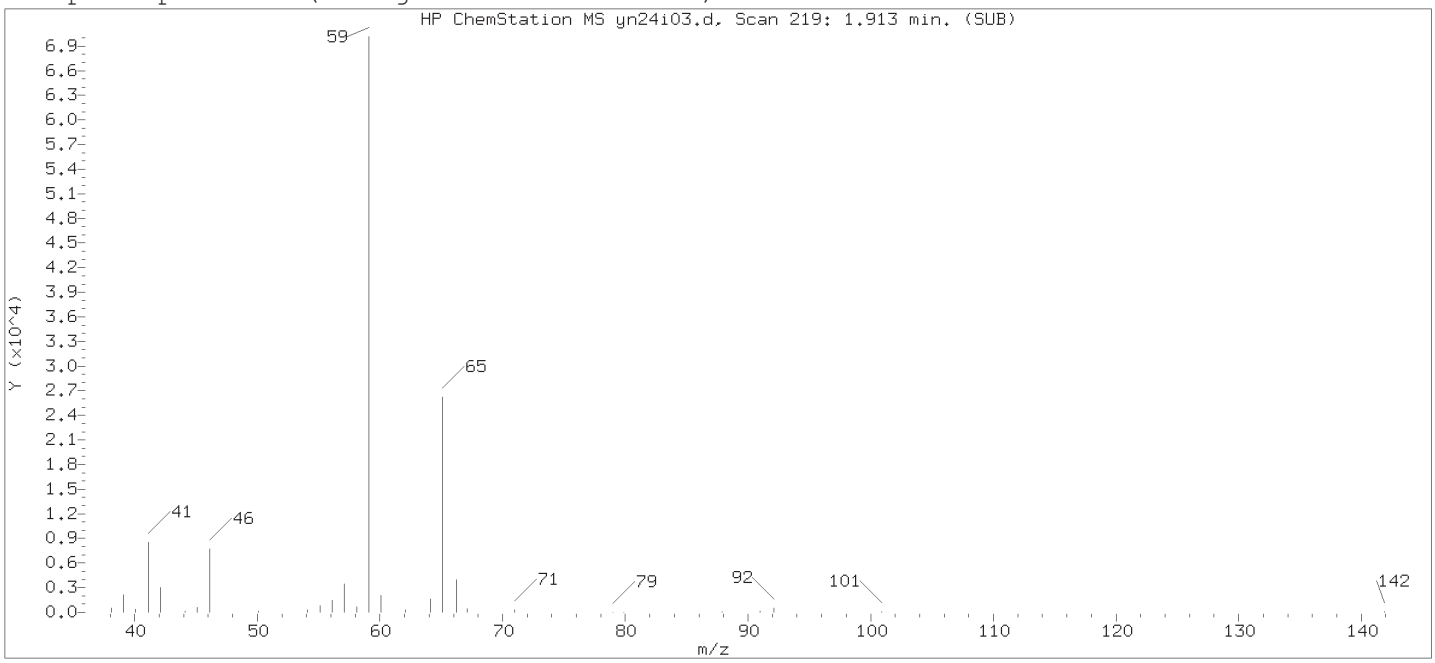
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 219
Retention Time (minutes): 1.913
Quant Ion : 59.00
Area (flag) : 503623M
On-Column Amount (ng) : 249.3394
Integration start scan : 205 Integration stop scan: 277
Y at integration start : 927 Y at integration end: 927

Reason for manual integration: improper integration

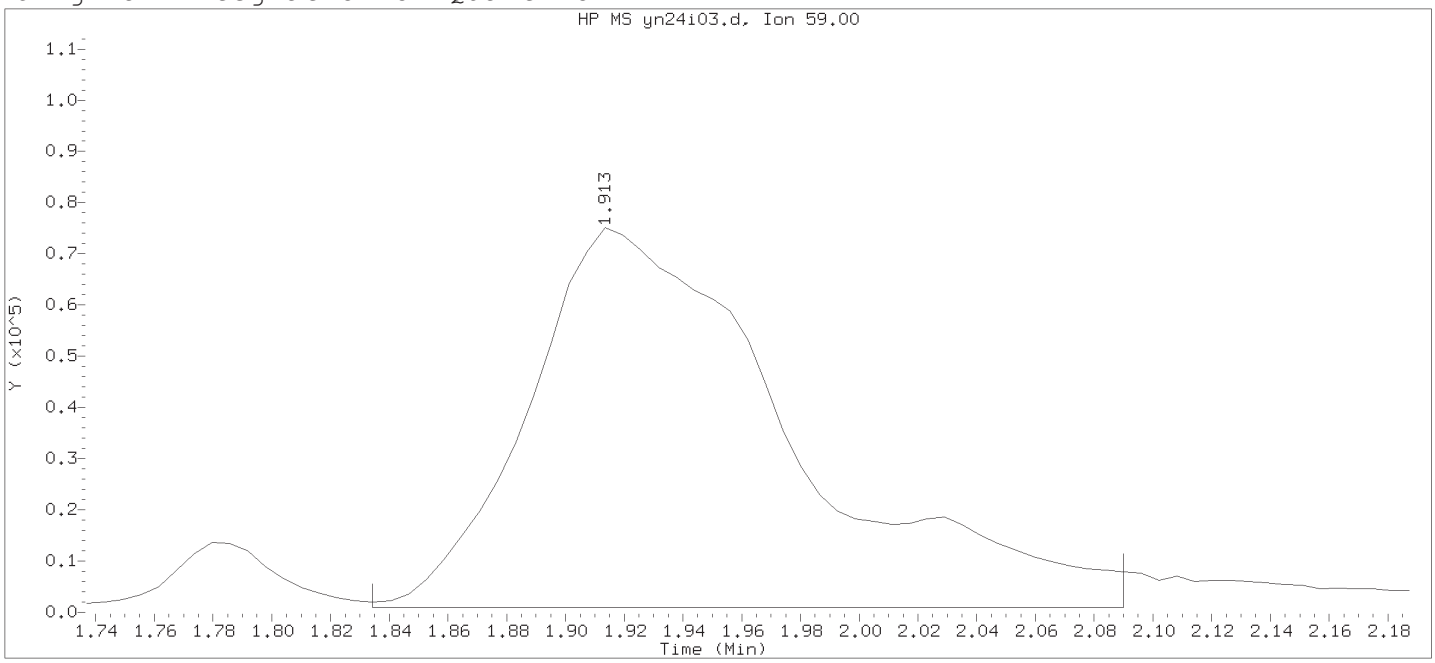
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

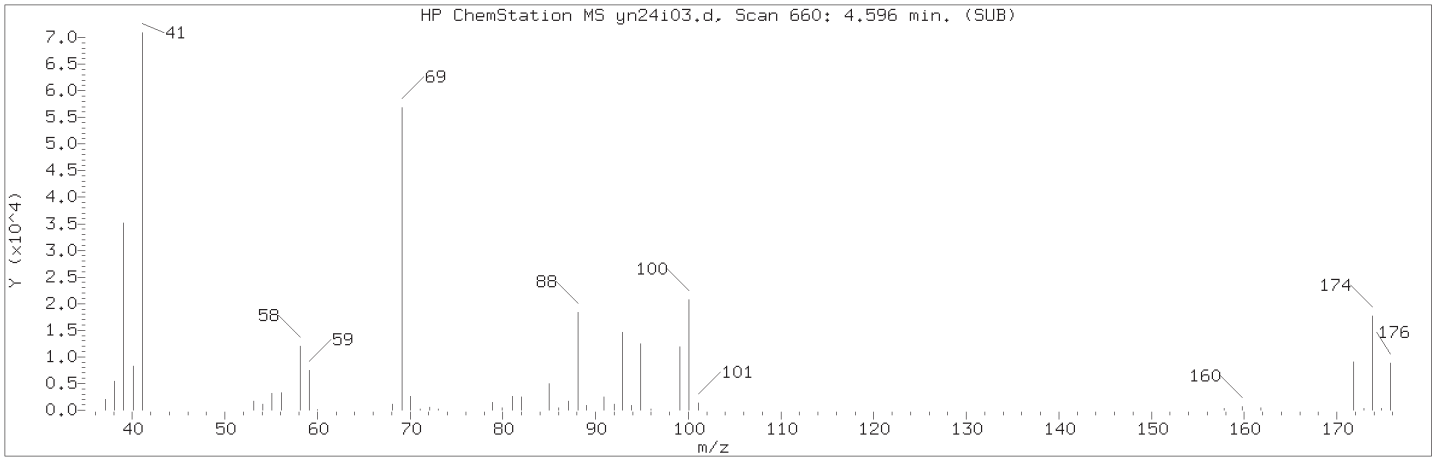
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

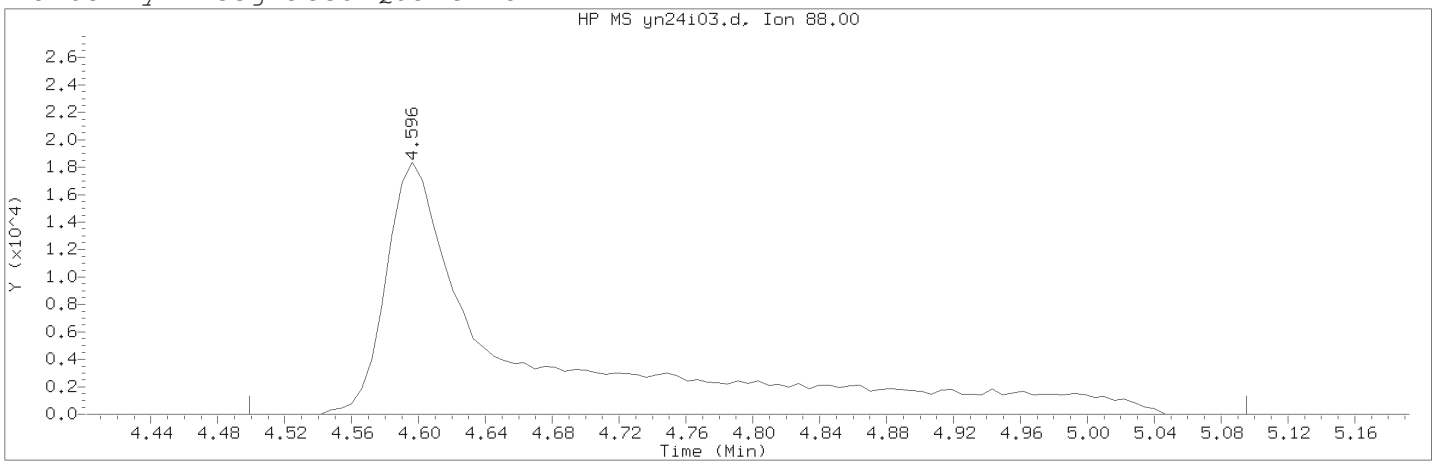
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 219
Retention Time (minutes): 1.913
Quant Ion : 59.00
Area : 460744
On-column Amount (ng) : 230.4121
Integration start scan : 205 Integration stop scan: 247
Y at integration start : 928 Y at integration end: 928

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

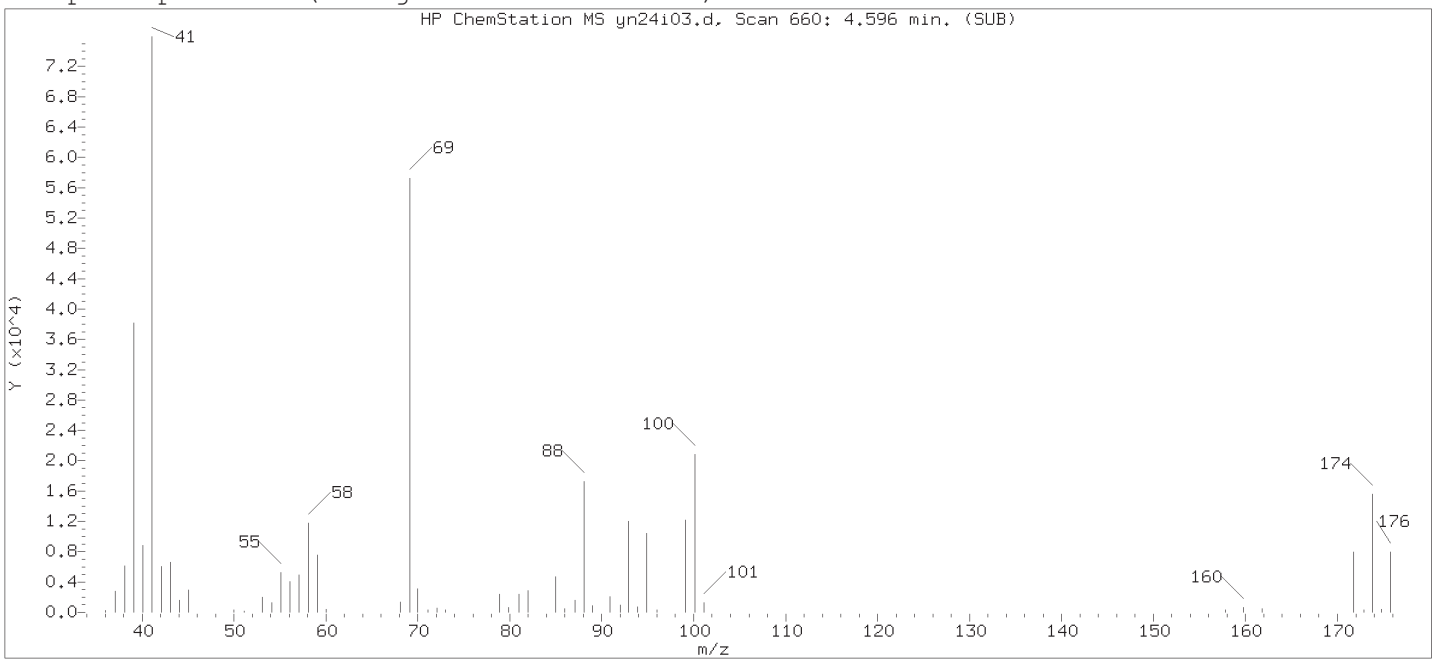
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area (flag) : 100341M
On-Column Amount (ng) : 648.5178
Integration start scan : 643 Integration stop scan: 741
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

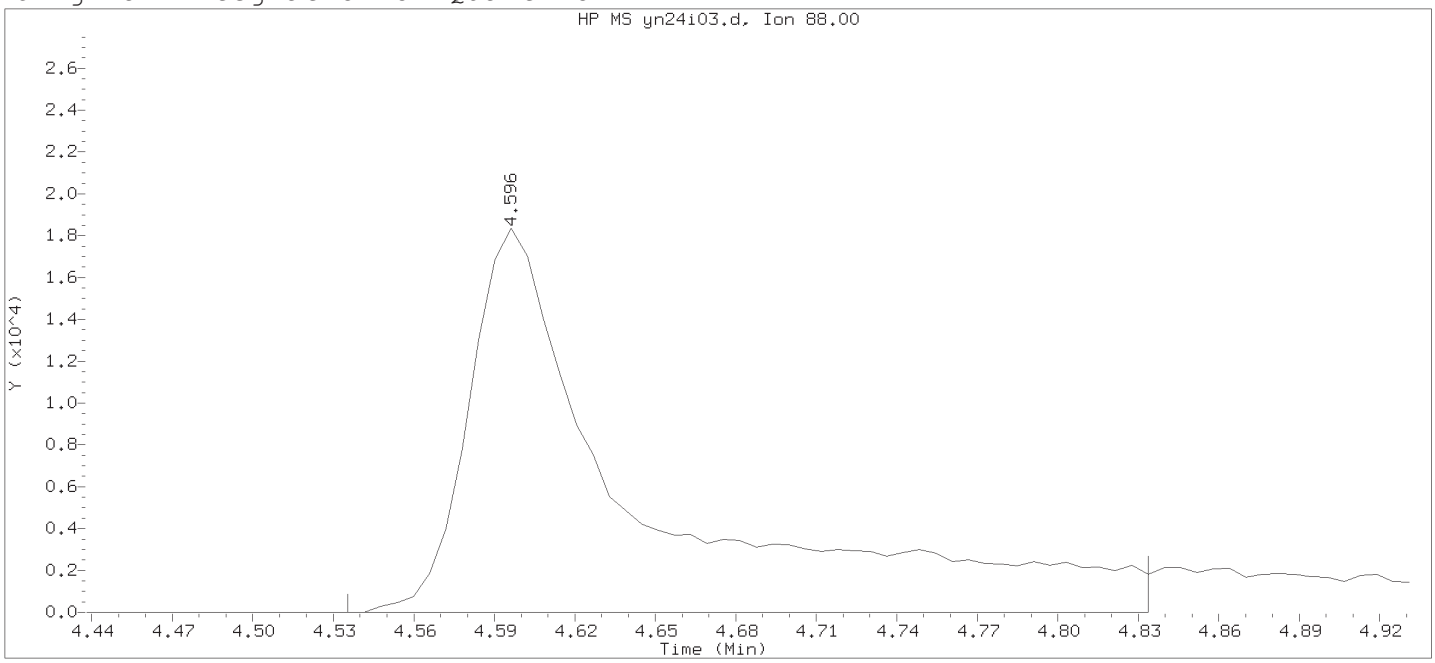
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

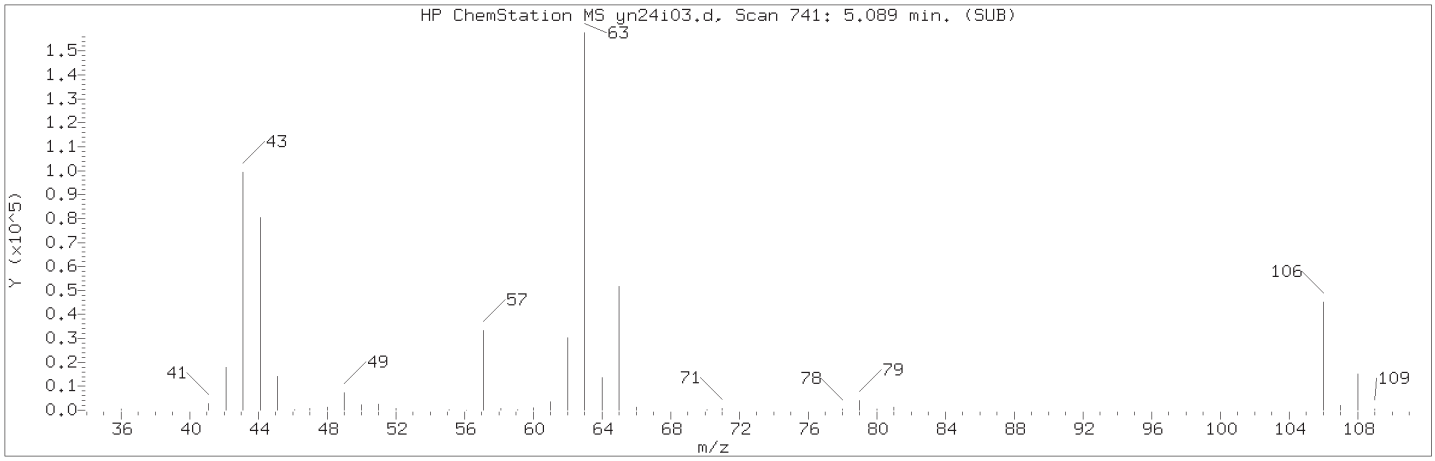
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

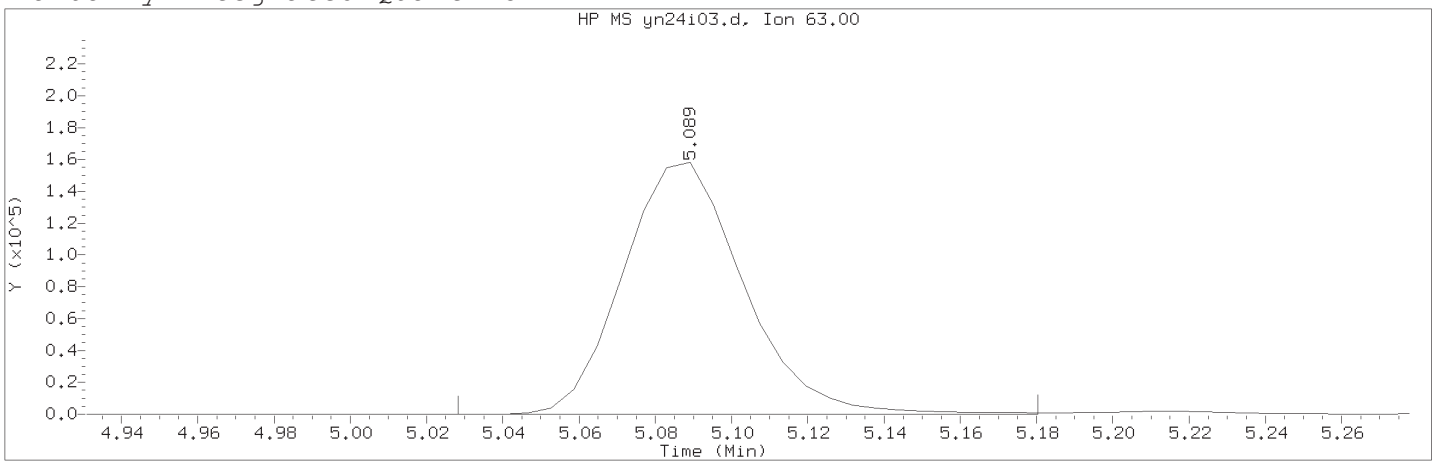
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area : 81148
On-column Amount (ng) : 580.4076
Integration start scan : 649 Integration stop scan: 698
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

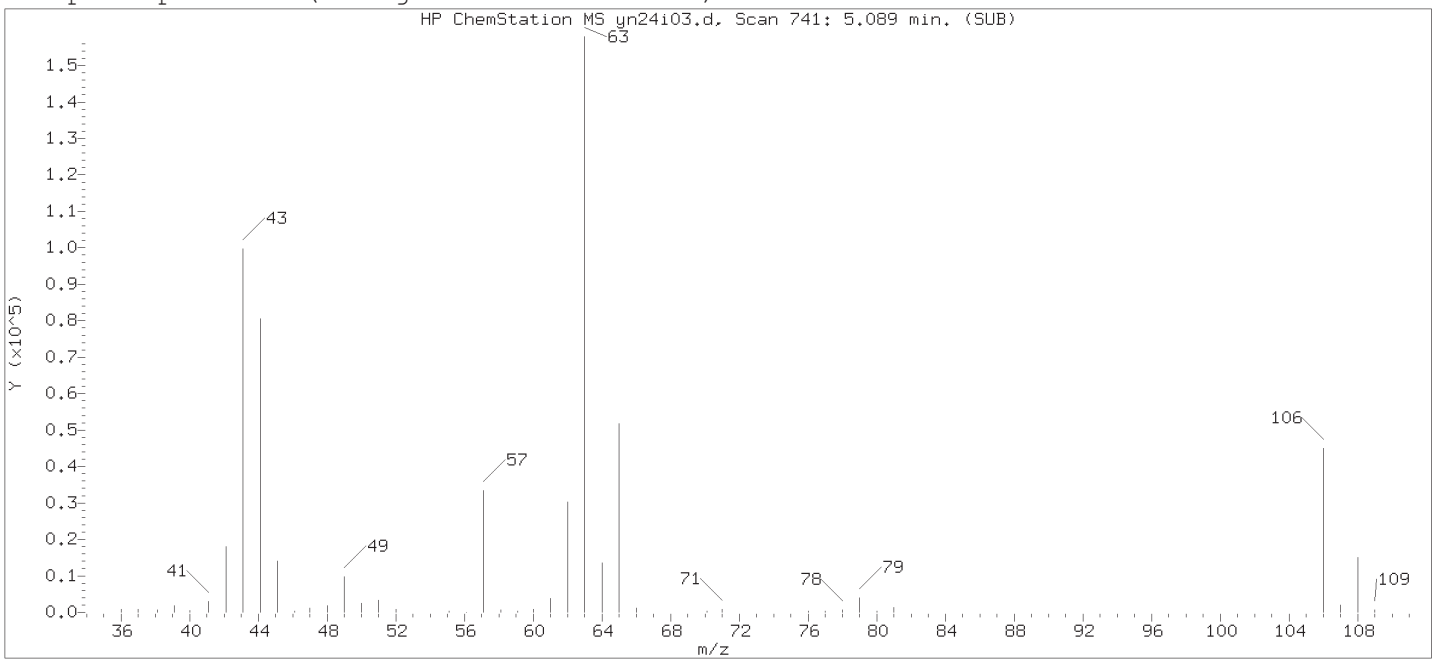
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 741
Retention Time (minutes): 5.089
Quant Ion : 63.00
Area (flag) : 347269M
On-Column Amount (ng) : 51.6257
Integration start scan : 730 Integration stop scan: 755
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

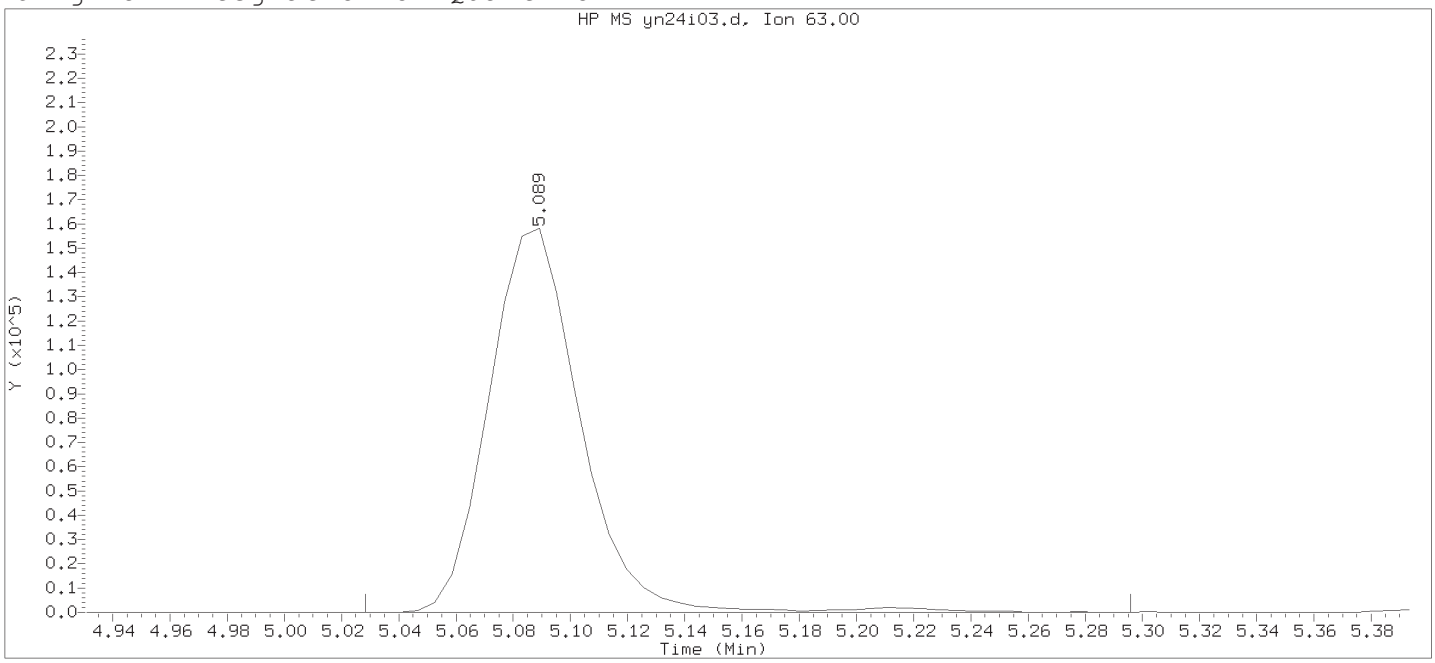
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

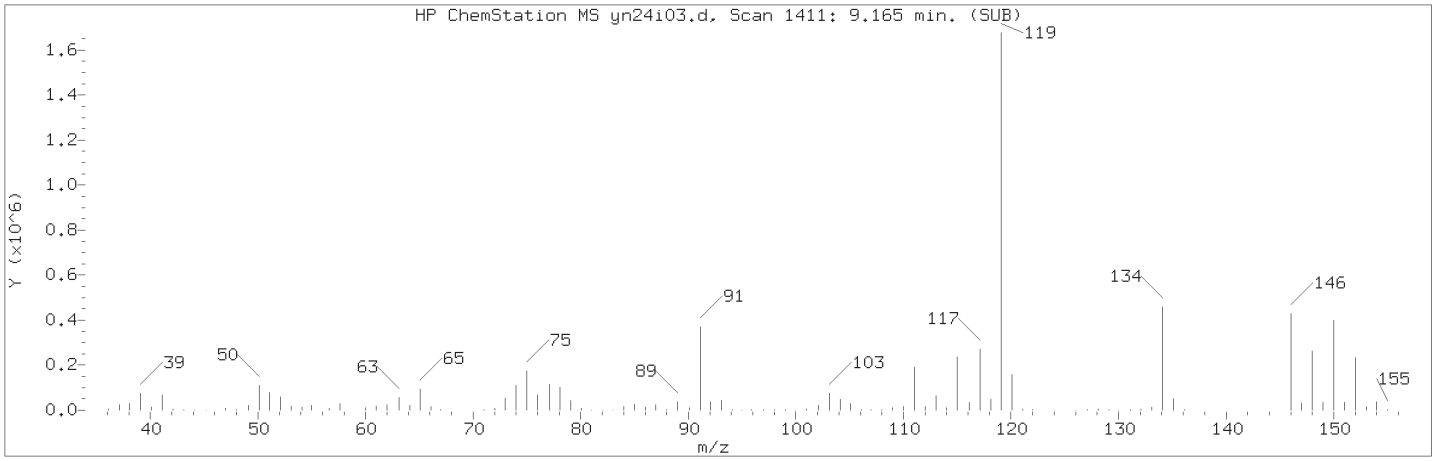
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

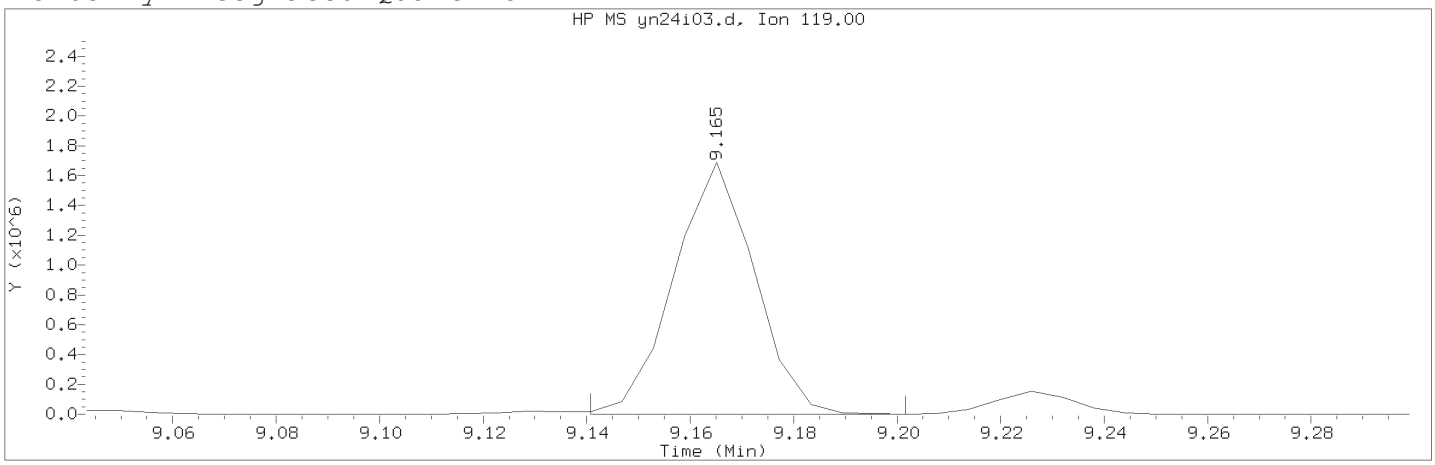
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 741
Retention Time (minutes): 5.089
Quant Ion : 63.00
Area : 352089
On-column Amount (ng) : 53.2013
Integration start scan : 730 Integration stop scan: 774
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

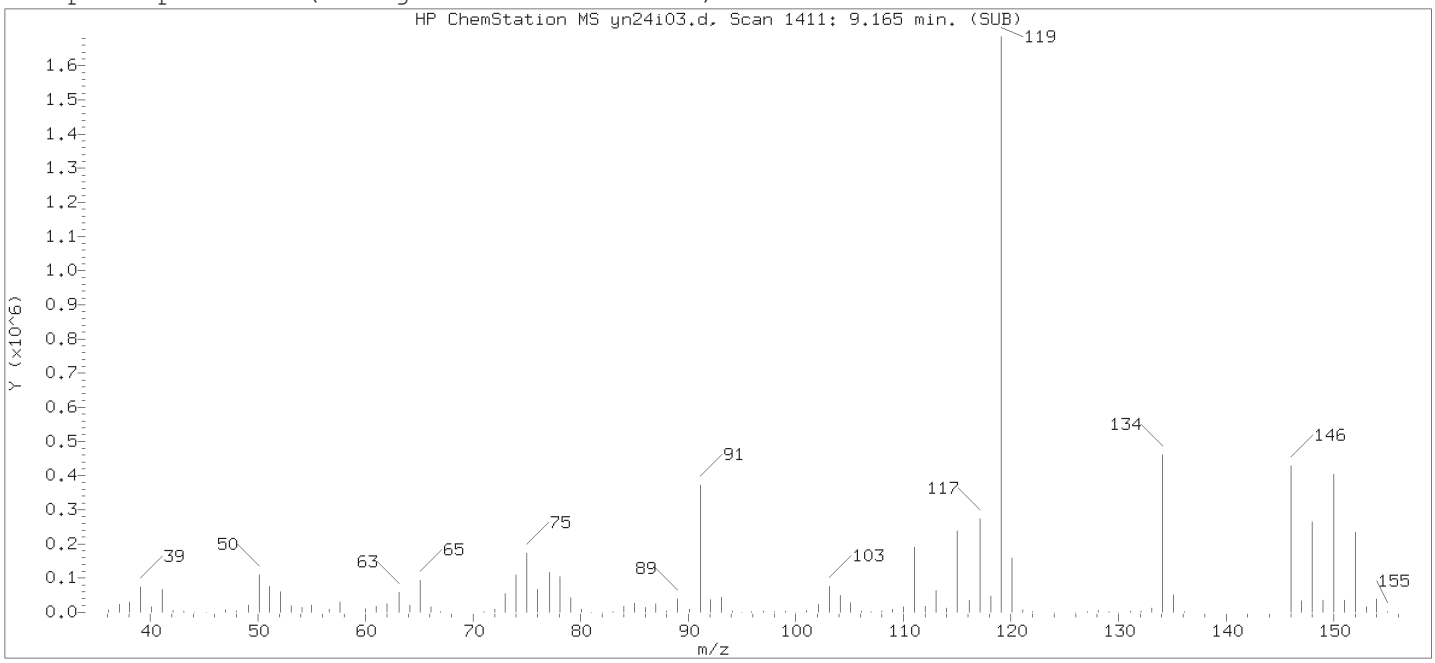
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area (flag) : 1819035M
On-Column Amount (ng) : 53.2286
Integration start scan : 1406 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

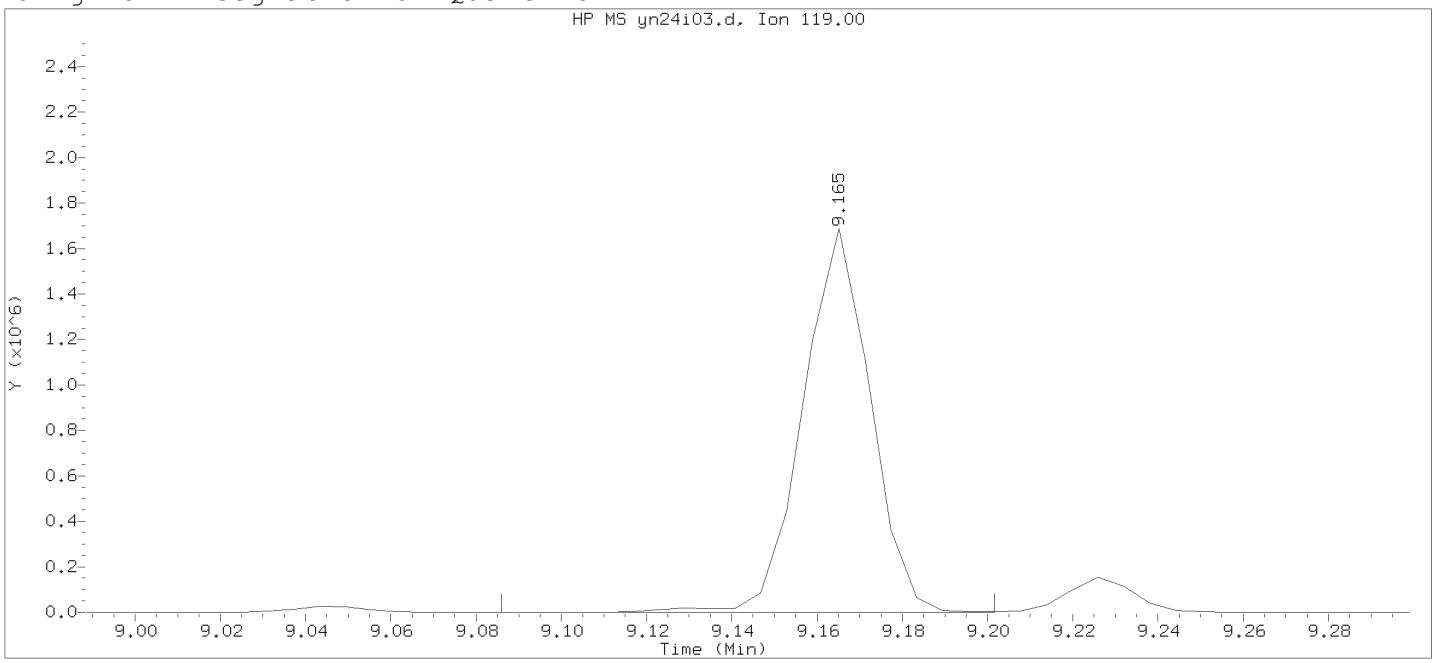
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



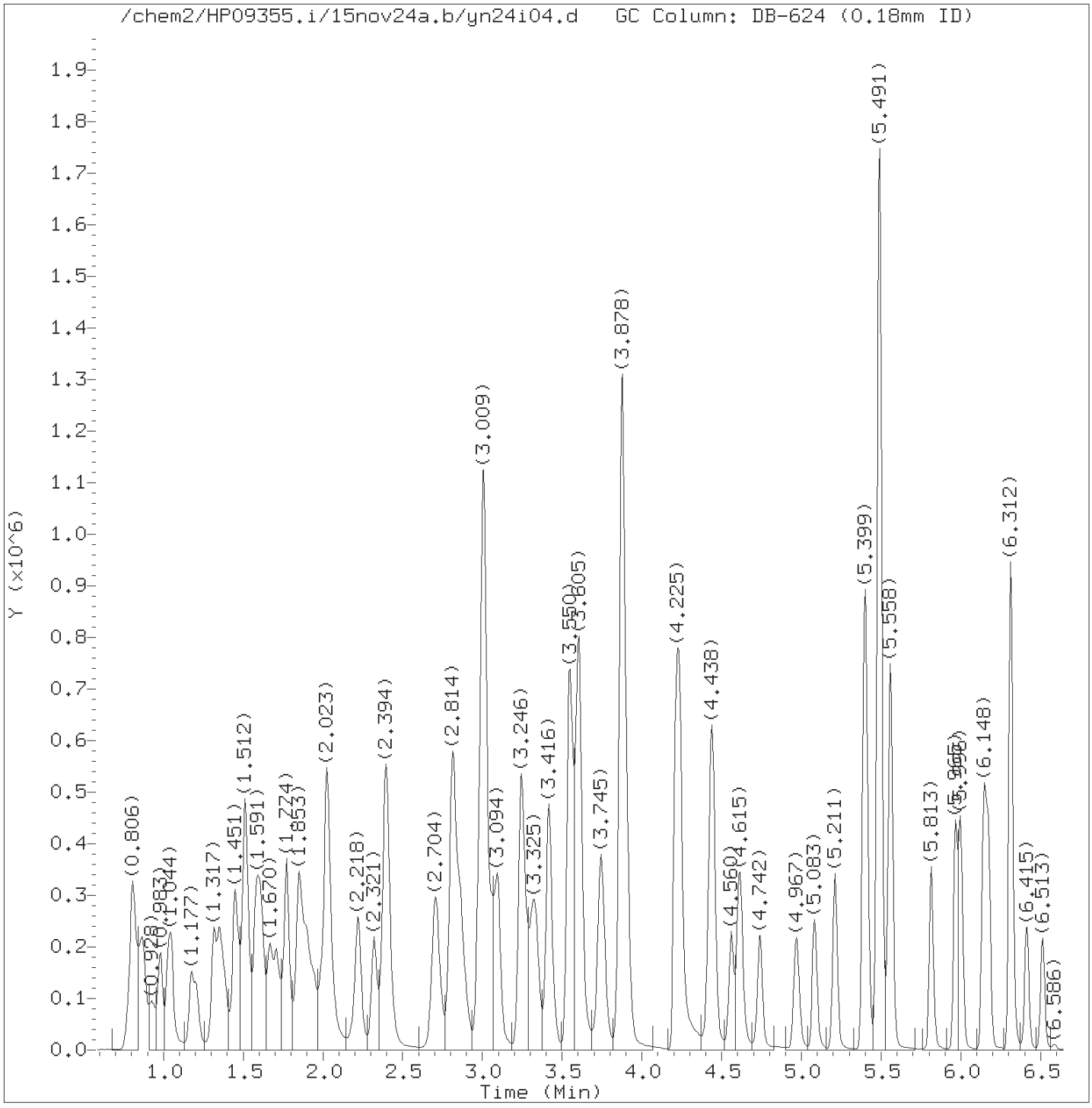
Data File: /chem2/HP09355.i/15nov24a.b/yn24i03.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:31 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 01:46
Date, time and analyst ID of latest file update: 24-Nov-2015 01:47 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area : 1837638
On-column Amount (ng) : 49.7353
Integration start scan : 1397 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731



Total Ion Chromatogram (TIC)

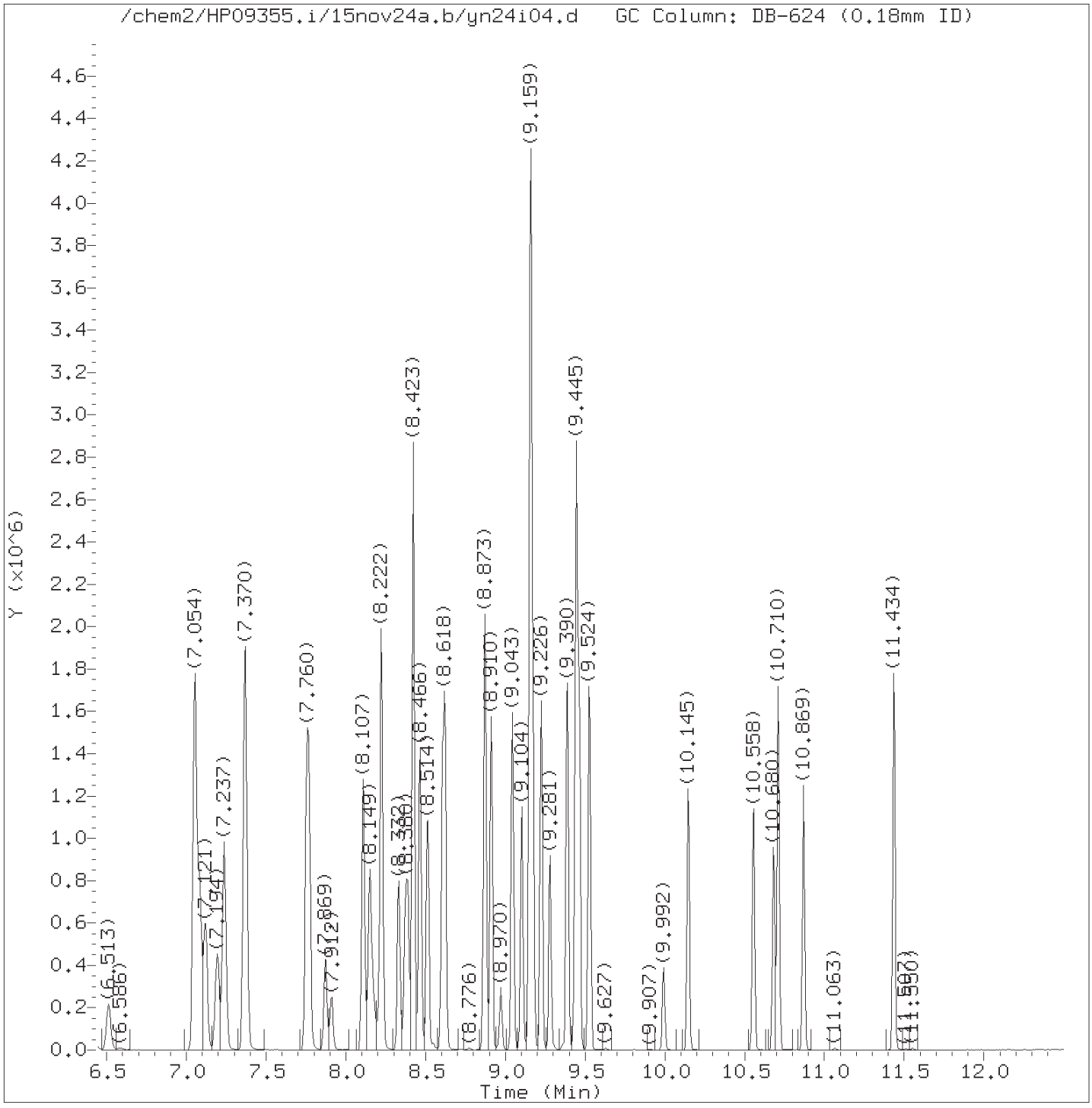
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.928	85	168966	21.333
4) Chloromethane	(2)	0.983	50	189777	21.059
5) 1,3-Butadiene	(2)	1.031	39	82860M	21.228
6) Vinyl Chloride	(2)	1.050	62	177196M	22.186
8) Bromomethane	(2)	1.177	94	121067	22.054
9) Chloroethane	(2)	1.208	64	100089	22.501
10) Dichlorofluoromethane	(2)	1.317	67	225324	22.414
11) n-Pentane	(2)	1.348	43	158596	20.205
12) Trichlorofluoromethane	(2)	1.378	101	198230	22.199
14) Ethyl ether	(2)	1.445	59	121765	21.326
15) Freon 123a	(2)	1.475	67	147863	22.163
16) Acrolein	(1)	1.512	56	596616	211.734
17) 1,1-Dichloroethene	(2)	1.585	96	116851	22.257
17) 1,1-Dichloroethene	(2)	1.579	63	56865	22.061
18) Acetone	(1)	1.591	58	61720	43.101
19) Freon 113	(2)	1.615	101	106976	21.109
21) 2-Propanol	(1)	1.664	45	183996M	216.485
22) Methyl Iodide	(2)	1.670	142	219730	21.987
23) Carbon Disulfide	(2)	1.713	76	433270	21.524
25) Allyl Chloride	(2)	1.774	41	167775	21.825
27) Methyl Acetate	(2)	1.774	43	185947	21.009
28) Methylene Chloride	(2)	1.847	84	132290	21.383
29)*t-Butyl alcohol-d10	(1)	1.865	65	465177	250.000
30) t-Butyl alcohol	(1)	1.914	59	408415	197.852
31) Acrylonitrile	(2)	1.993	53	109114	21.187
32) trans-1,2-Dichloroethene	(2)	2.023	96	130935	21.702
33) Methyl Tertiary Butyl Ether	(2)	2.035	73	443025	21.061
34) n-Hexane	(2)	2.218	57	189018	18.815
36) 1,1-Dichloroethane	(2)	2.321	63	265624	21.643
38) di-Isopropyl ether	(2)	2.394	45	495233	21.046
39) 2-Chloro-1,3-butadiene	(2)	2.394	53	211635	21.395
40) Ethyl t-butyl ether	(2)	2.704	59	478413	21.025
42) cis-1,2-Dichloroethene	(2)	2.808	96	157476	21.262
45) 2,2-Dichloropropane	(2)	2.820	77	192603	21.998
44) 2-Butanone	(2)	2.820	43	392825	43.934
47) Propionitrile	(1)	2.863	54	474344	201.260
43) 1,2-Dichloroethene (Total)	(2)		96	288411	42.964
48) Methacrylonitrile	(2)	3.002	67	561072	103.843

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.015	128	79675	20.910
50) Tetrahydrofuran	(1)	3.063	71	99473	40.778
51) Chloroform	(2)	3.100	83	240988	21.338
52)$Dibromofluoromethane	(2)	3.240	113	341079	49.903
52)$Dibromofluoromethane	(2)	3.240	111	349488	49.930
53) 1,1,1-Trichloroethane	(2)	3.270	97	229065	21.413
54) Cyclohexane	(2)	3.325	56	238680	20.736
54) Cyclohexane	(2)	3.331	84	233178	21.199
54) Cyclohexane	(2)	3.325	69	72412	20.603
55) 1,1-Dichloropropene	(2)	3.416	75	203610	21.408
56) Carbon Tetrachloride	(2)	3.422	117	171195	21.703
57)$1,2-Dichloroethane-d4	(2)	3.544	102	90147	50.868
57)$1,2-Dichloroethane-d4	(2)	3.544	65	421799	51.051
57)$1,2-Dichloroethane-d4	(2)	3.544	104	56979	50.546
58) Isobutyl Alcohol	(1)	3.568	41	346091	507.798
60) Benzene	(2)	3.605	78	602002	21.305
61) 1,2-Dichloroethane	(2)	3.617	62	205053	20.498
61) 1,2-Dichloroethane	(2)	3.617	98	19304	21.681
65) t-Amyl methyl ether	(2)	3.745	73	452699	21.011
66)*Fluorobenzene	(2)	3.872	96	1456753	50.000
67) n-Heptane	(2)	3.903	43	234389	19.947
69) n-Butanol	(1)	4.213	56	620030	1036.197
71) Trichloroethene	(2)	4.237	95	154076	21.424
72) Methylcyclohexane	(2)	4.432	83	230346	20.145
72) Methylcyclohexane	(2)	4.432	98	103437	20.147
73) 1,2-Dichloropropane	(2)	4.444	63	156452	21.307
74) Dibromomethane	(2)	4.560	93	99678	21.058
75) 1,4-Dioxane	(1)	4.596	88	79528M	502.942
76) Methyl Methacrylate	(2)	4.615	69	171040	20.462
78) Bromodichloromethane	(2)	4.742	83	170960	21.305
79) 2-Nitropropane	(2)	4.967	41	176522	46.769
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	140572	21.072
81) cis-1,3-Dichloropropene	(2)	5.211	75	240609	21.705
82) 4-Methyl-2-pentanone	(2)	5.399	43	822951	48.681
83)$Toluene-d8	(3)	5.491	98	1466825	49.964
83)$Toluene-d8	(3)	5.491	100	956565	49.329
88) Toluene	(3)	5.558	92	386215	21.378
89) trans-1,3-Dichloropropene	(3)	5.813	75	218236	21.489

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	458845	43.194
91) Ethyl Methacrylate	(3)	5.965	69	264832	20.604
92) 1,1,2-Trichloroethane	(3)	5.996	97	152344	21.106
93) Tetrachloroethene	(3)	6.148	166	165562	21.861
94) 1,3-Dichloropropane	(3)	6.172	76	260312	21.048
96) 2-Hexanone	(3)	6.312	43	701093	48.490
97) Dibromochloromethane	(3)	6.409	129	143985	19.203
99) 1,2-Dibromoethane	(3)	6.513	107	165890	21.118
100)*Chlorobenzene-d5	(3)	7.054	117	1089856	50.000
102) Chlorobenzene	(3)	7.085	112	441574	21.452
101) 1-Chlorohexane	(3)	7.121	91	207425	21.431
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	138172	21.503
104) Ethylbenzene	(3)	7.237	91	736648	21.673
106) m+p-Xylene	(3)	7.370	106	588951	43.934
107) o-Xylene	(3)	7.754	106	289618	21.693
109) Styrene	(3)	7.772	104	479876	21.275
108) Xylene (Total)	(3)		106	878569	65.626
110) Bromoform	(3)	7.912	173	102963	19.483
111) Isopropylbenzene	(3)	8.107	105	734775	21.484
112) Cyclohexanone	(1)	8.149	55	425811	487.697
114)$4-Bromofluorobenzene	(3)	8.222	95	551681M	50.102
114)$4-Bromofluorobenzene	(3)	8.222	174	440173	49.741
115) Bromobenzene	(4)	8.332	156	187210	20.644
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	261297	20.757
117) 1,2,3-Trichloropropane	(4)	8.393	110	80520	20.028
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	426744	102.534
119) n-Propylbenzene	(4)	8.466	91	885261	21.469
120) 2-Chlorotoluene	(4)	8.514	126	180458	20.671
121) 4-Chlorotoluene	(4)	8.605	126	191603	20.885
122) 1,3,5-Trimethylbenzene	(4)	8.624	105	647092	21.283
125) Pentachloroethane	(4)	8.867	167	101375	20.468
124) tert-Butylbenzene	(4)	8.873	134	144833	21.271
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	667362	21.460
127) sec-Butylbenzene	(4)	9.043	105	826191	21.716
129) 1,3-Dichlorobenzene	(4)	9.104	146	364878	20.923
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	585355	50.000
130) p-Isopropyltoluene	(4)	9.165	119	739815M	21.785
133) 1,4-Dichlorobenzene	(4)	9.171	146	374426	21.043

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Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

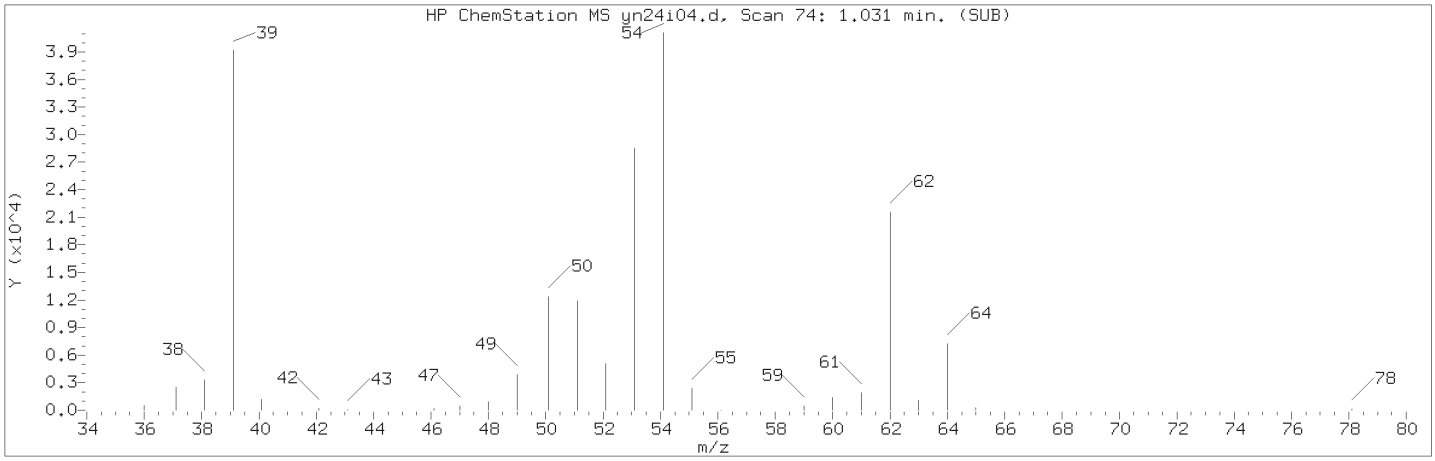
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

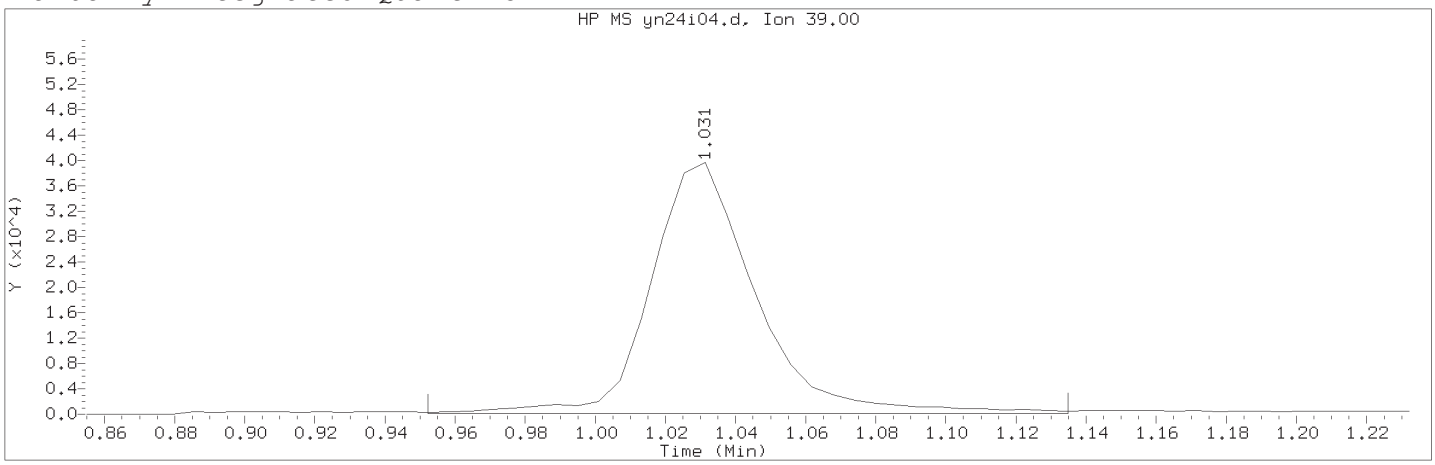
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	693689	21.654
135) Benzyl Chloride	(4)	9.281	91	457966	20.142
136) 1,3-Diethylbenzene	(4)	9.390	119	440020	21.486
138) 1,2-Dichlorobenzene	(4)	9.439	146	355483	20.949
137) 1,4-Diethylbenzene	(4)	9.445	119	460521	21.577
139) n-Butylbenzene	(4)	9.463	92	366387	21.461
140) 1,2-Diethylbenzene	(4)	9.524	119	363402	21.353
141) Diethylbenzene (total)	(4)		100	1263943	64.415
142) 1,2-Dibromo-3-chloropropane	(4)	9.992	75	65523	19.780
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	277956	20.855
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	268077	20.888
147) Hexachlorobutadiene	(4)	10.680	225	122954	20.870
148) Naphthalene	(4)	10.710	128	918659	20.586
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	254733	20.839
150) 2-Methylnaphthalene	(4)	11.434	142	570136	21.119

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

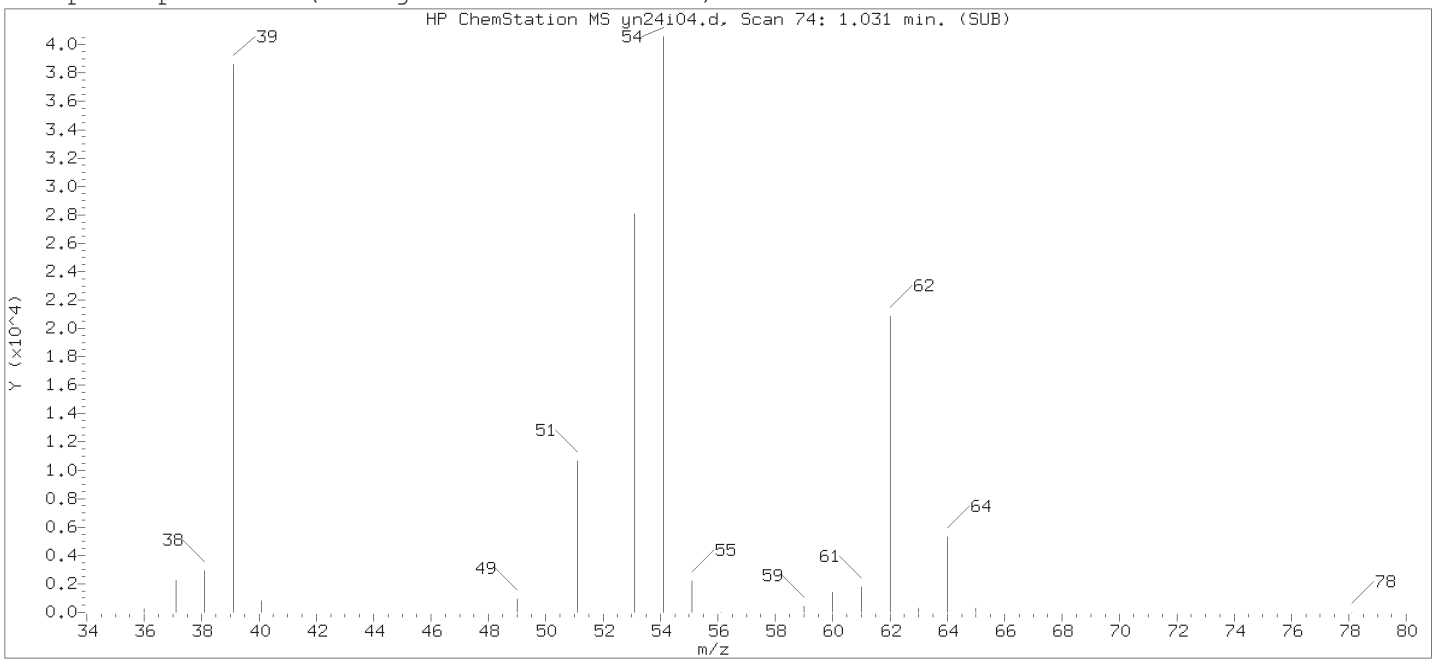
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 74
Retention Time (minutes): 1.031
Quant Ion : 39.00
Area (flag) : 82860M
On-Column Amount (ng) : 21.2281
Integration start scan : 60 Integration stop scan: 90
Y at integration start : 75 Y at integration end: 75

Reason for manual integration: improper integration

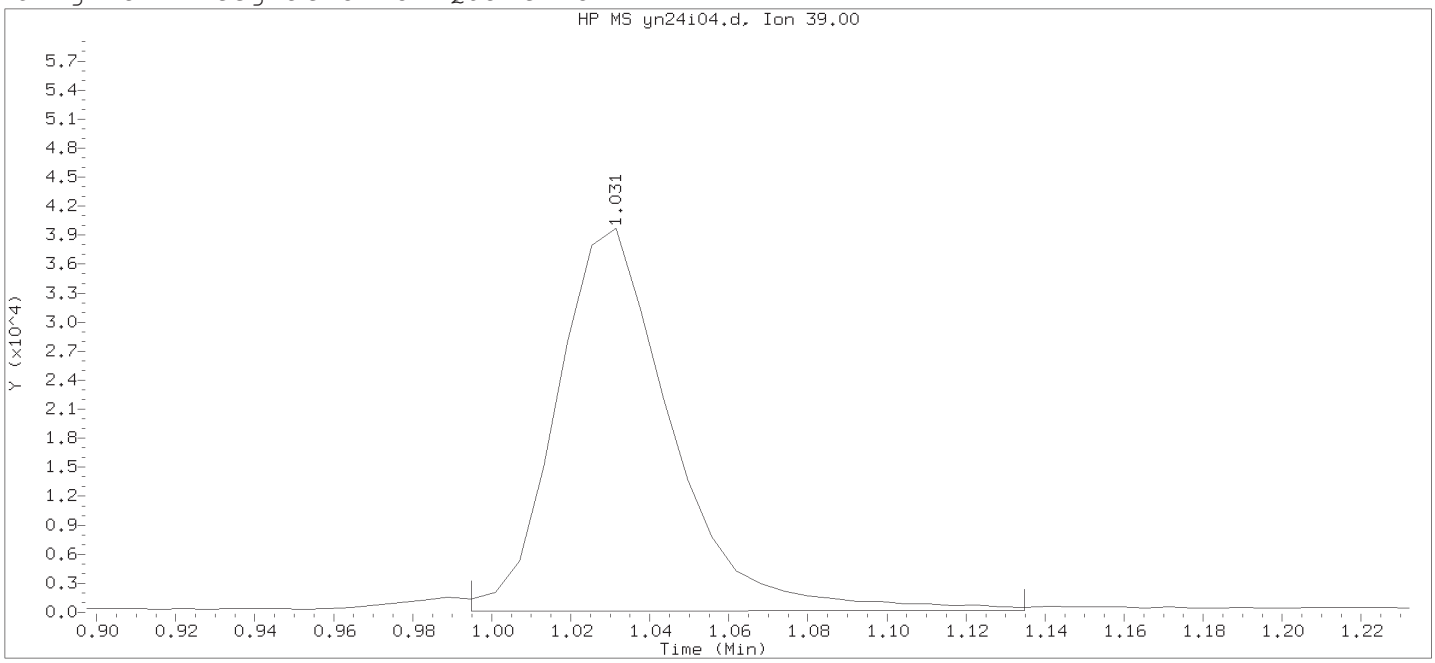
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

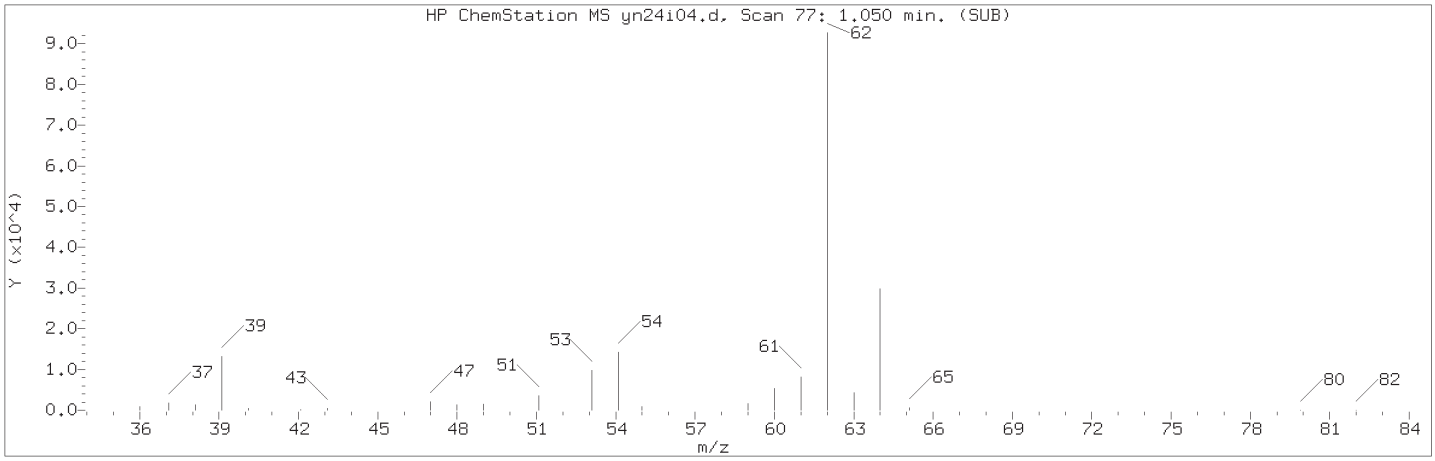
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

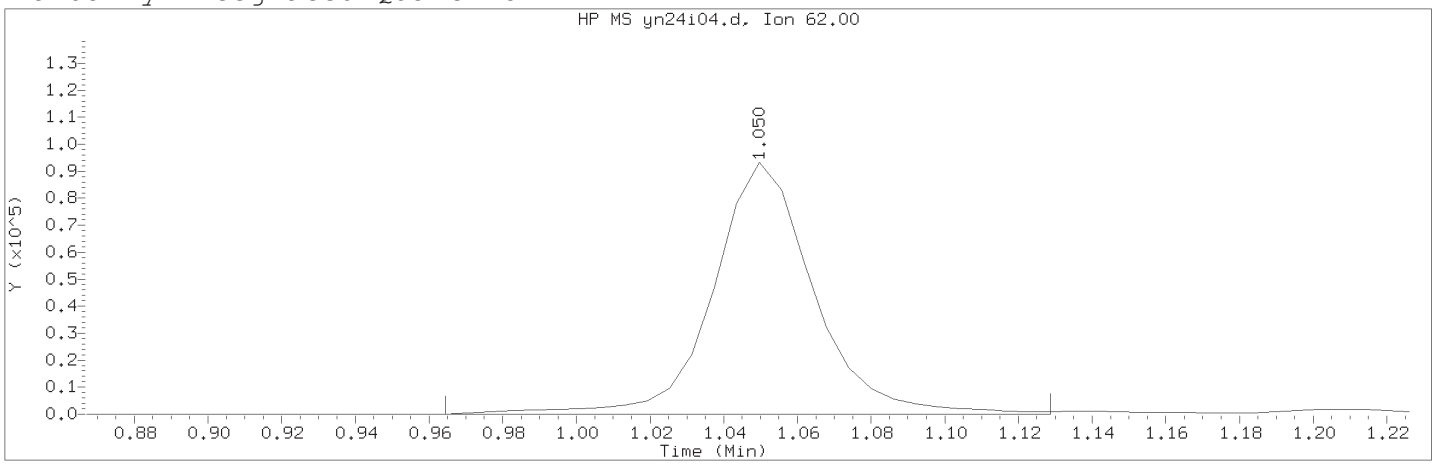
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 74
Retention Time (minutes): 1.031
Quant Ion : 39.00
Area : 80084
On-column Amount (ng) : 16.7204
Integration start scan : 67 Integration stop scan: 90
Y at integration start : 118 Y at integration end: 167

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

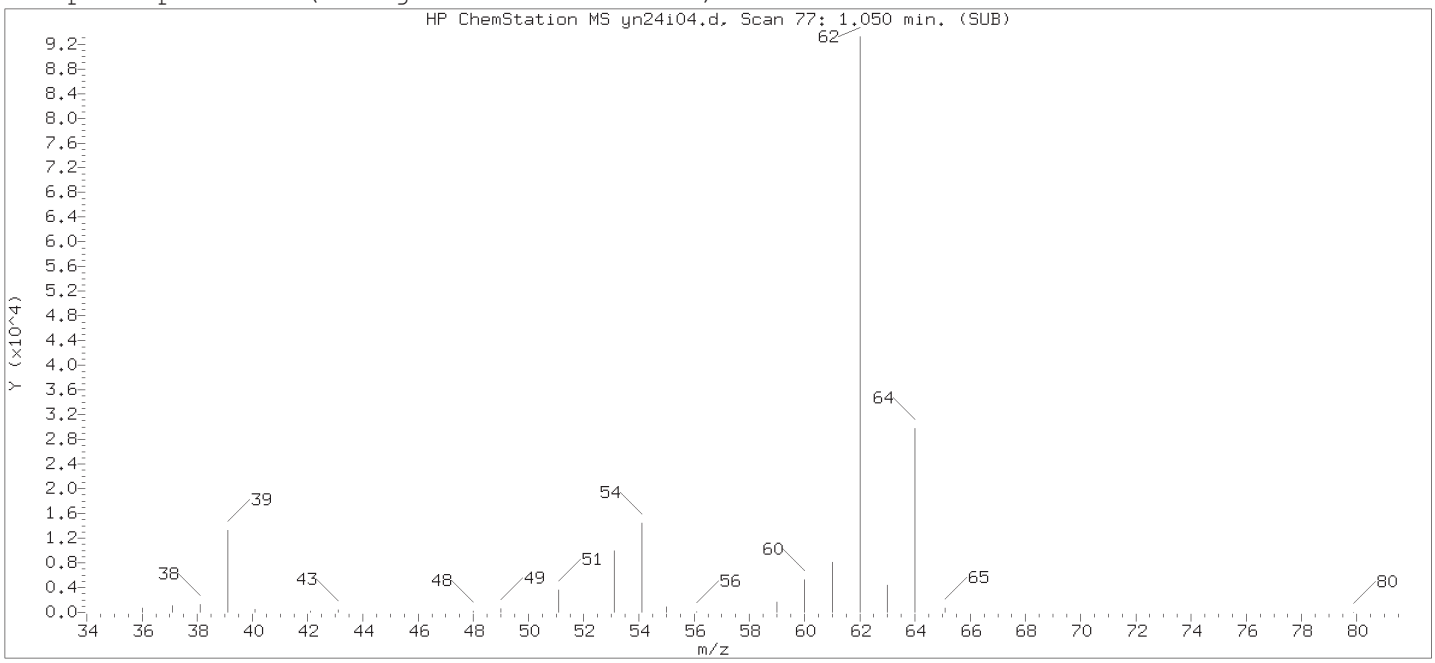
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 77
Retention Time (minutes): 1.050
Quant Ion : 62.00
Area (flag) : 177196M
On-Column Amount (ng) : 22.1861
Integration start scan : 62 Integration stop scan: 89
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

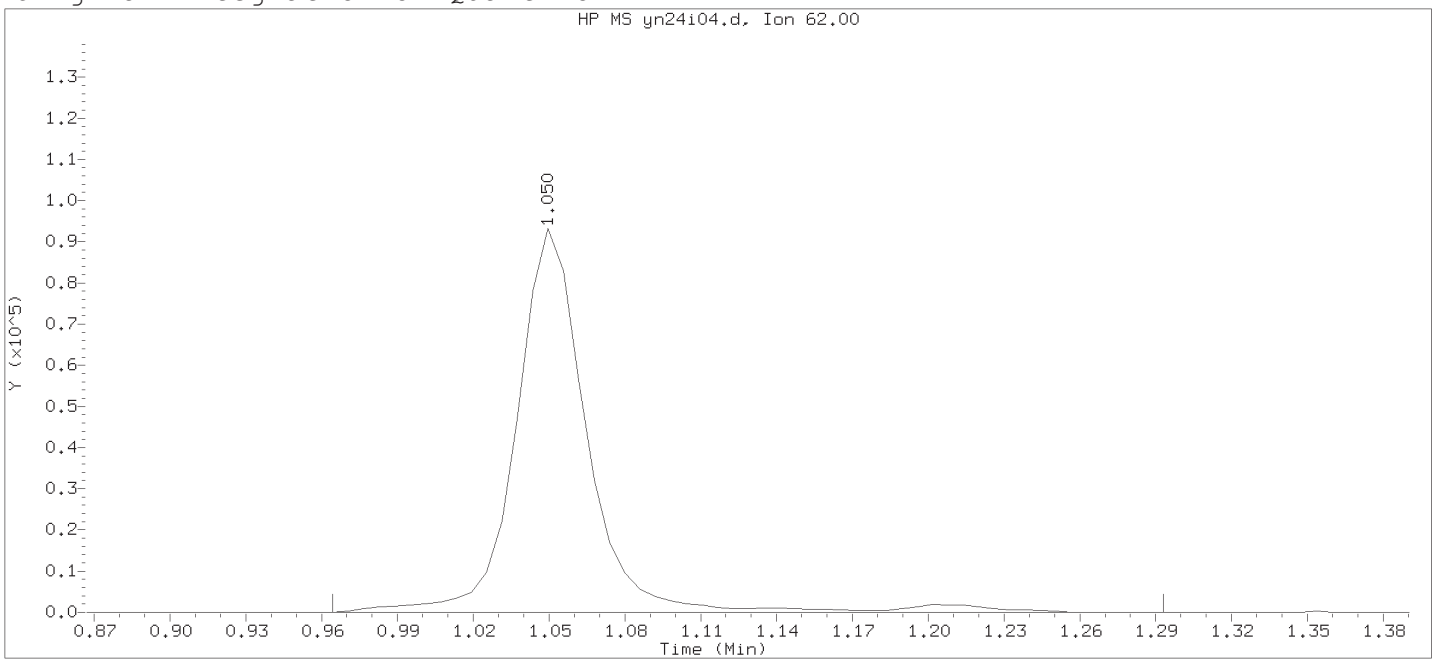
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

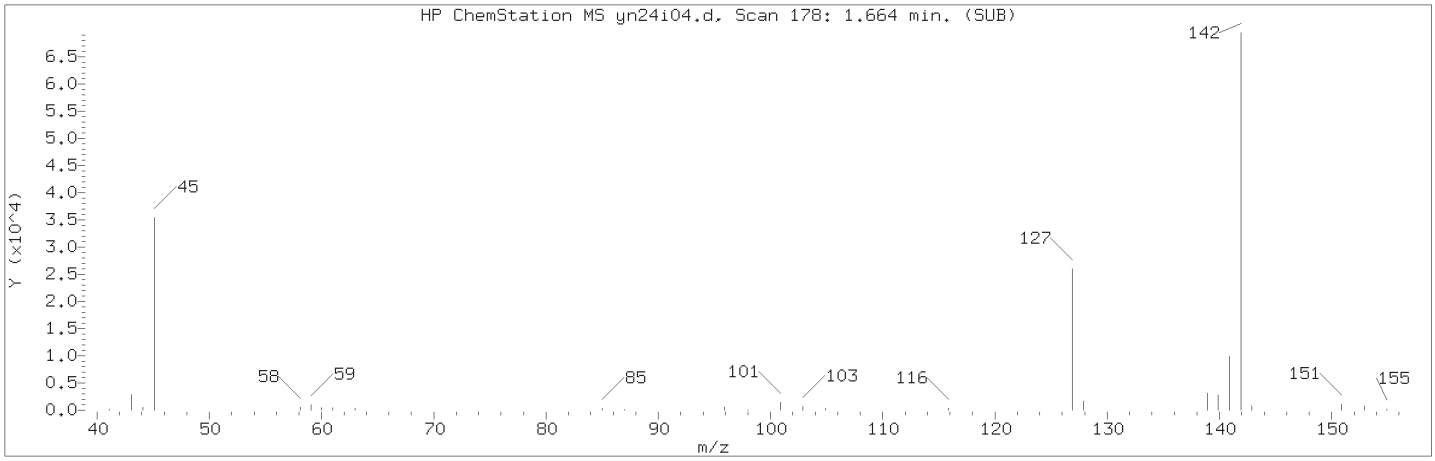
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

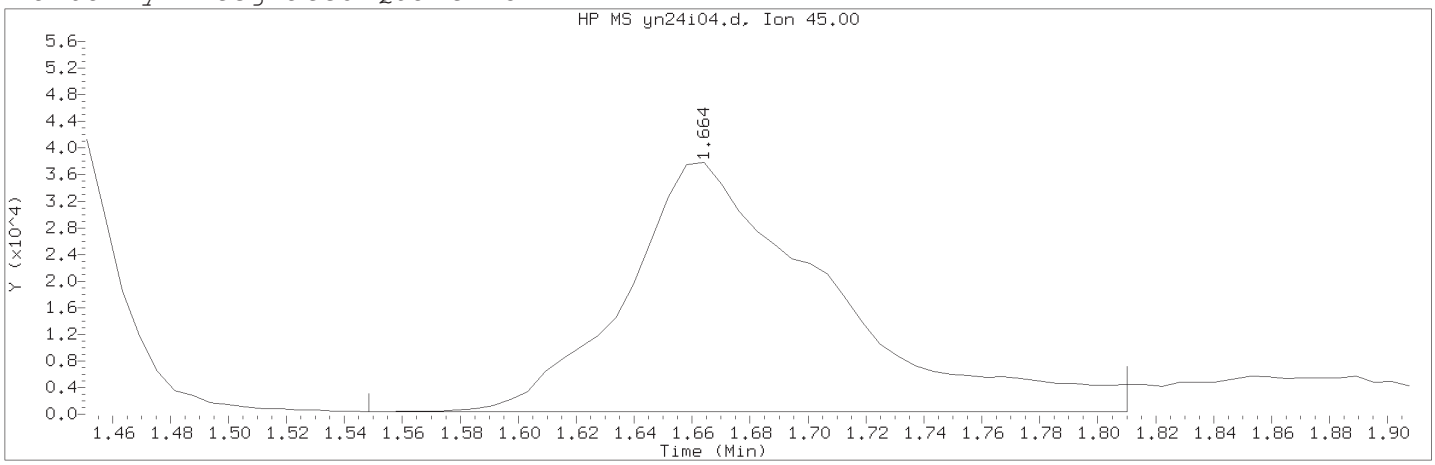
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 77
Retention Time (minutes): 1.050
Quant Ion : 62.00
Area : 183691
On-column Amount (ng) : 21.8952
Integration start scan : 62 Integration stop scan: 116
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0131

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

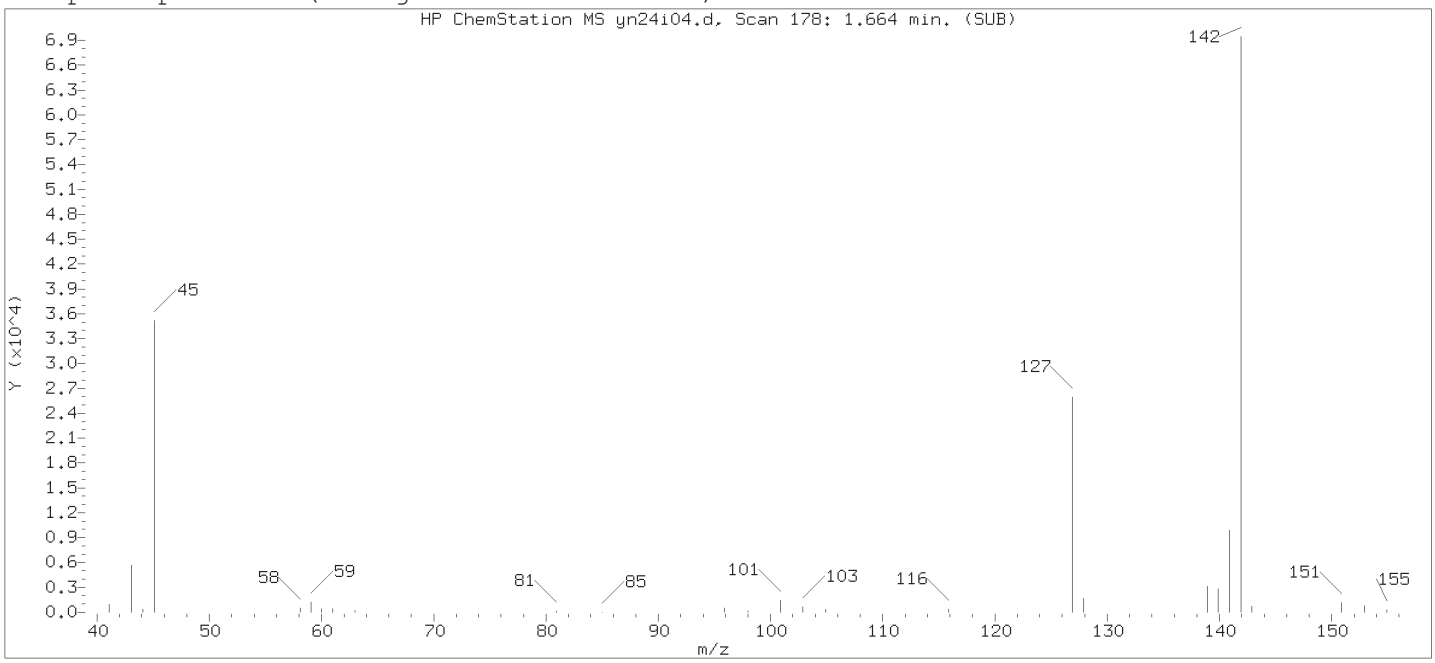
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 178
Retention Time (minutes): 1.664
Quant Ion : 45.00
Area (flag) : 183996M
On-Column Amount (ng) : 216.4854
Integration start scan : 158 Integration stop scan: 201
Y at integration start : 376 Y at integration end: 376

Reason for manual integration: improper integration

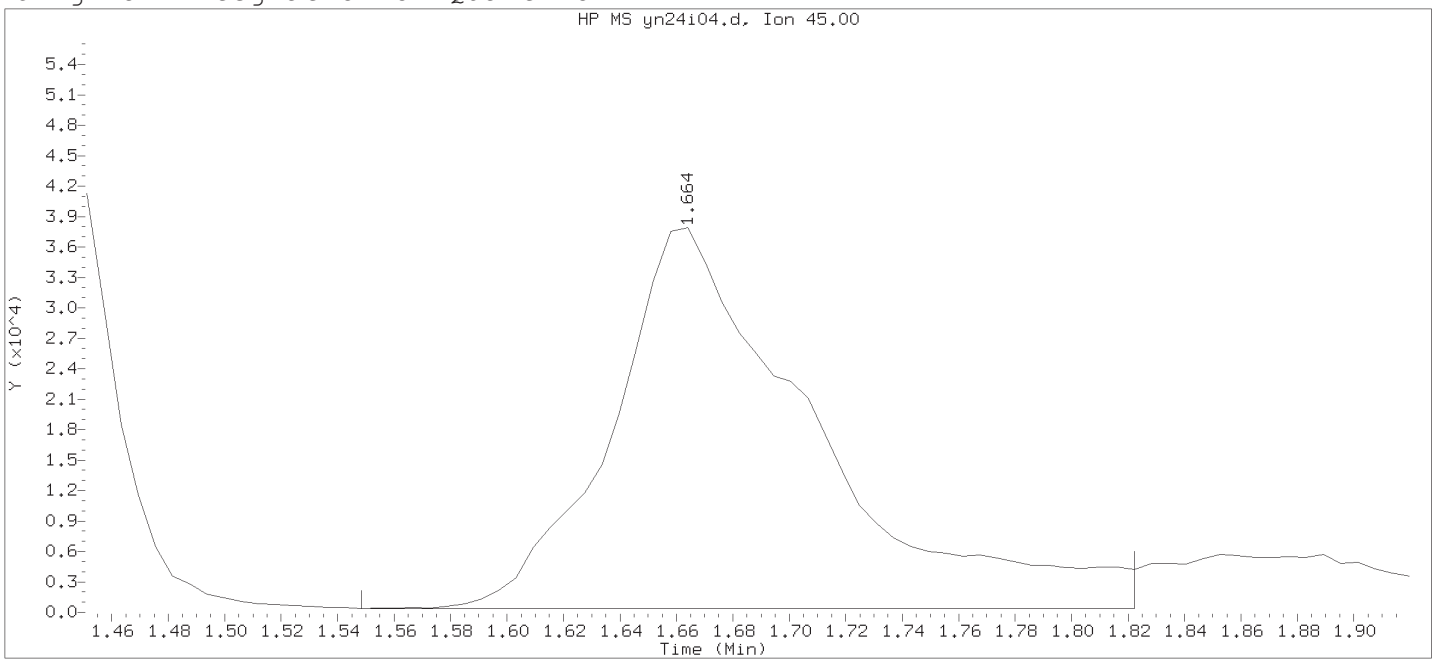
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

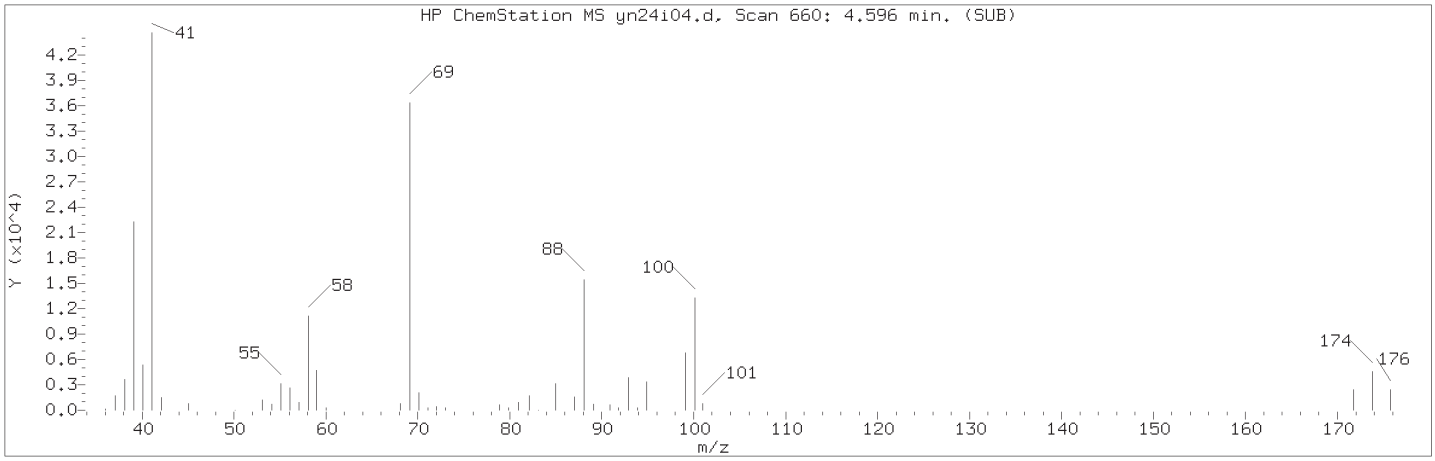
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

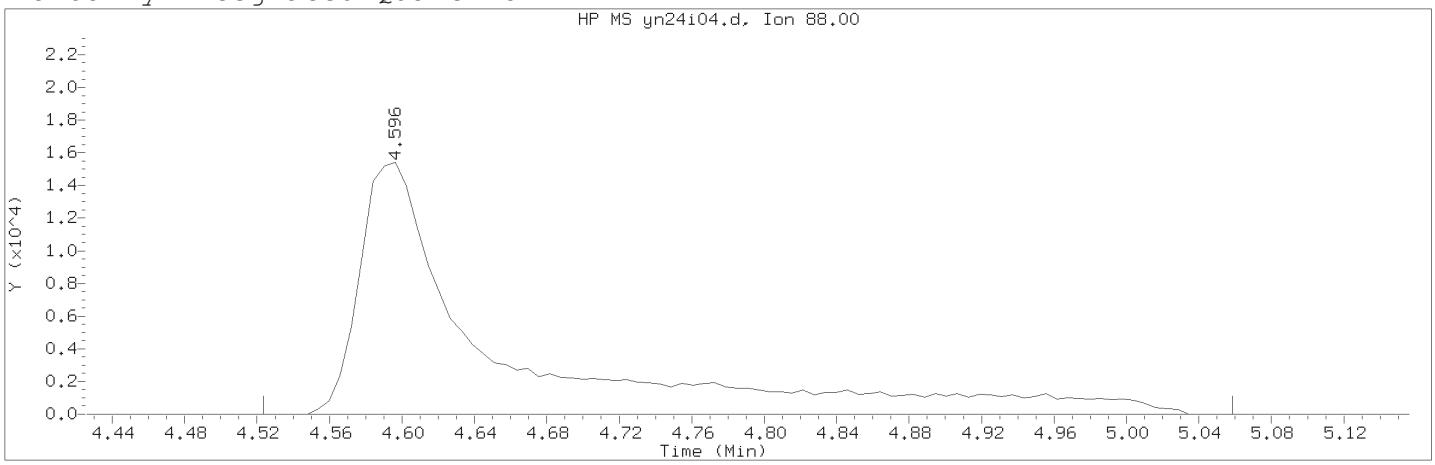
Compound Number	: 21
Compound Name	: 2-Propanol
Scan Number	: 178
Retention Time (minutes)	: 1.664
Quant Ion	: 45.00
Area	: 186195
On-column Amount (ng)	: 202.2879
Integration start scan	: 158 Integration stop scan: 203
Y at integration start	: 376 Y at integration end: 376

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0193

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

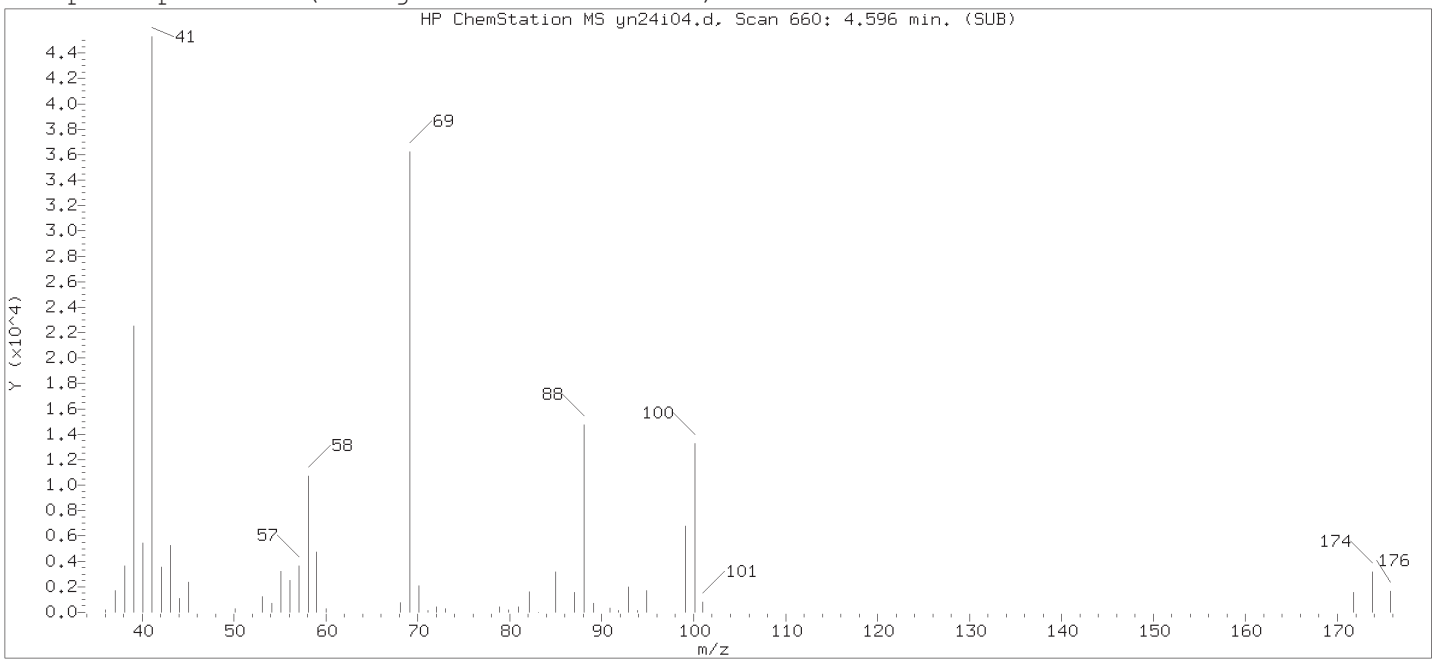
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area (flag) : 79528M
On-Column Amount (ng) : 502.9420
Integration start scan : 647 Integration stop scan: 735
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

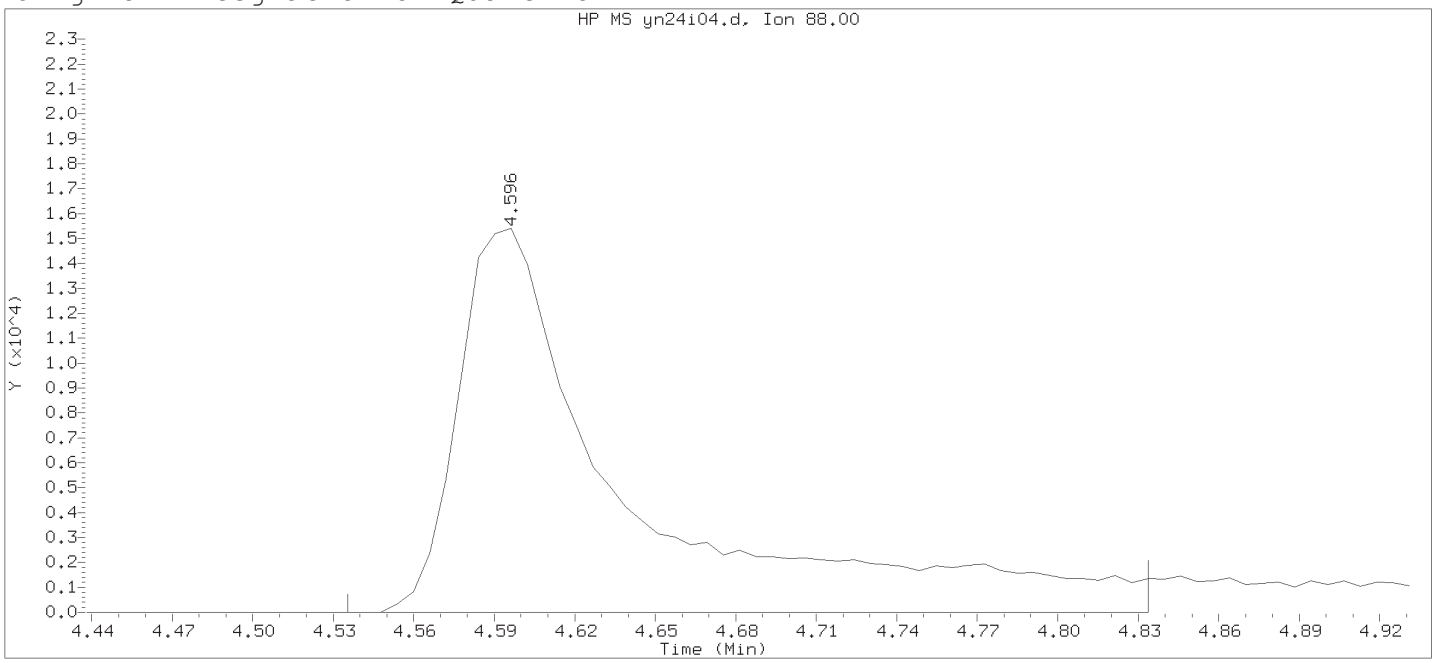
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

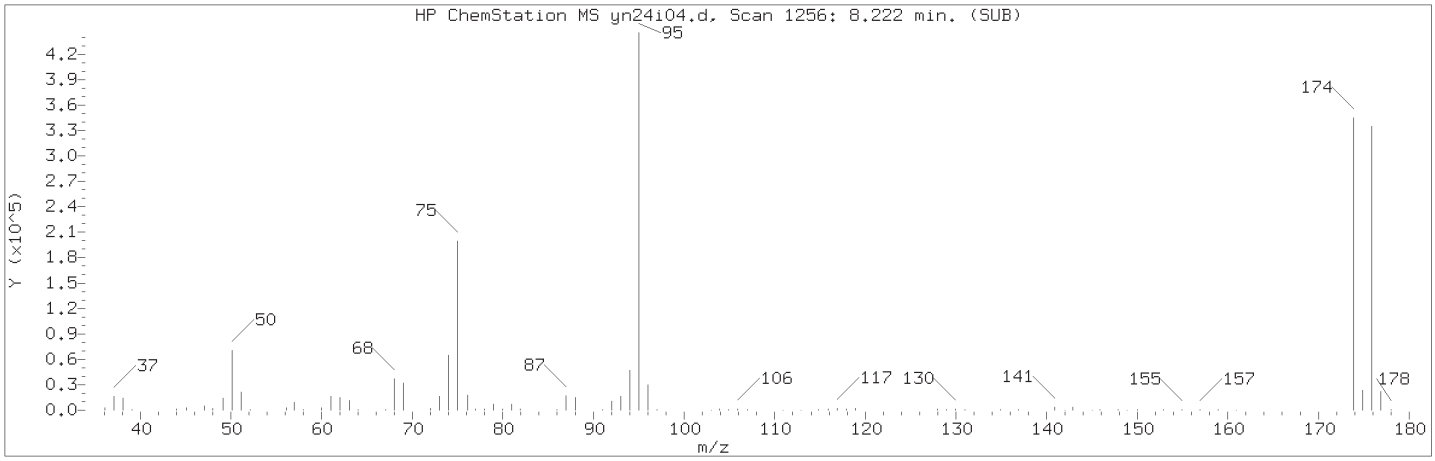
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

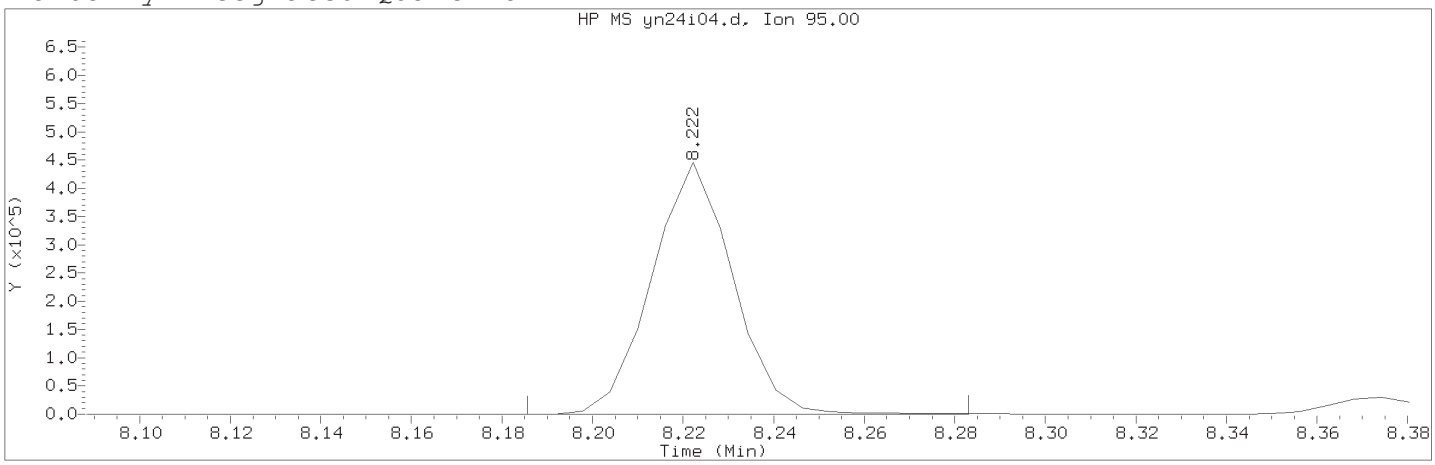
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.596
Quant Ion : 88.00
Area : 67267
On-column Amount (ng) : 480.9501
Integration start scan : 649 Integration stop scan: 698
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

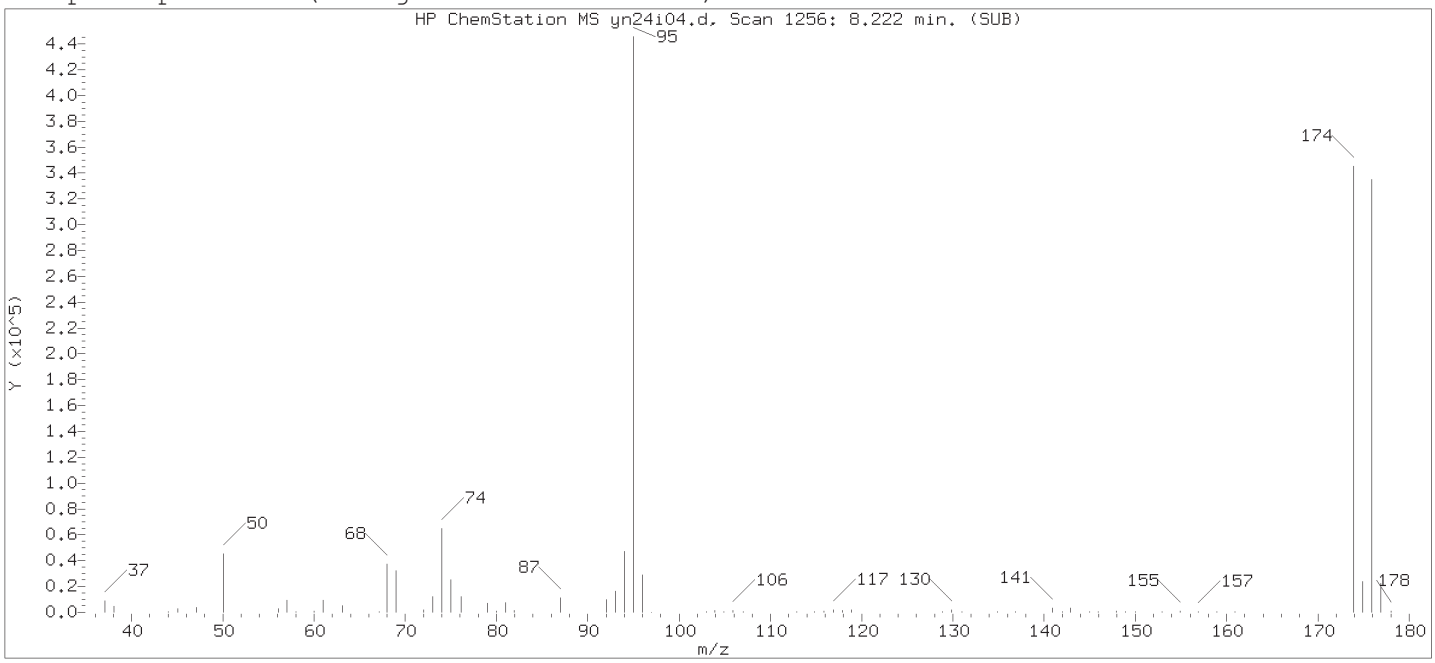
Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area (flag) : 551681M
On-Column Amount (ng) : 50.1015
Integration start scan : 1249 Integration stop scan: 1265
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

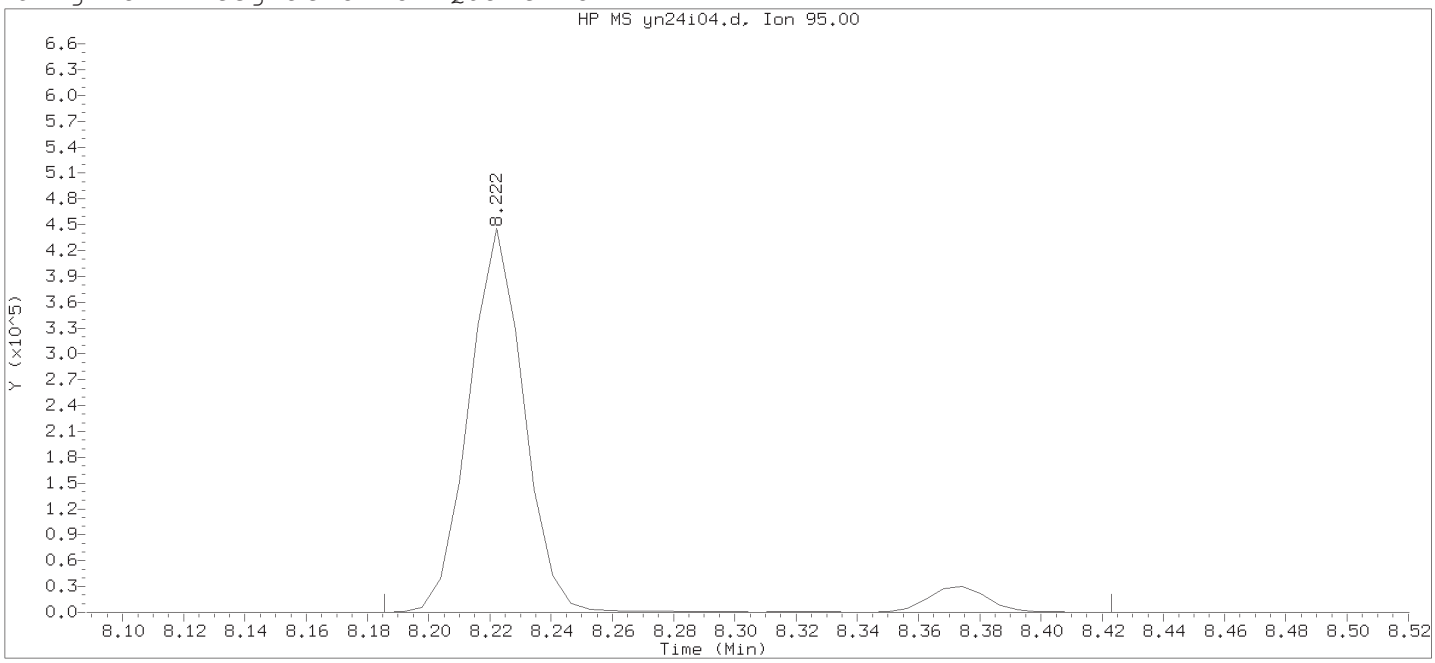
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

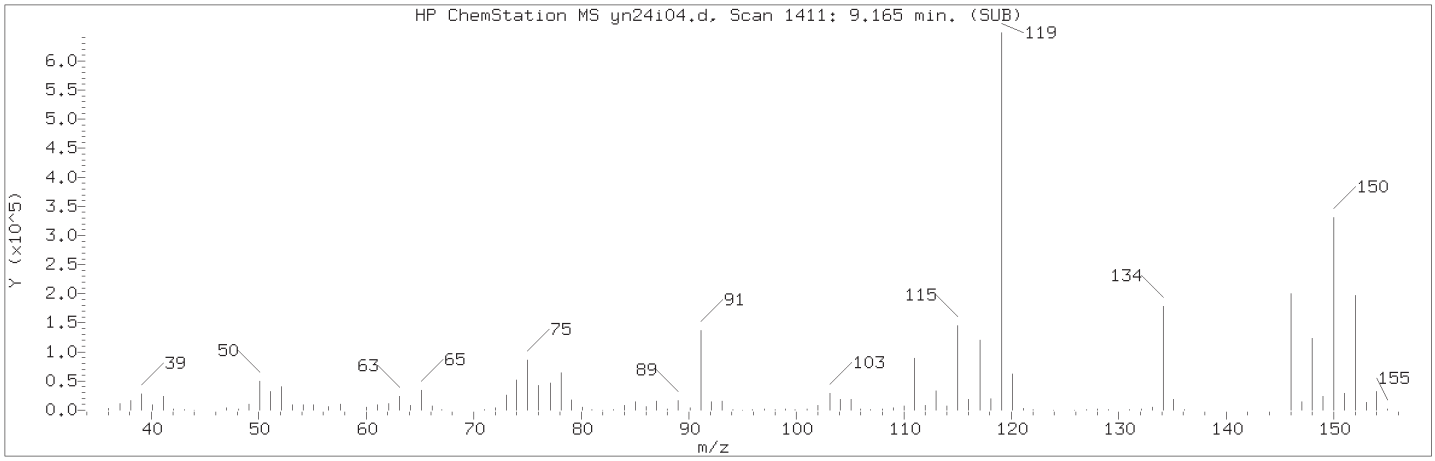
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

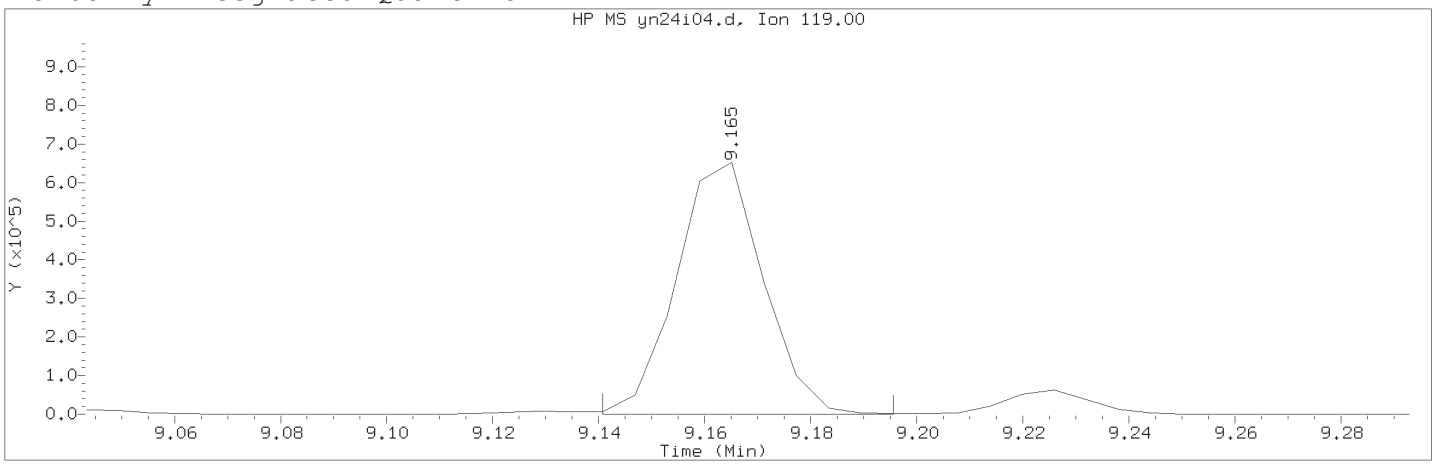
Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area : 594038
On-column Amount (ng) : 53.6401
Integration start scan : 1249 Integration stop scan: 1288
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

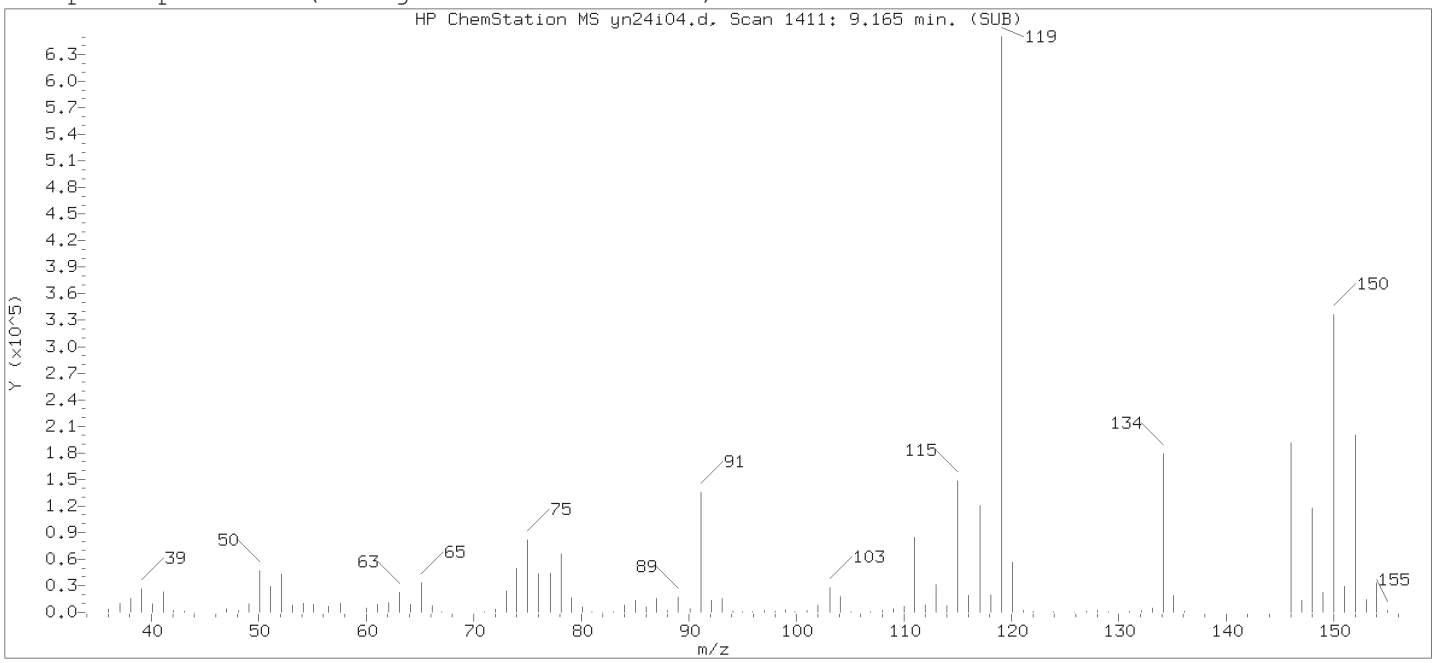
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area (flag) : 739815M
On-Column Amount (ng) : 21.7849
Integration start scan : 1406 Integration stop scan: 1415
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

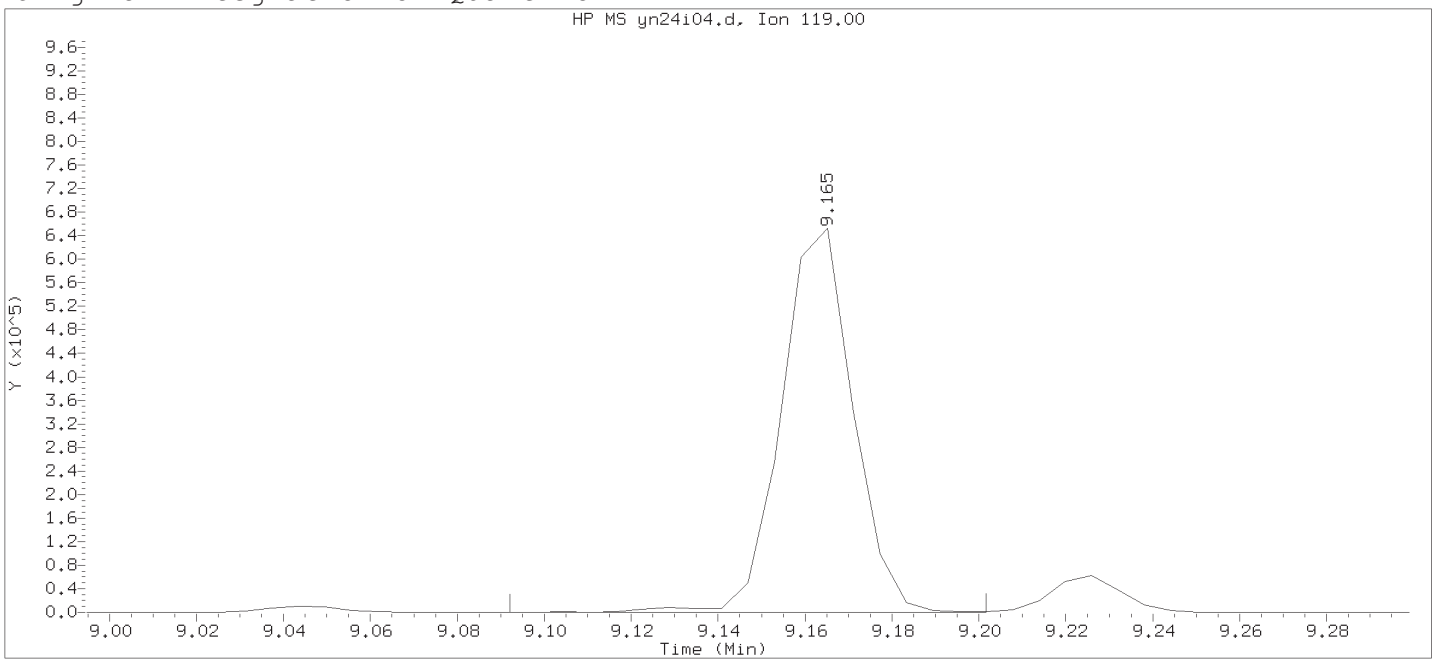
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



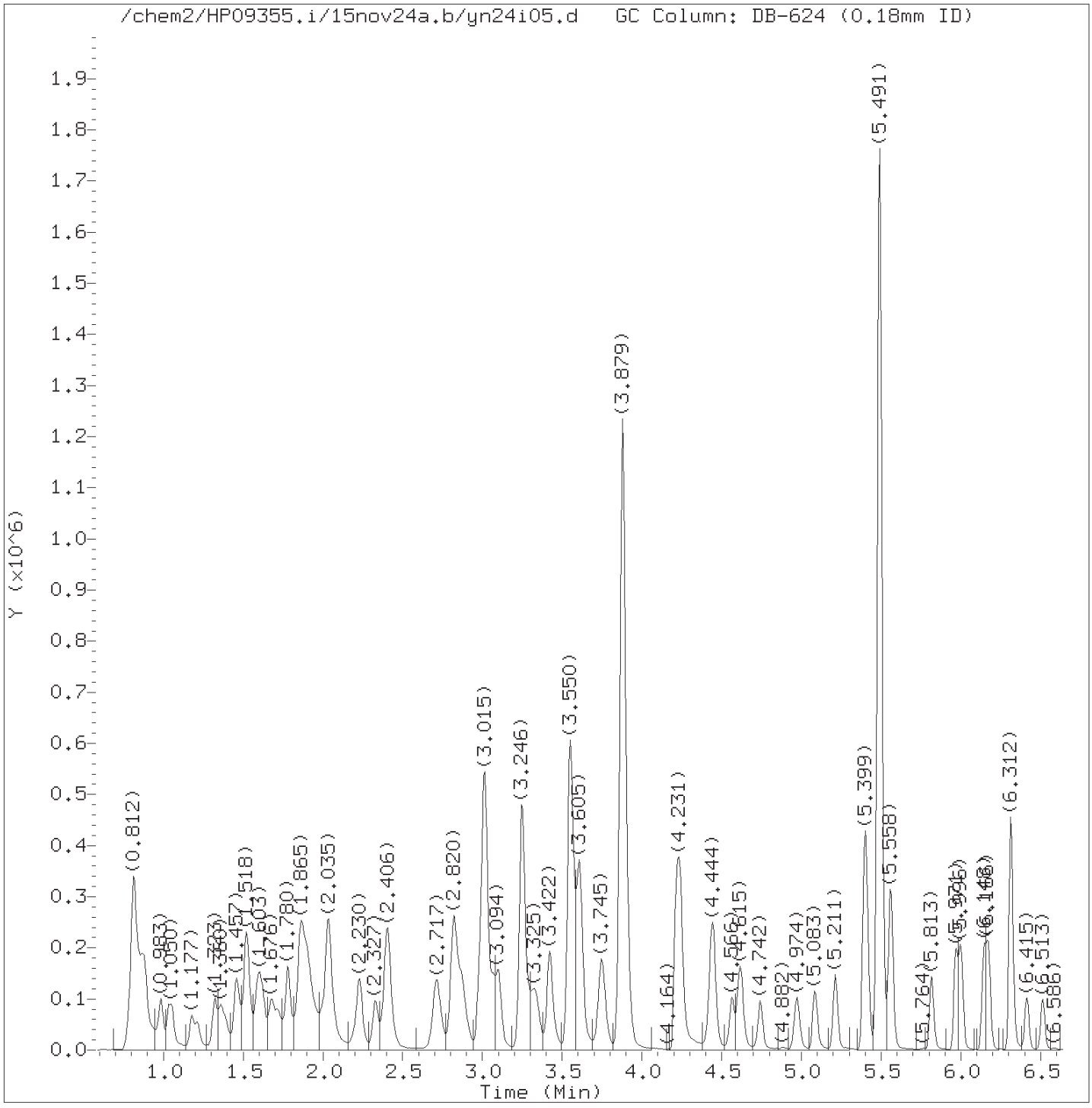
Data File: /chem2/HP09355.i/15nov24a.b/yn24i04.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 01:52 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:08
Date, time and analyst ID of latest file update: 24-Nov-2015 02:08 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area : 747801
On-column Amount (ng) : 20.4975
Integration start scan : 1398 Integration stop scan: 1416
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0403



Total Ion Chromatogram (TIC)

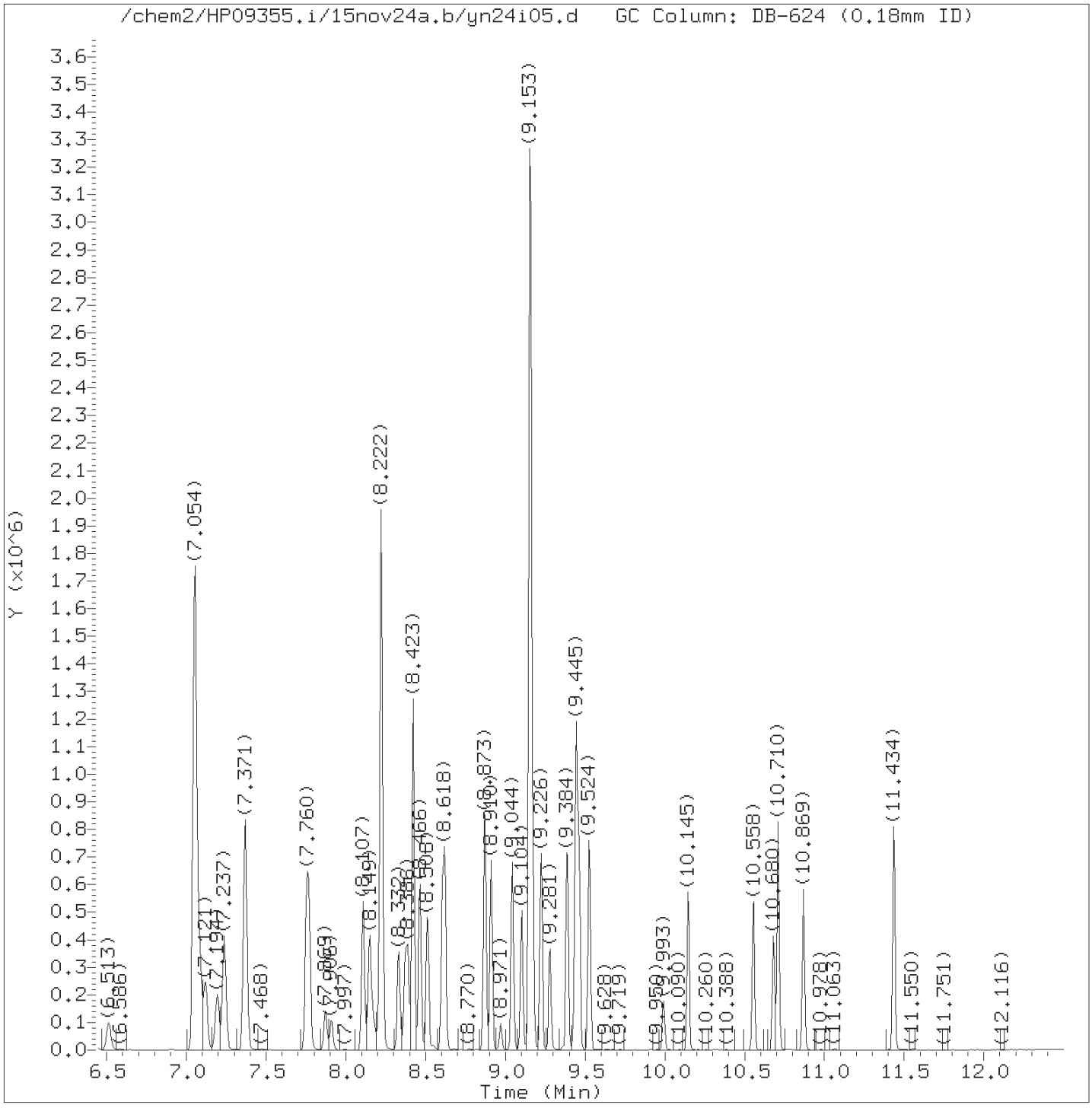
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.934	85	59065	7.391
4) Chloromethane	(2)	0.983	50	79887M	8.786
5) 1,3-Butadiene	(2)	1.031	39	34864	8.483
6) Vinyl Chloride	(2)	1.056	62	69805M	8.662
8) Bromomethane	(2)	1.177	94	51285	9.259
9) Chloroethane	(2)	1.214	64	40625	9.052
10) Dichlorofluoromethane	(2)	1.323	67	94093	9.277
11) n-Pentane	(2)	1.360	43	59238	7.480
12) Trichlorofluoromethane	(2)	1.384	101	73920	8.204
14) Ethyl ether	(2)	1.457	59	56380	9.787
15) Freon 123a	(2)	1.482	67	58984	8.763
16) Acrolein	(1)	1.518	56	292902	98.626
17) 1,1-Dichloroethene	(2)	1.591	96	46369	8.754
17) 1,1-Dichloroethene	(2)	1.591	63	23027	8.854
18) Acetone	(1)	1.603	58	30196	20.007
19) Freon 113	(2)	1.622	101	38421	7.514
21) 2-Propanol	(1)	1.676	45	102772	114.728
22) Methyl Iodide	(2)	1.682	142	92473	9.171
23) Carbon Disulfide	(2)	1.725	76	170491	8.394
25) Allyl Chloride	(2)	1.780	41	68779	8.867
27) Methyl Acetate	(2)	1.786	43	89269	9.996
28) Methylene Chloride	(2)	1.853	84	59358	9.509
29)*t-Butyl alcohol-d10	(1)	1.871	65	490281	250.000
30) t-Butyl alcohol	(1)	1.926	59	208153	95.674
31) Acrylonitrile	(2)	1.999	53	55346	10.651
32) trans-1,2-Dichloroethene	(2)	2.029	96	54946	9.026
33) Methyl Tertiary Butyl Ether	(2)	2.041	73	208557	9.826
34) n-Hexane	(2)	2.230	57	106600	10.517
36) 1,1-Dichloroethane	(2)	2.327	63	114187	9.221
38) di-Isopropyl ether	(2)	2.400	45	225279	9.489
39) 2-Chloro-1,3-butadiene	(2)	2.406	53	85626	8.579
40) Ethyl t-butyl ether	(2)	2.717	59	222978	9.712
42) cis-1,2-Dichloroethene	(2)	2.820	96	69143	9.252
45) 2,2-Dichloropropane	(2)	2.826	77	76998	8.716
44) 2-Butanone	(2)	2.826	43	197260	21.866
47) Propionitrile	(1)	2.869	54	241923	97.390
43) 1,2-Dichloroethene (Total)	(2)		96	124089	18.278
48) Methacrylonitrile	(2)	3.009	67	274888	50.423

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.027	128	35697	9.285
50) Tetrahydrofuran	(1)	3.076	71	49913	19.414
51) Chloroform	(2)	3.106	83	105909	9.294
52)$Dibromofluoromethane	(2)	3.246	113	341631	49.539
52)$Dibromofluoromethane	(2)	3.246	111	350641	49.649
53) 1,1,1-Trichloroethane	(2)	3.276	97	92274	8.549
54) Cyclohexane	(2)	3.337	56	90917	7.828
54) Cyclohexane	(2)	3.331	84	74918	6.750
54) Cyclohexane	(2)	3.331	69	26768	7.549
55) 1,1-Dichloropropene	(2)	3.422	75	84158	8.770
56) Carbon Tetrachloride	(2)	3.428	117	65609	8.243
57)$1,2-Dichloroethane-d4	(2)	3.550	102	90385	50.548
57)$1,2-Dichloroethane-d4	(2)	3.550	65	421848	50.603
57)$1,2-Dichloroethane-d4	(2)	3.550	104	56417	49.602
58) Isobutyl Alcohol	(1)	3.574	41	176558	245.788
60) Benzene	(2)	3.605	78	262196	9.196
61) 1,2-Dichloroethane	(2)	3.623	62	96733	9.584
61) 1,2-Dichloroethane	(2)	3.623	98	8990	10.007
65) t-Amyl methyl ether	(2)	3.745	73	209398	9.632
66)*Fluorobenzene	(2)	3.879	96	1469835	50.000
67) n-Heptane	(2)	3.903	43	96725	8.158
69) n-Butanol	(1)	4.219	56	312411	495.369
71) Trichloroethene	(2)	4.237	95	65079	8.969
72) Methylcyclohexane	(2)	4.438	83	83484	7.236
72) Methylcyclohexane	(2)	4.438	98	37213	7.184
73) 1,2-Dichloropropane	(2)	4.450	63	68694	9.272
74) Dibromomethane	(2)	4.566	93	45762	9.582
75) 1,4-Dioxane	(1)	4.602	88	42072M	252.444
76) Methyl Methacrylate	(2)	4.621	69	81036	9.608
78) Bromodichloromethane	(2)	4.742	83	72221	8.920
79) 2-Nitropropane	(2)	4.974	41	80683	21.186
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	63324	9.408
81) cis-1,3-Dichloropropene	(2)	5.211	75	102639	9.176
82) 4-Methyl-2-pentanone	(2)	5.399	43	402419	23.593
83)$Toluene-d8	(3)	5.491	98	1470661	50.038
83)$Toluene-d8	(3)	5.491	100	956150	49.252
88) Toluene	(3)	5.558	92	166101	9.184
89) trans-1,3-Dichloropropene	(3)	5.813	75	92823	9.130

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	195462	18.306
91) Ethyl Methacrylate	(3)	5.971	69	120695	9.380
92) 1,1,2-Trichloroethane	(3)	6.002	97	70369	9.738
93) Tetrachloroethene	(3)	6.148	166	66939	8.829
94) 1,3-Dichloropropane	(3)	6.172	76	119437	9.646
96) 2-Hexanone	(3)	6.312	43	341063	23.562
97) Dibromochloromethane	(3)	6.415	129	60421	9.184
99) 1,2-Dibromoethane	(3)	6.513	107	77305	9.830
100)*Chlorobenzene-d5	(3)	7.054	117	1091103	50.000
102) Chlorobenzene	(3)	7.085	112	193036	9.367
101) 1-Chlorohexane	(3)	7.121	91	82133	8.476
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	59264	9.212
104) Ethylbenzene	(3)	7.237	91	312558	9.185
106) m+p-Xylene	(3)	7.371	106	248749	18.535
107) o-Xylene	(3)	7.754	106	125303	9.375
109) Styrene	(3)	7.766	104	205035	9.080
108) Xylene (Total)	(3)		106	374052	27.909
110) Bromoform	(3)	7.906	173	43209	8.167
111) Isopropylbenzene	(3)	8.107	105	308694	9.016
112) Cyclohexanone	(1)	8.149	55	199161	216.426
114)$4-Bromofluorobenzene	(3)	8.222	95	551749	50.050
114)$4-Bromofluorobenzene	(3)	8.222	174	445509	50.286
115) Bromobenzene	(4)	8.332	156	83429	9.300
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	123325	9.904
117) 1,2,3-Trichloropropane	(4)	8.386	110	39036	9.815
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	198669	48.255
119) n-Propylbenzene	(4)	8.466	91	369934	9.069
120) 2-Chlorotoluene	(4)	8.514	126	78079	9.041
121) 4-Chlorotoluene	(4)	8.605	126	83599	9.212
122) 1,3,5-Trimethylbenzene	(4)	8.618	105	274112	9.114
125) Pentachloroethane	(4)	8.867	167	44206	9.023
124) tert-Butylbenzene	(4)	8.873	134	60497	8.982
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	282565	9.185
127) sec-Butylbenzene	(4)	9.044	105	343064	9.115
129) 1,3-Dichlorobenzene	(4)	9.104	146	159939	9.271
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	579041	50.000
130) p-Isopropyltoluene	(4)	9.165	119	307255M	9.146
133) 1,4-Dichlorobenzene	(4)	9.171	146	164326	9.336

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	305334	9.635
135) Benzyl Chloride	(4)	9.281	91	193785	8.616
136) 1,3-Diethylbenzene	(4)	9.390	119	185441	9.154
138) 1,2-Dichlorobenzene	(4)	9.439	146	160072	9.536
137) 1,4-Diethylbenzene	(4)	9.445	119	192870	9.135
139) n-Butylbenzene	(4)	9.463	92	154606	9.155
140) 1,2-Diethylbenzene	(4)	9.524	119	156579	9.301
141) Diethylbenzene (total)	(4)		100	534890	27.589
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	29800	9.094
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	123285	9.351
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	120943	9.526
147) Hexachlorobutadiene	(4)	10.680	225	54248	9.308
148) Naphthalene	(4)	10.710	128	429283	9.725
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	116815	9.661
150) 2-Methylnaphthalene	(4)	11.434	142	268295	10.047

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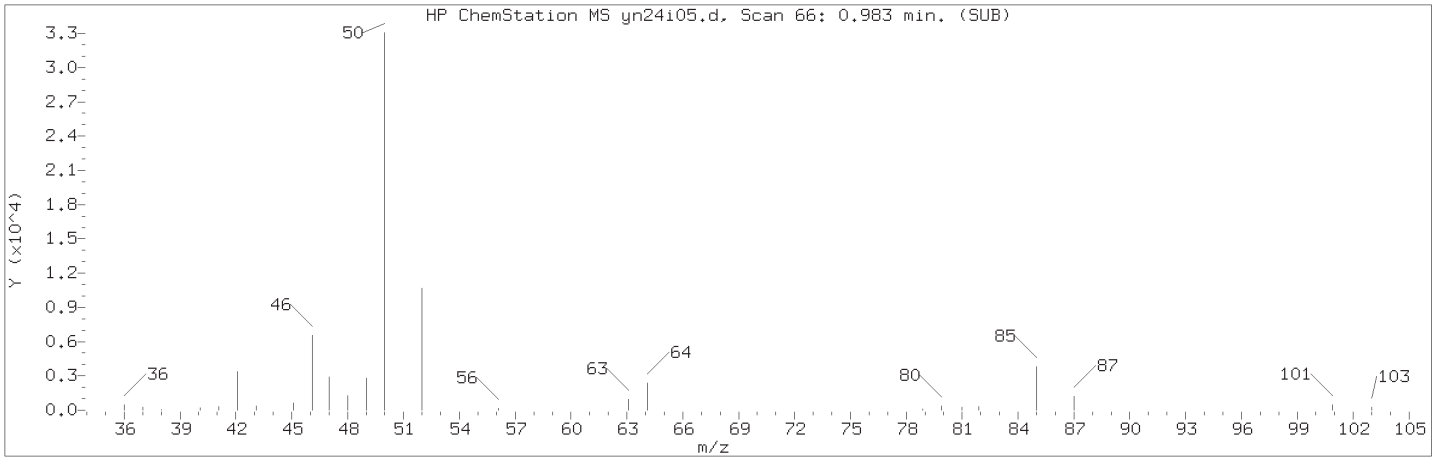
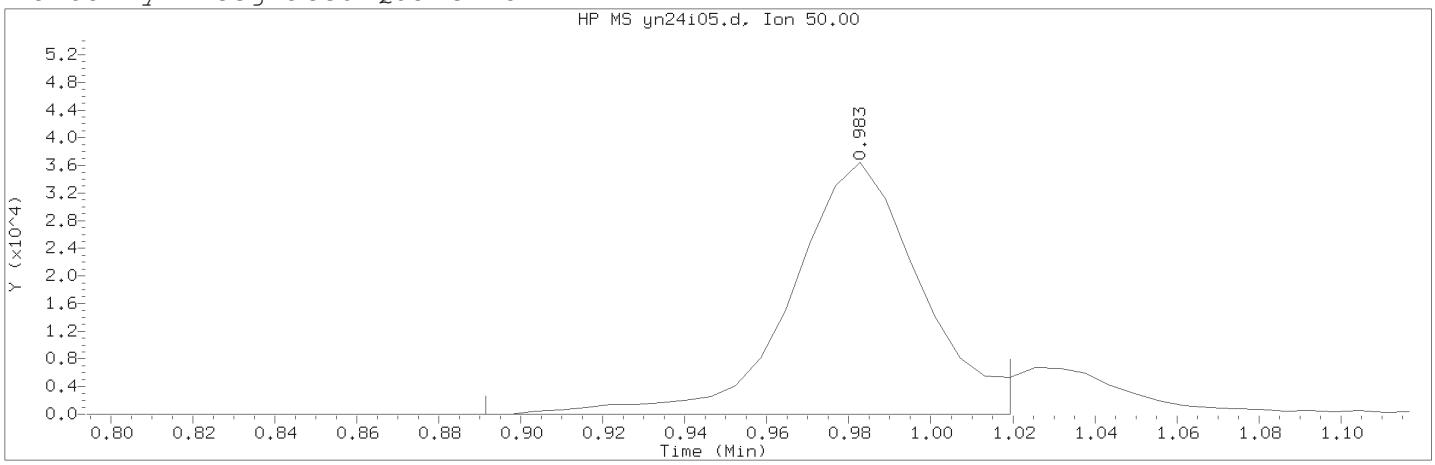
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

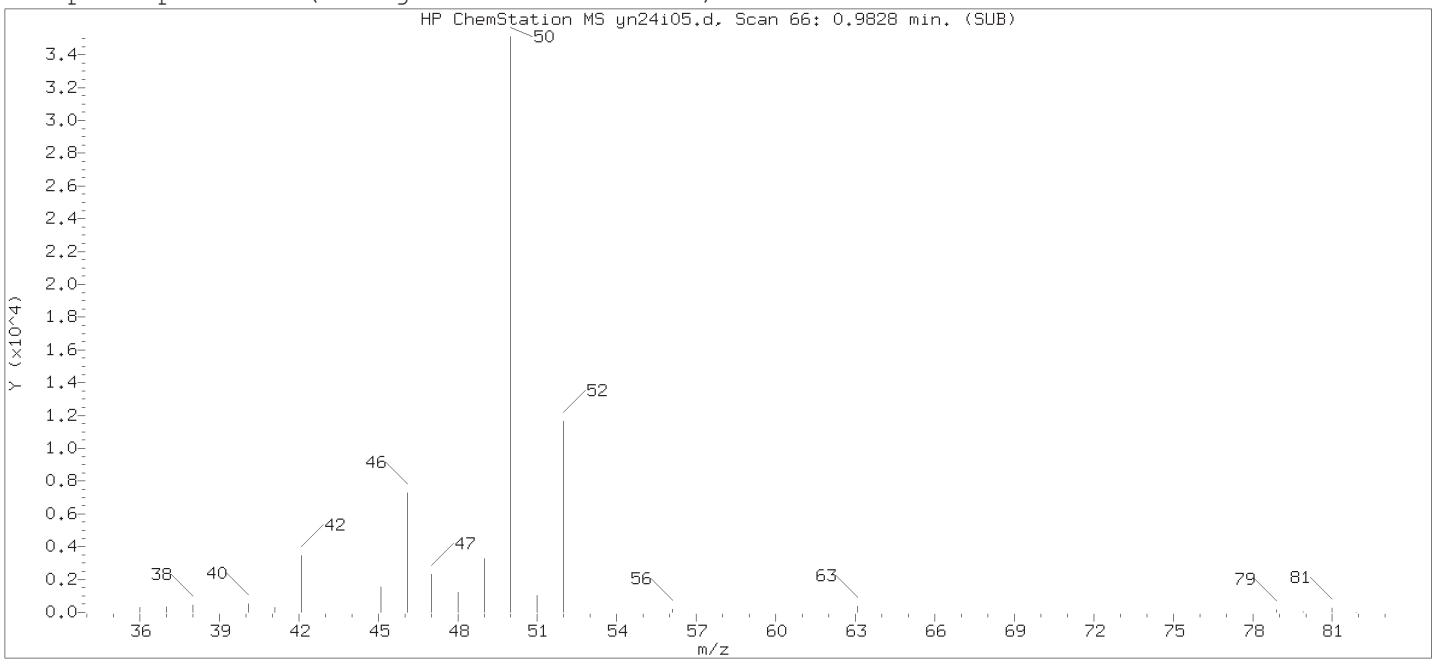
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 66
Retention Time (minutes): 0.983
Quant Ion : 50.00
Area (flag) : 79887M
On-Column Amount (ng) : 8.7861
Integration start scan : 50 Integration stop scan: 71
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

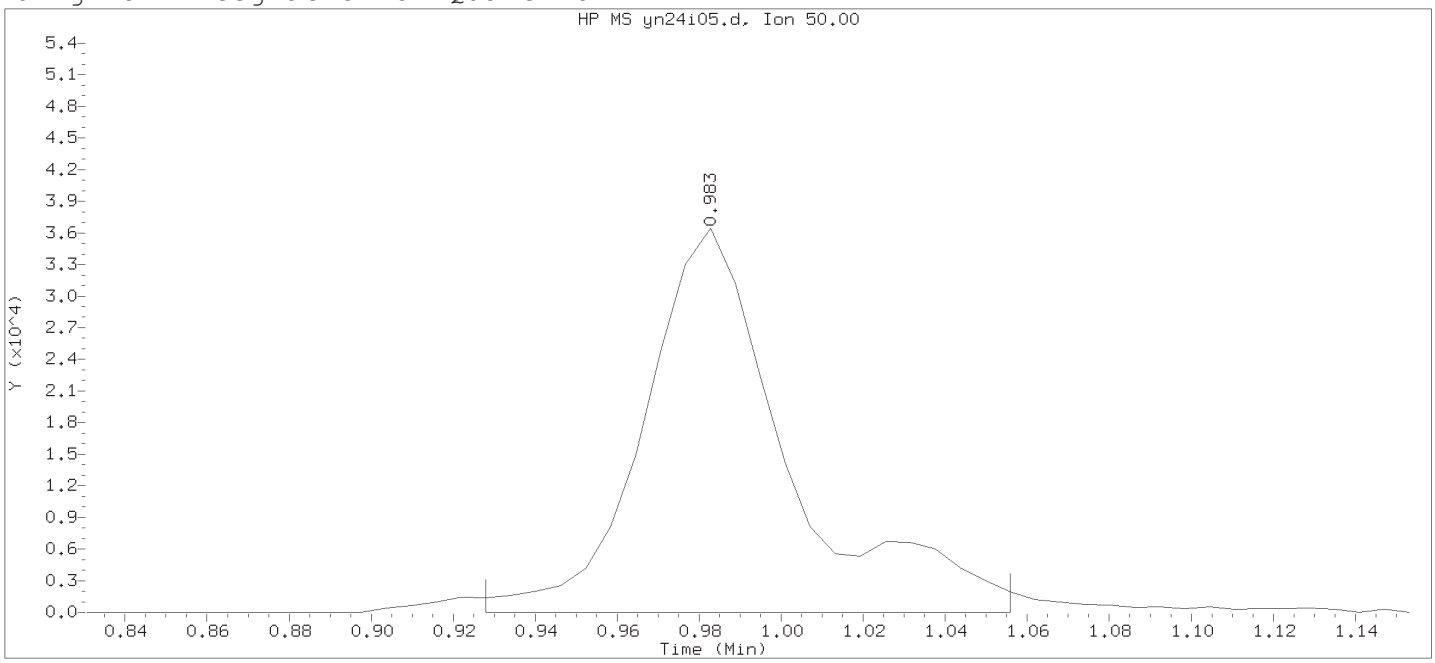
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

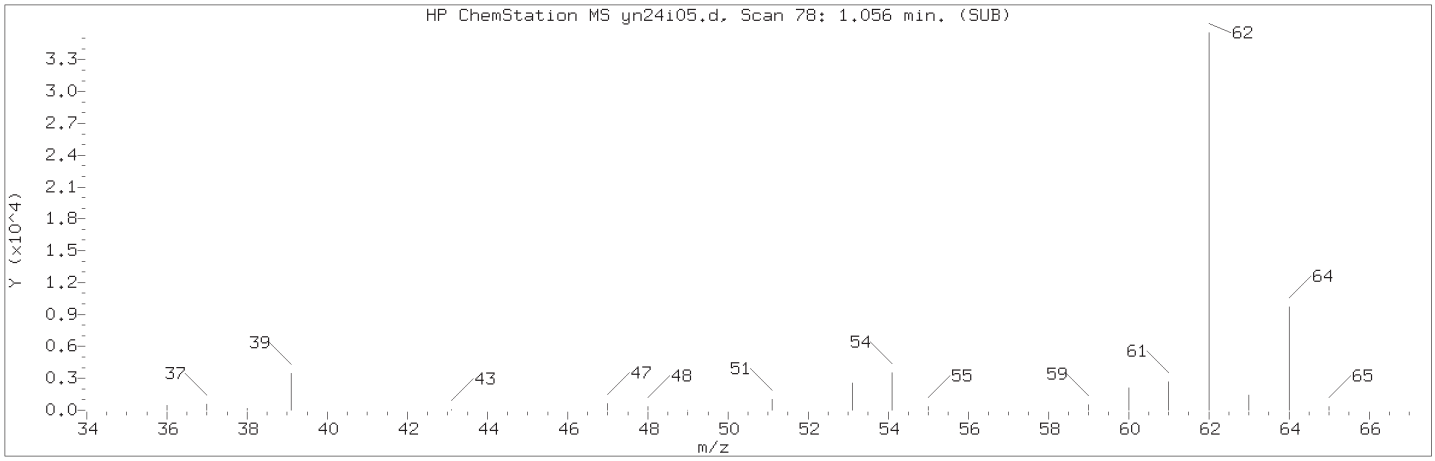
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:29
Date, time and analyst ID of latest file update: 24-Nov-2015 02:29 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

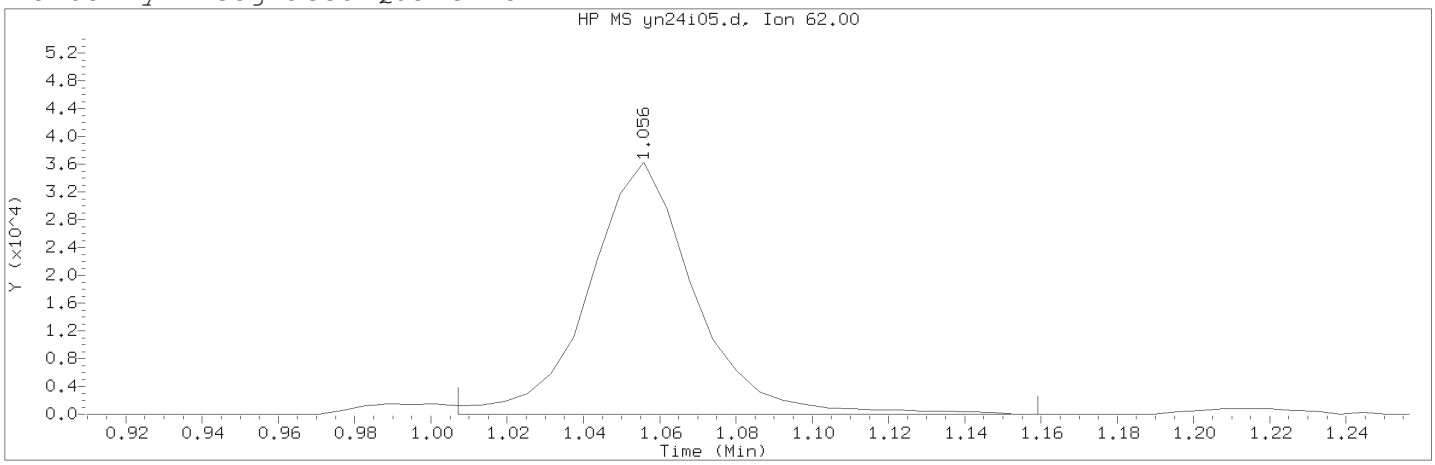
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 66
Retention Time (minutes): 0.983
Quant Ion : 50.00
Area : 88448
On-column Amount (ng) : 9.5484
Integration start scan : 56 Integration stop scan: 77
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

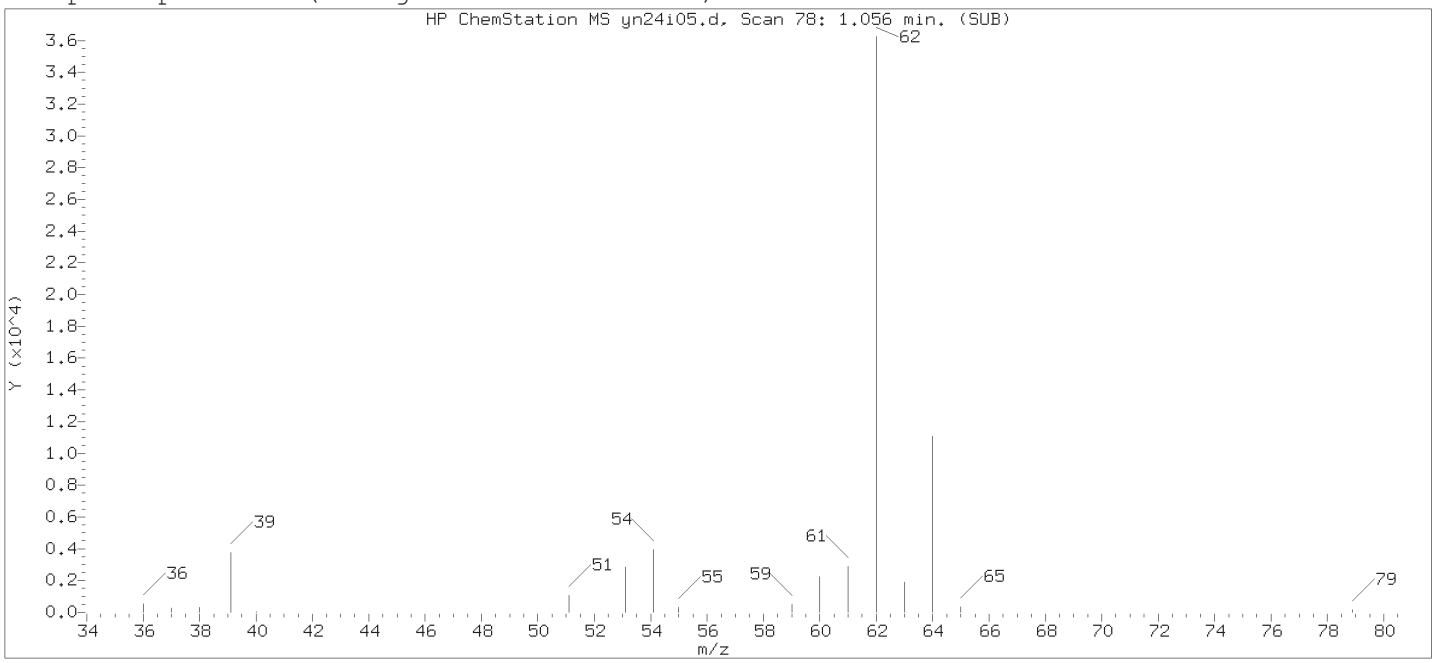
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 78
Retention Time (minutes): 1.056
Quant Ion : 62.00
Area (flag) : 69805M
On-Column Amount (ng) : 8.6623
Integration start scan : 69 Integration stop scan: 94
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

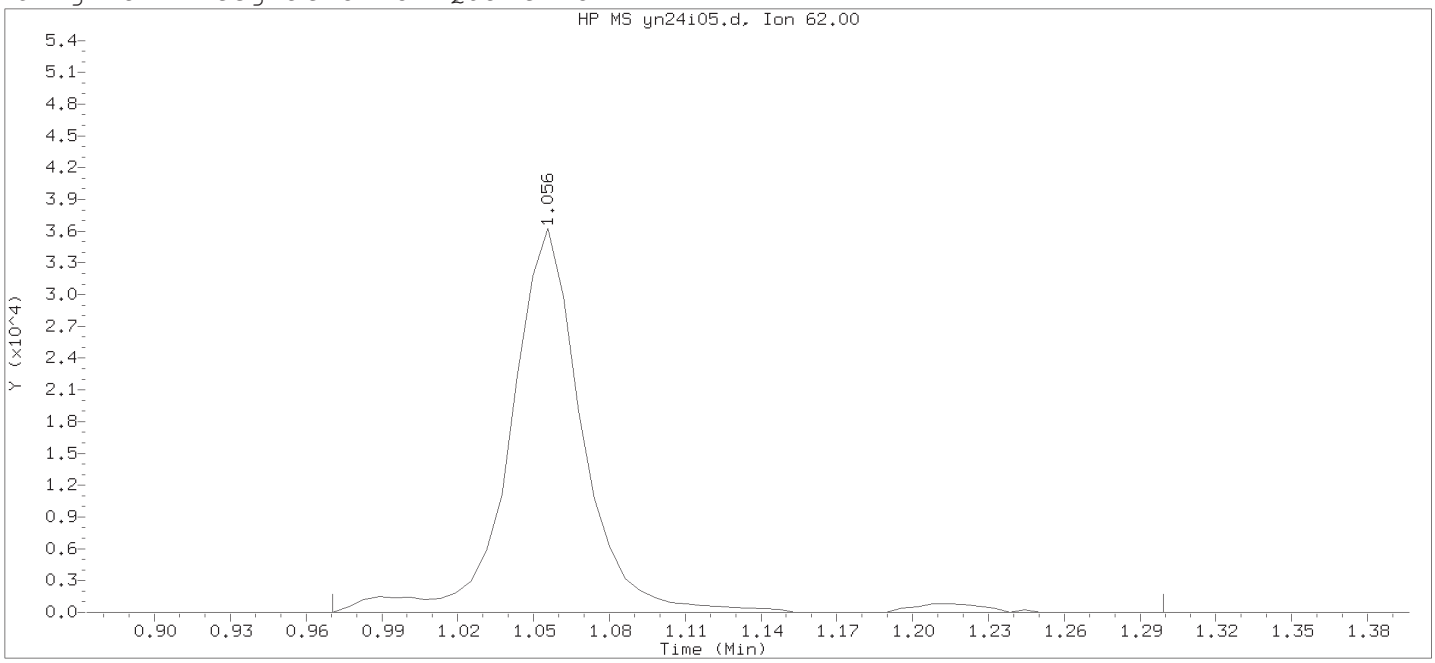
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

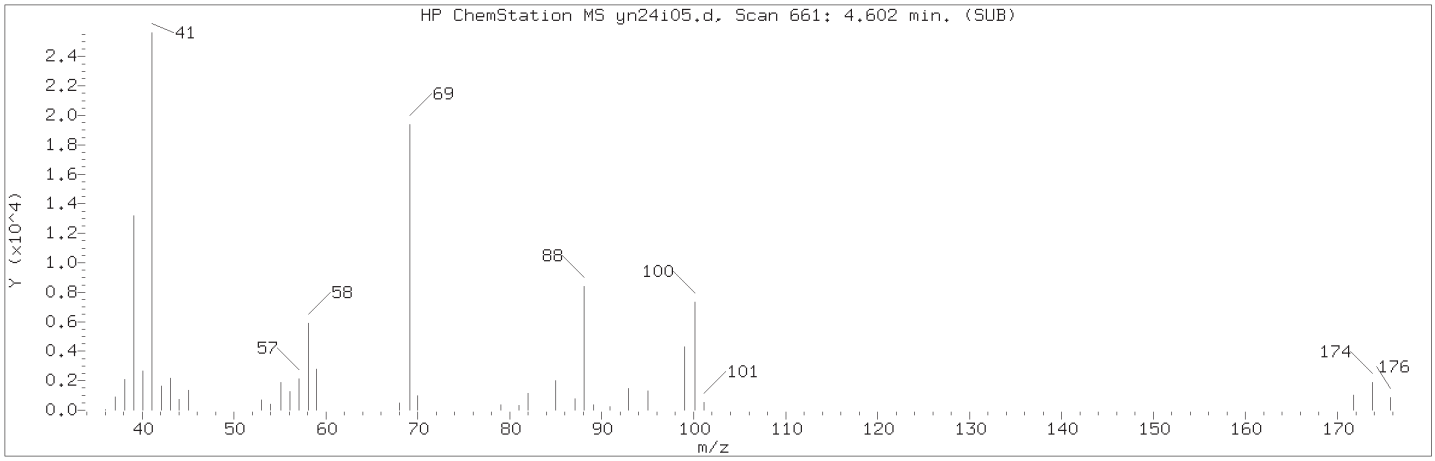
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:29
Date, time and analyst ID of latest file update: 24-Nov-2015 02:29 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

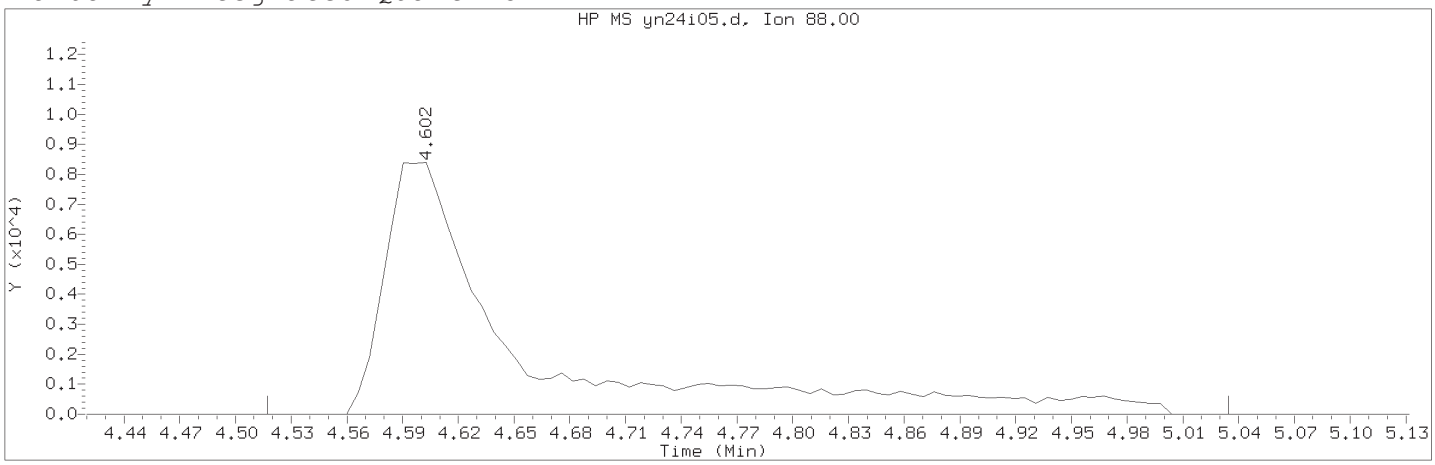
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 78
Retention Time (minutes): 1.056
Quant Ion : 62.00
Area : 73616
On-column Amount (ng) : 9.0169
Integration start scan : 63 Integration stop scan: 117
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

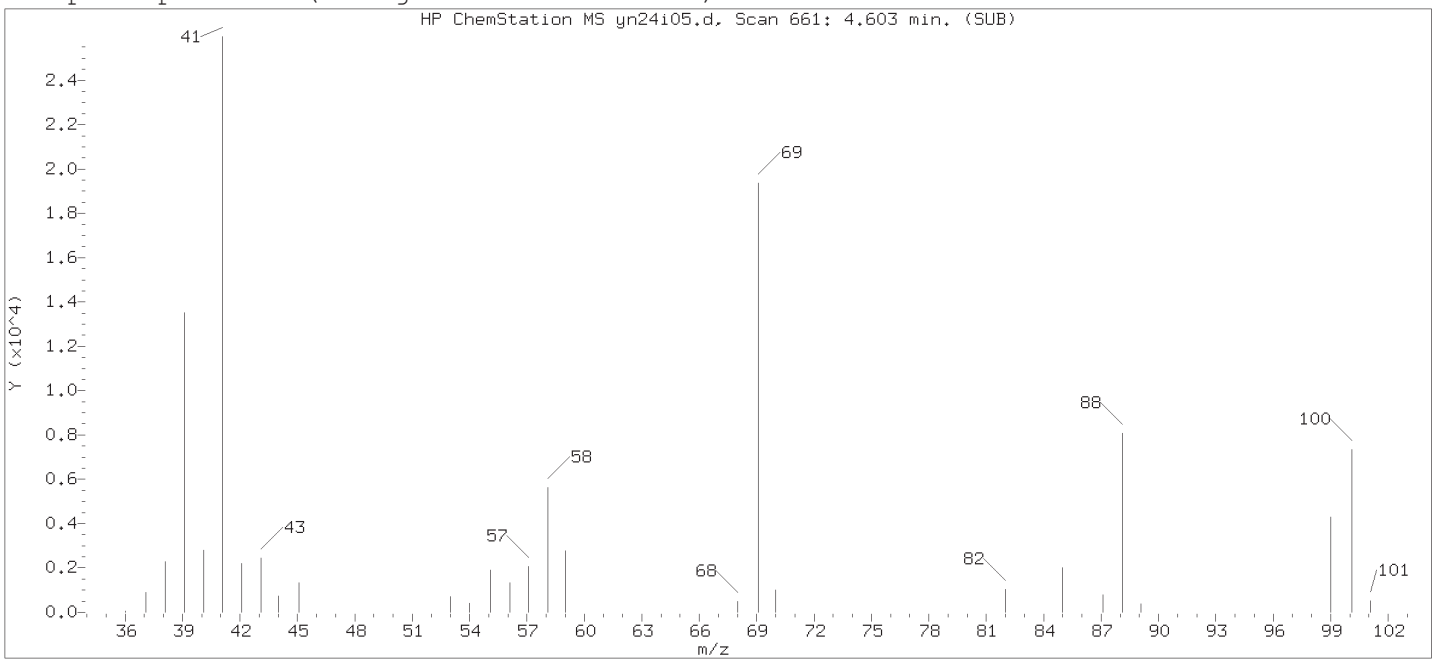
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 661
Retention Time (minutes): 4.602
Quant Ion : 88.00
Area (flag) : 42072M
On-Column Amount (ng) : 252.4435
Integration start scan : 646 Integration stop scan: 731
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

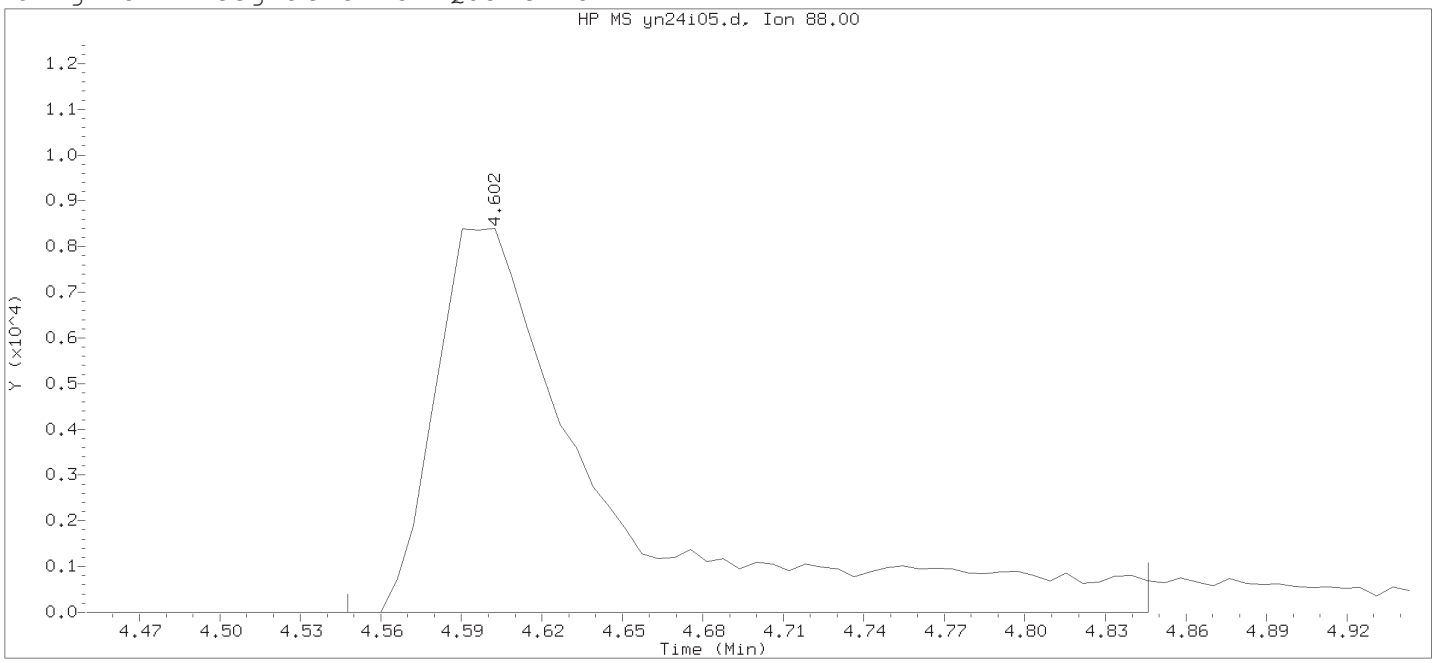
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

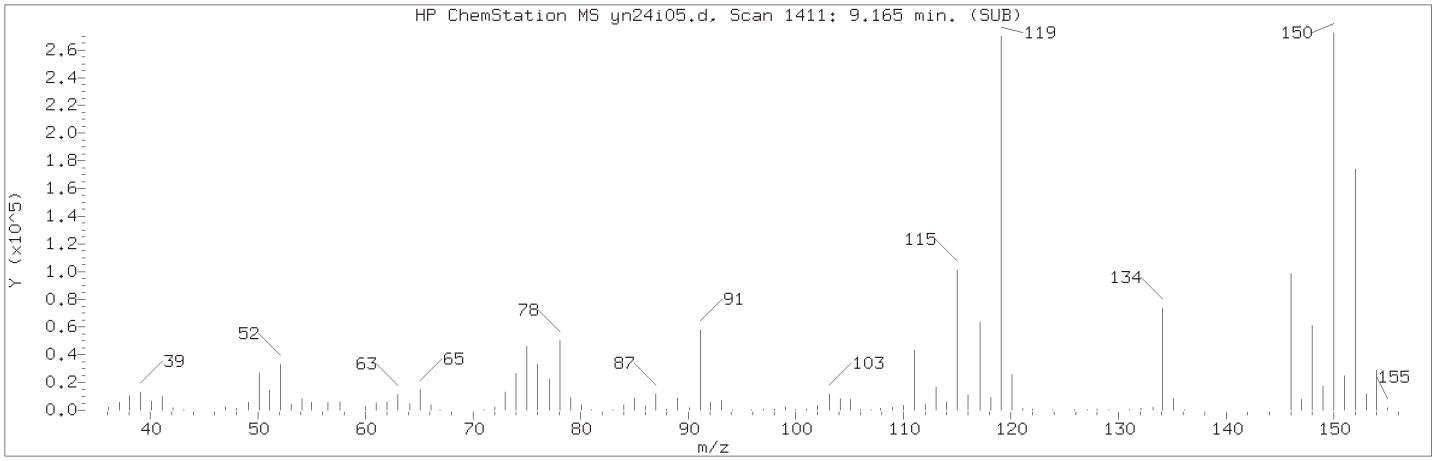
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:29
Date, time and analyst ID of latest file update: 24-Nov-2015 02:29 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

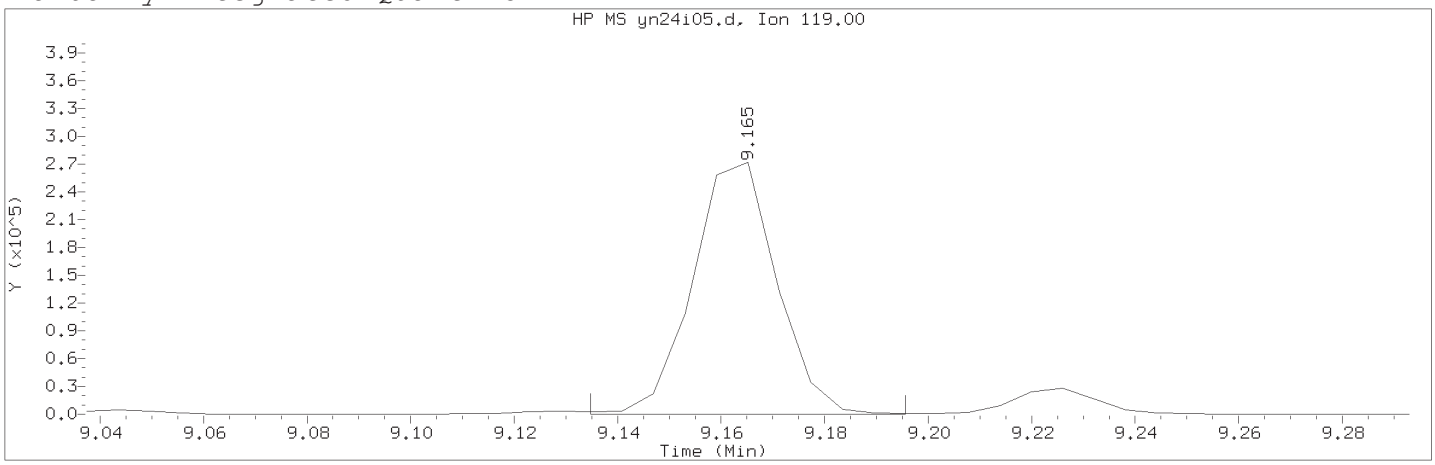
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 661
Retention Time (minutes): 4.602
Quant Ion : 88.00
Area : 36973
On-column Amount (ng) : 260.0827
Integration start scan : 651 Integration stop scan: 700
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

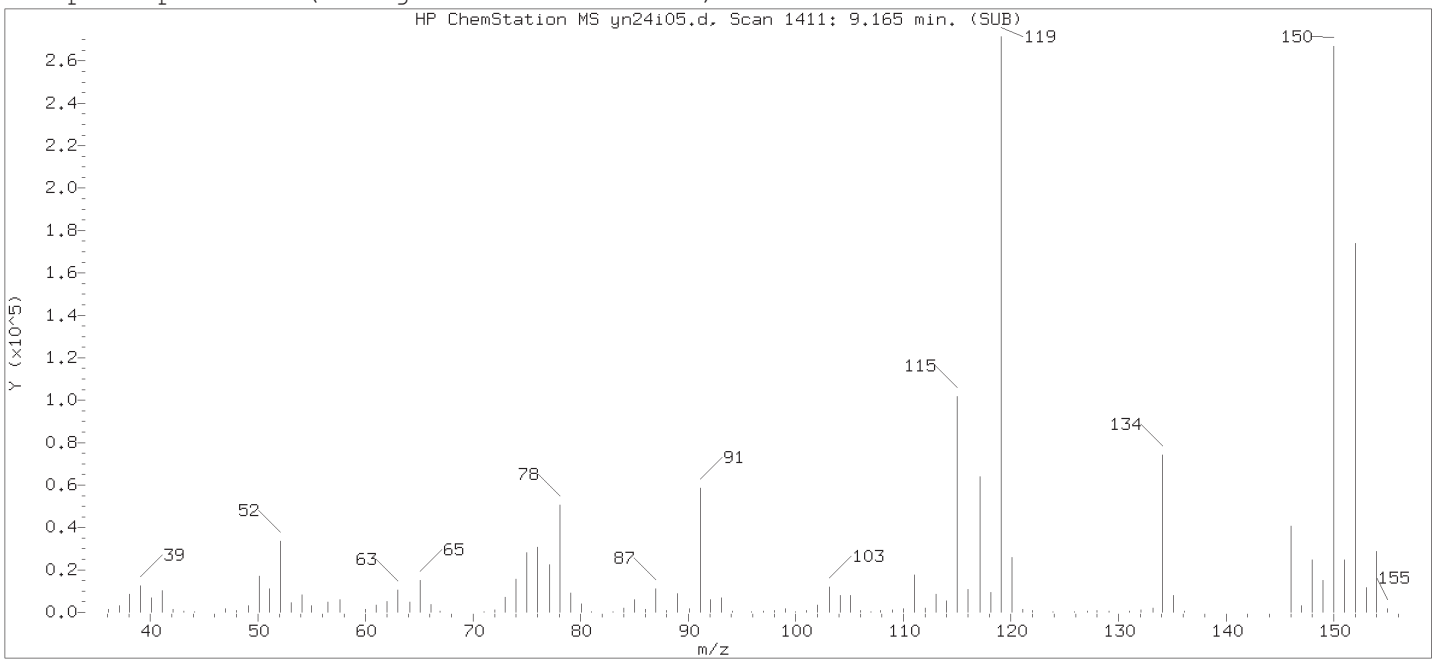
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area (flag) : 307255M
On-Column Amount (ng) : 9.1462
Integration start scan : 1405 Integration stop scan: 1415
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

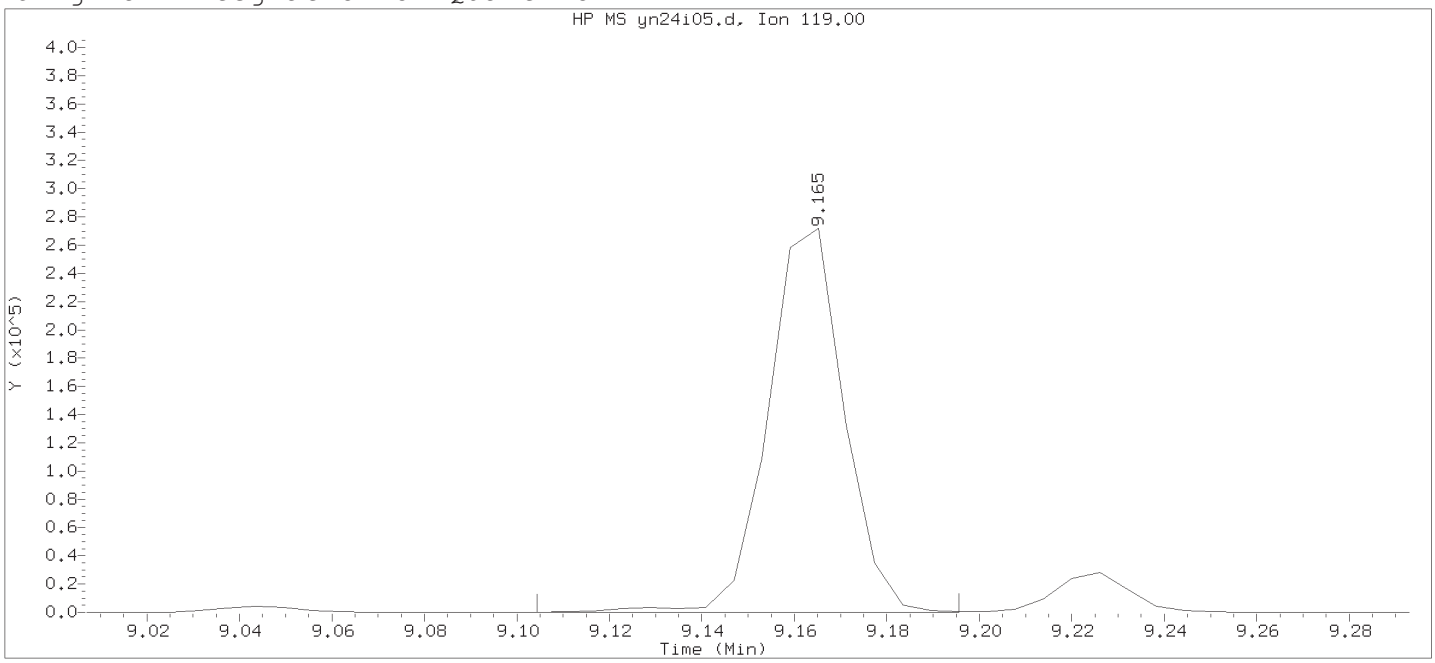
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



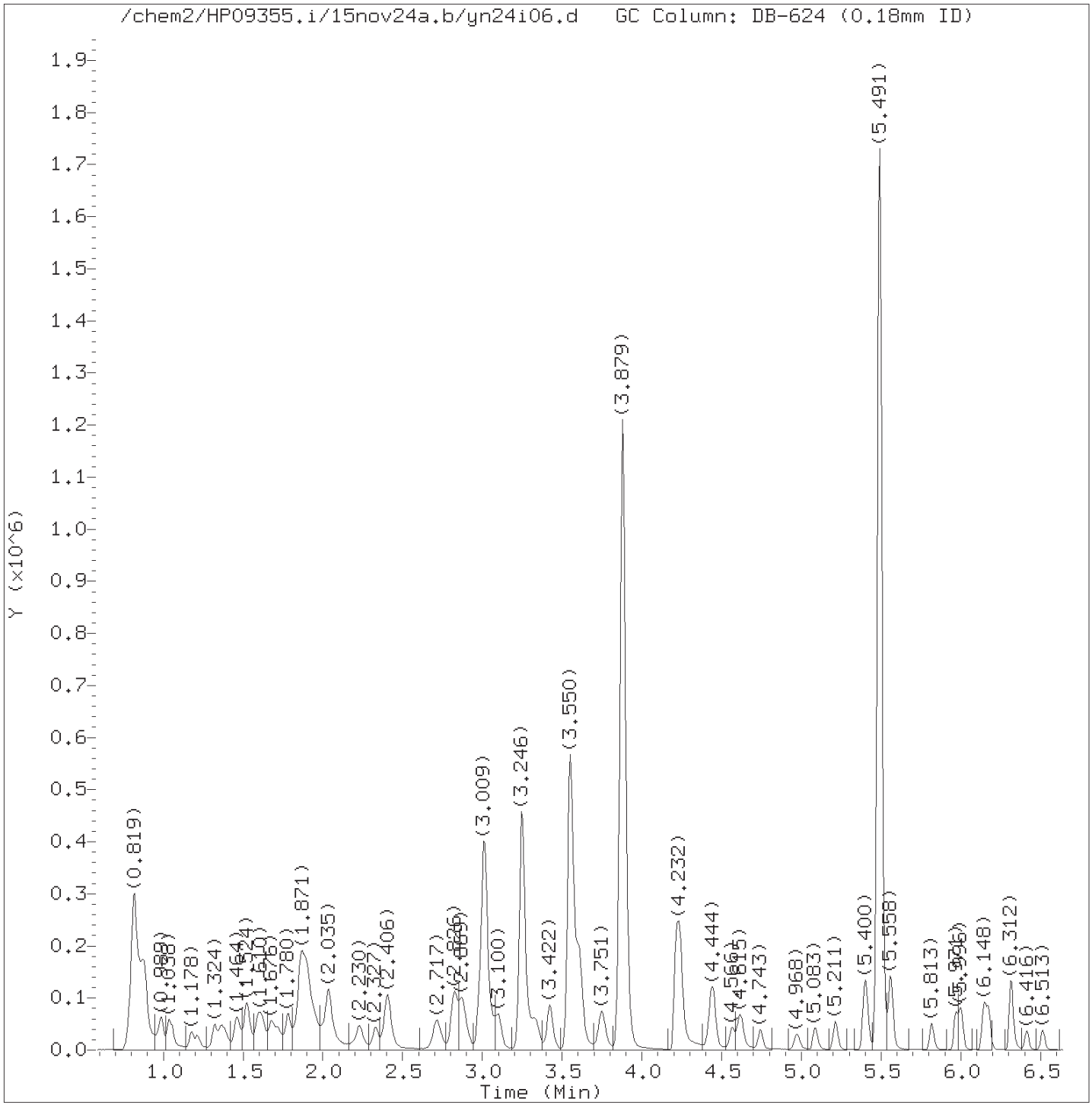
Data File: /chem2/HP09355.i/15nov24a.b/yn24i05.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:13 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:29
Date, time and analyst ID of latest file update: 24-Nov-2015 02:29 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1411
Retention Time (minutes): 9.165
Quant Ion : 119.00
Area : 309719
On-column Amount (ng) : 8.9685
Integration start scan : 1400 Integration stop scan: 1415
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asds0731



Total Ion Chromatogram (TIC)

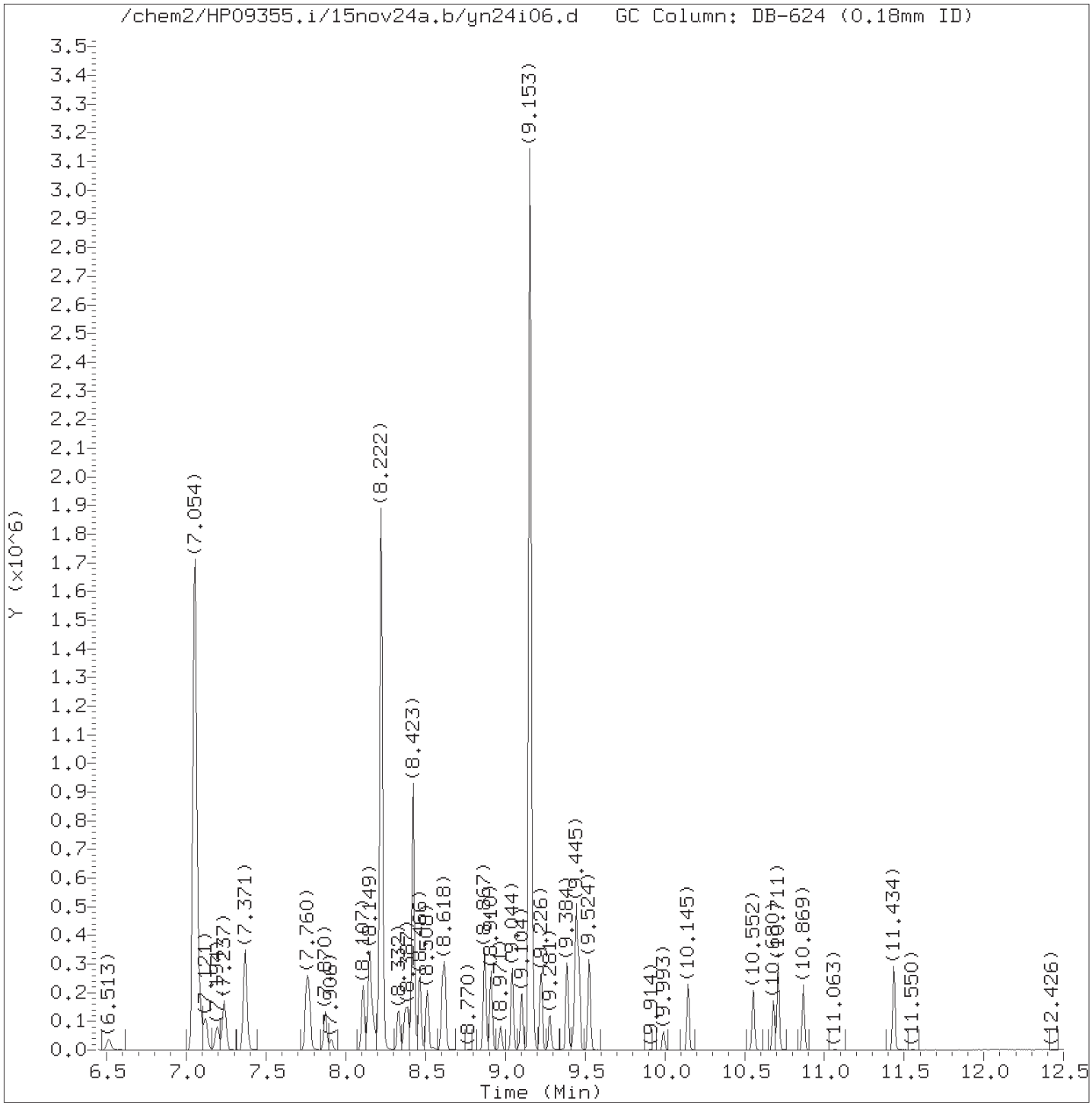
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.940	85	34496	4.319
4) Chloromethane	(2)	0.977	50	39340	4.330
5) 1,3-Butadiene	(2)	1.032	39	22236	5.219
6) Vinyl Chloride	(2)	1.056	62	35664	4.429
8) Bromomethane	(2)	1.178	94	23955	4.328
9) Chloroethane	(2)	1.214	64	19617	4.374
10) Dichlorofluoromethane	(2)	1.324	67	43050	4.247
11) n-Pentane	(2)	1.360	43	34445	4.352
12) Trichlorofluoromethane	(2)	1.384	101	39762	4.416
14) Ethyl ether	(2)	1.457	59	23572	4.095
15) Freon 123a	(2)	1.482	67	28506	4.238
16) Acrolein	(1)	1.524	56	112380	38.991
17) 1,1-Dichloroethene	(2)	1.597	96	21987	4.154
17) 1,1-Dichloroethene	(2)	1.591	63	10748	4.136
18) Acetone	(1)	1.603	58	12006	8.197
19) Freon 113	(2)	1.622	101	19658	3.847
21) 2-Propanol	(1)	1.676	45	75940	87.352
22) Methyl Iodide	(2)	1.683	142	40633	4.033
23) Carbon Disulfide	(2)	1.725	76	77382	3.813
25) Allyl Chloride	(2)	1.780	41	30190	3.895
27) Methyl Acetate	(2)	1.786	43	36815	4.125
28) Methylene Chloride	(2)	1.859	84	24993	4.007
29)*t-Butyl alcohol-d10	(1)	1.871	65	475815	250.000
30) t-Butyl alcohol	(1)	1.932	59	165736	78.494
31) Acrylonitrile	(2)	2.005	53	21074	4.058
32) trans-1,2-Dichloroethene	(2)	2.035	96	24503	4.028
33) Methyl Tertiary Butyl Ether	(2)	2.041	73	84023	3.962
34) n-Hexane	(2)	2.230	57	32522	3.211
36) 1,1-Dichloroethane	(2)	2.327	63	49036	3.963
38) di-Isopropyl ether	(2)	2.406	45	98055	4.133
39) 2-Chloro-1,3-butadiene	(2)	2.406	53	38558	3.866
40) Ethyl t-butyl ether	(2)	2.717	59	92850	4.047
42) cis-1,2-Dichloroethene	(2)	2.820	96	29501	3.950
44) 2-Butanone	(2)	2.826	43	70495	7.820
45) 2,2-Dichloropropane	(2)	2.832	77	33219	3.763
47) Propionitrile	(1)	2.875	54	188625	78.243
43) 1,2-Dichloroethene (Total)	(2)		96	54004	7.978
48) Methacrylonitrile	(2)	3.009	67	215856	39.623

* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.027	128	14830	3.860
50) Tetrahydrofuran	(1)	3.070	71	17926	7.184
51) Chloroform	(2)	3.106	83	44726	3.928
52)$Dibromofluoromethane	(2)	3.246	113	339234	49.226
52)$Dibromofluoromethane	(2)	3.246	111	349632	49.541
53) 1,1,1-Trichloroethane	(2)	3.276	97	47144	4.371
54) Cyclohexane	(2)	3.331	56	44086	3.799
54) Cyclohexane	(2)	3.331	84	43158	3.891
54) Cyclohexane	(2)	3.337	69	13370	3.773
55) 1,1-Dichloropropene	(2)	3.422	75	38262	3.990
56) Carbon Tetrachloride	(2)	3.429	117	29570	3.718
57)$1,2-Dichloroethane-d4	(2)	3.550	102	89633	50.163
57)$1,2-Dichloroethane-d4	(2)	3.550	65	416461	49.992
57)$1,2-Dichloroethane-d4	(2)	3.550	104	56644	49.836
58) Isobutyl Alcohol	(1)	3.568	41	138428	198.566
60) Benzene	(2)	3.611	78	113374	3.979
61) 1,2-Dichloroethane	(2)	3.617	62	39542	3.920
61) 1,2-Dichloroethane	(2)	3.629	98	3620	4.032
65) t-Amyl methyl ether	(2)	3.751	73	84909	3.909
66)*Fluorobenzene	(2)	3.879	96	1468806	50.000
67) n-Heptane	(2)	3.909	43	43796	3.697
69) n-Butanol	(1)	4.219	56	229559	375.063
71) Trichloroethene	(2)	4.238	95	28483	3.928
72) Methylcyclohexane	(2)	4.438	83	43932	3.811
72) Methylcyclohexane	(2)	4.438	98	20252	3.912
73) 1,2-Dichloropropane	(2)	4.451	63	28780	3.887
74) Dibromomethane	(2)	4.566	93	18380	3.851
75) 1,4-Dioxane	(1)	4.597	88	31930M	197.414
76) Methyl Methacrylate	(2)	4.615	69	31009	3.679
78) Bromodichloromethane	(2)	4.743	83	28458	3.517
79) 2-Nitropropane	(2)	4.974	41	25298	6.648
80) 2-Chloroethyl Vinyl Ether	(2)	5.089	63	24209	3.599
81) cis-1,3-Dichloropropene	(2)	5.211	75	39649	3.547
82) 4-Methyl-2-pentanone	(2)	5.400	43	122830	7.206
83)$Toluene-d8	(3)	5.491	98	1456457	49.960
83)$Toluene-d8	(3)	5.491	100	949100	49.289
88) Toluene	(3)	5.558	92	72078	4.018
89) trans-1,3-Dichloropropene	(3)	5.813	75	34217	3.393

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	73866	6.940
91) Ethyl Methacrylate	(3)	5.965	69	45133	3.536
92) 1,1,2-Trichloroethane	(3)	6.002	97	27902	3.893
93) Tetrachloroethene	(3)	6.148	166	29866	3.971
94) 1,3-Dichloropropane	(3)	6.172	76	47474	3.866
96) 2-Hexanone	(3)	6.312	43	107543	7.490
97) Dibromochloromethane	(3)	6.416	129	22258	4.641
99) 1,2-Dibromoethane	(3)	6.513	107	29861	3.828
100)*Chlorobenzene-d5	(3)	7.054	117	1082242	50.000
102) Chlorobenzene	(3)	7.085	112	81205	3.973
101) 1-Chlorohexane	(3)	7.121	91	35150	3.657
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	22615	3.544
104) Ethylbenzene	(3)	7.237	91	133465	3.954
106) m+p-Xylene	(3)	7.371	106	104322	7.837
107) o-Xylene	(3)	7.754	106	51981	3.921
109) Styrene	(3)	7.772	104	80764	3.606
108) Xylene (Total)	(3)		106	156303	11.758
110) Bromoform	(3)	7.906	173	15123	2.882
111) Isopropylbenzene	(3)	8.107	105	128878	3.795
112) Cyclohexanone	(1)	8.149	55	169023	189.260
114)$4-Bromofluorobenzene	(3)	8.222	95	546886	50.015
114)$4-Bromofluorobenzene	(3)	8.222	174	437762	49.816
115) Bromobenzene	(4)	8.332	156	34396	3.886
116) 1,1,2,2-Tetrachloroethane	(4)	8.368	83	47832	3.893
117) 1,2,3-Trichloropropane	(4)	8.387	110	15228	3.881
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	151299	37.244
119) n-Propylbenzene	(4)	8.466	91	157958	3.925
120) 2-Chlorotoluene	(4)	8.508	126	33325	3.911
121) 4-Chlorotoluene	(4)	8.606	126	34124	3.811
122) 1,3,5-Trimethylbenzene	(4)	8.618	105	112591	3.794
125) Pentachloroethane	(4)	8.867	167	16011	3.312
124) tert-Butylbenzene	(4)	8.873	134	24691	3.715
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	113485	3.739
127) sec-Butylbenzene	(4)	9.044	105	143013	3.851
129) 1,3-Dichlorobenzene	(4)	9.104	146	65585	3.853
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	571349	50.000
130) p-Isopropyltoluene	(4)	9.165	119	126520	3.817
133) 1,4-Dichlorobenzene	(4)	9.171	146	68730	3.957

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	121643	3.890
135) Benzyl Chloride	(4)	9.281	91	66179	2.982
136) 1,3-Diethylbenzene	(4)	9.384	119	77036	3.854
138) 1,2-Dichlorobenzene	(4)	9.439	146	65509	3.955
137) 1,4-Diethylbenzene	(4)	9.445	119	81424	3.908
139) n-Butylbenzene	(4)	9.463	92	63380	3.803
140) 1,2-Diethylbenzene	(4)	9.524	119	65068	3.917
141) Diethylbenzene (total)	(4)		100	223528	11.679
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	10924	3.379
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	50328	3.869
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	48309	3.856
147) Hexachlorobutadiene	(4)	10.680	225	21889	3.807
148) Naphthalene	(4)	10.711	128	165829	3.807
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	47136	3.951
150) 2-Methylnaphthalene	(4)	11.434	142	97295	3.692

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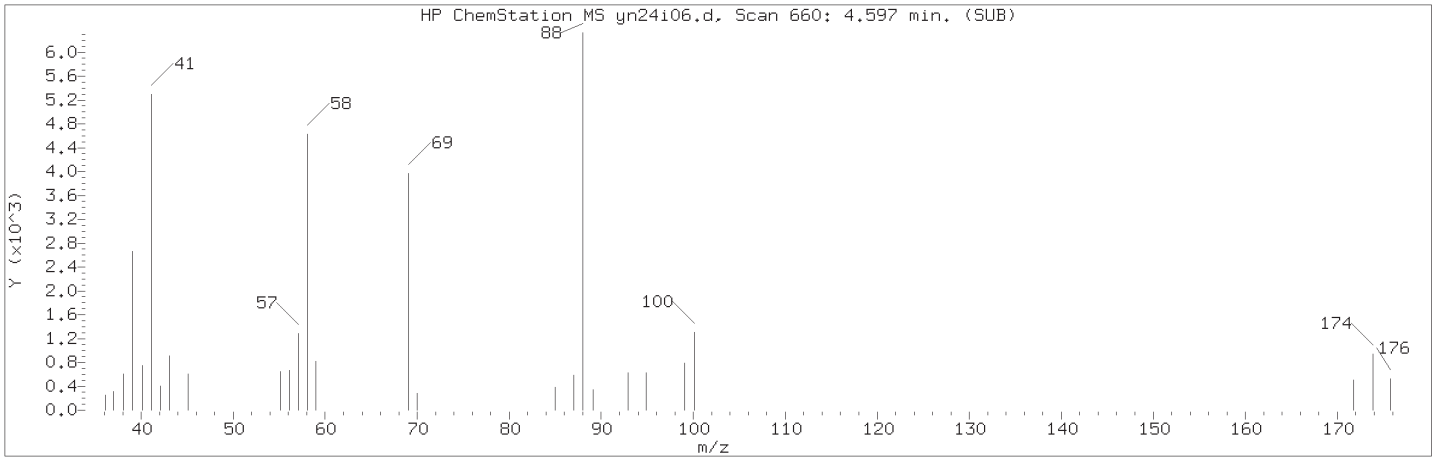
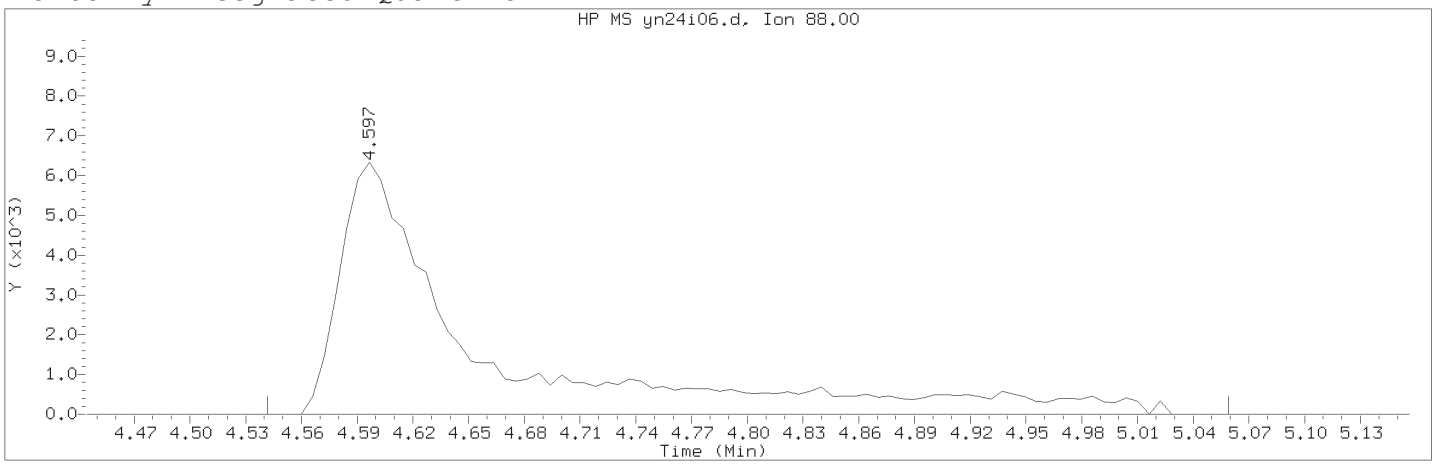
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

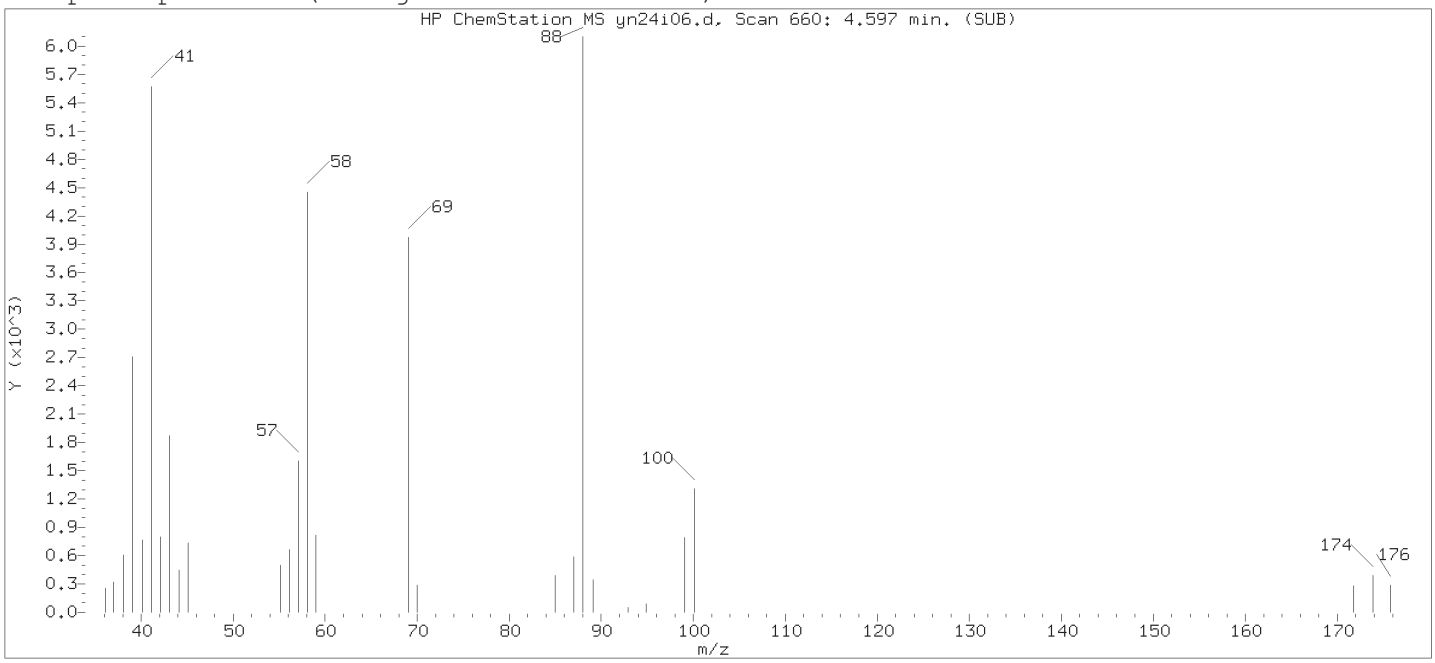
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.597
Quant Ion : 88.00
Area (flag) : 31930M
On-Column Amount (ng) : 197.4135
Integration start scan : 650 Integration stop scan: 735
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

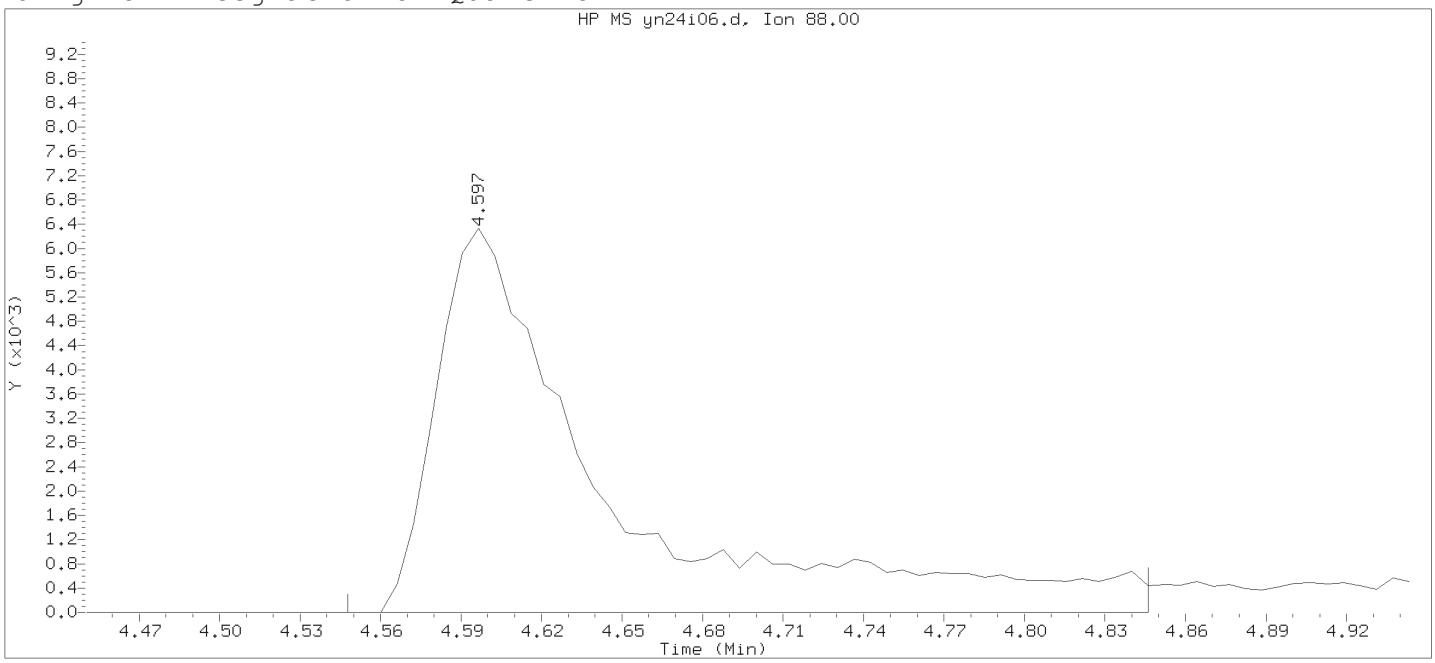
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



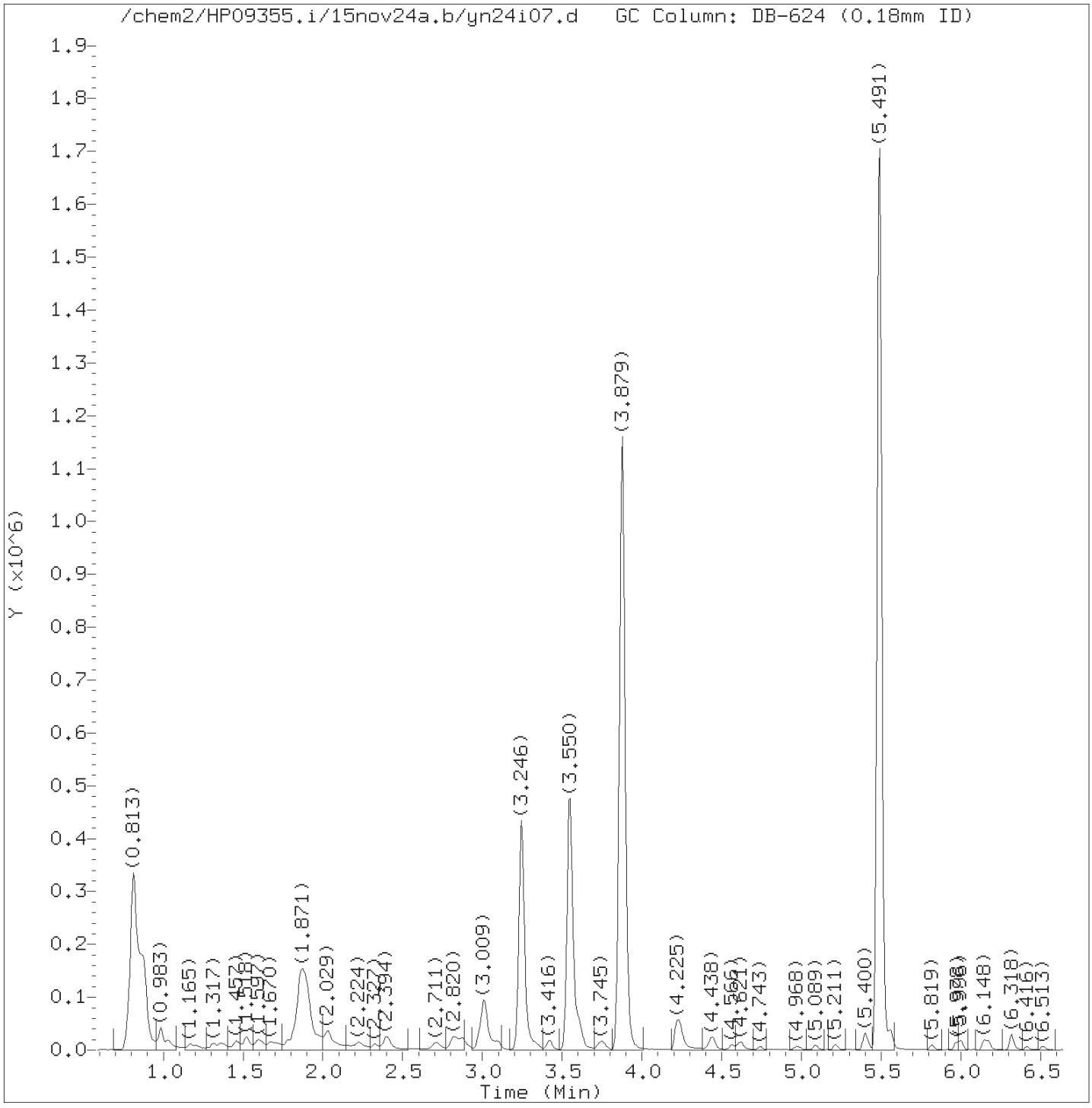
Data File: /chem2/HP09355.i/15nov24a.b/yn24i06.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 02:50
Date, time and analyst ID of latest file update: 24-Nov-2015 02:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 660
Retention Time (minutes): 4.597
Quant Ion : 88.00
Area : 27597
On-column Amount (ng) : 163.5549
Integration start scan : 651 Integration stop scan: 700
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri0731



Total Ion Chromatogram (TIC)

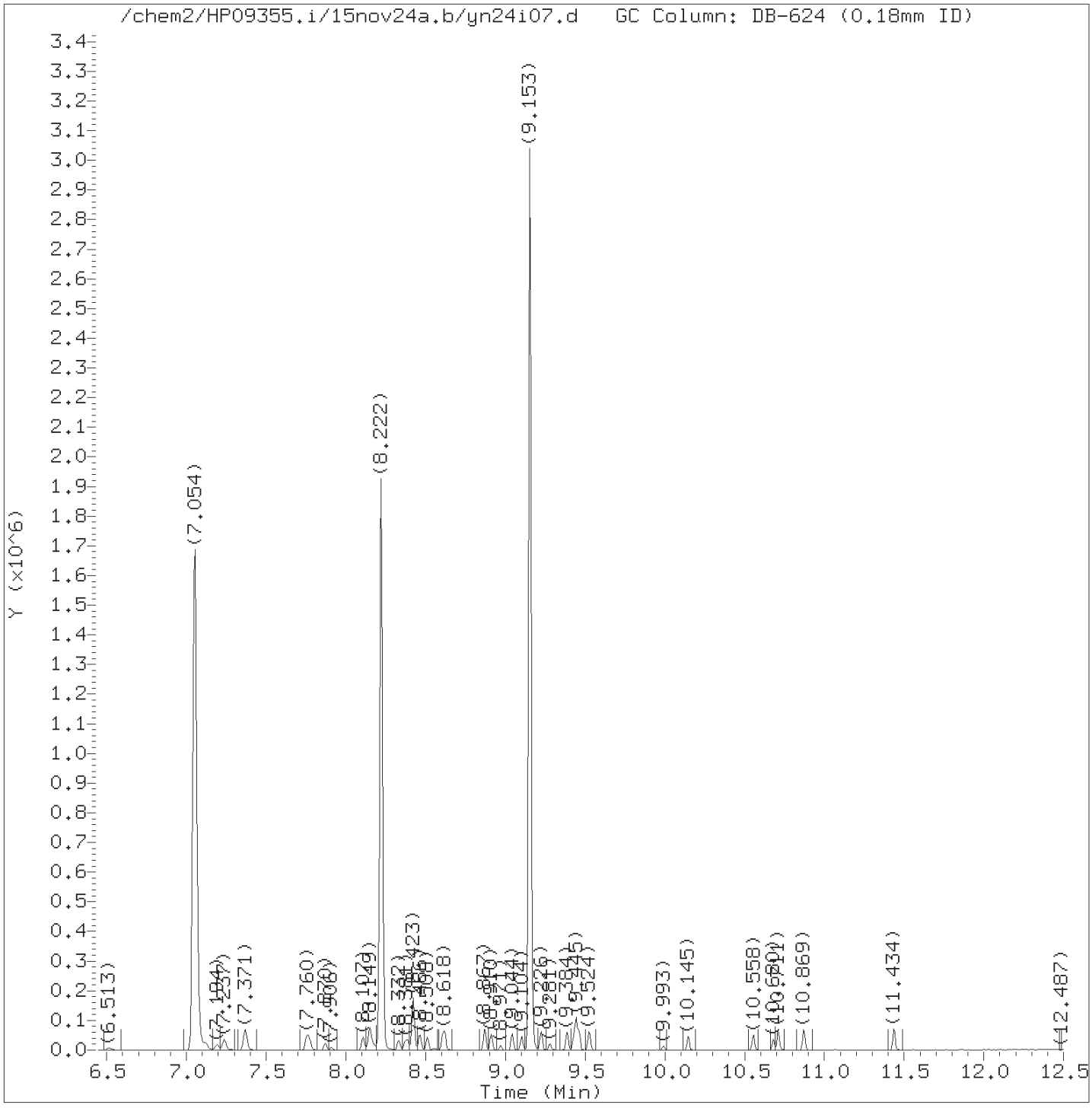
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.934	85	6253	0.792
4) Chloromethane	(2)	0.965	50	8537A	0.951
5) 1,3-Butadiene	(2)	1.025	39	5450	0.910
6) Vinyl Chloride	(2)	1.044	62	7312	0.919
8) Bromomethane	(2)	1.171	94	5314	0.971
9) Chloroethane	(2)	1.214	64	4340	0.979
10) Dichlorofluoromethane	(2)	1.311	67	8825	0.881
11) n-Pentane	(2)	1.360	43	7611	0.973
12) Trichlorofluoromethane	(2)	1.378	101	7280	0.818
14) Ethyl ether	(2)	1.457	59	5789	1.017
15) Freon 123a	(2)	1.476	67	5721	0.861
16) Acrolein	(1)	1.524	56	28252	9.801
17) 1,1-Dichloroethene	(2)	1.585	96	4524	0.865
17) 1,1-Dichloroethene	(2)	1.585	63	2331	0.907
18) Acetone	(1)	1.603	58	2684	1.832
19) Freon 113	(2)	1.622	101	3360	0.665
21) 2-Propanol	(1)	1.670	45	21025	24.181
22) Methyl Iodide	(2)	1.676	142	8631	0.867
23) Carbon Disulfide	(2)	1.719	76	15891	0.792
25) Allyl Chloride	(2)	1.780	41	8231	1.074
27) Methyl Acetate	(2)	1.780	43	10856	1.231
28) Methylene Chloride	(2)	1.853	84	5860	0.950
29)*t-Butyl alcohol-d10	(1)	1.871	65	475892	250.000
30) t-Butyl alcohol	(1)	1.926	59	40301	19.084
31) Acrylonitrile	(2)	1.993	53	5058	0.986
32) trans-1,2-Dichloroethene	(2)	2.029	96	5258	0.875
33) Methyl Tertiary Butyl Ether	(2)	2.035	73	19782	0.944
34) n-Hexane	(2)	2.224	57	6145	0.614
36) 1,1-Dichloroethane	(2)	2.321	63	10713	0.876
38) di-Isopropyl ether	(2)	2.394	45	22889	0.976
39) 2-Chloro-1,3-butadiene	(2)	2.406	53	7714	0.783
40) Ethyl t-butyl ether	(2)	2.717	59	21288	0.939
42) cis-1,2-Dichloroethene	(2)	2.814	96	6544	0.887
44) 2-Butanone	(2)	2.820	43	18343	2.059
45) 2,2-Dichloropropane	(2)	2.826	77	6778	0.777
47) Propionitrile	(1)	2.875	54	46686	19.362
43) 1,2-Dichloroethene (Total)	(2)		96	11802	1.761
48) Methacrylonitrile	(2)	3.009	67	52478	9.746

A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
49) Bromochloromethane	(2)	3.021	128	3054	0.804
50) Tetrahydrofuran	(1)	3.076	71	4685	1.877
51) Chloroform	(2)	3.100	83	9749	0.866
52)$Dibromofluoromethane	(2)	3.246	113	335404	49.244
52)$Dibromofluoromethane	(2)	3.246	111	340589	48.829
53) 1,1,1-Trichloroethane	(2)	3.270	97	10011	0.939
54) Cyclohexane	(2)	3.325	56	8781	0.766
54) Cyclohexane	(2)	3.337	84	8054	0.735
54) Cyclohexane	(2)	3.325	69	2516	0.718
55) 1,1-Dichloropropene	(2)	3.416	75	8297	0.875
56) Carbon Tetrachloride	(2)	3.422	117	5683	0.723
57)$1,2-Dichloroethane-d4	(2)	3.550	102	88448	50.083
57)$1,2-Dichloroethane-d4	(2)	3.544	65	413568	50.230
57)$1,2-Dichloroethane-d4	(2)	3.550	104	55578	49.475
58) Isobutyl Alcohol	(1)	3.574	41	34605	49.631
60) Benzene	(2)	3.605	78	26153	0.929
61) 1,2-Dichloroethane	(2)	3.617	62	10515	1.055
61) 1,2-Dichloroethane	(2)	3.623	98	614	0.692
65) t-Amyl methyl ether	(2)	3.751	73	19287	0.898
66)*Fluorobenzene	(2)	3.879	96	1451688	50.000
67) n-Heptane	(2)	3.903	43	10506	0.897
69) n-Butanol	(1)	4.219	56	53102	86.746
71) Trichloroethene	(2)	4.238	95	6329	0.883
72) Methylcyclohexane	(2)	4.432	83	8715	0.765
72) Methylcyclohexane	(2)	4.432	98	4004	0.783
73) 1,2-Dichloropropane	(2)	4.451	63	6535	0.893
74) Dibromomethane	(2)	4.566	93	4068	0.862
75) 1,4-Dioxane	(1)	4.590	88	5447	33.672
76) Methyl Methacrylate	(2)	4.621	69	7073	0.849
78) Bromodichloromethane	(2)	4.743	83	5737	0.717
79) 2-Nitropropane	(2)	4.968	41	6194	1.647
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	5124	0.771
81) cis-1,3-Dichloropropene	(2)	5.211	75	8177	0.740
82) 4-Methyl-2-pentanone	(2)	5.400	43	29218	1.734
83)$Toluene-d8	(3)	5.491	98	1443230	50.082
83)$Toluene-d8	(3)	5.491	100	942653	49.523
88) Toluene	(3)	5.558	92	16021	0.903
89) trans-1,3-Dichloropropene	(3)	5.819	75	7078	0.710

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropene (total)	(3)		100	15255	1.450
91) Ethyl Methacrylate	(3)	5.971	69	9602	0.761
92) 1,1,2-Trichloroethane	(3)	5.996	97	6334	0.894
93) Tetrachloroethene	(3)	6.148	166	6303	0.848
94) 1,3-Dichloropropane	(3)	6.172	76	11150	0.918
96) 2-Hexanone	(3)	6.318	43	24435	1.722
97) Dibromochloromethane	(3)	6.409	129	4475	2.503
99) 1,2-Dibromoethane	(3)	6.513	107	6347	0.823
100)*Chlorobenzene-d5	(3)	7.054	117	1069809	50.000
102) Chlorobenzene	(3)	7.085	112	17873	0.885
101) 1-Chlorohexane	(3)	7.121	91	7213	0.759
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	4619	0.732
104) Ethylbenzene	(3)	7.237	91	28372	0.850
106) m+p-Xylene	(3)	7.371	106	22257	1.691
107) o-Xylene	(3)	7.754	106	11158	0.851
109) Styrene	(3)	7.772	104	16742	0.756
108) Xylene (Total)	(3)		106	33415	2.543
110) Bromoform	(3)	7.906	173	3603	0.695
111) Isopropylbenzene	(3)	8.107	105	26974	0.803
112) Cyclohexanone	(1)	8.149	55	37847	42.372
114)$4-Bromofluorobenzene	(3)	8.222	95	540012	49.961
114)$4-Bromofluorobenzene	(3)	8.222	174	435132	50.092
115) Bromobenzene	(4)	8.332	156	7907	0.899
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	10798	0.884
117) 1,2,3-Trichloropropane	(4)	8.387	110	3624	0.929
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	32310	8.002
119) n-Propylbenzene	(4)	8.466	91	33233	0.831
120) 2-Chlorotoluene	(4)	8.514	126	6988	0.825
121) 4-Chlorotoluene	(4)	8.606	126	7624	0.857
122) 1,3,5-Trimethylbenzene	(4)	8.618	105	23367	0.792
125) Pentachloroethane	(4)	8.867	167	3028	0.630
124) tert-Butylbenzene	(4)	8.873	134	5302	0.803
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	23939	0.793
127) sec-Butylbenzene	(4)	9.044	105	28831	0.781
129) 1,3-Dichlorobenzene	(4)	9.104	146	15221	0.900
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	567913	50.000
130) p-Isopropyltoluene	(4)	9.159	119	25417	0.771
133) 1,4-Dichlorobenzene	(4)	9.171	146	15889	0.920

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

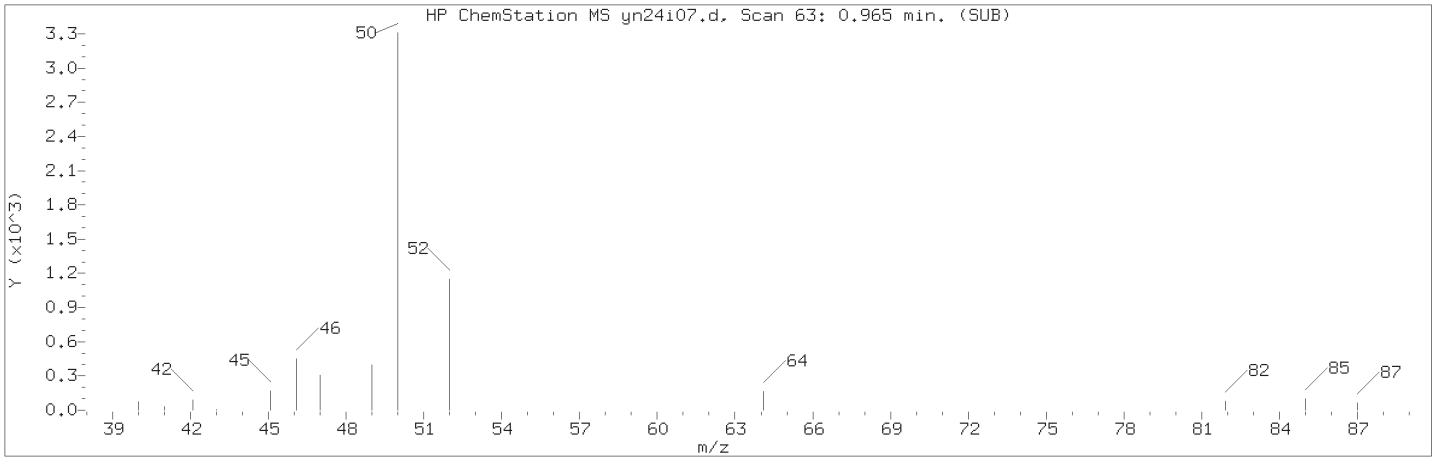
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	26458	0.851
135) Benzyl Chloride	(4)	9.281	91	12767	0.579
136) 1,3-Diethylbenzene	(4)	9.384	119	15779	0.794
138) 1,2-Dichlorobenzene	(4)	9.439	146	14675	0.891
137) 1,4-Diethylbenzene	(4)	9.445	119	16476	0.796
139) n-Butylbenzene	(4)	9.463	92	12783M	0.772
140) 1,2-Diethylbenzene	(4)	9.524	119	13673	0.828
141) Diethylbenzene (total)	(4)		100	45928	2.418
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	2332	0.726
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	11084	0.857
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	11840	0.951
147) Hexachlorobutadiene	(4)	10.680	225	5116	0.895
148) Naphthalene	(4)	10.711	128	39361	0.909
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	11908	1.004
150) 2-Methylnaphthalene	(4)	11.434	142	25863	0.987

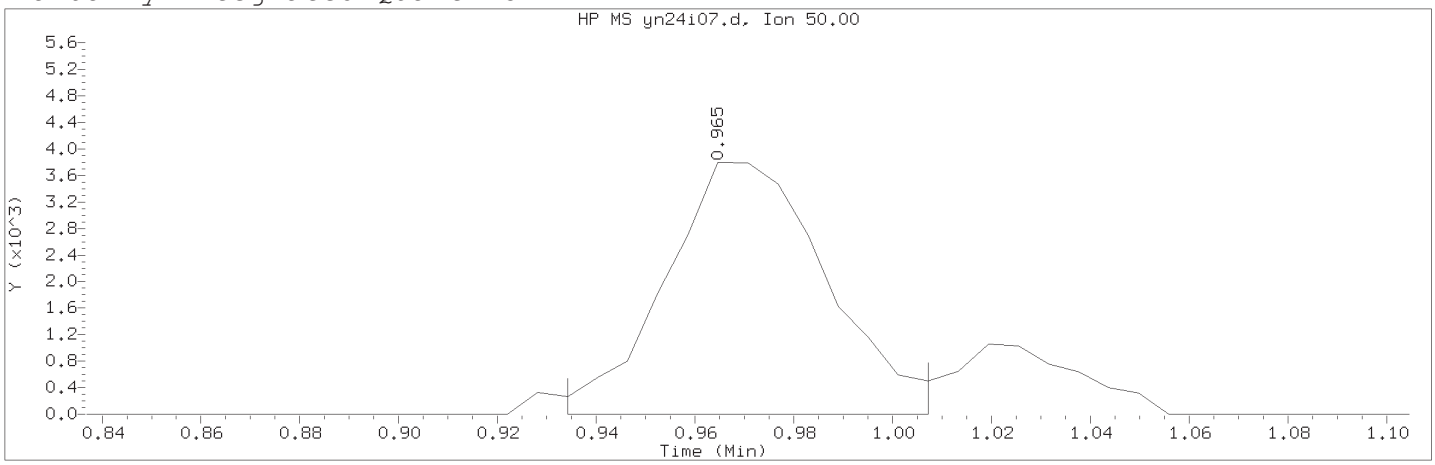
M = Compound was manually integrated.

Digitally signed by Angela D. Sneeringer
on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

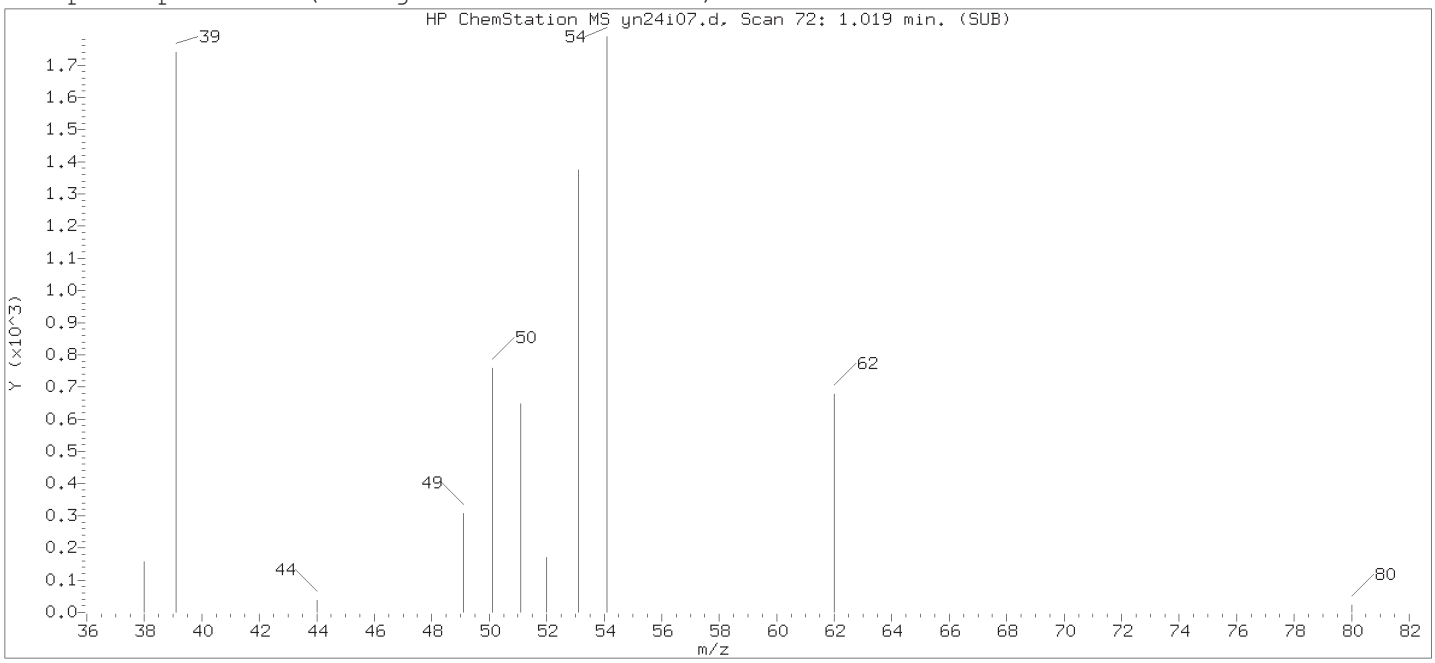
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 63
Retention Time (minutes): 0.965
Quant Ion : 50.00
Area (flag) : 8537A
On-Column Amount (ng) : 0.9506
Integration start scan : 57 Integration stop scan: 69
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

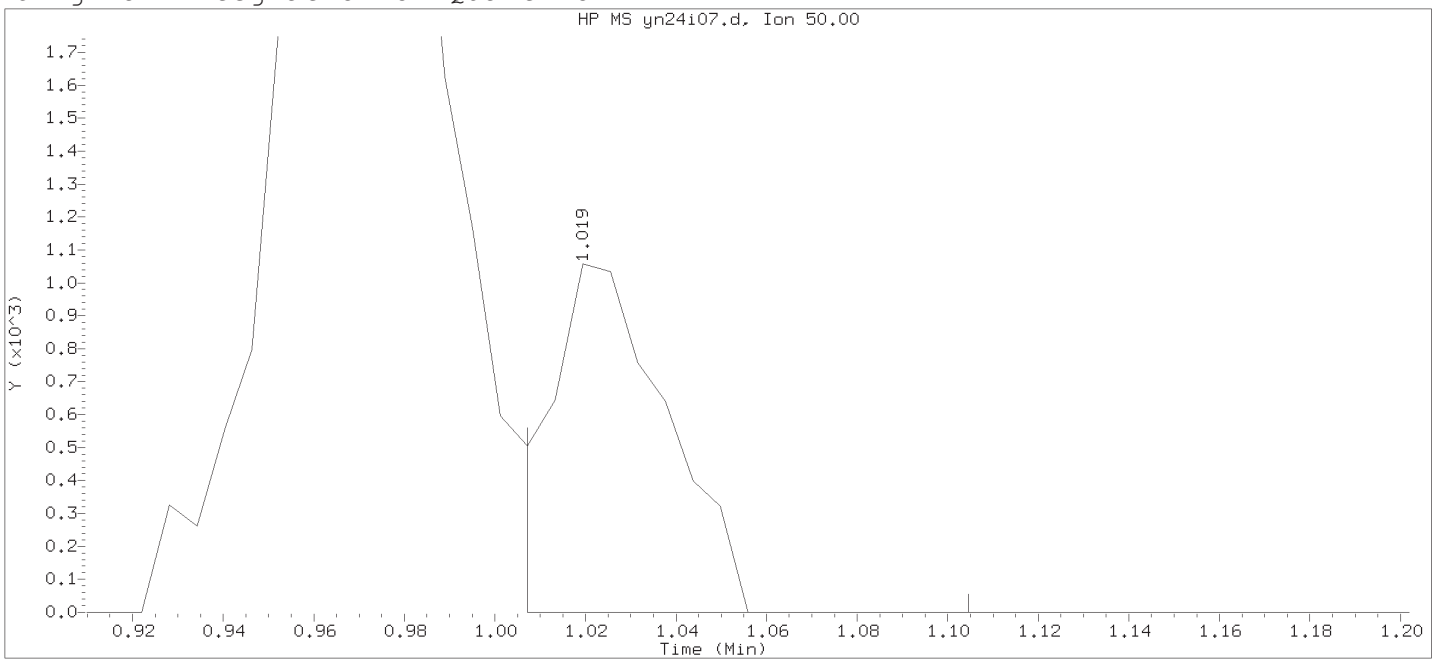
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

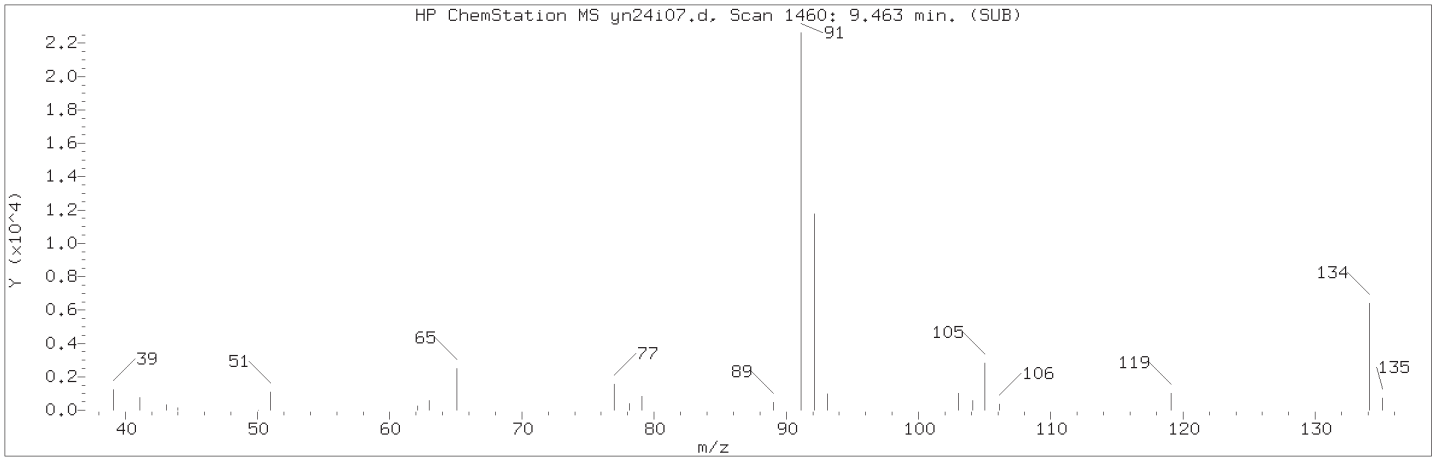
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 03:11
Date, time and analyst ID of latest file update: 24-Nov-2015 03:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

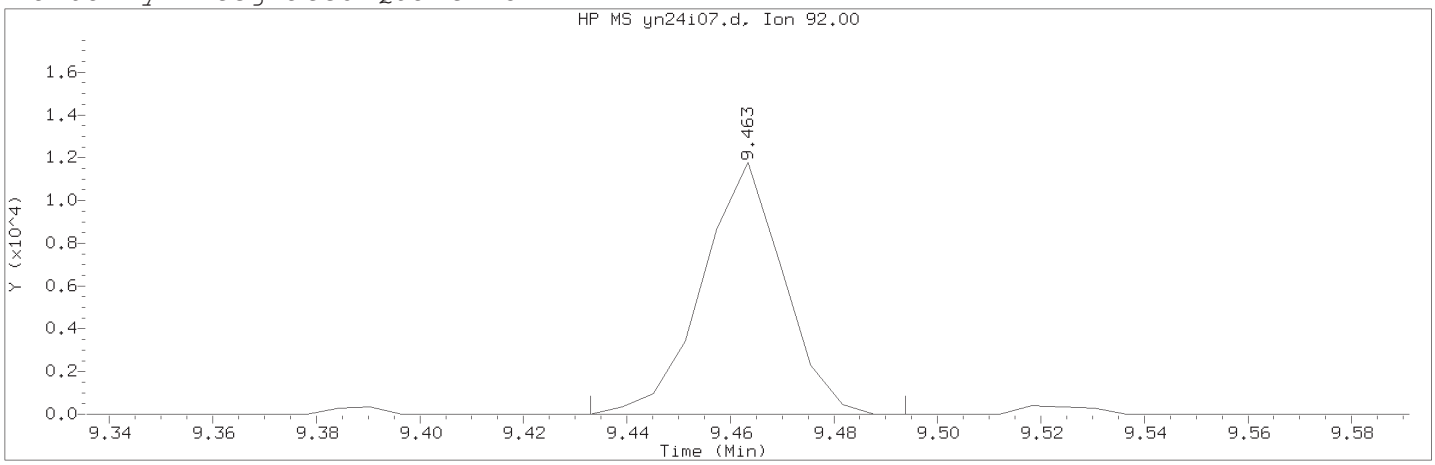
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 72
Retention Time (minutes): 1.019
Quant Ion : 50.00
Area : 1863
On-column Amount (ng) : 0.2322
Integration start scan : 69 Integration stop scan: 85
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 09:43
Date, time and analyst ID of latest file update: 24-Nov-2015 09:43 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

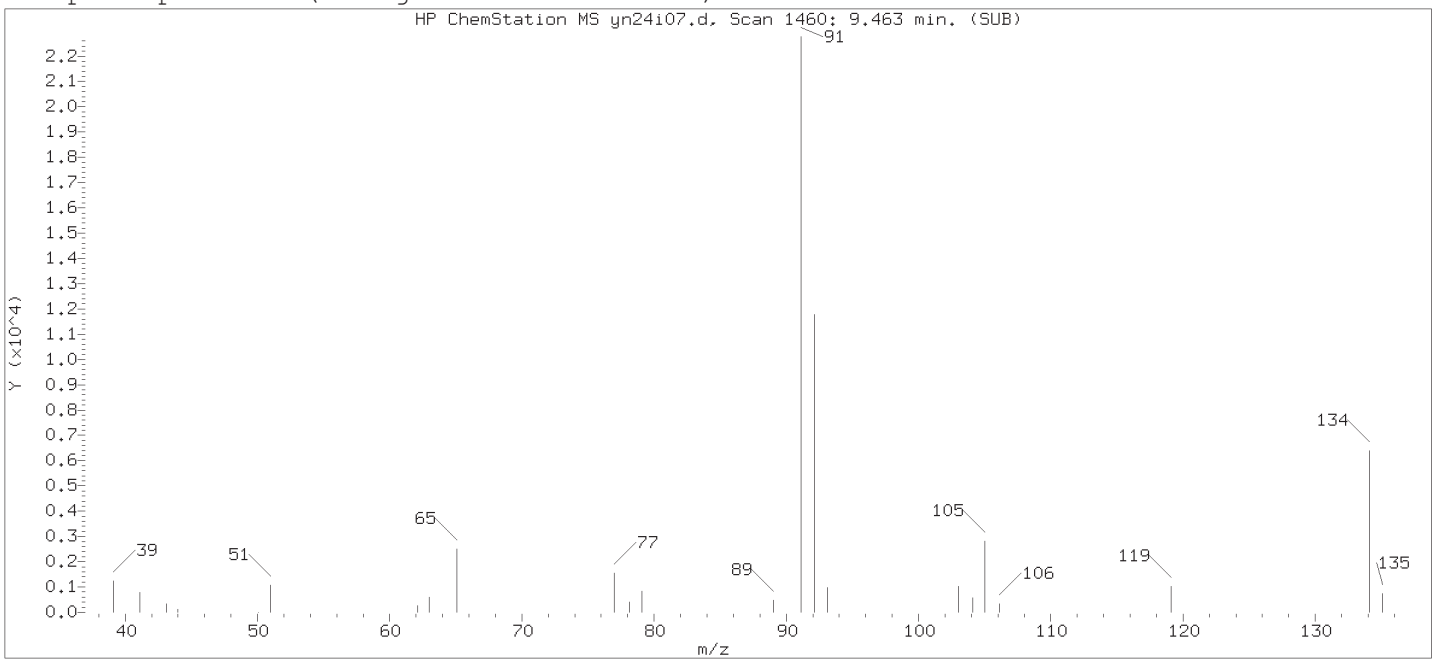
Compound Number : 139
Compound Name : n-Butylbenzene
Scan Number : 1460
Retention Time (minutes): 9.463
Quant Ion : 92.00
Area (flag) : 12783M
On-Column Amount (ng) : 0.7717
Integration start scan : 1454 Integration stop scan: 1464
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

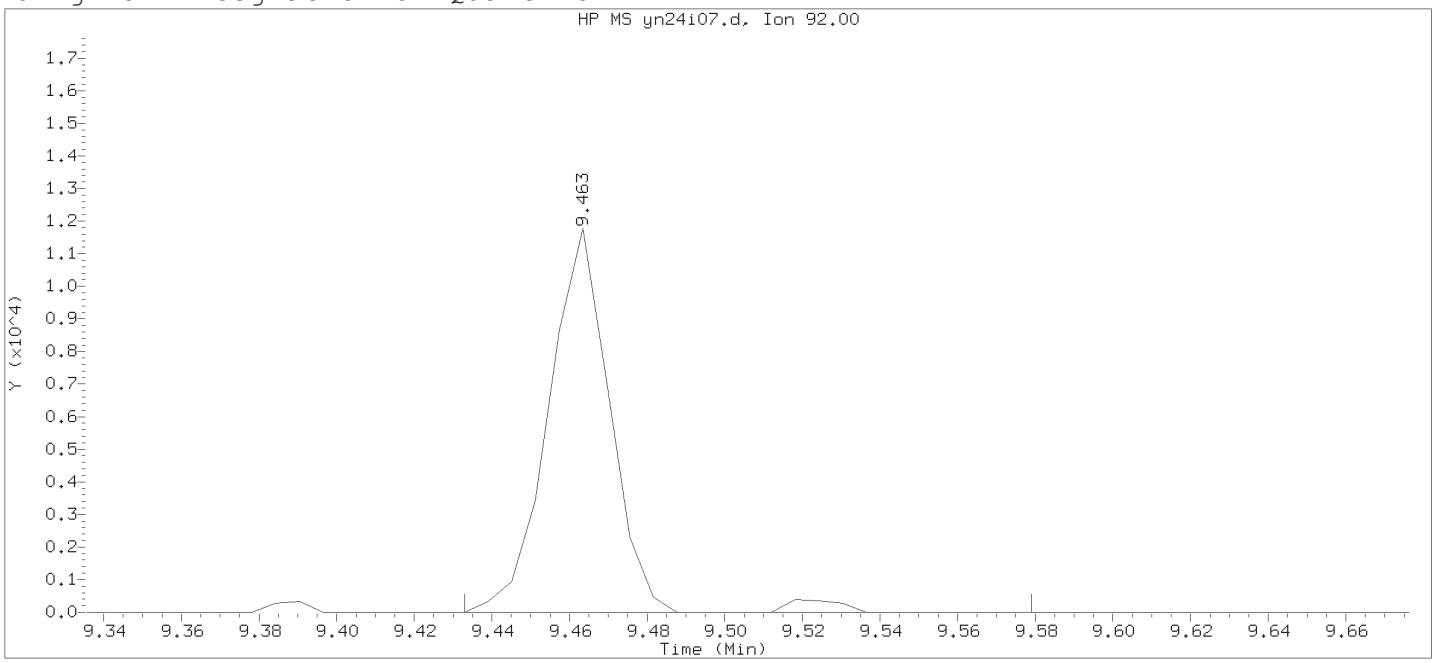
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 09:42.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



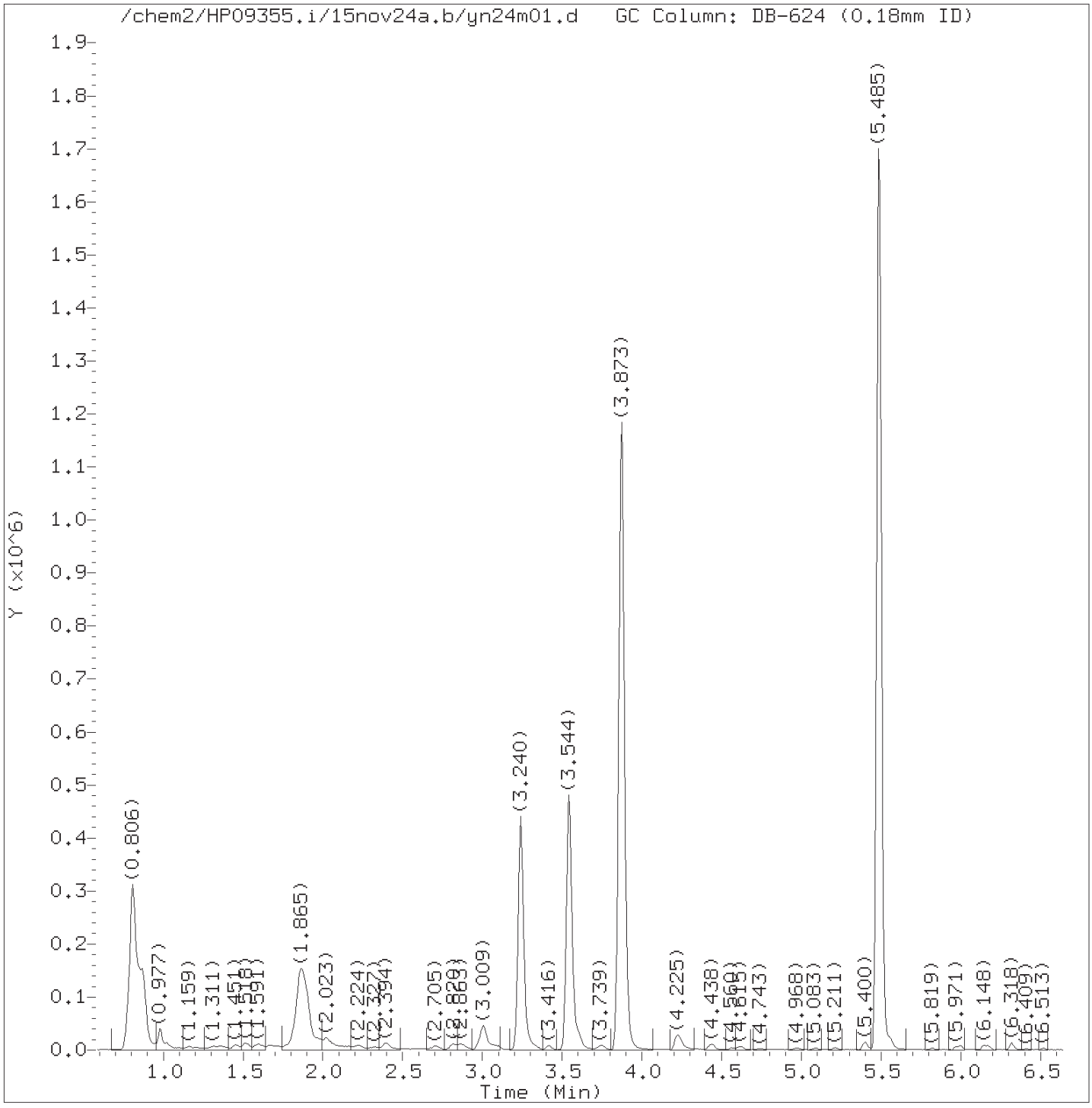
Data File: /chem2/HP09355.i/15nov24a.b/yn24i07.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 02:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 03:11
Date, time and analyst ID of latest file update: 24-Nov-2015 03:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 139
Compound Name : n-Butylbenzene
Scan Number : 1460
Retention Time (minutes): 9.463
Quant Ion : 92.00
Area : 13155
On-column Amount (ng) : 0.7942
Integration start scan : 1454 Integration stop scan: 1478
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/24/2015 at 09:45.
Target 3.5 esignature user ID: asneeri731



Total Ion Chromatogram (TIC)

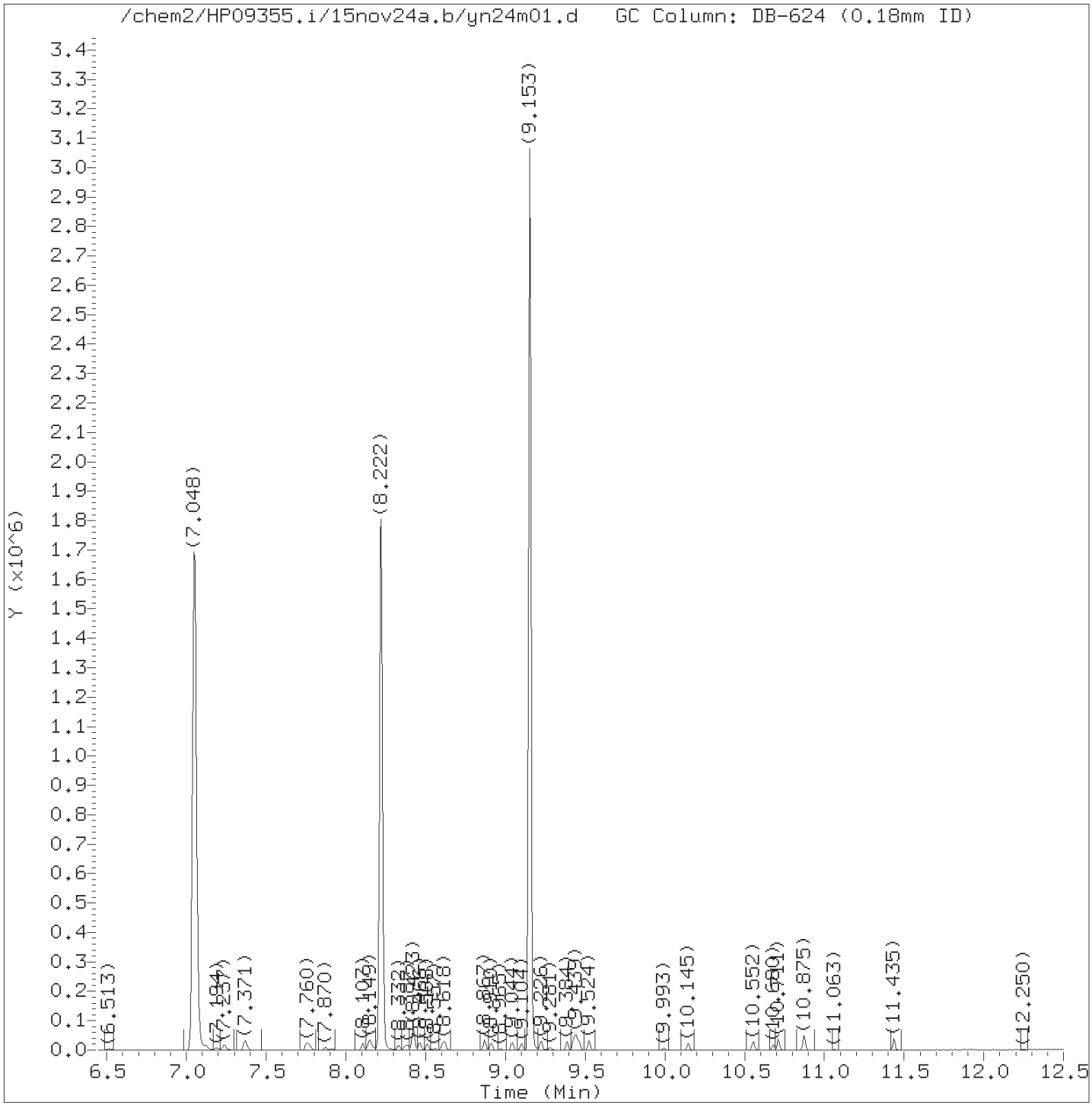
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.928	85	2865	0.359
4) Chloromethane	(2)	0.965	50	4138A	0.455
5) 1,3-Butadiene	(2)	1.019	39	2505	0.137
6) Vinyl Chloride	(2)	1.038	62	3660M	0.455
8) Bromomethane	(2)	1.165	94	2558	0.462
9) Chloroethane	(2)	1.208	64	1931	0.431
10) Dichlorofluoromethane	(2)	1.305	67	4622	0.456
11) n-Pentane	(2)	1.354	43	3743	0.473
12) Trichlorofluoromethane	(2)	1.372	101	3131	0.348
14) Ethyl ether	(2)	1.445	59	2820	0.490
15) Freon 123a	(2)	1.464	67	2787M	0.414
16) Acrolein	(1)	1.512	56	13876	4.666
17) 1,1-Dichloroethene	(2)	1.573	96	2199	0.415
18) Acetone	(1)	1.591	58	1014	0.671
19) Freon 113	(2)	1.610	101	1648	0.323
21) 2-Propanol	(1)	1.664	45	9714	10.829
22) Methyl Iodide	(2)	1.670	142	4022	0.399
23) Carbon Disulfide	(2)	1.725	76	7840M	0.386
25) Allyl Chloride	(2)	1.774	41	3940	0.508
27) Methyl Acetate	(2)	1.780	43	5881	0.659
28) Methylene Chloride	(2)	1.853	84	2794	0.448
29)*t-Butyl alcohol-d10	(1)	1.865	65	490973	250.000
30) t-Butyl alcohol	(1)	1.914	59	20322	9.328
31) Acrylonitrile	(2)	1.993	53	2286	0.440
32) trans-1,2-Dichloroethene	(2)	2.011	96	2363	0.389
33) Methyl Tertiary Butyl Ether	(2)	2.023	73	9785	0.461
34) n-Hexane	(2)	2.218	57	3502	0.346
36) 1,1-Dichloroethane	(2)	2.315	63	5057	0.409
38) di-Isopropyl ether	(2)	2.394	45	10871	0.458
39) 2-Chloro-1,3-butadiene	(2)	2.400	53	3550	0.356
40) Ethyl t-butyl ether	(2)	2.705	59	10053	0.438
42) cis-1,2-Dichloroethene	(2)	2.814	96	2979	0.399
45) 2,2-Dichloropropane	(2)	2.820	77	3338	0.378
44) 2-Butanone	(2)	2.826	43	9285	1.030
47) Propionitrile	(1)	2.863	54	22477	9.036
43) 1,2-Dichloroethene (Total)	(2)		96	5342	0.787
48) Methacrylonitrile	(2)	3.009	67	25565	4.693
49) Bromochloromethane	(2)	3.015	128	1445	0.376

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.070	71	2693	1.046
51) Chloroform	(2)	3.100	83	4874	0.428
52)$Dibromofluoromethane	(2)	3.240	113	334565	48.556
53) 1,1,1-Trichloroethane	(2)	3.264	97	4692	0.435
54) Cyclohexane	(2)	3.337	56	4289	0.370
55) 1,1-Dichloropropene	(2)	3.404	75	3760	0.392
56) Carbon Tetrachloride	(2)	3.429	117	2730	0.343
57)$1,2-Dichloroethane-d4	(2)	3.544	102	88645	49.618
58) Isobutyl Alcohol	(1)	3.575	41	16999	23.631
60) Benzene	(2)	3.605	78	12383	0.435
61) 1,2-Dichloroethane	(2)	3.617	62	5685	0.564
65) t-Amyl methyl ether	(2)	3.739	73	9527	0.439
66)*Fluorobenzene	(2)	3.873	96	1468582	50.000
67) n-Heptane	(2)	3.909	43	5445	0.460
69) n-Butanol	(1)	4.219	56	25467	40.324
71) Trichloroethene	(2)	4.238	95	2776	0.383
72) Methylcyclohexane	(2)	4.432	83	4050	0.351
73) 1,2-Dichloropropane	(2)	4.444	63	2950	0.399
74) Dibromomethane	(2)	4.560	93	1971	0.413
75) 1,4-Dioxane	(1)	4.609	88	2183	13.080
76) Methyl Methacrylate	(2)	4.621	69	3327	0.395
78) Bromodichloromethane	(2)	4.743	83	2877	0.356
79) 2-Nitropropane	(2)	4.968	41	2882	0.757
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	2528	0.376
81) cis-1,3-Dichloropropene	(2)	5.211	75	3926	0.351
82) 4-Methyl-2-pentanone	(2)	5.400	43	13826	0.811
83)$Toluene-d8	(3)	5.485	98	1452115	49.641
88) Toluene	(3)	5.552	92	7894	0.439
89) trans-1,3-Dichloropropene	(3)	5.819	75	2993	0.296
90) 1,3-Dichloropropene (total)	(3)		100	6919	0.647
91) Ethyl Methacrylate	(3)	5.971	69	4674	0.365
92) 1,1,2-Trichloroethane	(3)	5.996	97	3103	0.431
93) Tetrachloroethene	(3)	6.142	166	2932	0.389
94) 1,3-Dichloropropane	(3)	6.178	76	5136	0.417
96) 2-Hexanone	(3)	6.318	43	11244	0.780
97) Dibromochloromethane	(3)	6.416	129	2074	0.334
99) 1,2-Dibromoethane	(3)	6.513	107	2933	0.375
100)*Chlorobenzene-d5	(3)	7.054	117	1085939	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
102) Chlorobenzene	(3)	7.085	112	9018	0.440
101) 1-Chlorohexane	(3)	7.121	91	3490	0.362
103) 1,1,1,2-Tetrachloroethane	(3)	7.188	131	2291	0.358
104) Ethylbenzene	(3)	7.237	91	13784	0.407
106) m+p-Xylene	(3)	7.371	106	10971M	0.821
107) o-Xylene	(3)	7.754	106	5353	0.402
109) Styrene	(3)	7.772	104	7813	0.348
108) Xylene (Total)	(3)		106	16324	1.224
110) Bromoform	(3)	7.906	173	1924	0.365
111) Isopropylbenzene	(3)	8.107	105	12989	0.381
112) Cyclohexanone	(1)	8.149	55	16396M	17.792
114)$4-Bromofluorobenzene	(3)	8.216	95	542442	49.440
115) Bromobenzene	(4)	8.332	156	3759	0.426
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	5020	0.410
117) 1,2,3-Trichloropropane	(4)	8.393	110	1631	0.417
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	14683	3.623
119) n-Propylbenzene	(4)	8.466	91	16253	0.405
120) 2-Chlorotoluene	(4)	8.508	126	3547	0.417
121) 4-Chlorotoluene	(4)	8.606	126	3620	0.405
122) 1,3,5-Trimethylbenzene	(4)	8.618	105	11370	0.384
124) tert-Butylbenzene	(4)	8.867	134	2652	0.400
125) Pentachloroethane	(4)	8.867	167	1357	0.281
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	11768	0.389
127) sec-Butylbenzene	(4)	9.044	105	14465	0.390
129) 1,3-Dichlorobenzene	(4)	9.104	146	7924	0.467
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	569917	50.000
130) p-Isopropyltoluene	(4)	9.159	119	13404M	0.405
133) 1,4-Dichlorobenzene	(4)	9.171	146	8580	0.495
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	12921	0.414
135) Benzyl Chloride	(4)	9.281	91	5568	0.252
136) 1,3-Diethylbenzene	(4)	9.384	119	7549	0.379
138) 1,2-Dichlorobenzene	(4)	9.439	146	7768	0.470
137) 1,4-Diethylbenzene	(4)	9.445	119	8043	0.387
139) n-Butylbenzene	(4)	9.463	92	6638M	0.399
140) 1,2-Diethylbenzene	(4)	9.524	119	6553	0.395
141) Diethylbenzene (total)	(4)		100	22145	1.161
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	1245	0.386
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	6348	0.489

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

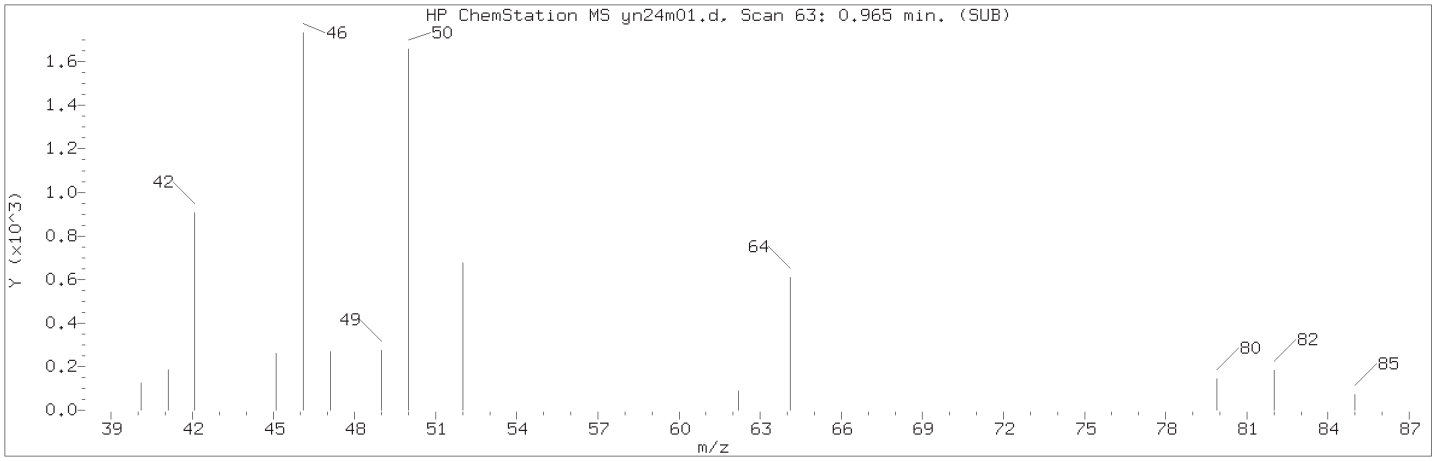
Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	6757	0.541
147) Hexachlorobutadiene	(4)	10.680	225	2709	0.472
148) Naphthalene	(4)	10.711	128	20541M	0.473
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	6798	0.571
150) 2-Methylnaphthalene	(4)	11.435	142	13718	0.522

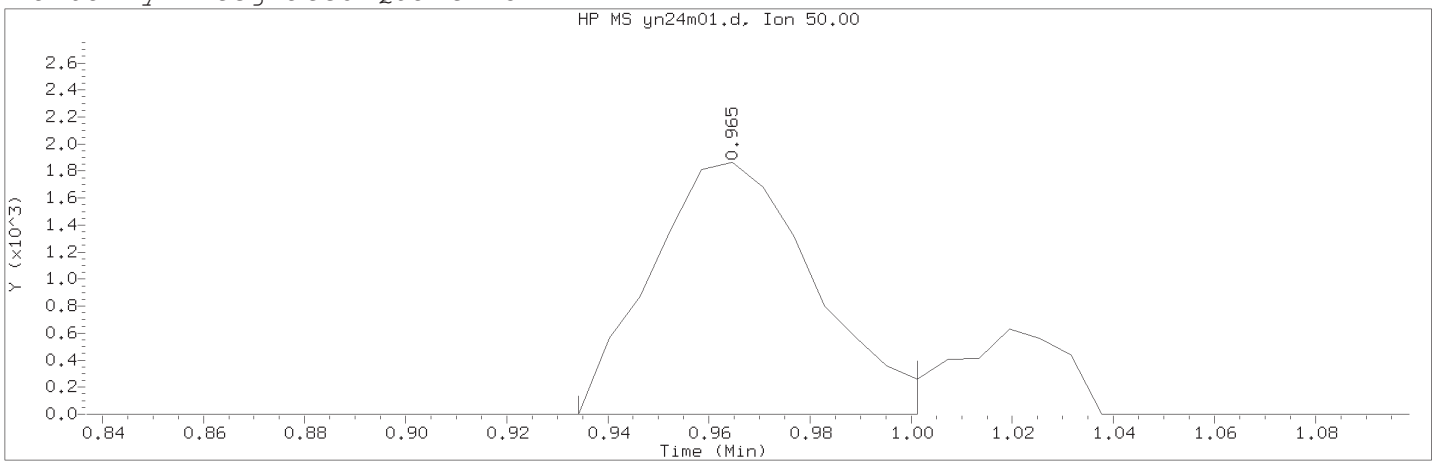
M = Compound was manually integrated.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

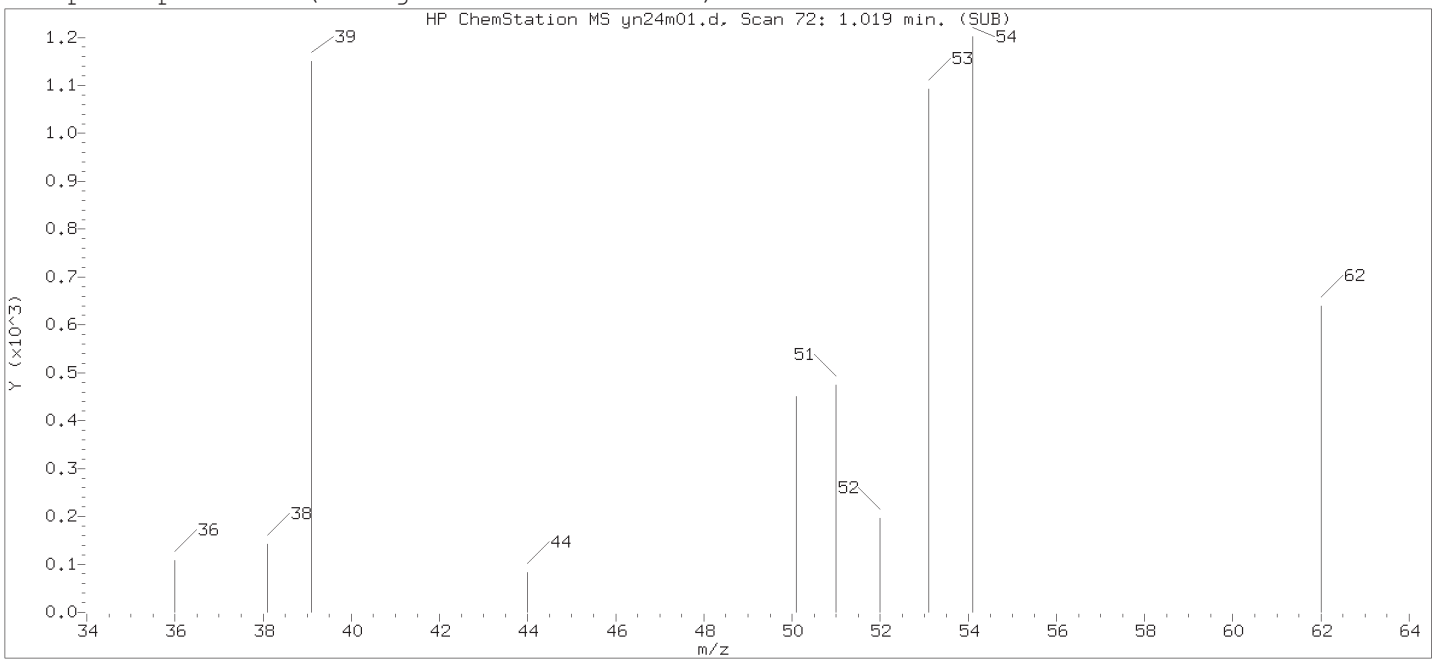
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 63
Retention Time (minutes): 0.965
Quant Ion : 50.00
Area (flag) : 4138A
On-Column Amount (ng) : 0.4555
Integration start scan : 57 Integration stop scan: 68
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

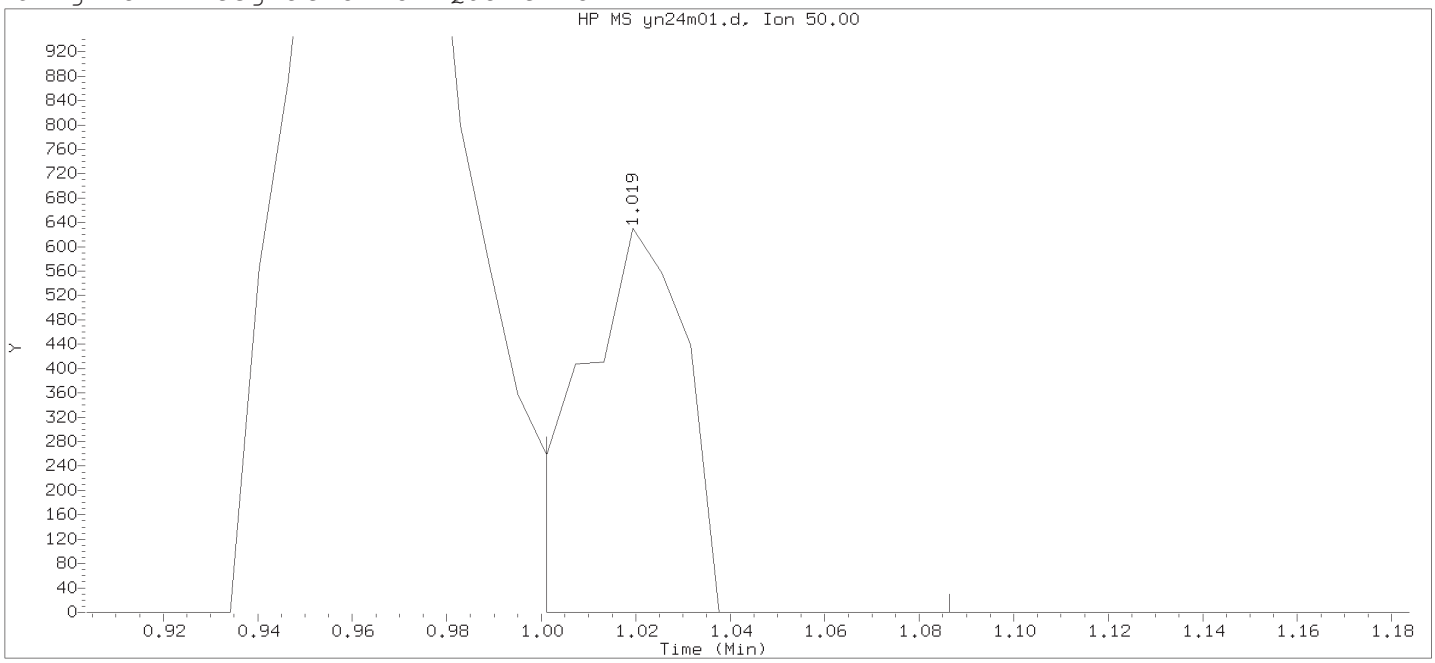
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

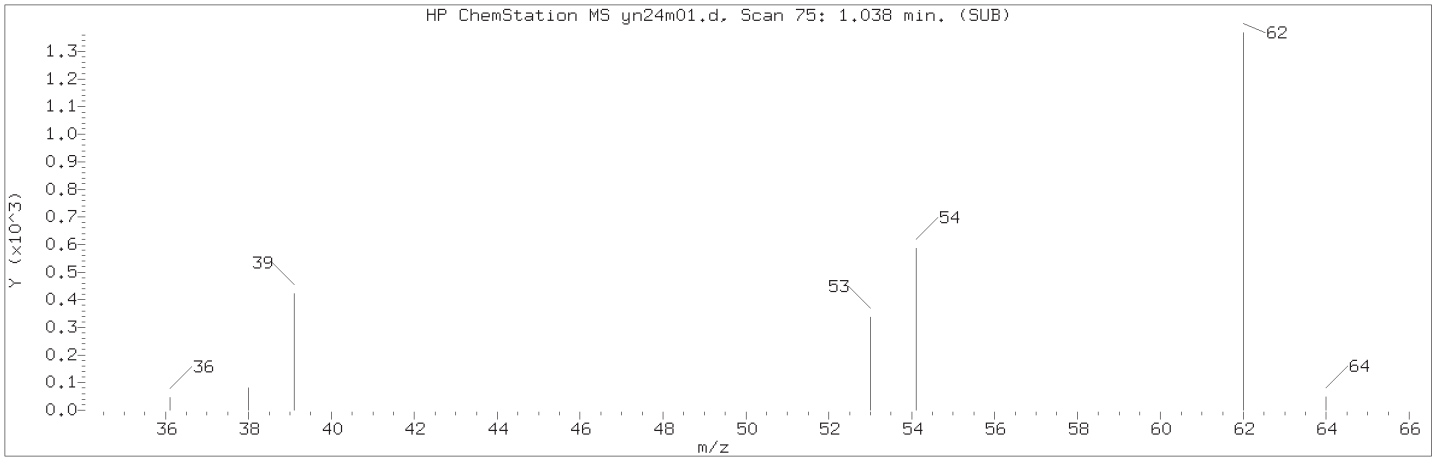
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

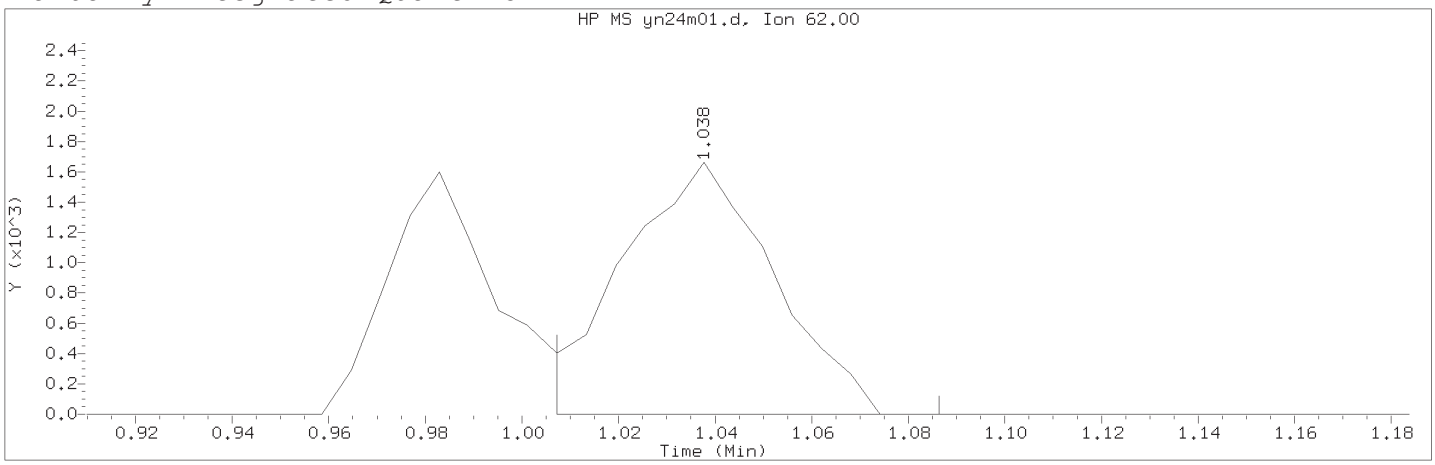
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 72
Retention Time (minutes): 1.019
Quant Ion : 50.00
Area : 939
On-column Amount (ng) : 0.1034
Integration start scan : 68 Integration stop scan: 82
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

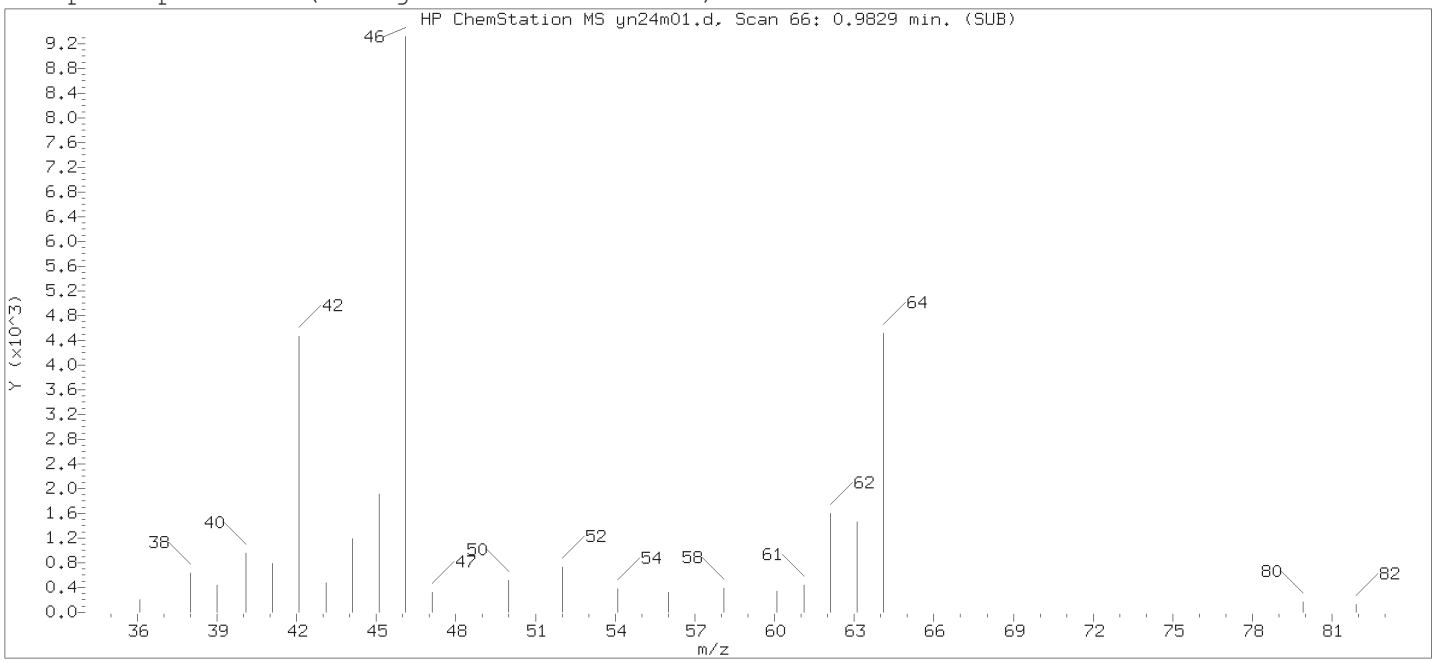
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 75
Retention Time (minutes): 1.038
Quant Ion : 62.00
Area (flag) : 3660M
On-Column Amount (ng) : 0.4546
Integration start scan : 69 Integration stop scan: 82
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

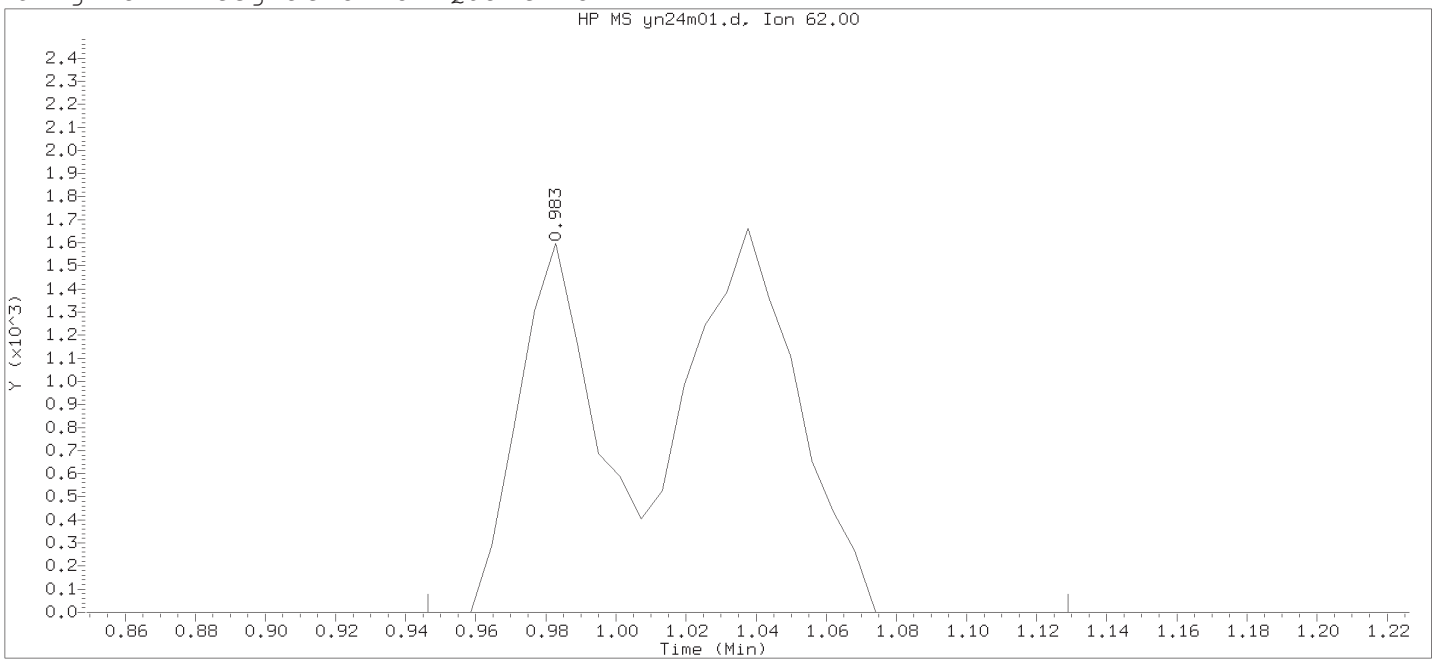
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

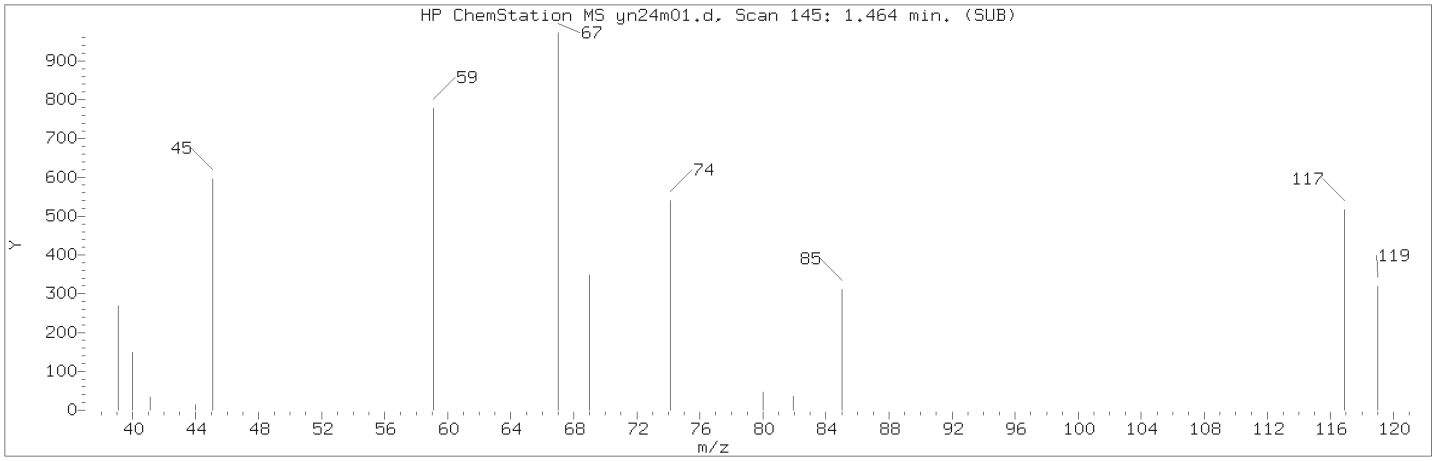
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

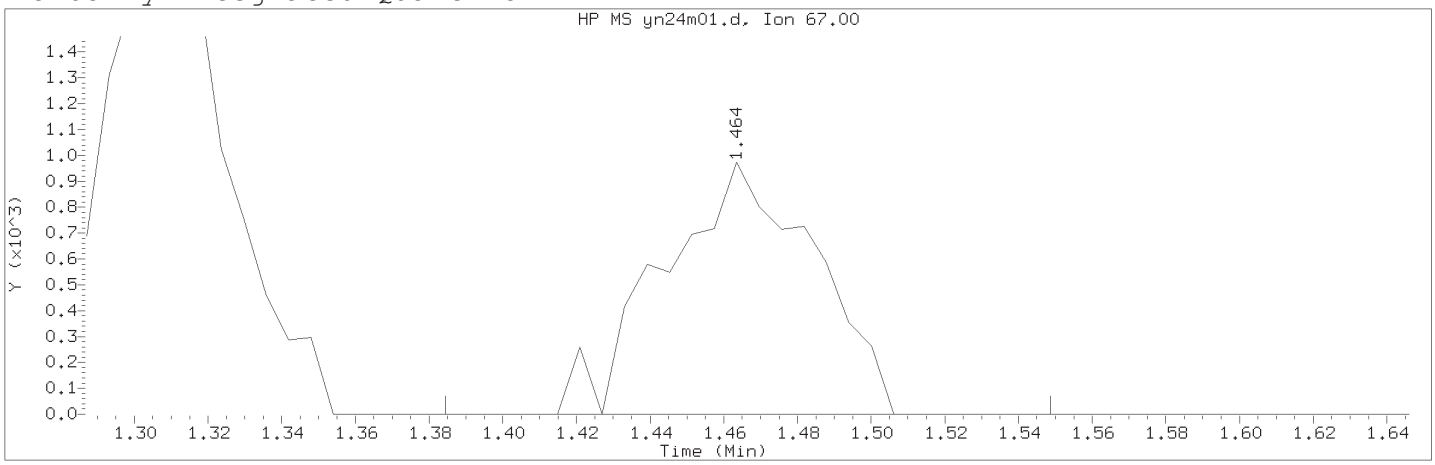
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 66
Retention Time (minutes): 0.983
Quant Ion : 62.00
Area : 6005
On-column Amount (ng) : 0.7459
Integration start scan : 59 Integration stop scan: 89
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri931

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

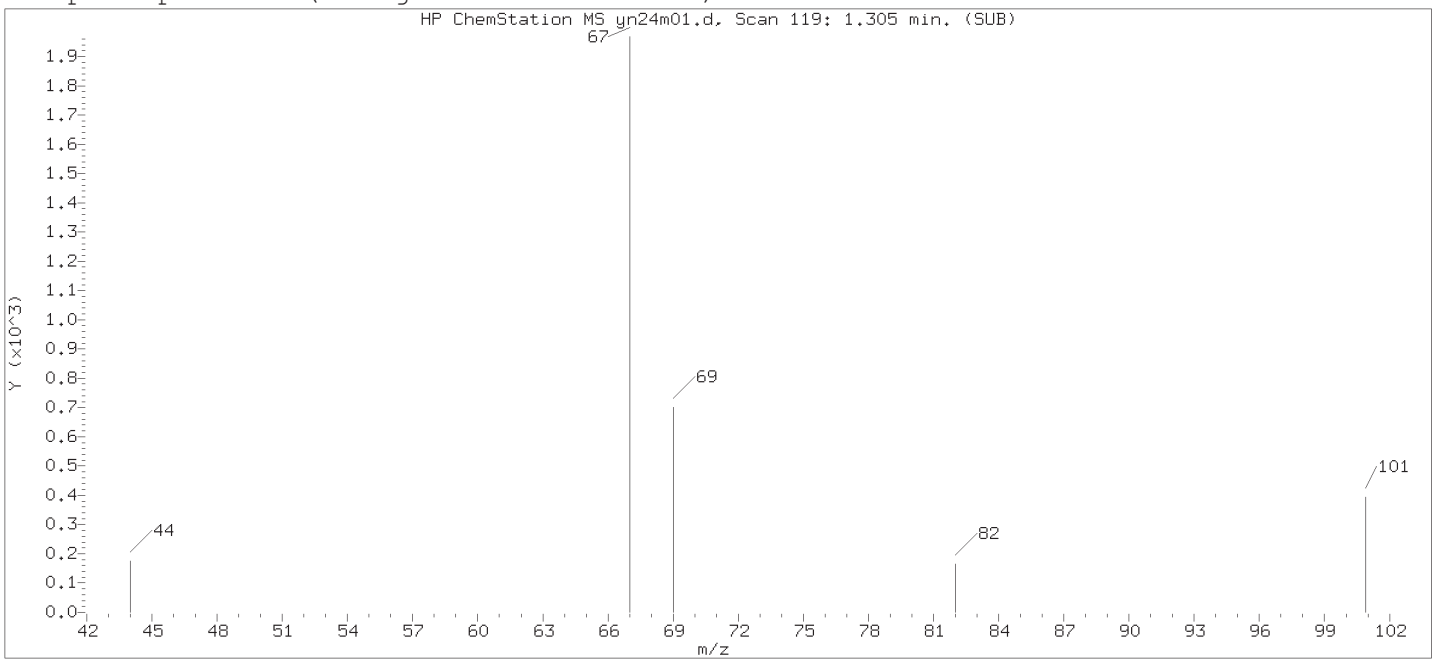
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 145
Retention Time (minutes): 1.464
Quant Ion : 67.00
Area (flag) : 2787M
On-Column Amount (ng) : 0.4144
Integration start scan : 131 Integration stop scan: 158
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

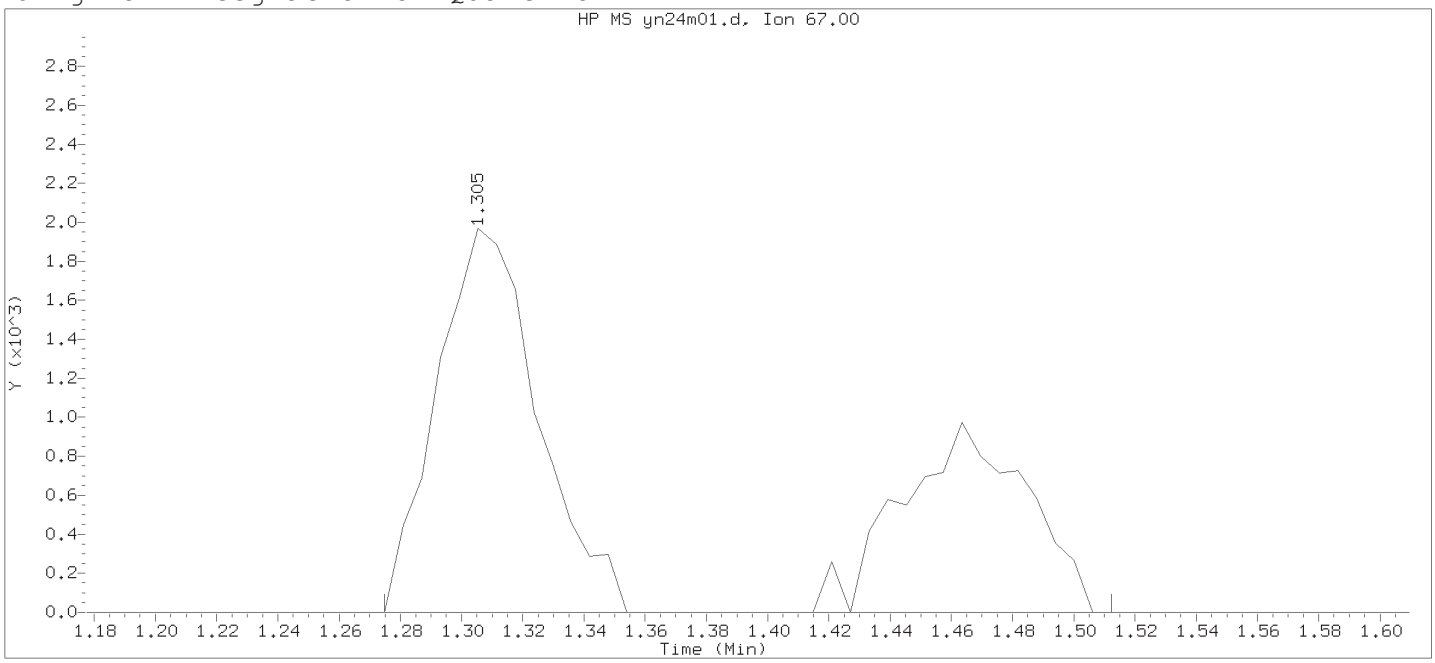
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number : 15
Compound Name : Freon 123a
Scan Number : 119
Retention Time (minutes): 1.305
Quant Ion : 67.00
Area : 7315
On-column Amount (ng) : 1.0877
Integration start scan : 113 Integration stop scan: 152
Y at integration start : 0 Y at integration end: 0

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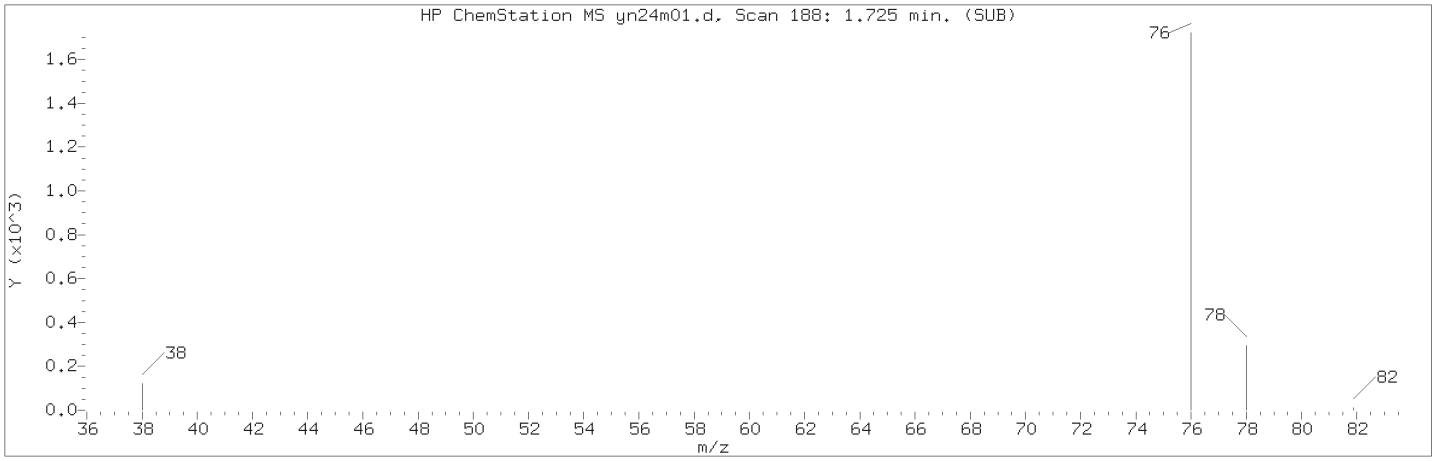
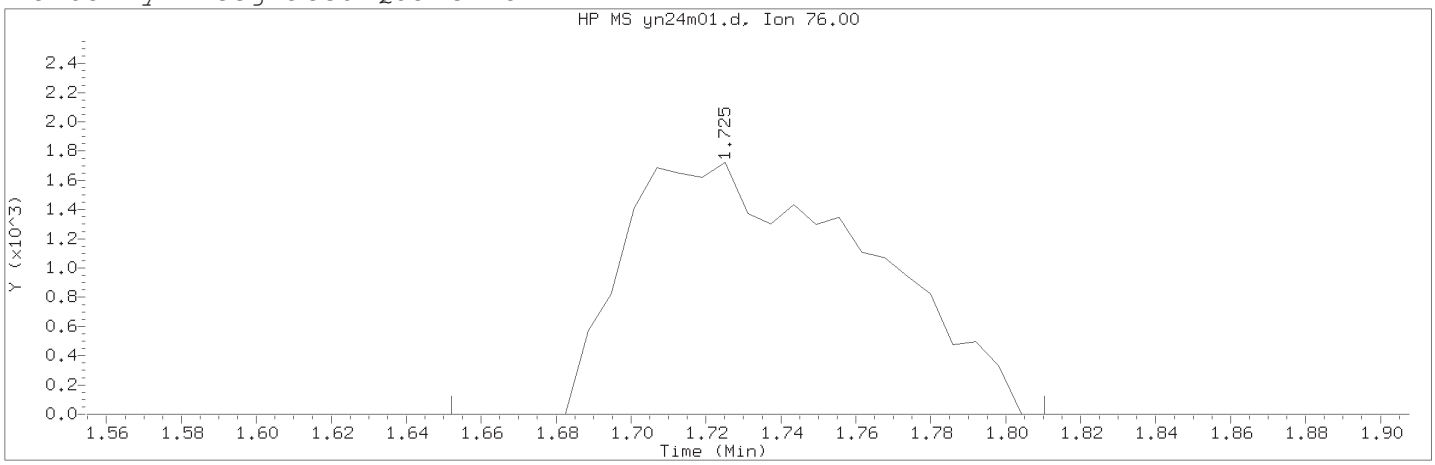
Target 3.5 esignature user ID: asneeri931

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

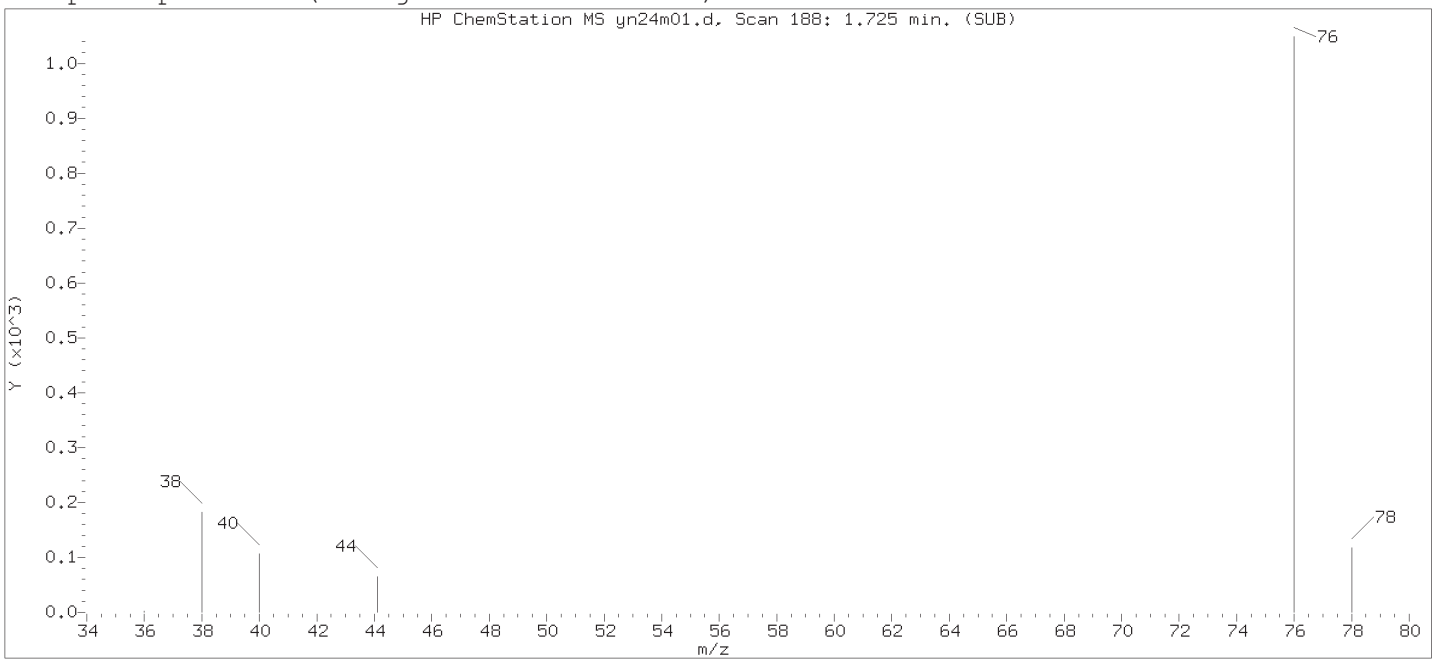
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 188
Retention Time (minutes): 1.725
Quant Ion : 76.00
Area (flag) : 7840M
On-Column Amount (ng) : 0.3863
Integration start scan : 175 Integration stop scan: 201
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

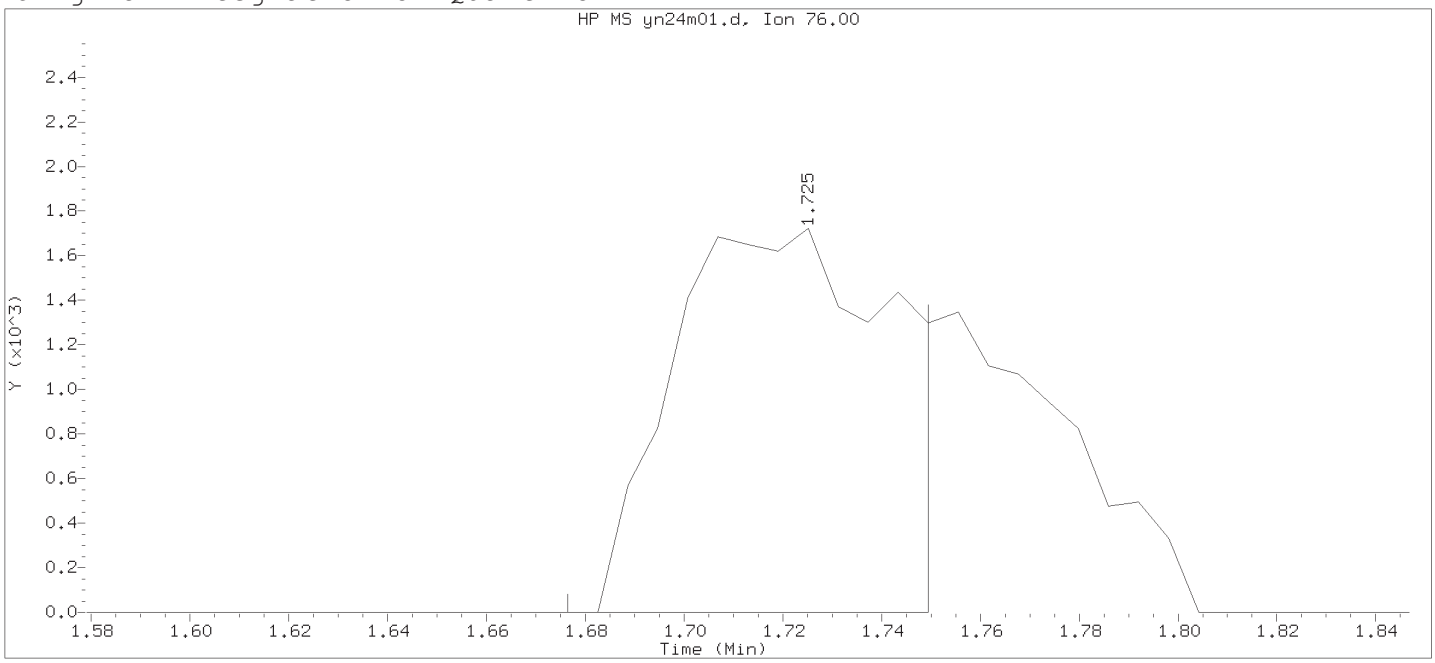
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

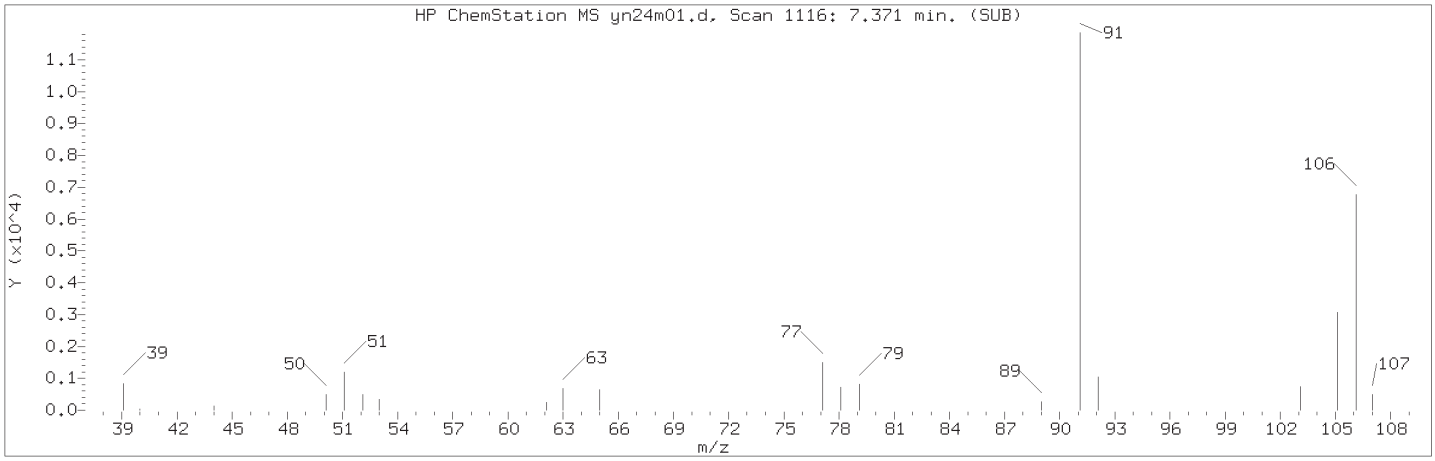
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

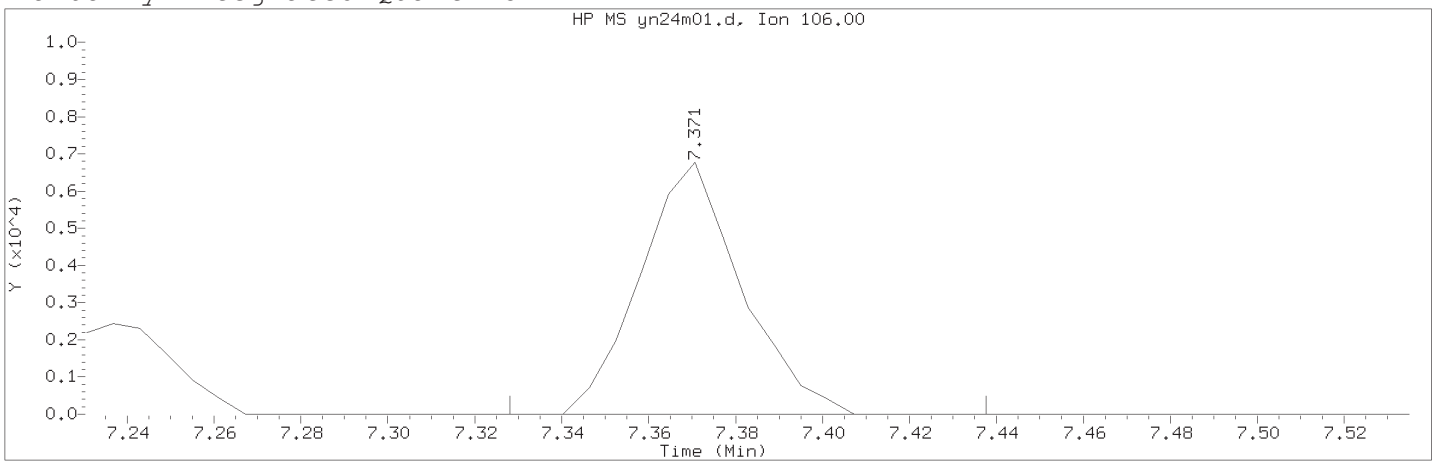
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 188
Retention Time (minutes): 1.725
Quant Ion : 76.00
Area : 5197
On-column Amount (ng) : 0.2561
Integration start scan : 179 Integration stop scan: 191
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

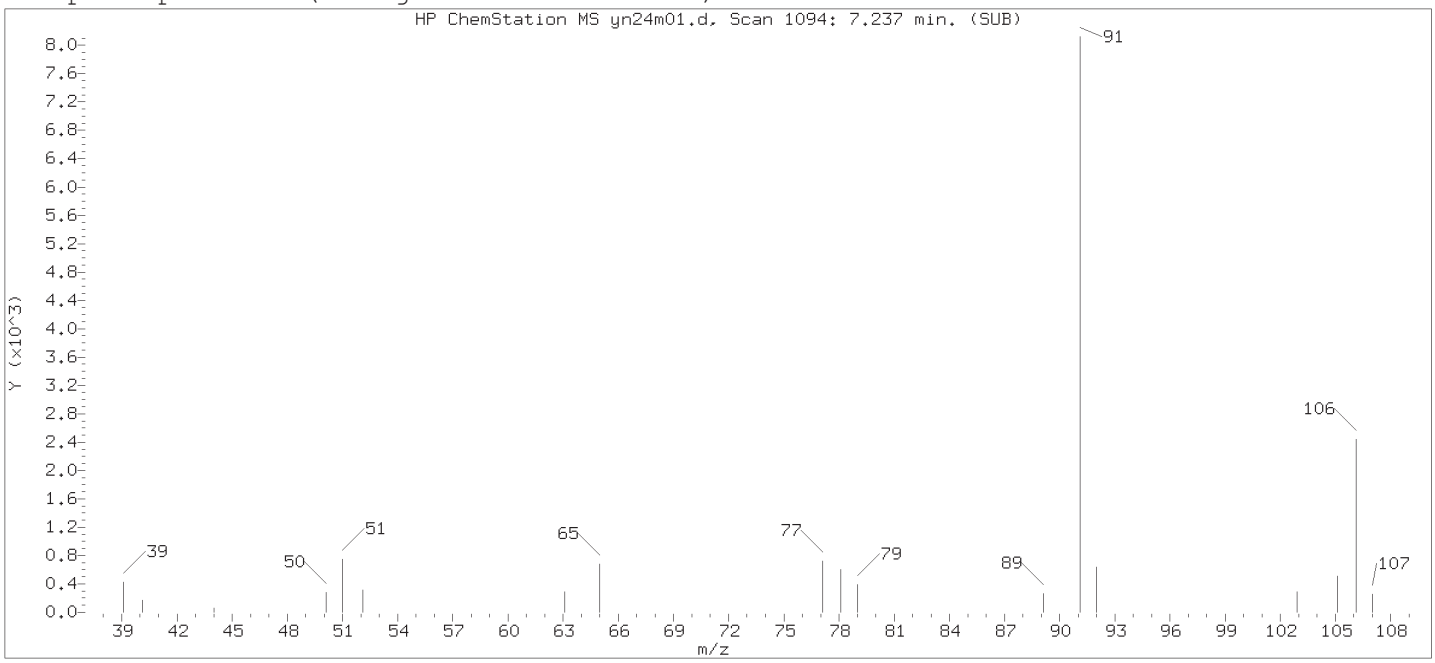
Compound Number : 106
Compound Name : m+p-Xylene
Scan Number : 1116
Retention Time (minutes): 7.371
Quant Ion : 106.00
Area (flag) : 10971M
On-Column Amount (ng) : 0.8213
Integration start scan : 1108 Integration stop scan: 1126
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

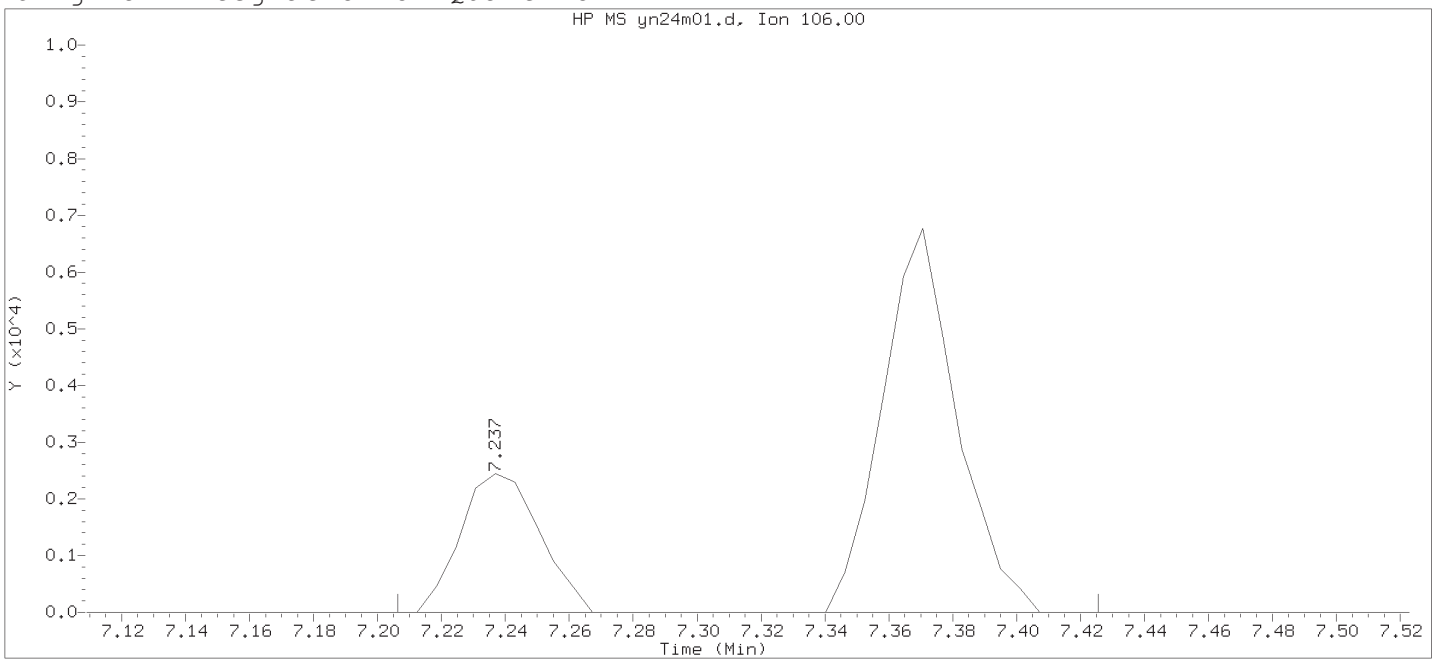
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

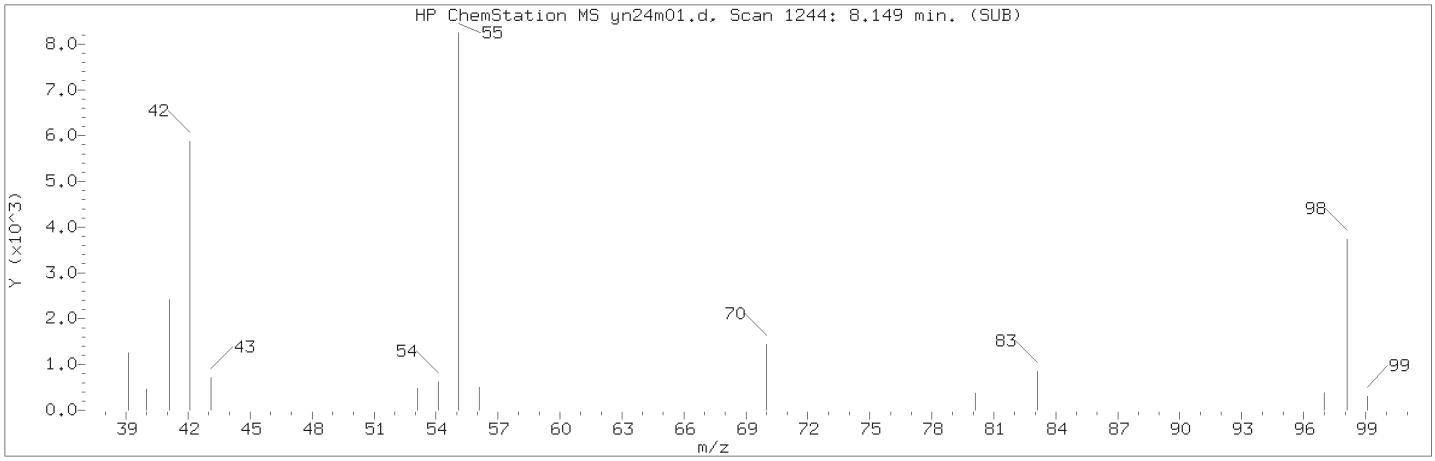
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

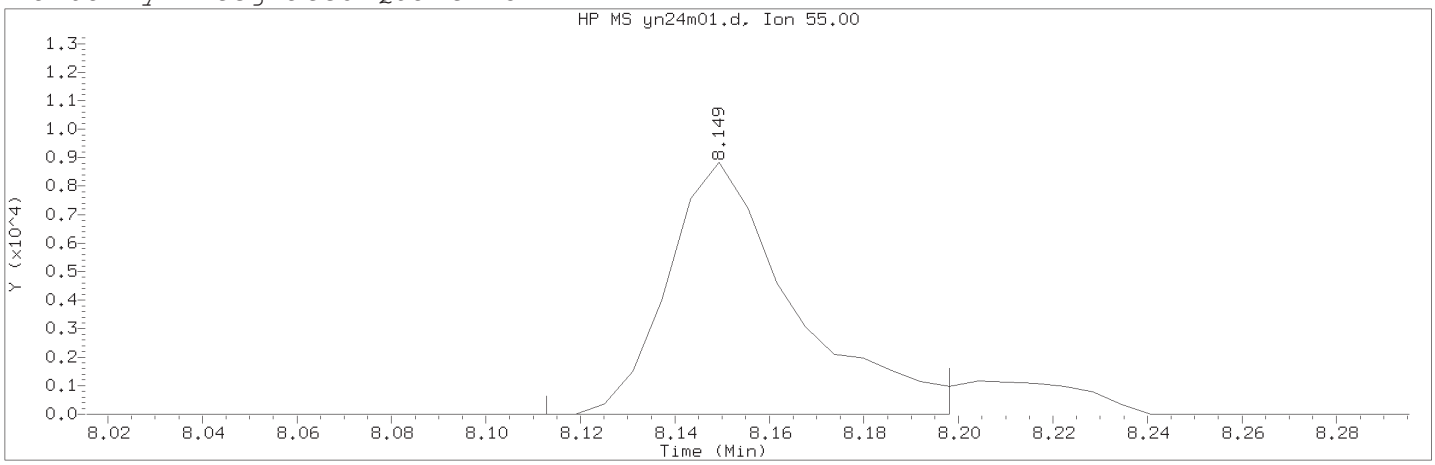
Compound Number : 106
Compound Name : m+p-Xylene
Scan Number : 1094
Retention Time (minutes): 7.237
Quant Ion : 106.00
Area : 15179
On-column Amount (ng) : 1.1364
Integration start scan : 1088 Integration stop scan: 1124
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri0731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

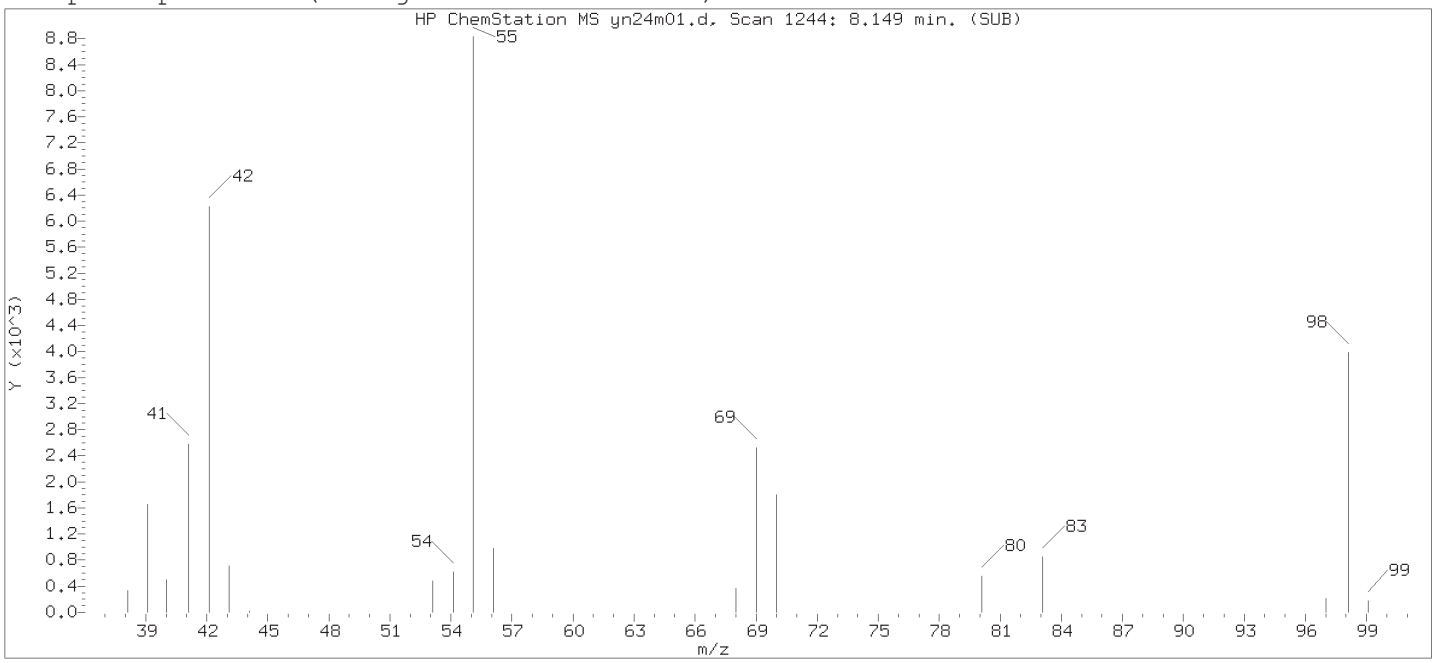
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1244
Retention Time (minutes): 8.149
Quant Ion : 55.00
Area (flag) : 16396M
On-Column Amount (ng) : 17.7923
Integration start scan : 1237 Integration stop scan: 1251
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

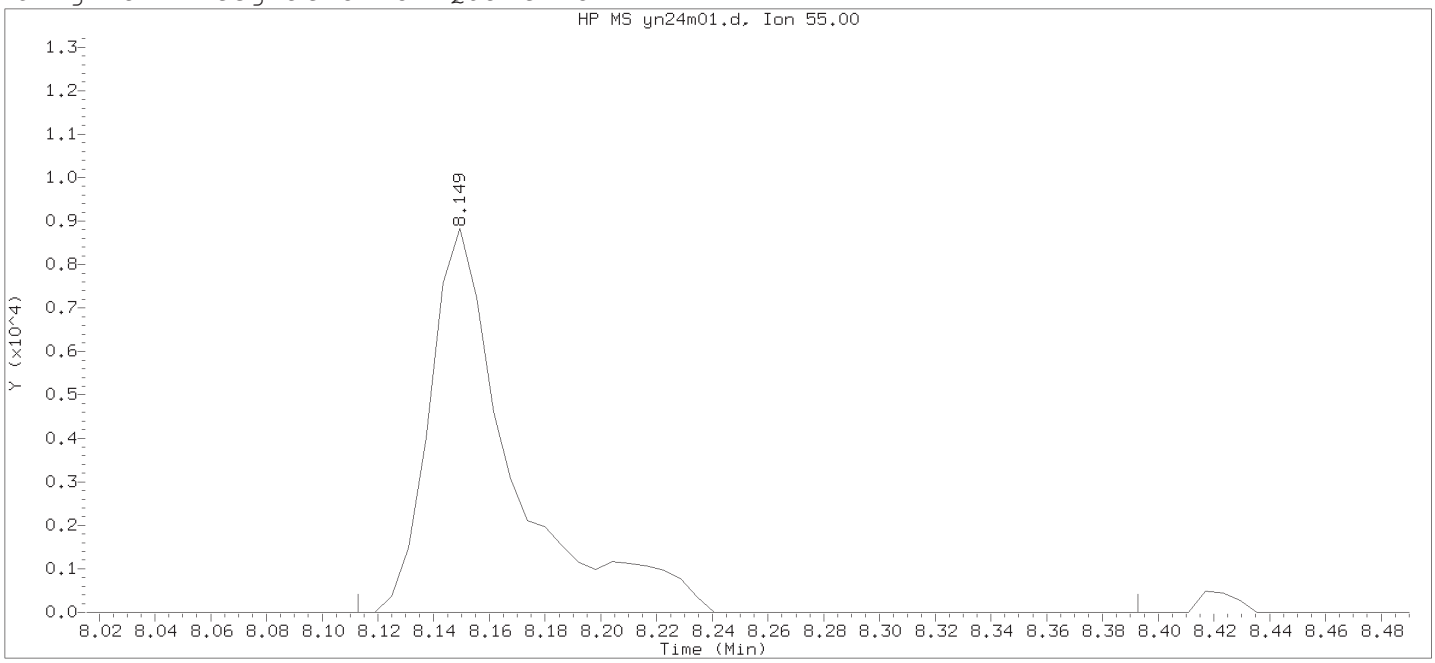
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

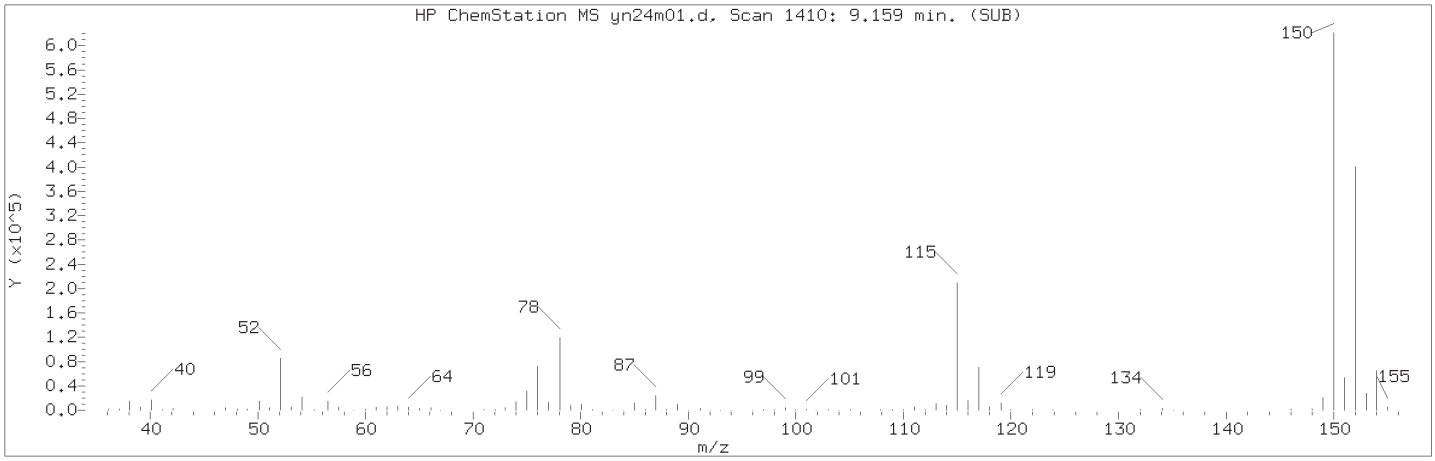
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

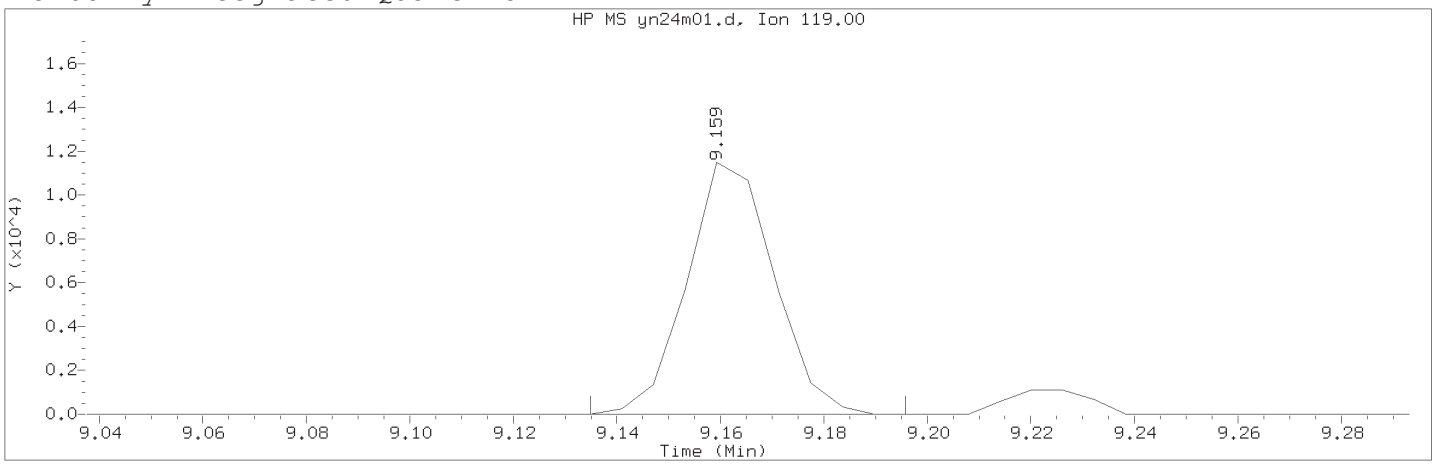
Compound Number : 112
Compound Name : Cyclohexanone
Scan Number : 1244
Retention Time (minutes): 8.149
Quant Ion : 55.00
Area : 18383
On-column Amount (ng) : 19.9486
Integration start scan : 1237 Integration stop scan: 1283
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

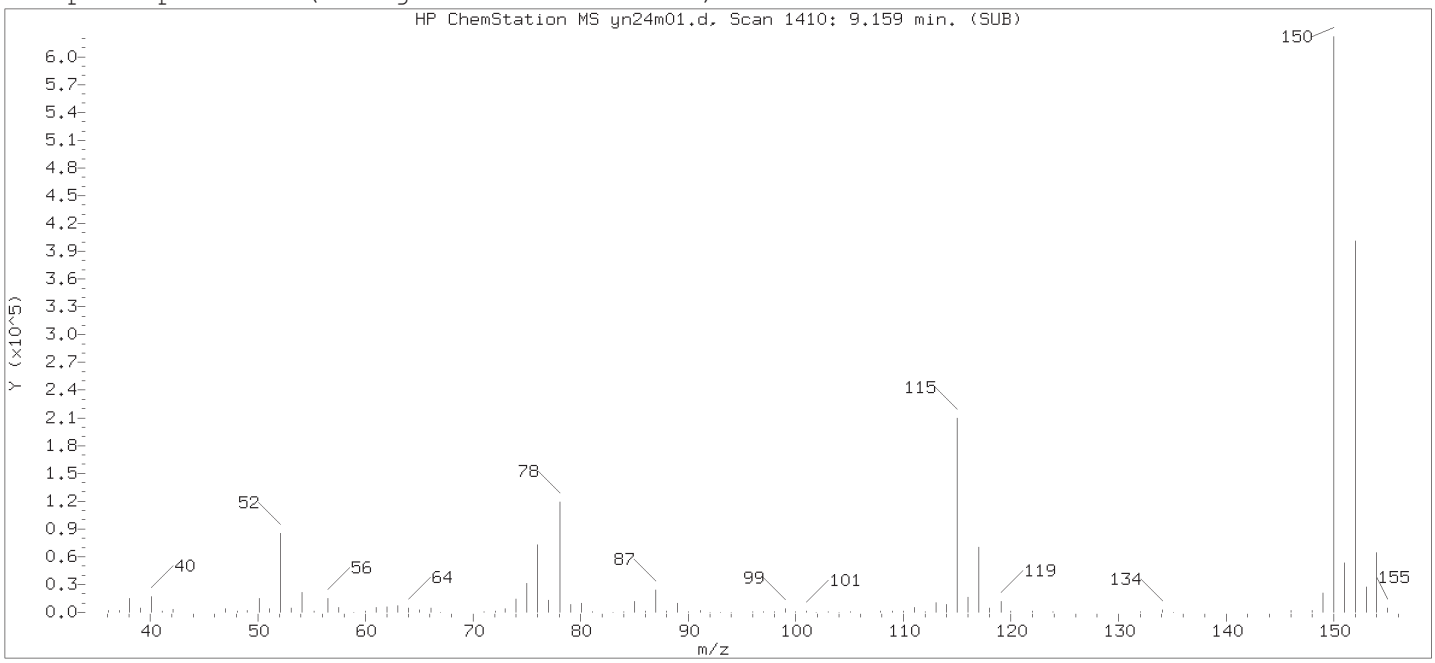
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1410
Retention Time (minutes): 9.159
Quant Ion : 119.00
Area (flag) : 13404M
On-Column Amount (ng) : 0.4054
Integration start scan : 1405 Integration stop scan: 1415
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

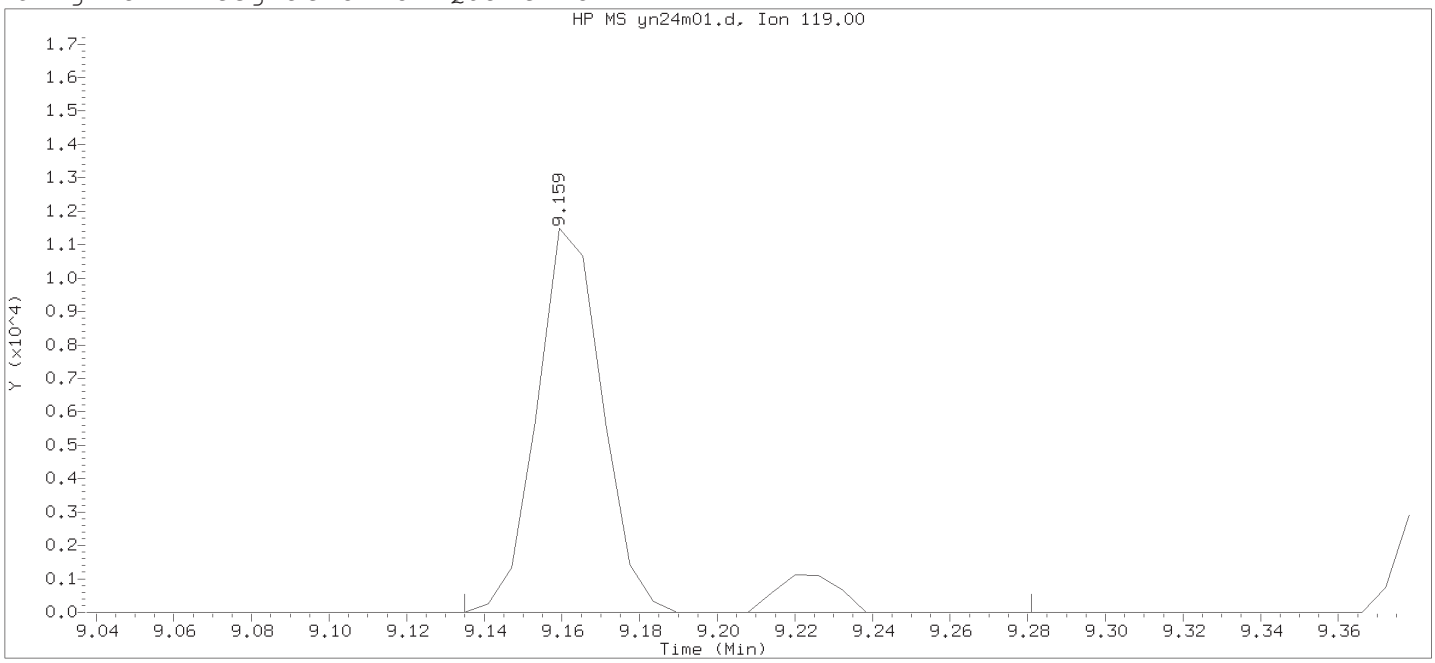
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

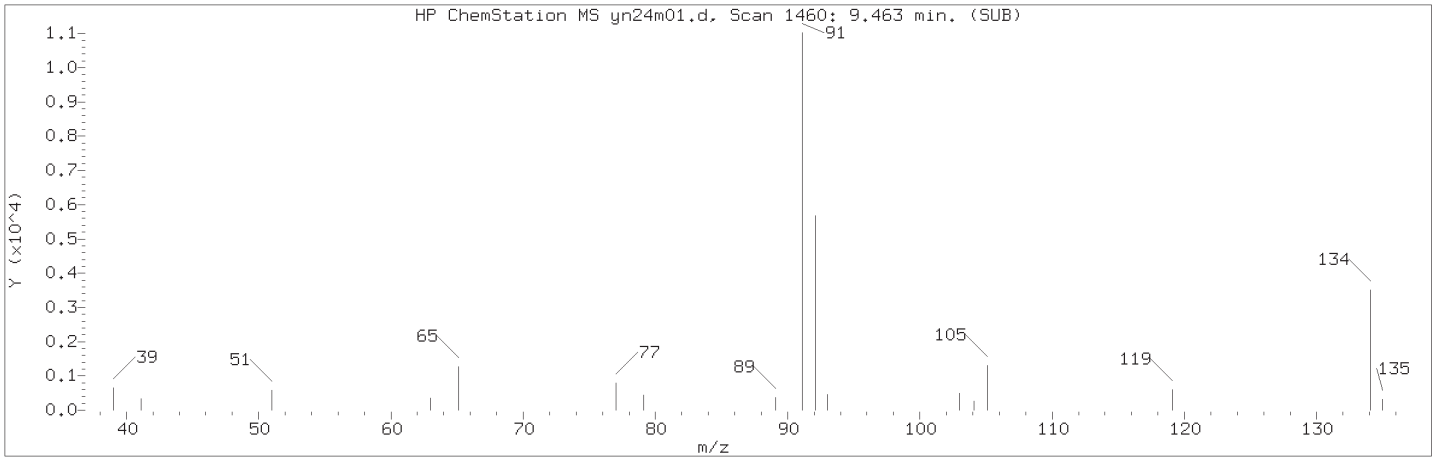
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

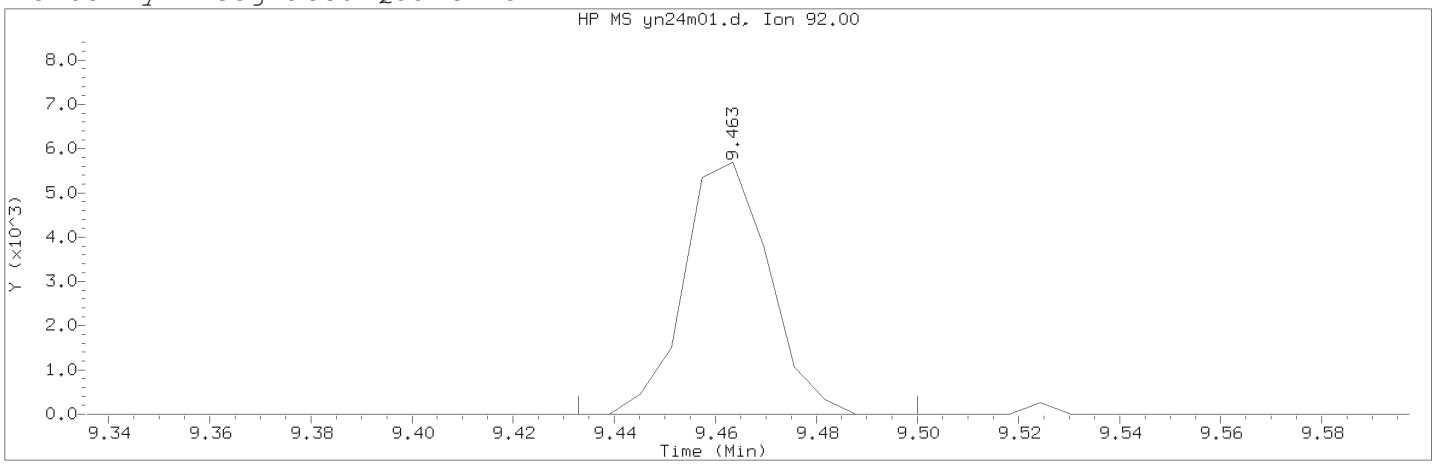
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1410
Retention Time (minutes): 9.159
Quant Ion : 119.00
Area : 14666
On-column Amount (ng) : 0.4436
Integration start scan : 1405 Integration stop scan: 1429
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

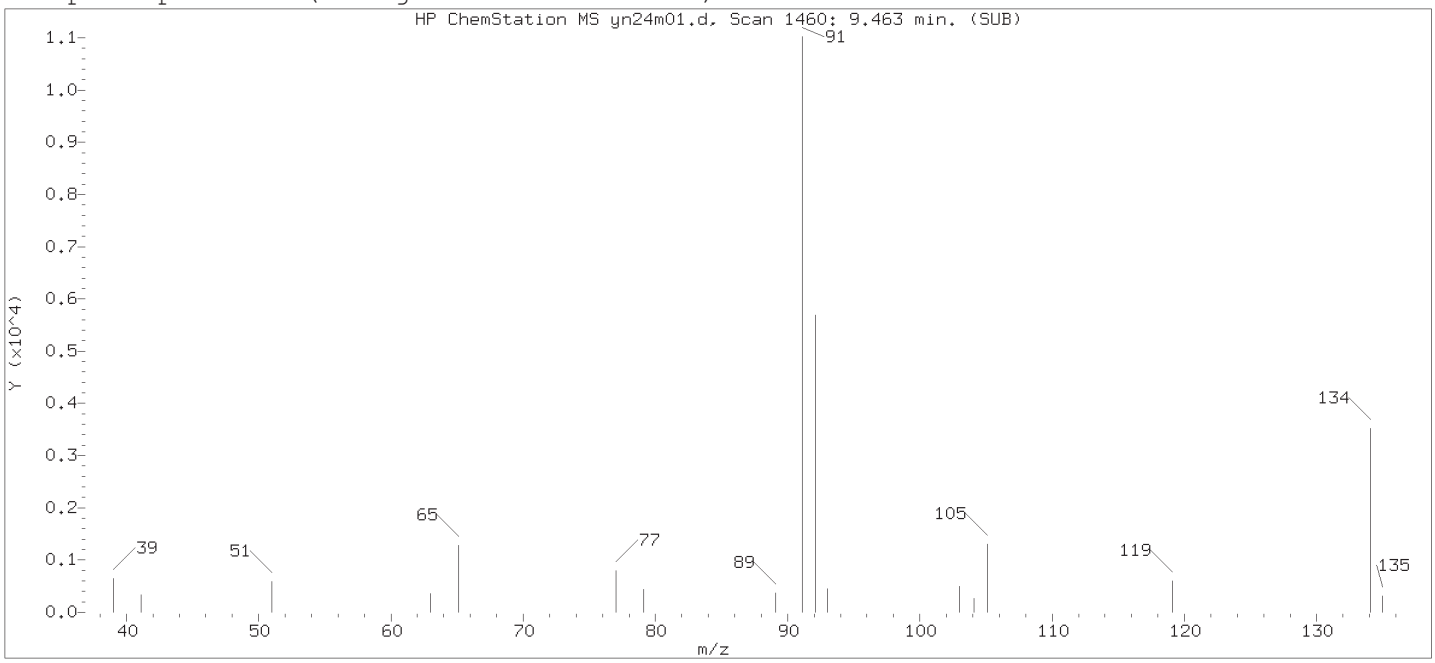
Compound Number : 139
Compound Name : n-Butylbenzene
Scan Number : 1460
Retention Time (minutes): 9.463
Quant Ion : 92.00
Area (flag) : 6638M
On-Column Amount (ng) : 0.3993
Integration start scan : 1454 Integration stop scan: 1465
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

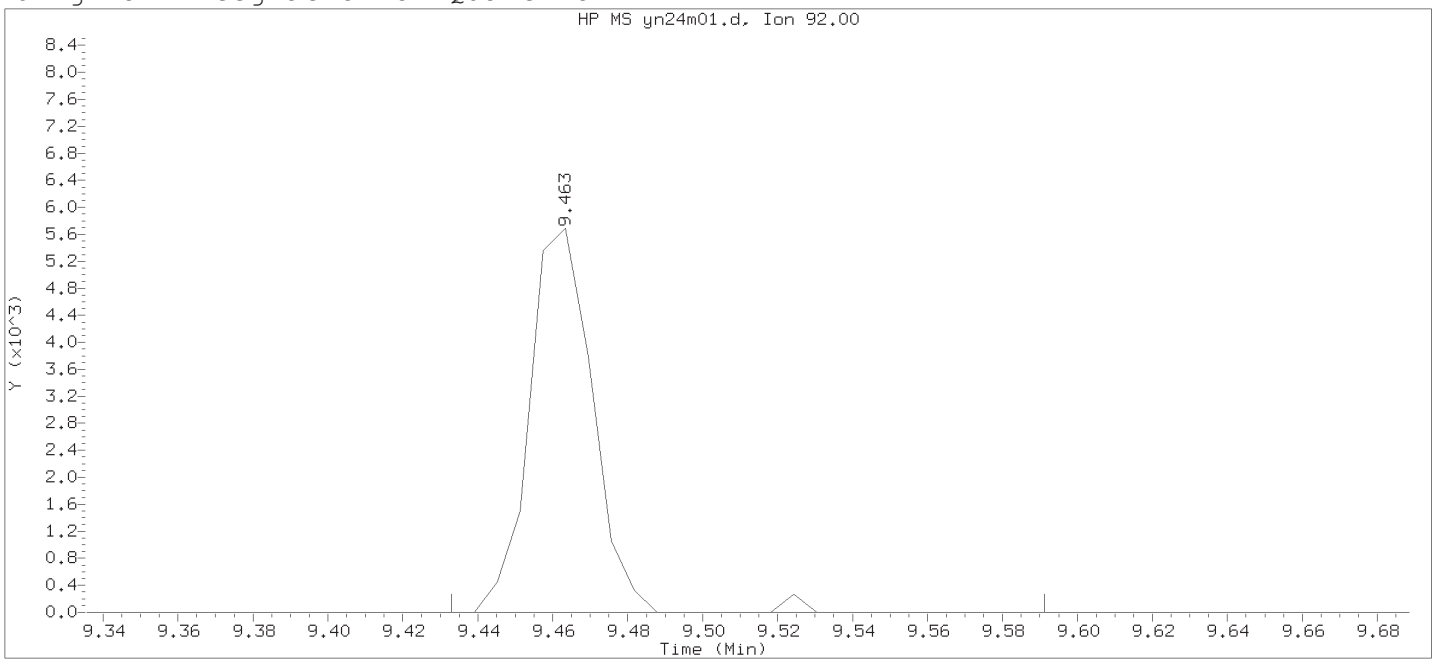
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

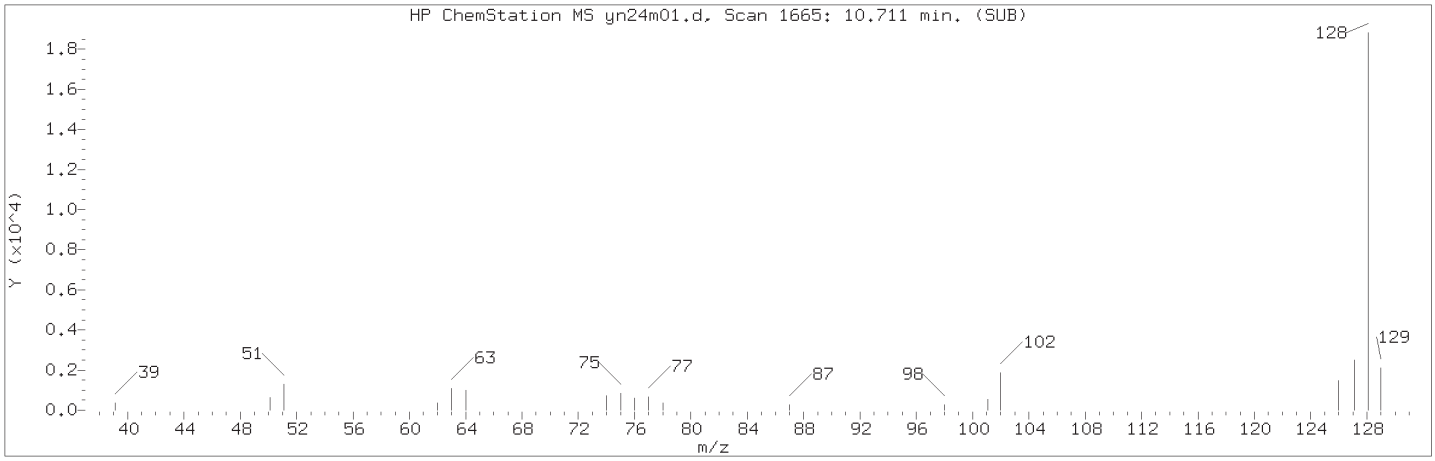
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

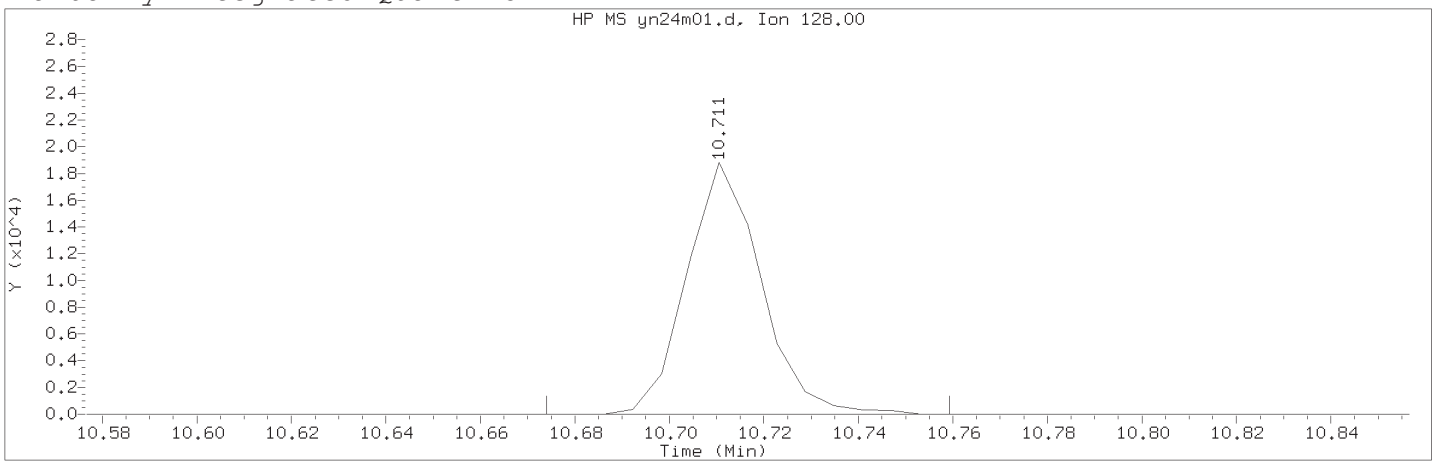
Compound Number : 139
Compound Name : n-Butylbenzene
Scan Number : 1460
Retention Time (minutes): 9.463
Quant Ion : 92.00
Area : 6734
On-column Amount (ng) : 0.4052
Integration start scan : 1454 Integration stop scan: 1480
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:47 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

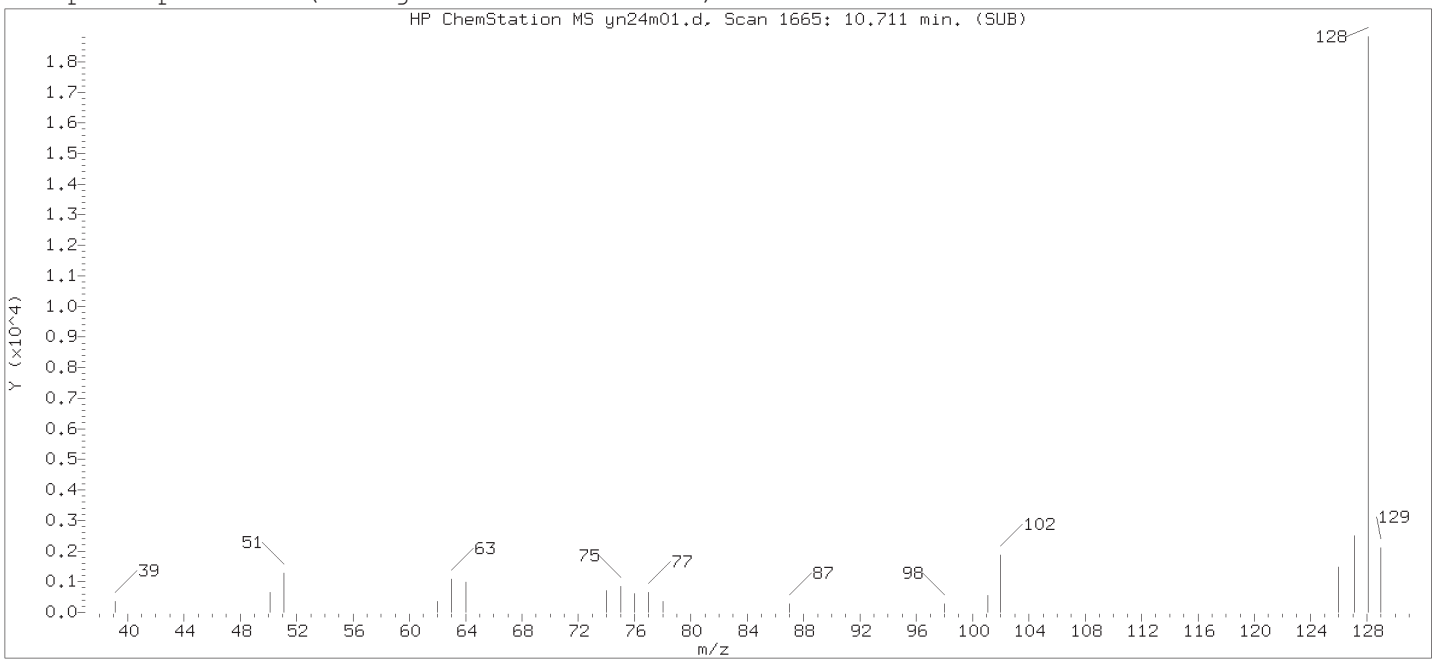
Compound Number : 148
Compound Name : Naphthalene
Scan Number : 1665
Retention Time (minutes): 10.711
Quant Ion : 128.00
Area (flag) : 20541M
On-Column Amount (ng) : 0.4728
Integration start scan : 1658 Integration stop scan: 1672
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

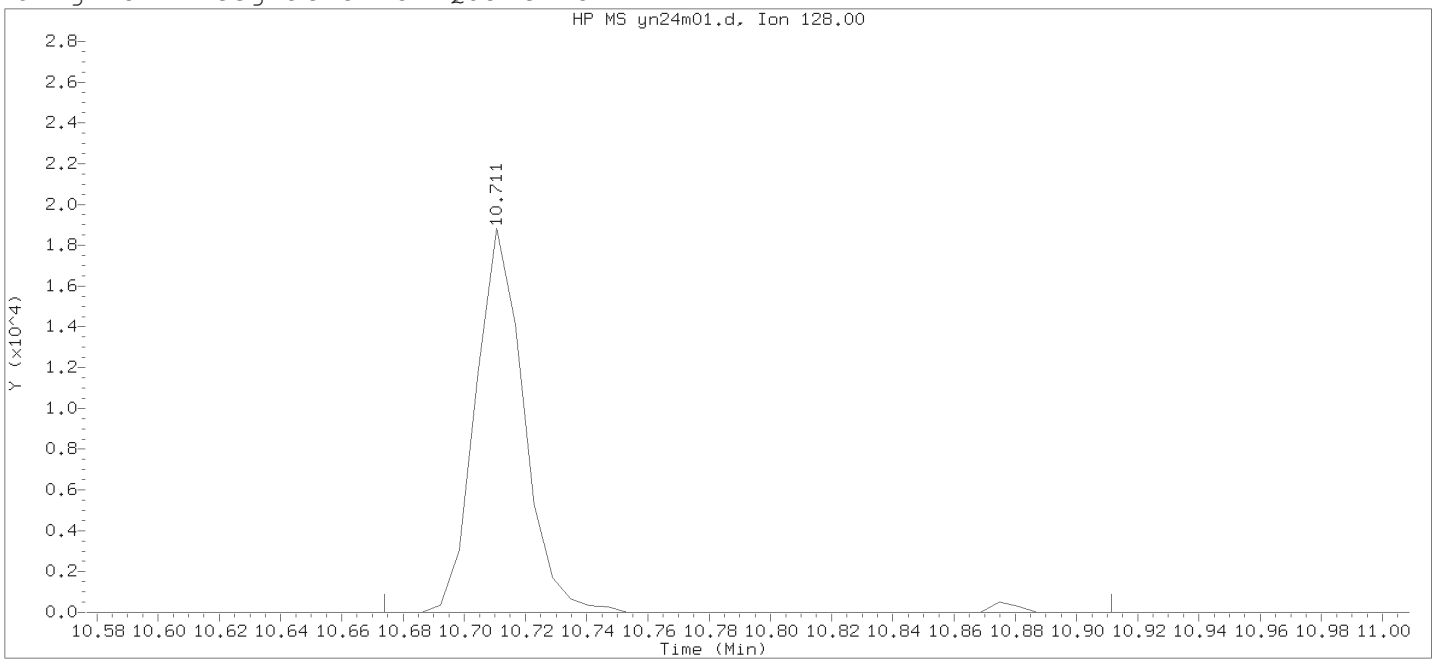
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:13.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



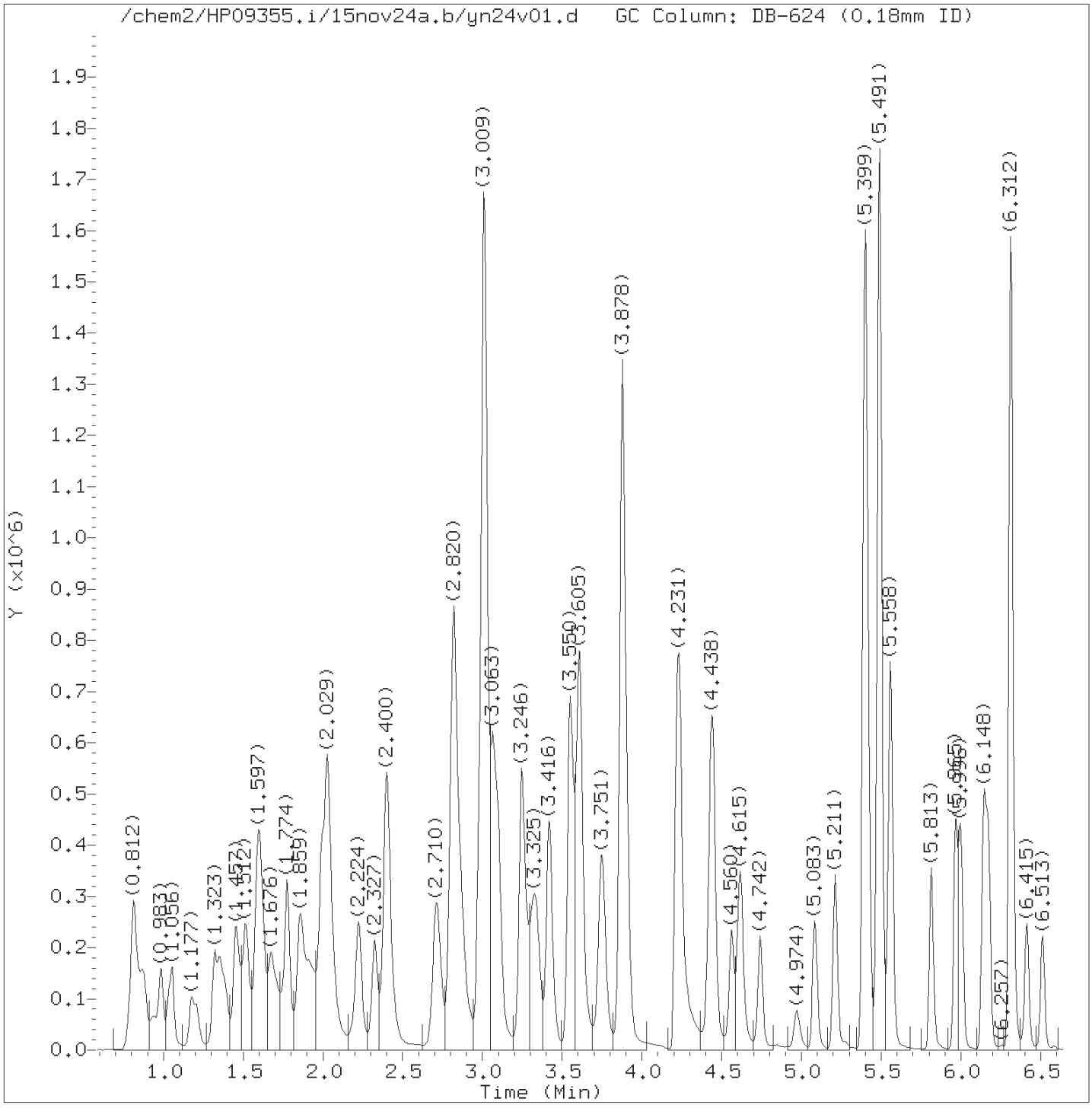
Data File: /chem2/HP09355.i/15nov24a.b/yn24m01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 04:39
Date, time and analyst ID of latest file update: 24-Nov-2015 04:51 sas00403

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number : 148
Compound Name : Naphthalene
Scan Number : 1665
Retention Time (minutes): 10.711
Quant Ion : 128.00
Area : 20827
On-column Amount (ng) : 0.4794
Integration start scan : 1658 Integration stop scan: 1697
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01



Total Ion Chromatogram (TIC)

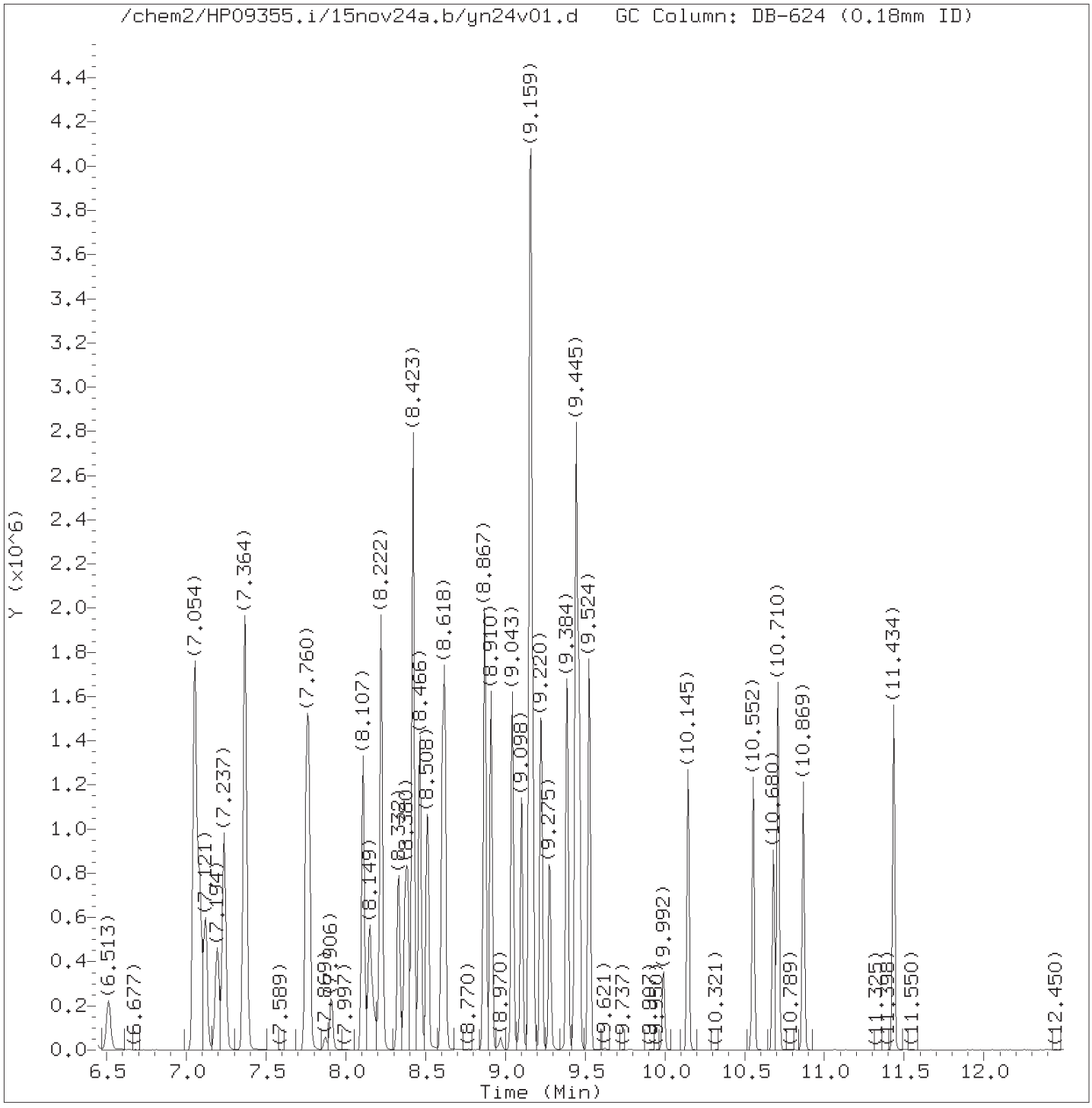
Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.940	85	126665	16.272
4) Chloromethane	(2)	0.983	50	161907M	18.281
5) 1,3-Butadiene	(2)	1.031	39	45148M	11.468
6) Vinyl Chloride	(2)	1.056	62	147645M	18.810
8) Bromomethane	(2)	1.177	94	83684	15.511
9) Chloroethane	(2)	1.208	64	65961	15.088
10) Dichlorofluoromethane	(2)	1.323	67	185547	18.780
11) n-Pentane	(2)	1.354	43	126692	16.423
12) Trichlorofluoromethane	(2)	1.378	101	156145	17.792
14) Ethyl ether	(2)	1.451	59	92584	16.499
15) Freon 123a	(2)	1.475	67	122597	18.698
16) Acrolein	(1)	1.518	56	303749	130.518
17) 1,1-Dichloroethene	(2)	1.591	96	99105	19.207
18) Acetone	(1)	1.597	58	157493	133.162
19) Freon 113	(2)	1.615	101	98162	19.708
21) 2-Propanol	(1)	1.670	45	110151M	156.916
22) Methyl Iodide	(2)	1.676	142	196512	20.008
23) Carbon Disulfide	(2)	1.749	76	328970	16.628
25) Allyl Chloride	(2)	1.774	41	144385	19.111
27) Methyl Acetate	(2)	1.780	43	182654	20.998
28) Methylene Chloride	(2)	1.853	84	117723	19.361
29)*t-Butyl alcohol-d10	(1)	1.865	65	384201	250.000
30) t-Butyl alcohol	(1)	1.920	59	377517	221.430
31) Acrylonitrile	(2)	1.993	53	420206	83.021
32) trans-1,2-Dichloroethene	(2)	2.029	96	120809	20.374
33) Methyl Tertiary Butyl Ether	(2)	2.041	73	412597	19.958
34) n-Hexane	(2)	2.224	57	177726	18.001
36) 1,1-Dichloroethane	(2)	2.327	63	250156	20.739
38) di-Isopropyl ether	(2)	2.400	45	504622	21.820
39) 2-Chloro-1,3-butadiene	(2)	2.400	53	195130	20.071
40) Ethyl t-butyl ether	(2)	2.717	59	473805	21.187
42) cis-1,2-Dichloroethene	(2)	2.814	96	156183	21.456
45) 2,2-Dichloropropane	(2)	2.826	77	176429	20.504
44) 2-Butanone	(2)	2.826	43	1239940	141.103
47) Propionitrile	(1)	2.869	54	345895	177.692
43) 1,2-Dichloroethene (Total)	(2)		96	276992	41.830
48) Methacrylonitrile	(2)	3.009	67	859046	161.773
49) Bromochloromethane	(2)	3.021	128	79414	21.206

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.069	71	225327	111.838
51) Chloroform	(2)	3.100	83	238000	21.442
52)$Dibromofluoromethane	(2)	3.246	113	331968	49.420
53) 1,1,1-Trichloroethane	(2)	3.276	97	215249	20.473
54) Cyclohexane	(2)	3.325	56	234780	20.754
55) 1,1-Dichloropropene	(2)	3.416	75	188395	20.155
56) Carbon Tetrachloride	(2)	3.428	117	161654	20.852
57)$1,2-Dichloroethane-d4	(2)	3.544	102	86989	49.945
58) Isobutyl Alcohol	(1)	3.568	41	321747M	571.577
60) Benzene	(2)	3.605	78	591293	21.292
61) 1,2-Dichloroethane	(2)	3.617	62	203614	20.710
65) t-Amyl methyl ether	(2)	3.751	73	450323	21.267
66)*Fluorobenzene	(2)	3.878	96	1431706	50.000
67) n-Heptane	(2)	3.903	43	231104	20.012
69) n-Butanol	(1)	4.219	56	572086	1157.579
71) Trichloroethene	(2)	4.237	95	154196	21.816
72) Methylcyclohexane	(2)	4.432	83	252219	22.444
73) 1,2-Dichloropropane	(2)	4.444	63	158278	21.933
74) Dibromomethane	(2)	4.560	93	98957	21.272
75) 1,4-Dioxane	(1)	4.590	88	85752M	656.602
76) Methyl Methacrylate	(2)	4.615	69	171069	20.824
78) Bromodichloromethane	(2)	4.742	83	163706	20.758
79) 2-Nitropropane	(2)	4.974	41	60779	16.385
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	137375	20.953
81) cis-1,3-Dichloropropene	(2)	5.211	75	233289	21.412
82) 4-Methyl-2-pentanone	(2)	5.399	43	1508349	90.786
83)$Toluene-d8	(3)	5.491	98	1438089	49.840
88) Toluene	(3)	5.558	92	383873	21.619
89) trans-1,3-Dichloropropene	(3)	5.813	75	216775	21.718
90) 1,3-Dichloropropene (total)	(3)		100	450064	43.130
91) Ethyl Methacrylate	(3)	5.965	69	271129	21.462
92) 1,1,2-Trichloroethane	(3)	6.002	97	153478	21.634
93) Tetrachloroethene	(3)	6.148	166	161966	21.759
94) 1,3-Dichloropropane	(3)	6.172	76	259945	21.385
96) 2-Hexanone	(3)	6.312	43	1236607	87.019
97) Dibromochloromethane	(3)	6.415	129	137538	22.473
99) 1,2-Dibromoethane	(3)	6.513	107	169465	21.950
100)*Chlorobenzene-d5	(3)	7.054	117	1071174	50.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
102) Chlorobenzene	(3)	7.085	112	444842	21.988
101) 1-Chlorohexane	(3)	7.121	91	200928	21.122
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	136534	21.618
104) Ethylbenzene	(3)	7.237	91	737358	22.072
106) m+p-Xylene	(3)	7.364	106	590518	44.819
107) o-Xylene	(3)	7.754	106	288108	21.956
109) Styrene	(3)	7.766	104	485964	21.921
108) Xylene (Total)	(3)		106	878626	66.774
110) Bromoform	(3)	7.906	173	95987	18.480
111) Isopropylbenzene	(3)	8.107	105	743141	22.108
112) Cyclohexanone	(1)	8.149	55	313177	434.293
114)$4-Bromofluorobenzene	(3)	8.222	95	541238M	50.010
115) Bromobenzene	(4)	8.332	156	189755	21.544
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	263590	21.560
117) 1,2,3-Trichloropropane	(4)	8.386	110	84441	21.626
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	427470	105.750
119) n-Propylbenzene	(4)	8.466	91	885795	22.118
120) 2-Chlorotoluene	(4)	8.514	126	183998	21.701
121) 4-Chlorotoluene	(4)	8.605	126	194613	21.842
122) 1,3,5-Trimethylbenzene	(4)	8.618	105	639653	21.662
125) Pentachloroethane	(4)	8.867	167	100066	20.802
124) tert-Butylbenzene	(4)	8.873	134	143769	21.740
126) 1,2,4-Trimethylbenzene	(4)	8.910	105	659443	21.833
127) sec-Butylbenzene	(4)	9.043	105	819965	22.190
129) 1,3-Dichlorobenzene	(4)	9.104	146	363244	21.446
131)*1,4-Dichlorobenzene-d4	(4)	9.153	152	568515	50.000
130) p-Isopropyltoluene	(4)	9.159	119	719915	21.827
133) 1,4-Dichlorobenzene	(4)	9.171	146	377031	21.817
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	673700	21.653
135) Benzyl Chloride	(4)	9.275	91	447168	20.250
136) 1,3-Diethylbenzene	(4)	9.384	119	431170	21.677
138) 1,2-Dichlorobenzene	(4)	9.439	146	360496	21.874
137) 1,4-Diethylbenzene	(4)	9.445	119	464190	22.393
139) n-Butylbenzene	(4)	9.463	92	355938	21.466
140) 1,2-Diethylbenzene	(4)	9.524	119	366362	22.164
141) Diethylbenzene (total)	(4)		100	1261722	66.235
142) 1,2-Dibromo-3-chloropropane	(4)	9.992	75	63885	19.857
144) 1,3,5-Trichlorobenzene	(4)	10.145	180	277550	21.442

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) 1,2,4-Trichlorobenzene	(4)	10.552	180	263184	21.114
147) Hexachlorobutadiene	(4)	10.680	225	114928	20.086
148) Naphthalene	(4)	10.710	128	913259	21.071
149) 1,2,3-Trichlorobenzene	(4)	10.869	180	247510	20.848
150) 2-Methylnaphthalene	(4)	11.434	142	494556	18.862

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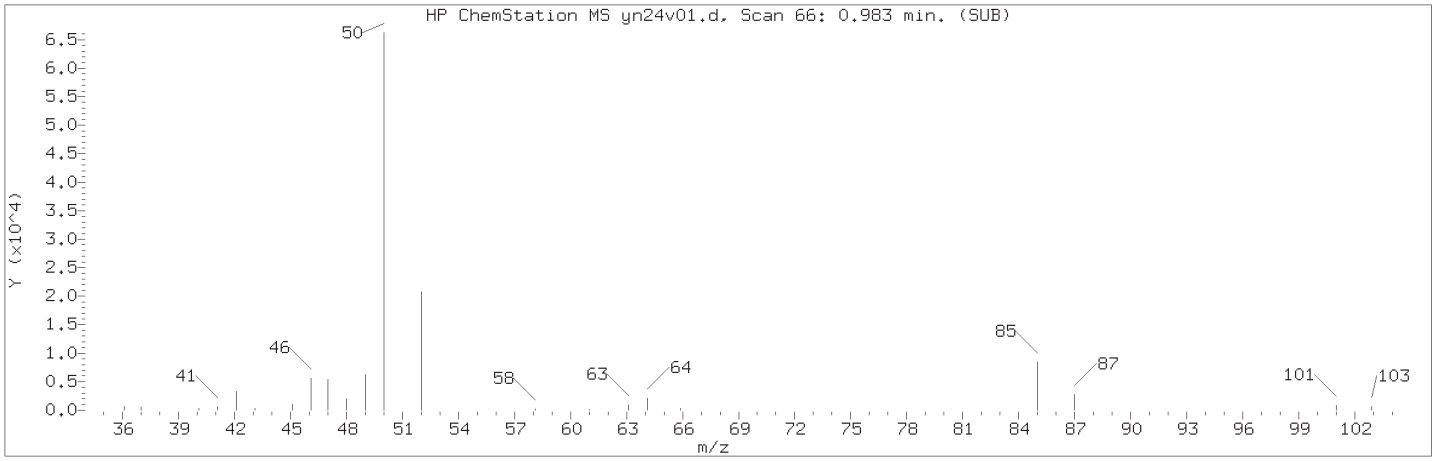
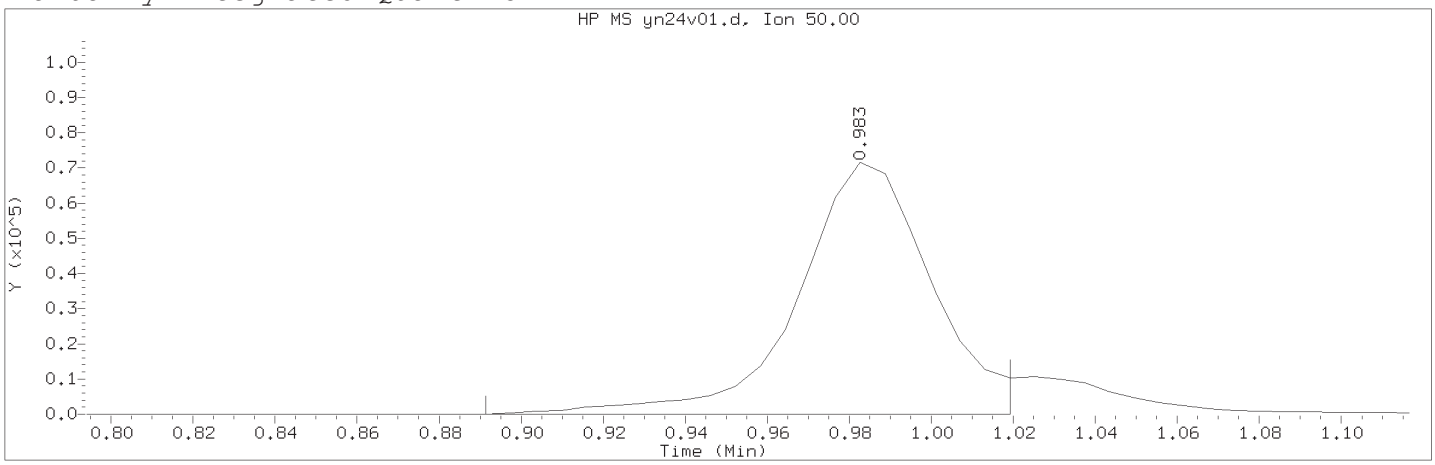
on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

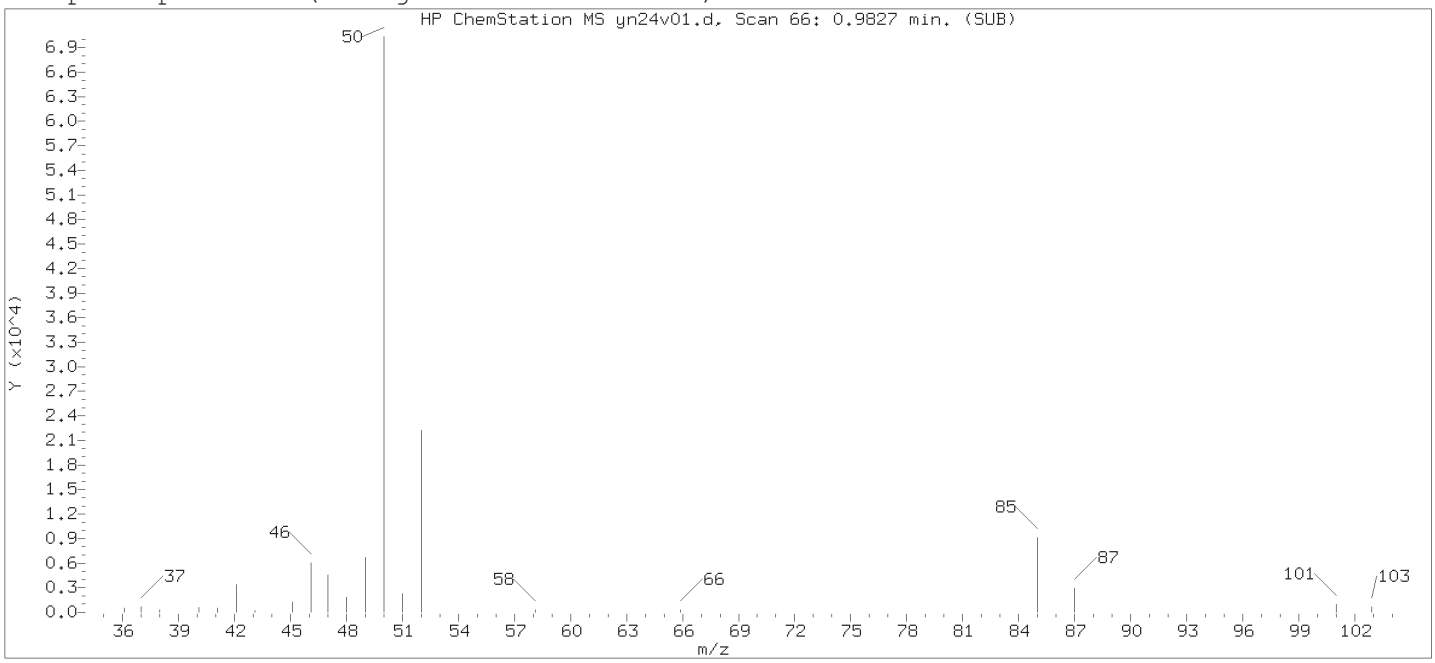
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 66
Retention Time (minutes): 0.983
Quant Ion : 50.00
Area (flag) : 161907M
On-Column Amount (ng) : 18.2810
Integration start scan : 50 Integration stop scan: 71
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

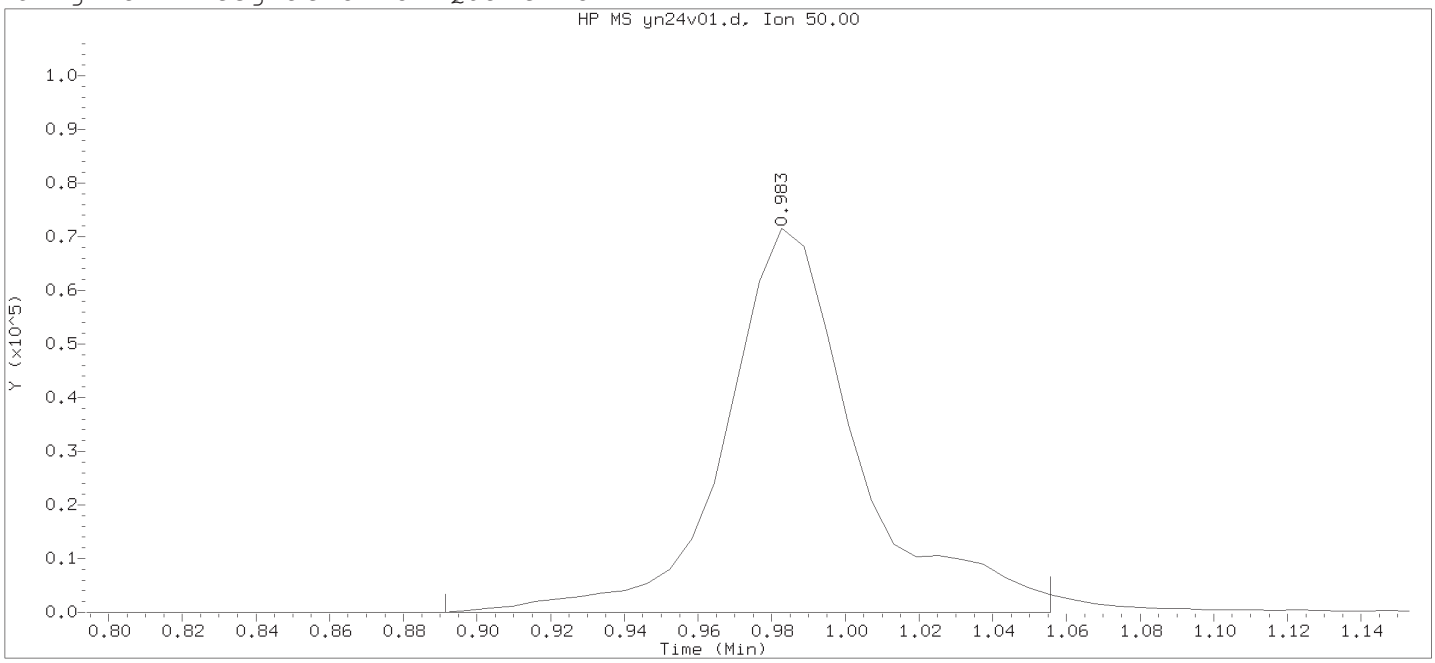
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

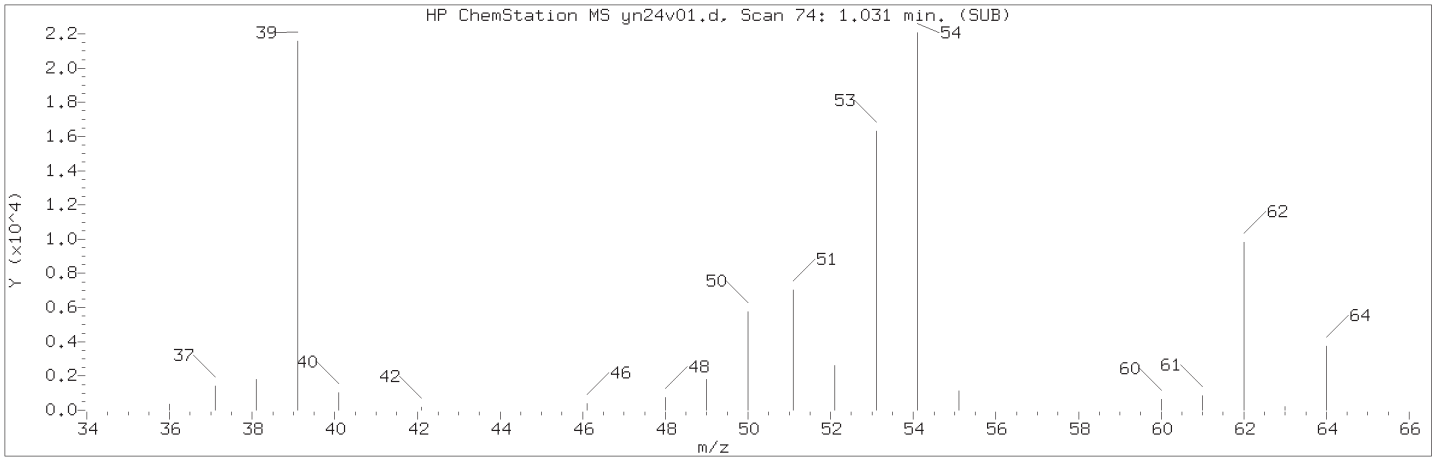
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

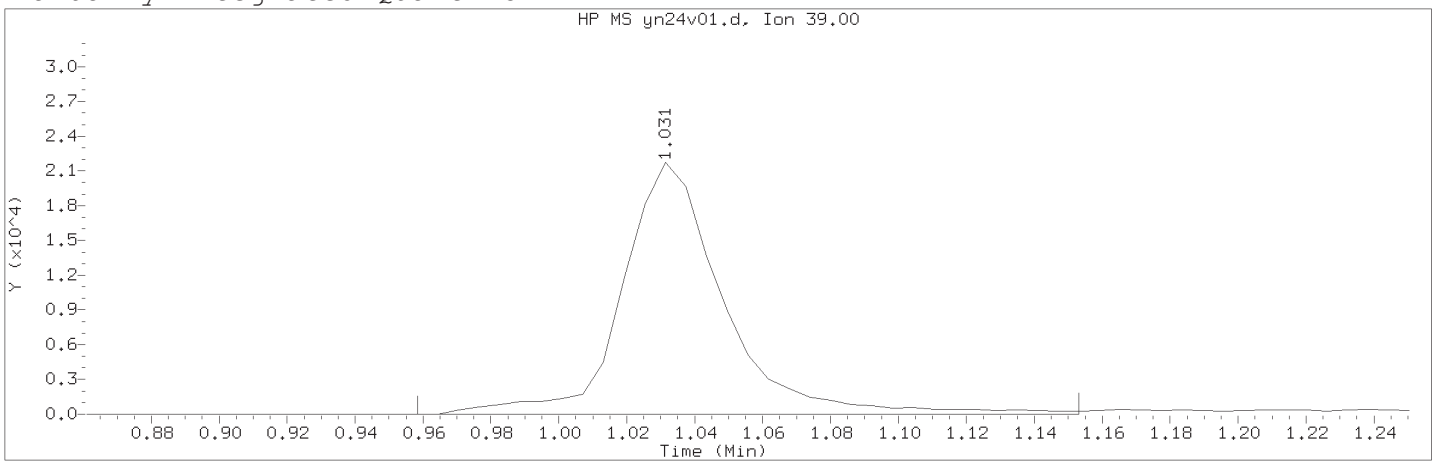
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 66
Retention Time (minutes): 0.983
Quant Ion : 50.00
Area : 177261
On-column Amount (ng) : 20.0147
Integration start scan : 50 Integration stop scan: 77
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

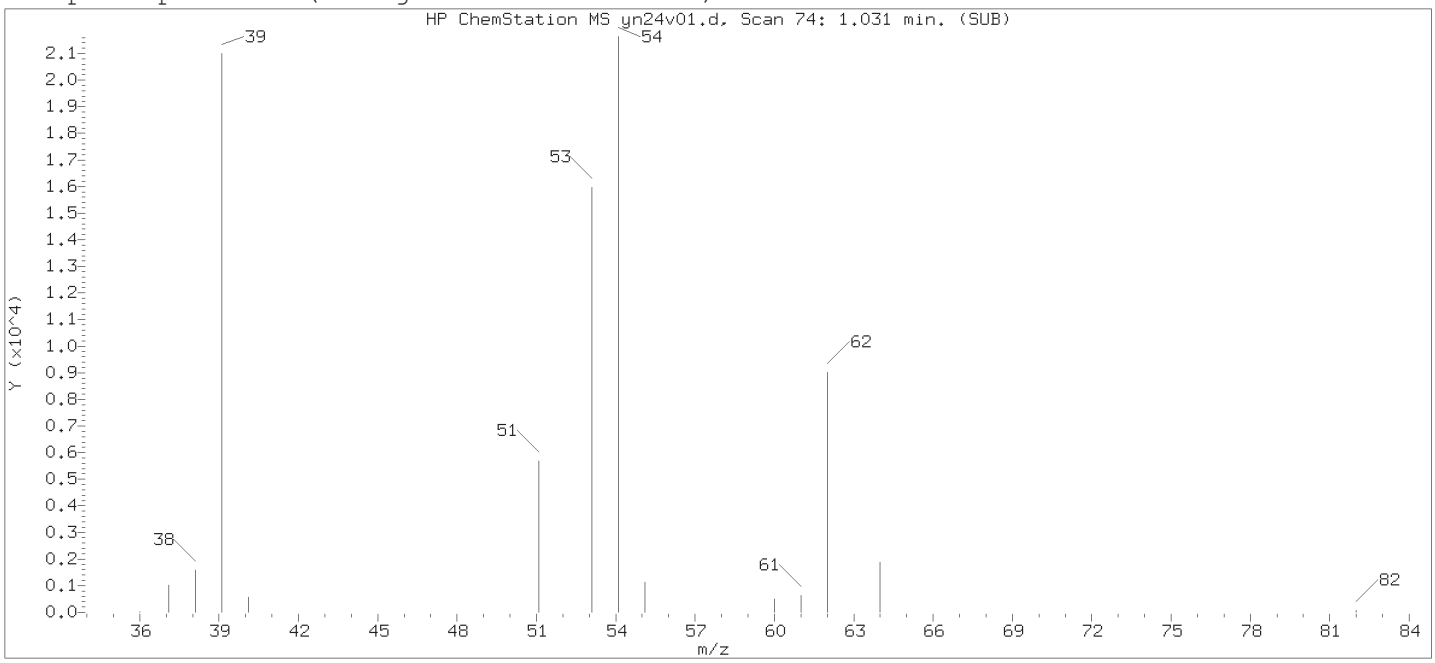
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 74
Retention Time (minutes): 1.031
Quant Ion : 39.00
Area (flag) : 45148M
On-Column Amount (ng) : 11.4682
Integration start scan : 61 Integration stop scan: 93
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

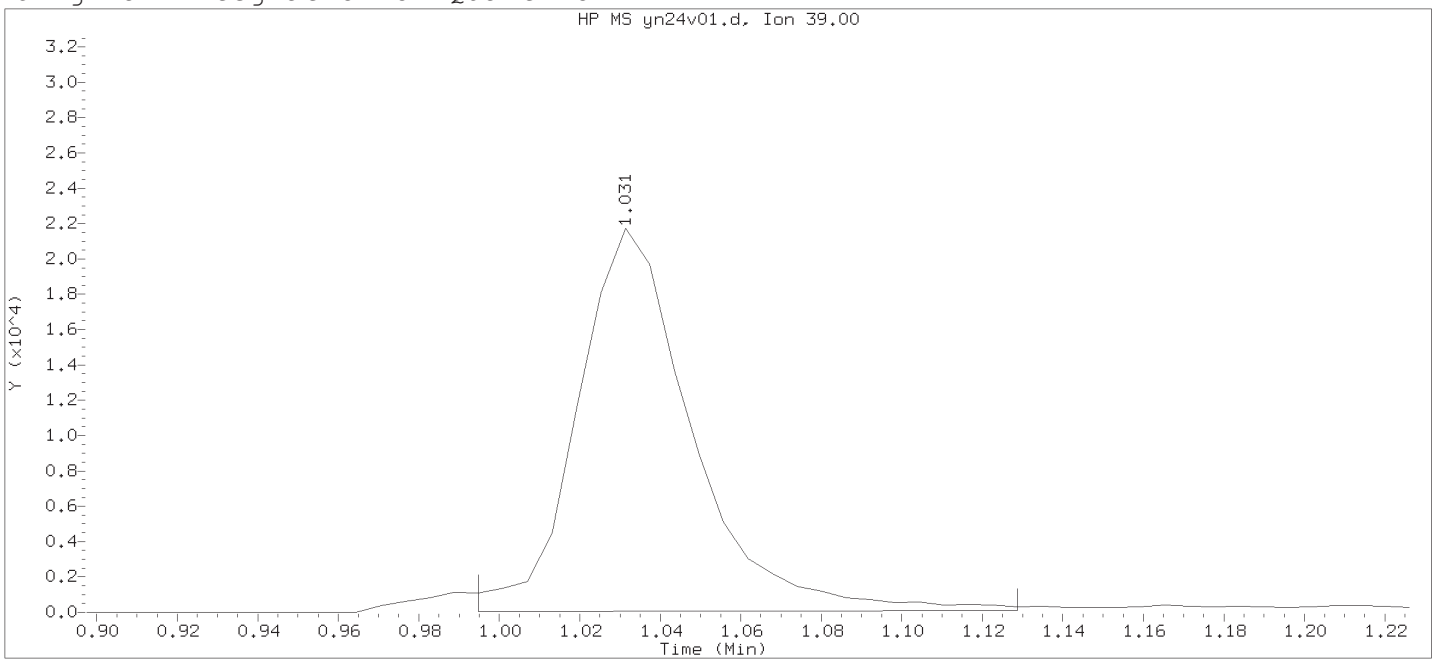
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

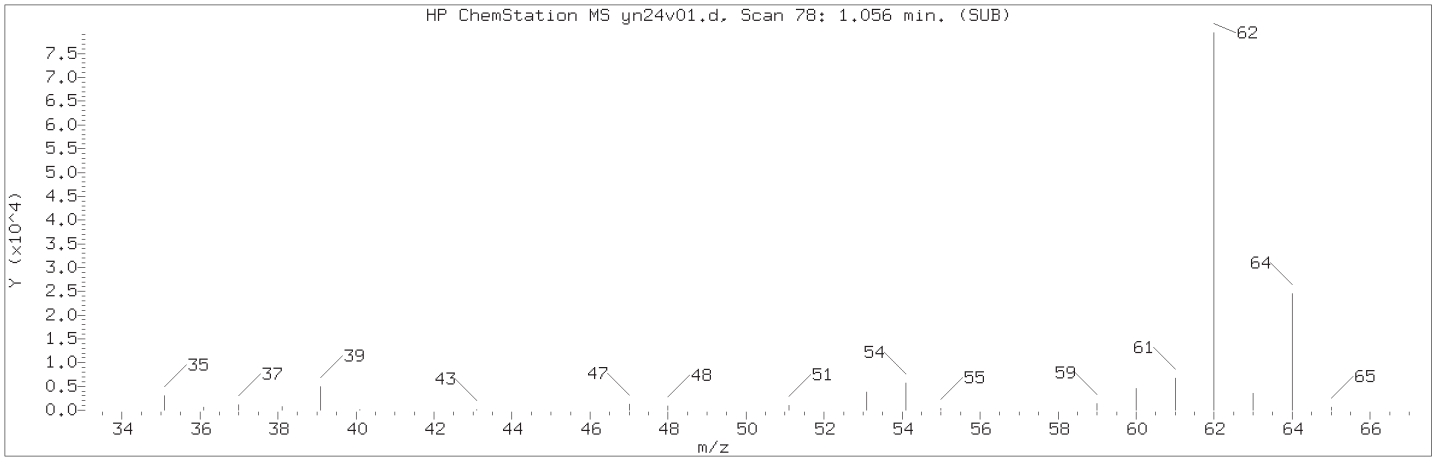
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

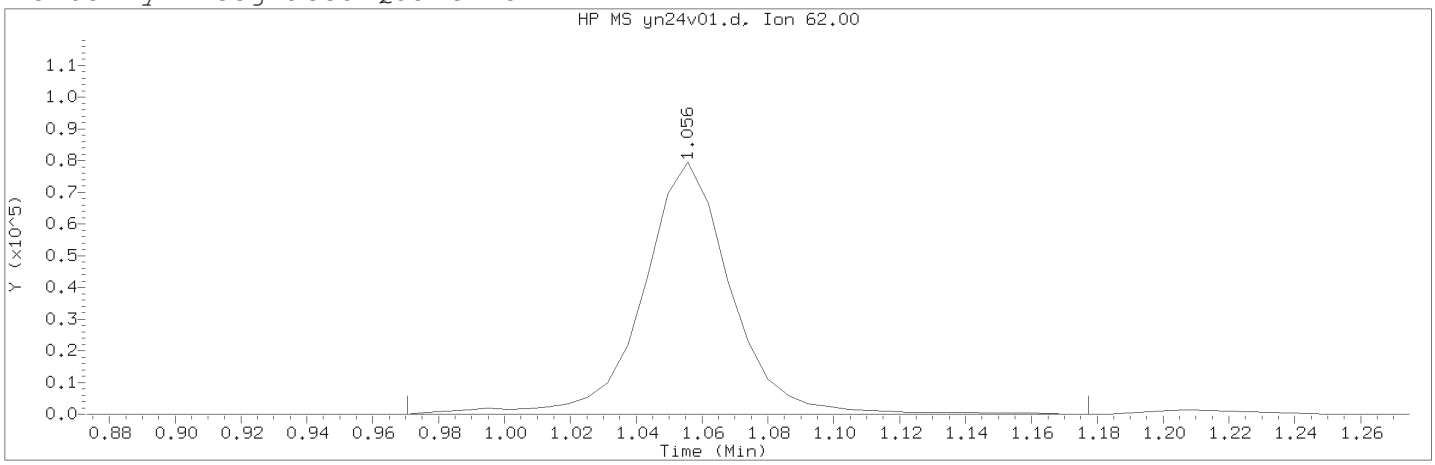
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 74
Retention Time (minutes): 1.031
Quant Ion : 39.00
Area : 42926
On-column Amount (ng) : 10.8746
Integration start scan : 67 Integration stop scan: 89
Y at integration start : 25 Y at integration end: 89

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

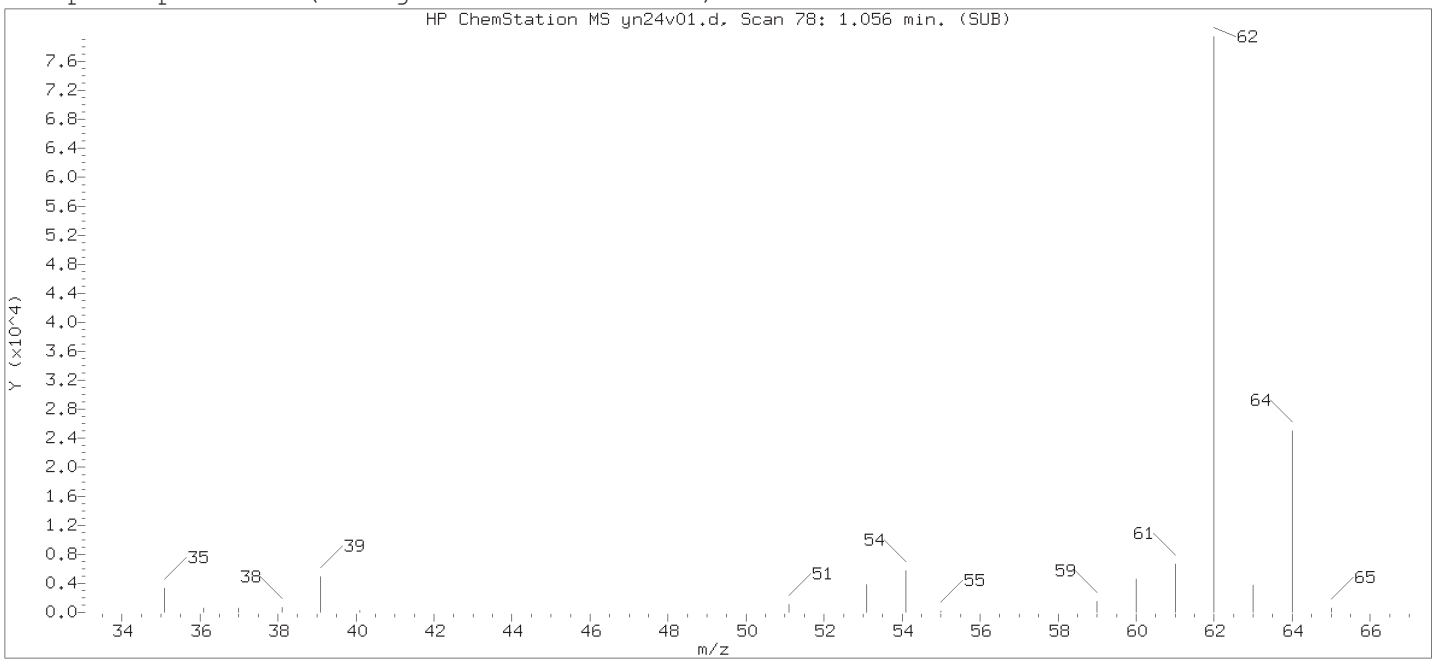
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 78
Retention Time (minutes): 1.056
Quant Ion : 62.00
Area (flag) : 147645M
On-Column Amount (ng) : 18.8095
Integration start scan : 63 Integration stop scan: 97
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

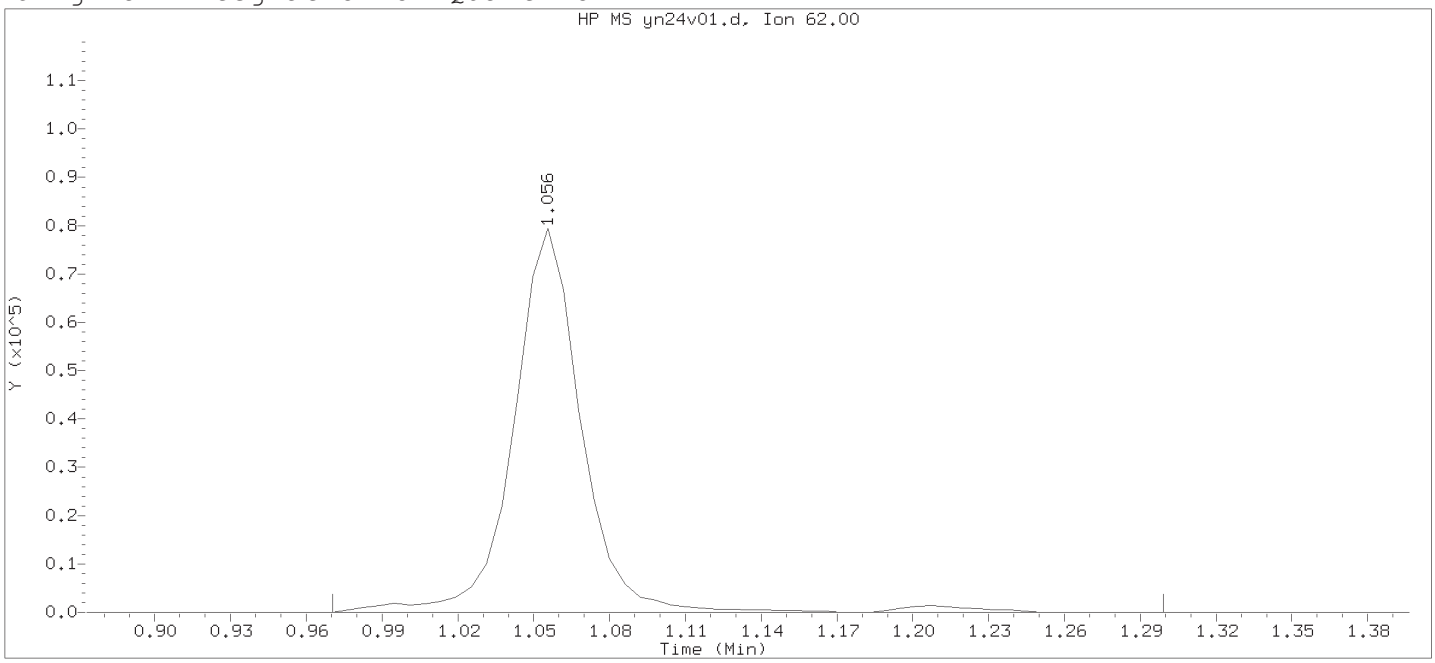
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

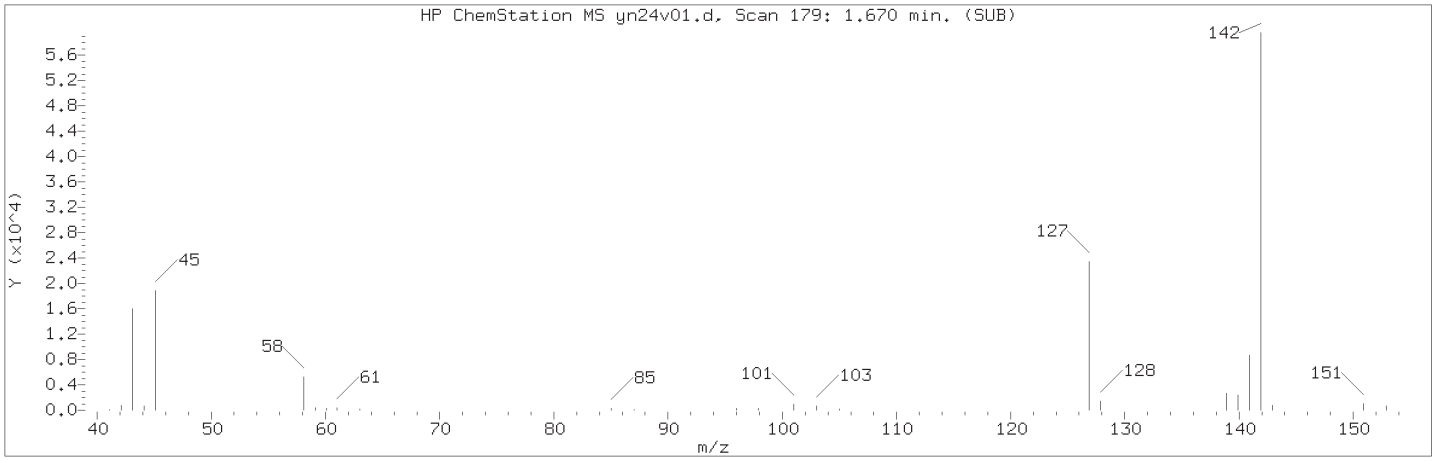
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

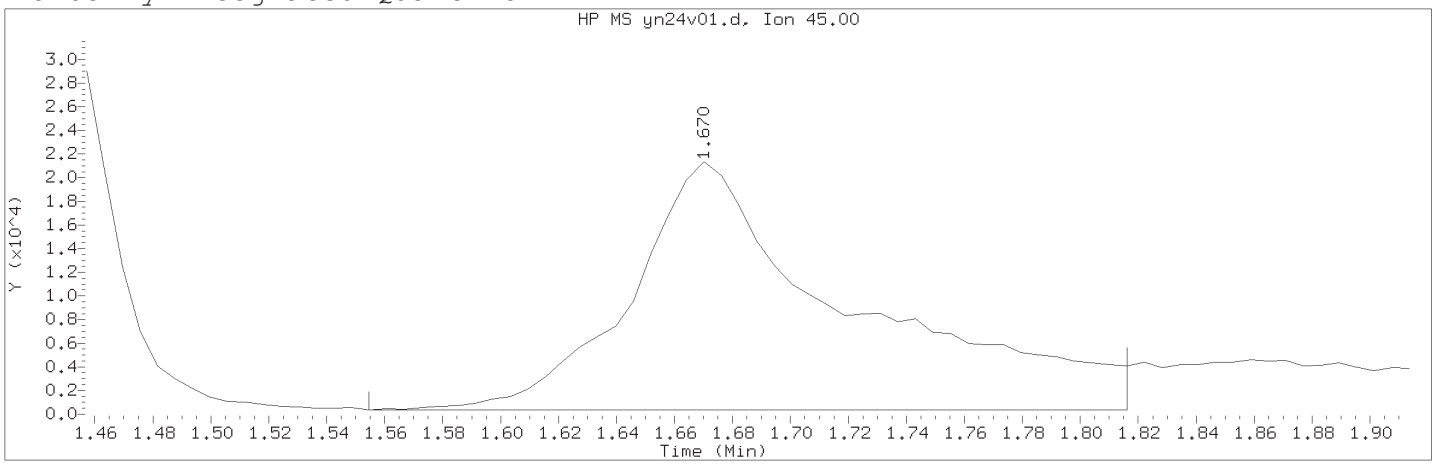
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 78
Retention Time (minutes): 1.056
Quant Ion : 62.00
Area : 150490
On-column Amount (ng) : 19.1721
Integration start scan : 63 Integration stop scan: 117
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri031

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

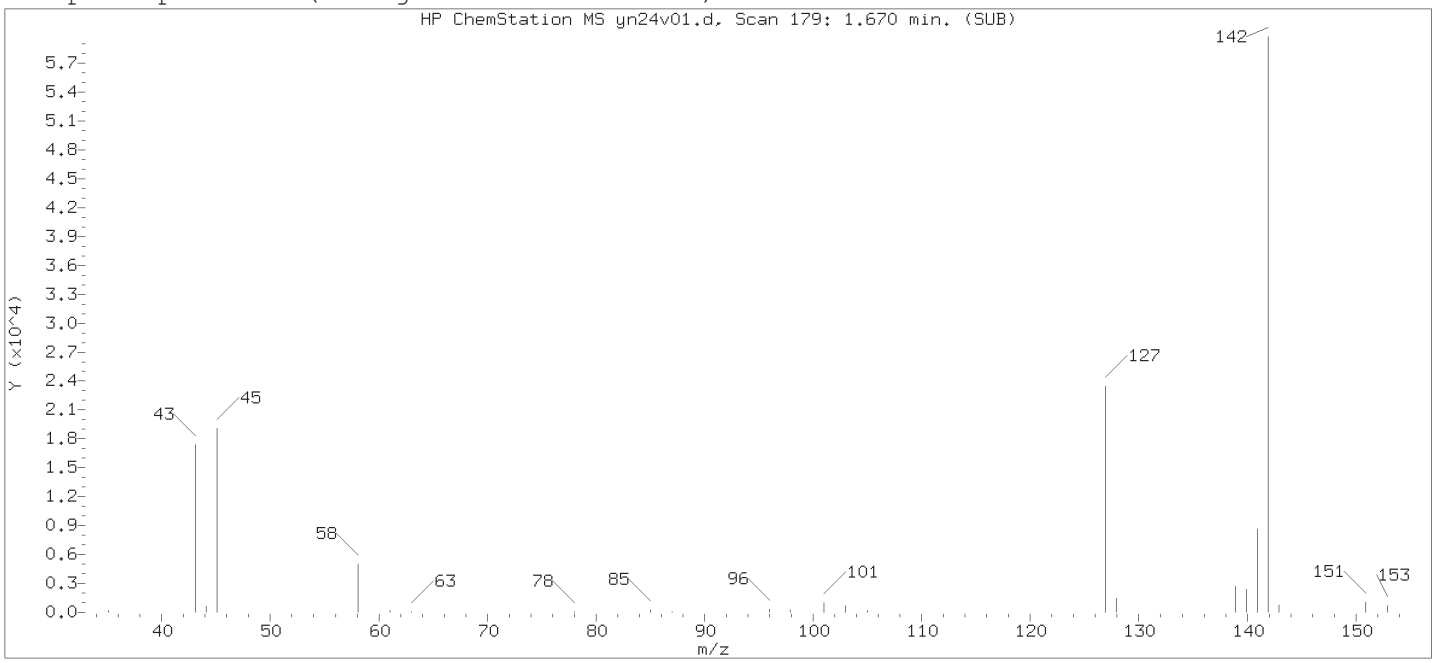
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 179
Retention Time (minutes): 1.670
Quant Ion : 45.00
Area (flag) : 110151M
On-Column Amount (ng) : 156.9164
Integration start scan : 159 Integration stop scan: 202
Y at integration start : 362 Y at integration end: 362

Reason for manual integration: improper integration

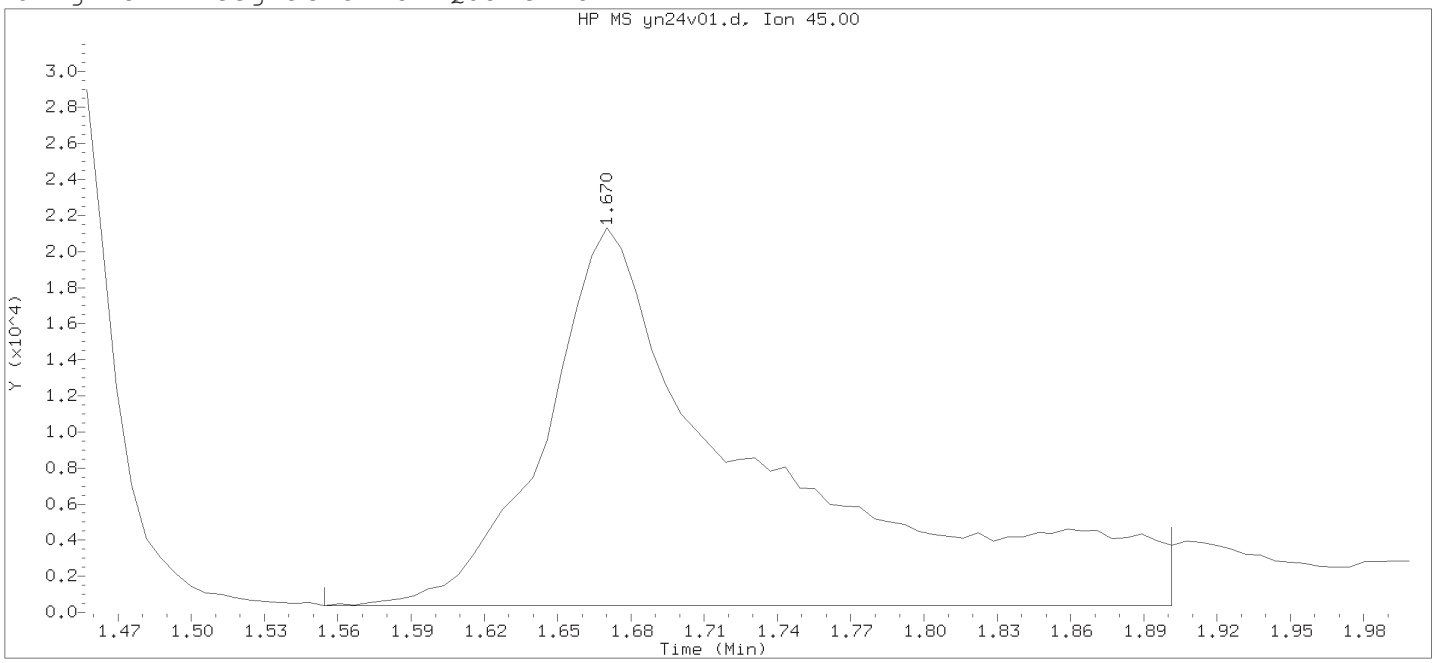
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

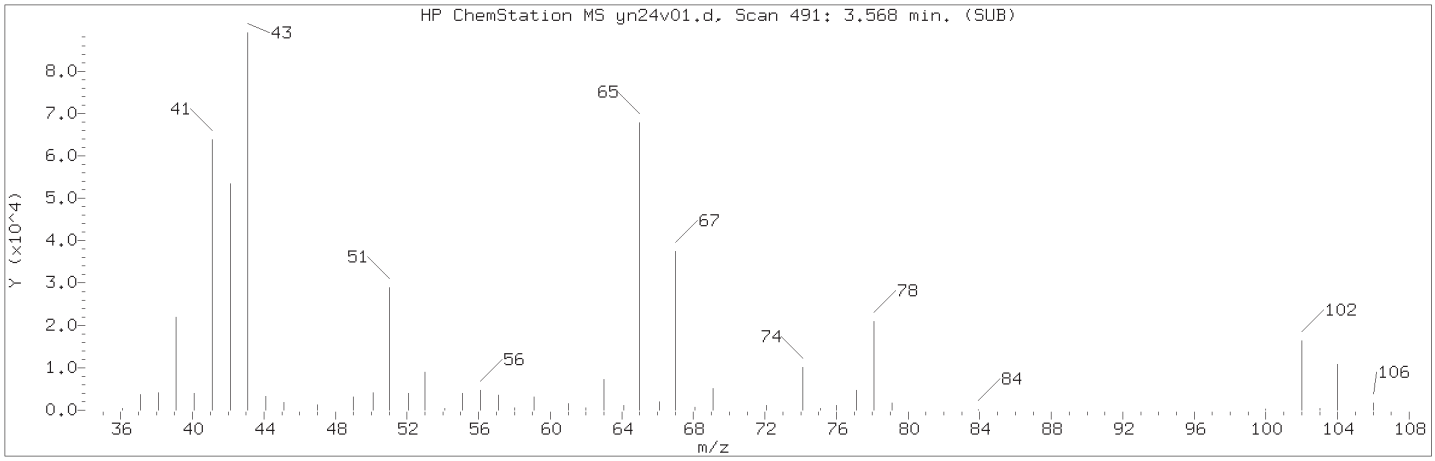
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

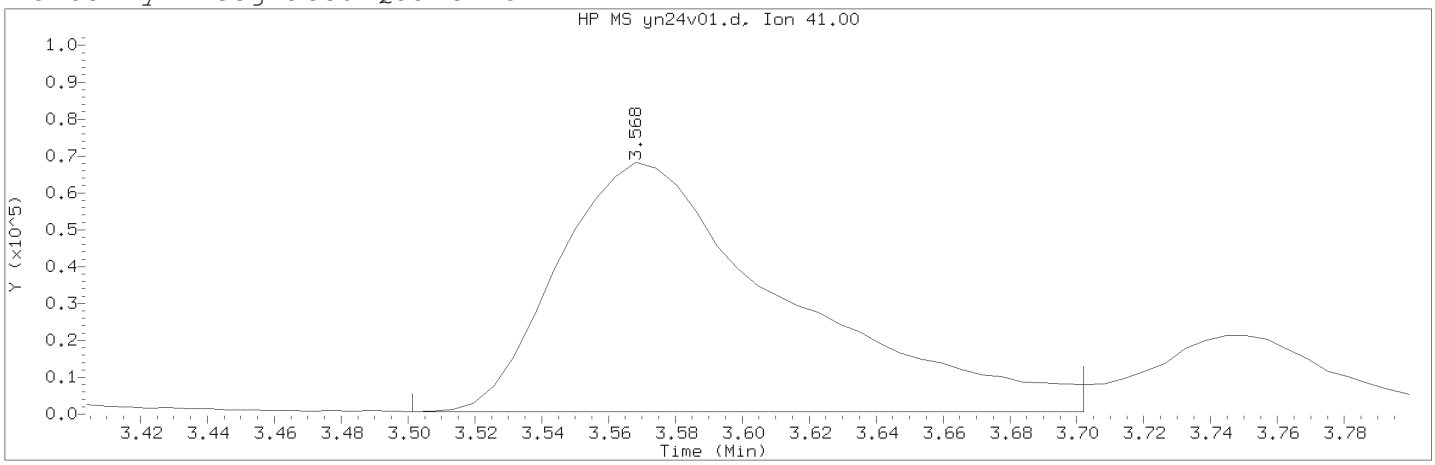
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 179
Retention Time (minutes): 1.670
Quant Ion : 45.00
Area : 129355
On-column Amount (ng) : 184.2737
Integration start scan : 159 Integration stop scan: 216
Y at integration start : 362 Y at integration end: 362

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

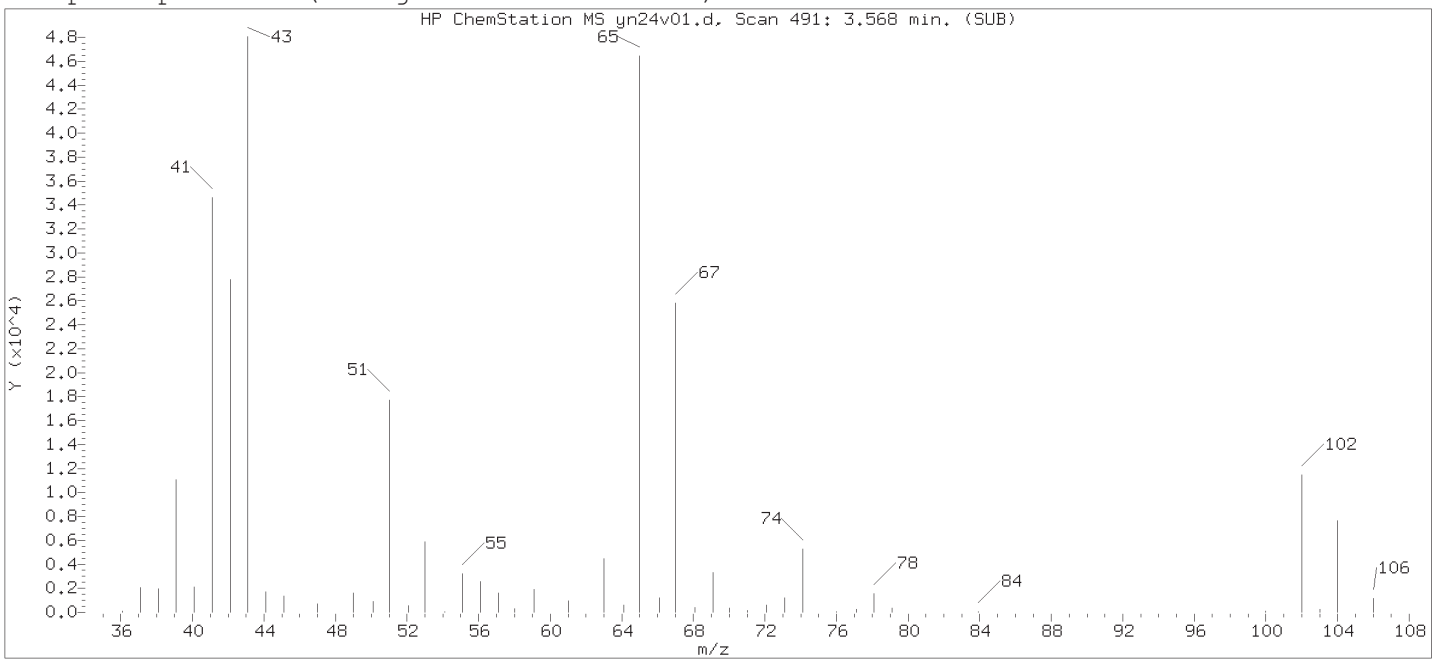
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 491
Retention Time (minutes): 3.568
Quant Ion : 41.00
Area (flag) : 321747M
On-Column Amount (ng) : 571.5773
Integration start scan : 479 Integration stop scan: 512
Y at integration start : 724 Y at integration end: 724

Reason for manual integration: improper integration

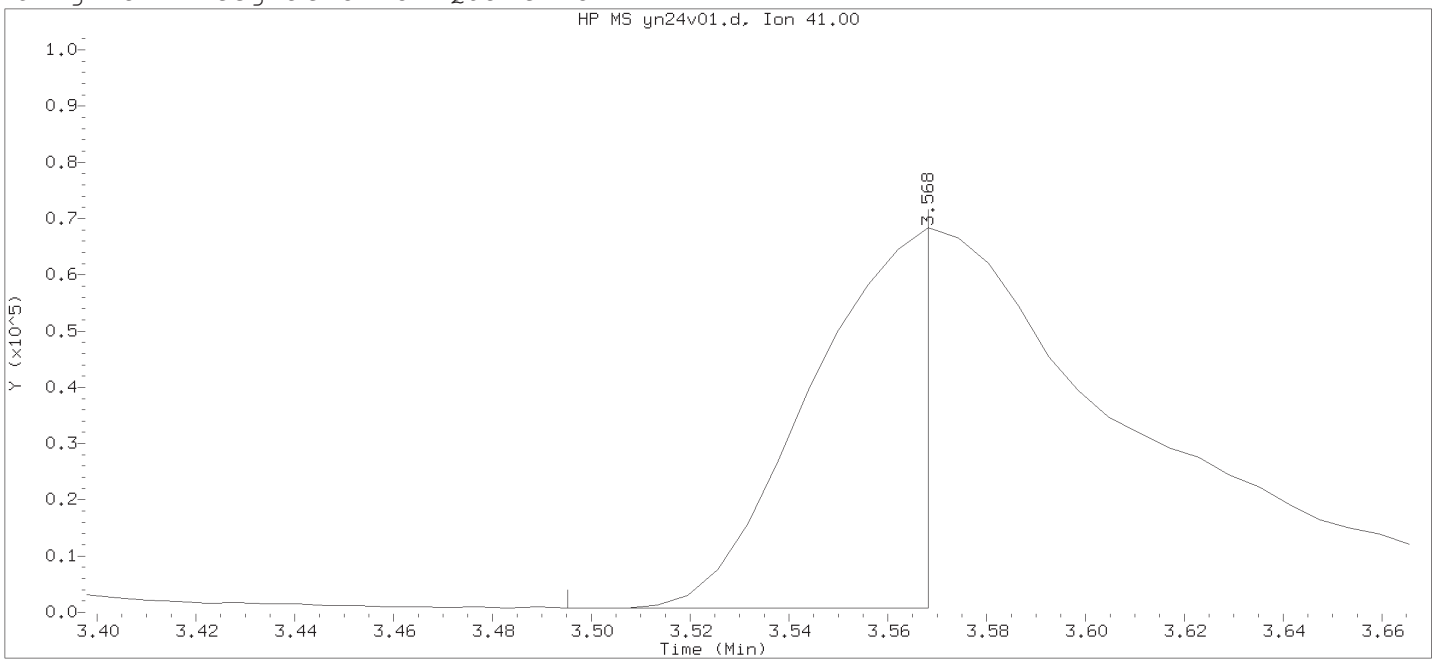
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

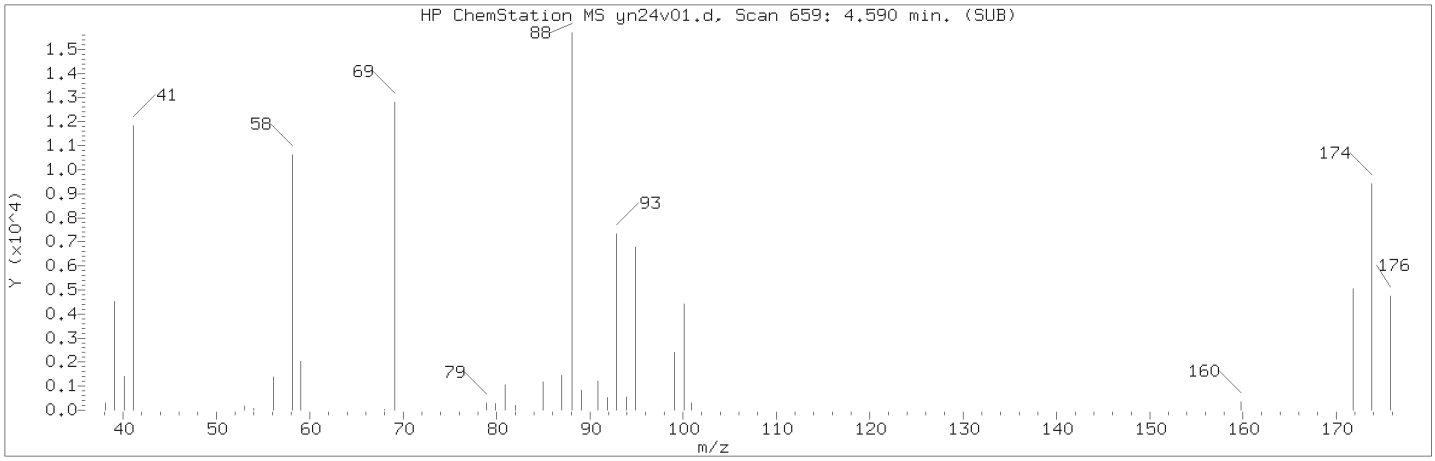
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

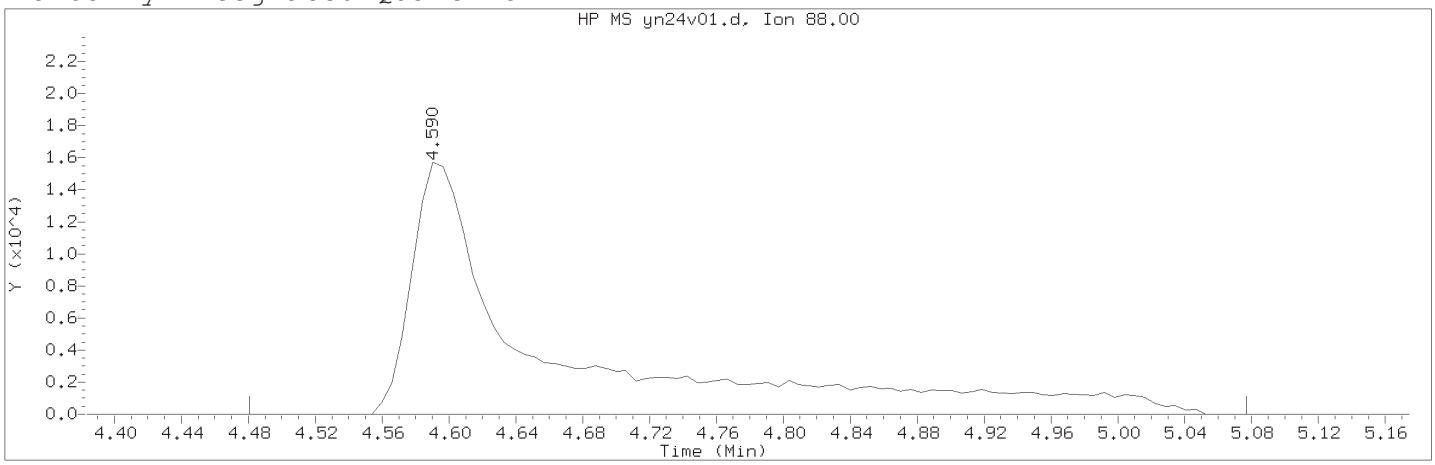
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 491
Retention Time (minutes): 3.568
Quant Ion : 41.00
Area : 107252
On-column Amount (ng) : 190.5325
Integration start scan : 478 Integration stop scan: 490
Y at integration start : 766 Y at integration end: 766

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

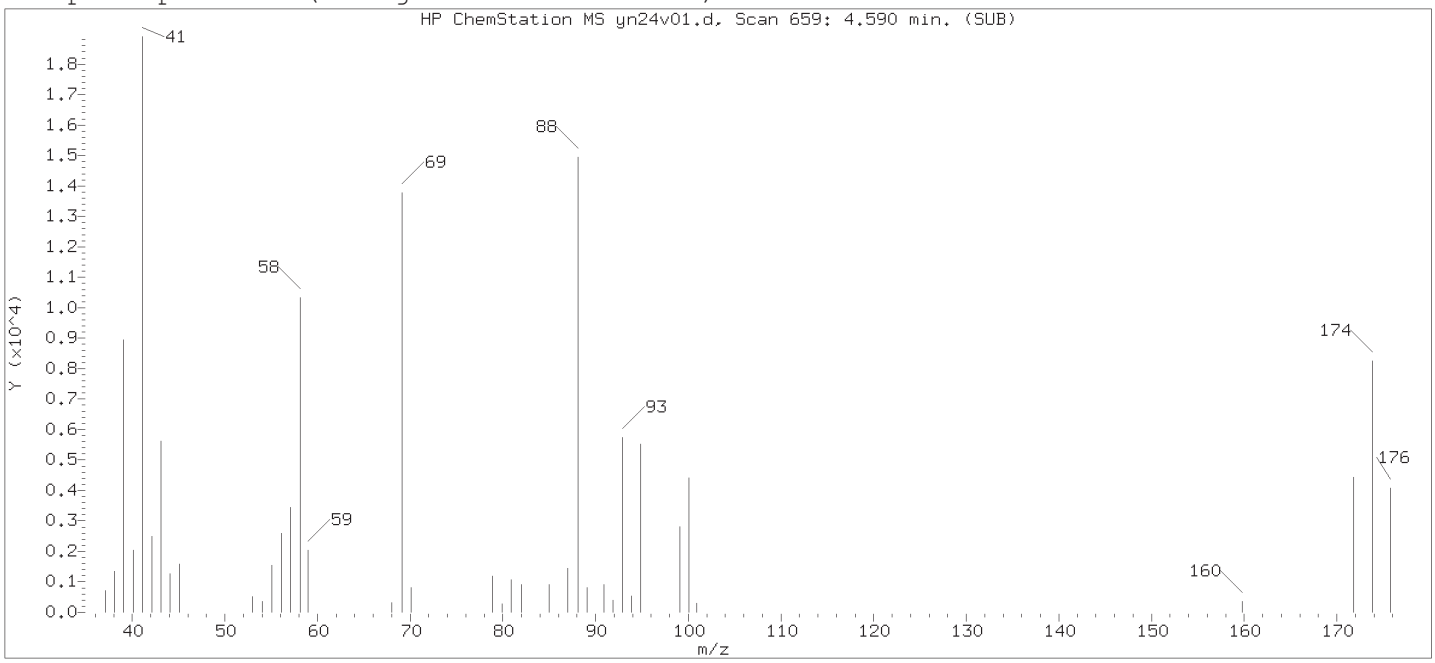
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 659
Retention Time (minutes): 4.590
Quant Ion : 88.00
Area (flag) : 85752M
On-Column Amount (ng) : 656.6015
Integration start scan : 640 Integration stop scan: 738
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

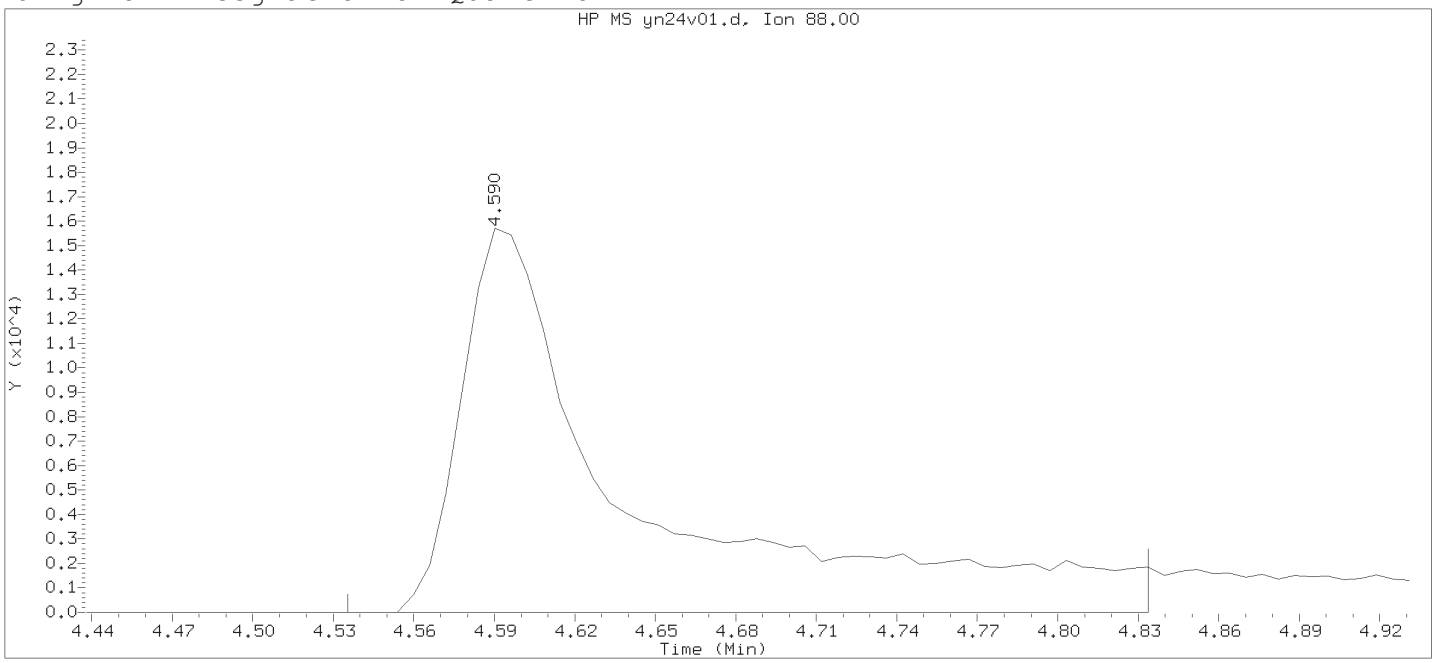
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

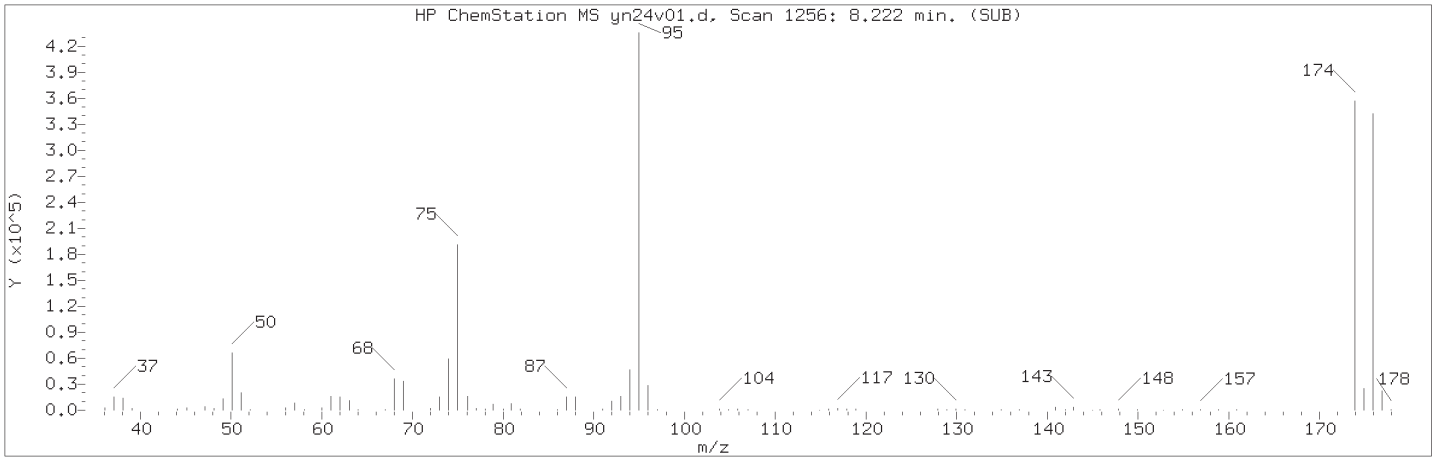
Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

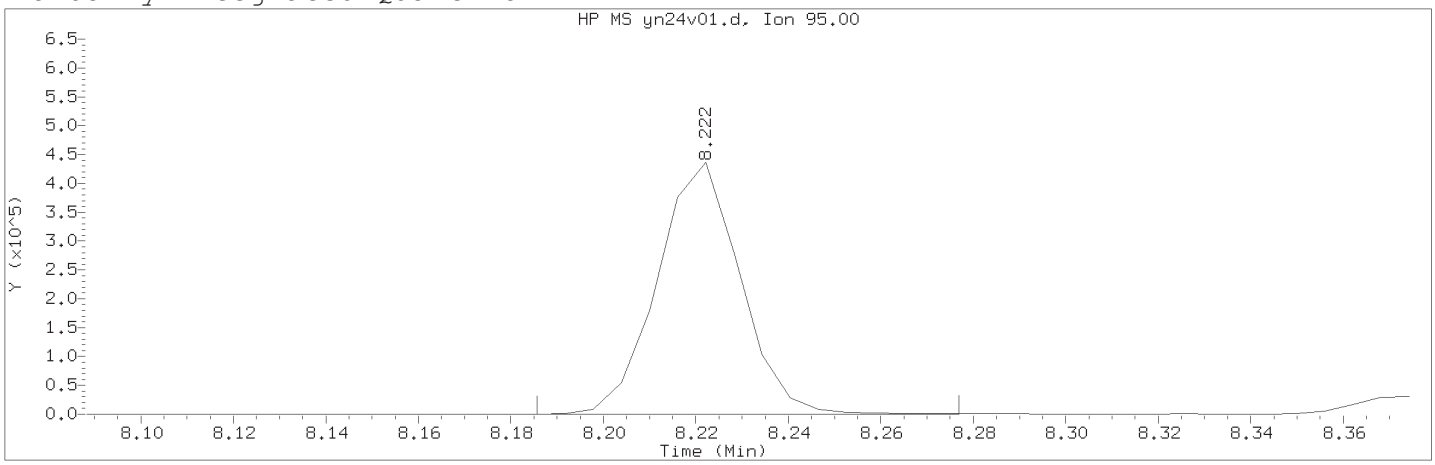
Compound Number : 75
Compound Name : 1,4-Dioxane
Scan Number : 659
Retention Time (minutes): 4.590
Quant Ion : 88.00
Area : 69648
On-column Amount (ng) : 533.2983
Integration start scan : 649 Integration stop scan: 698
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 30-NOV-2015 22:46
Date, time and analyst ID of latest file update: 30-Nov-2015 22:48 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

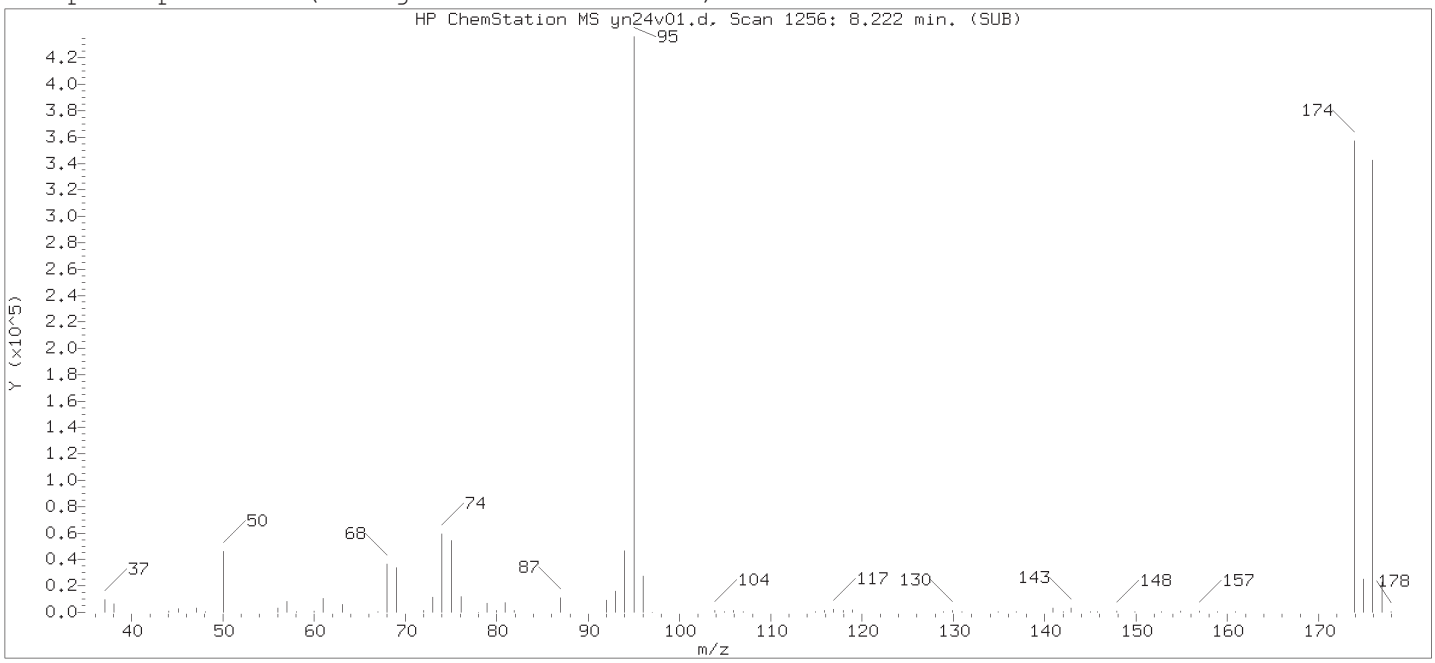
Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area (flag) : 541238M
On-Column Amount (ng) : 50.0104
Integration start scan : 1249 Integration stop scan: 1264
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

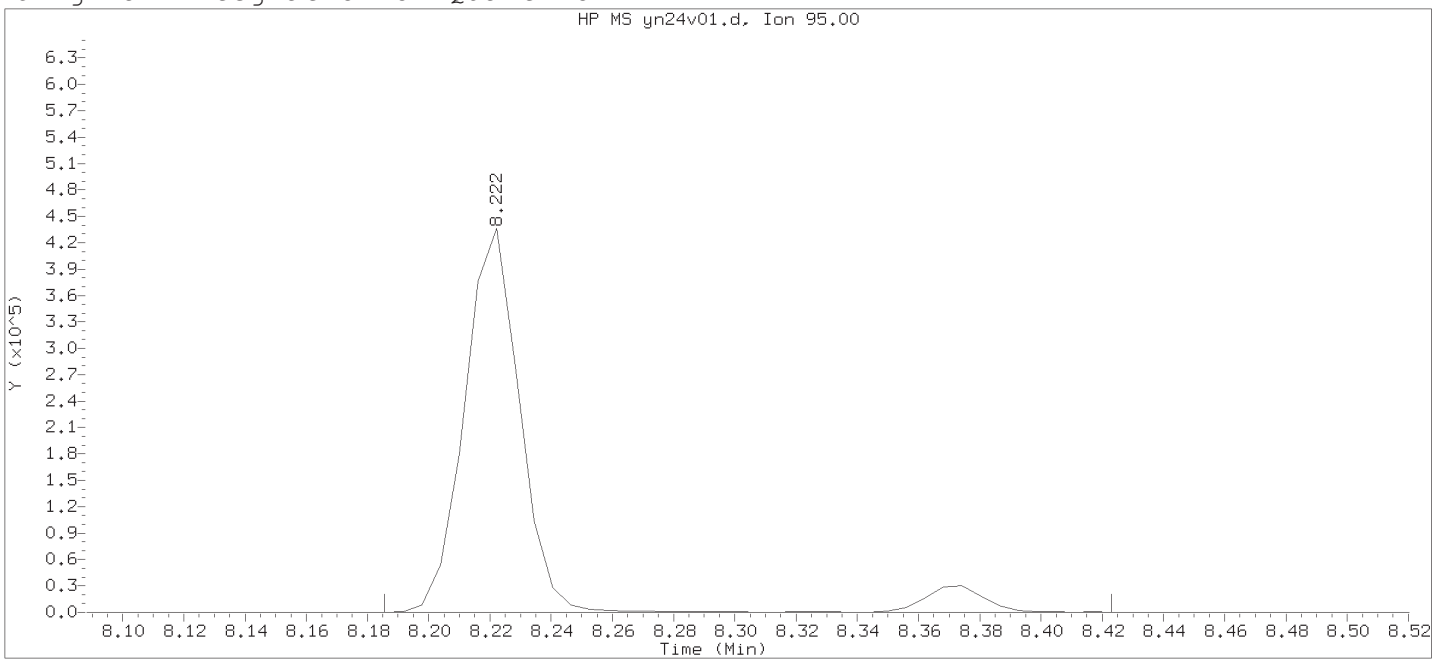
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 12/01/2015 at 10:20.
Parallax ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15nov24a.b/yn24v01.d Instrument ID: HP09355.i
Injection date and time: 24-NOV-2015 03:38 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15nov24a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 24-NOV-2015 05:00
Date, time and analyst ID of latest file update: 24-Nov-2015 05:00 sas00403

Sample Name: YLGICV Lab Sample ID: YLGICV

Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area : 583941
On-column Amount (ng) : 53.9562
Integration start scan : 1249 Integration stop scan: 1288
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 12/01/2015 at 09:55.
Target 3.5 esignature user ID: asneeri01

Data File: /chem2/HP09355.i/15dec16a.b/yd16t01.d

Date : 16-DEC-2015 00:56

Client ID: BFB AUG28-15

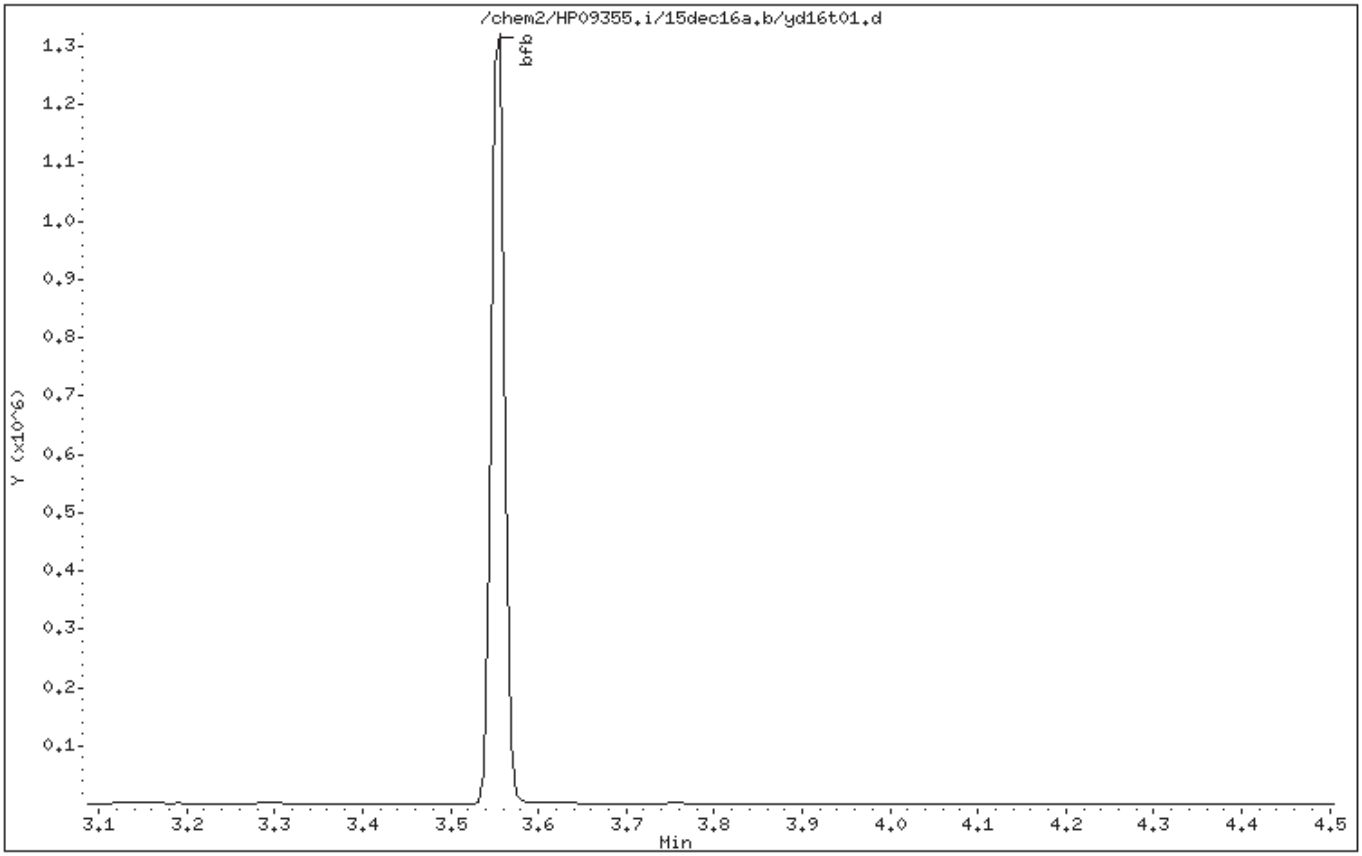
Instrument: HP09355.i

Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

Operator: SAS00403

Column phase: DB-624

Column diameter: 0.18



Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Data File: /chem2/HP09355.i/15dec16a.b/yd16t01.d

Date : 16-DEC-2015 00:56

Client ID: BFB AUG28-15

Instrument: HP09355.i

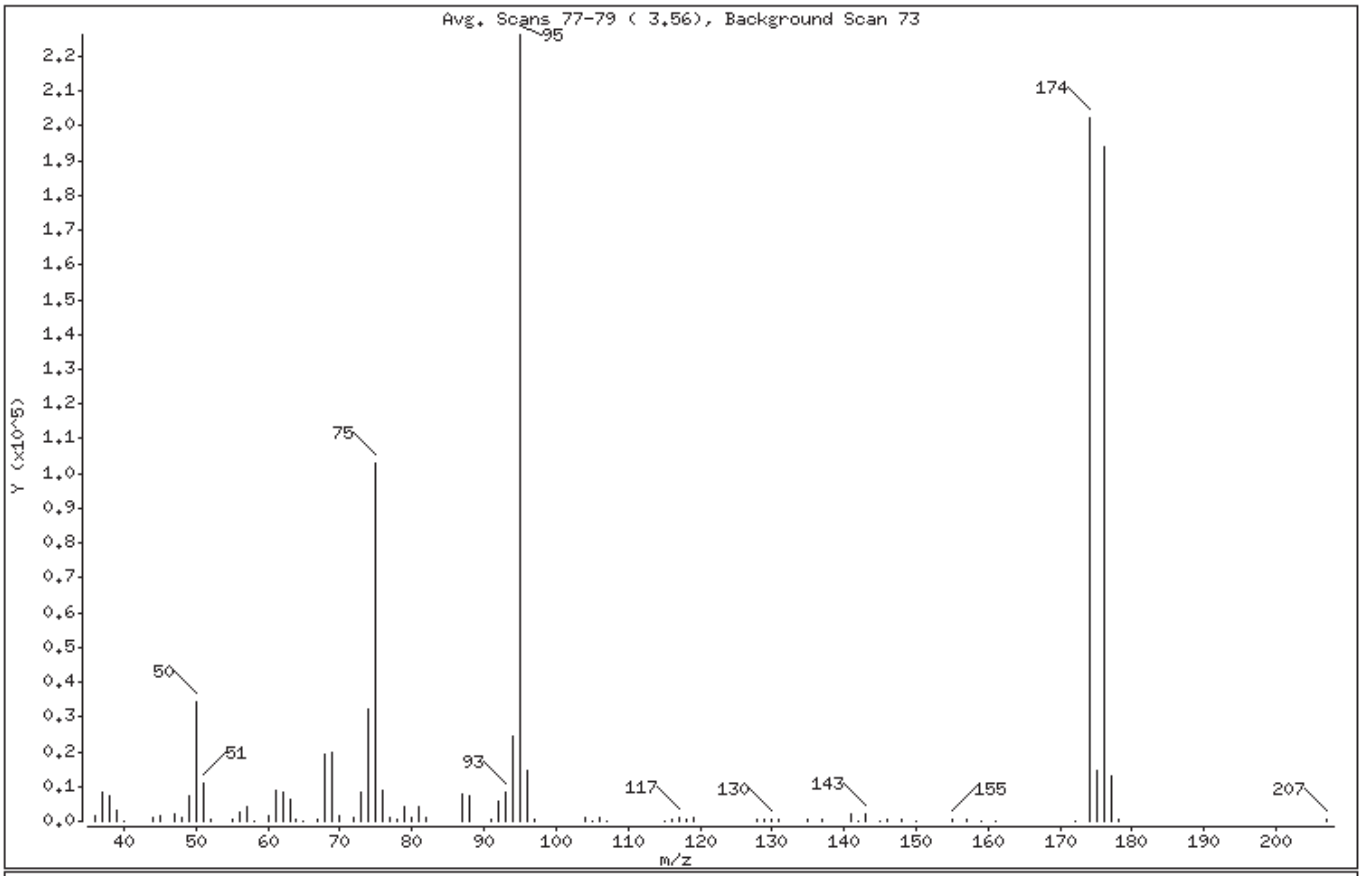
Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

Operator: SAS00403

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.13
75	30.00 - 60.00% of mass 95	45.57
96	5.00 - 9.00% of mass 95	6.52
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	89.39
175	5.00 - 9.00% of mass 174	6.49 (7.26)
176	95.00 - 101.00% of mass 174	85.69 (95.86)
177	5.00 - 9.00% of mass 176	5.67 (6.62)

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Date : 16-DEC-2015 00:56

Client ID: BFB AUG28-15 Instrument: HP09355.i

Sample Info: BFB AUG28-15;50 NG BFB;1;3;;;;;;

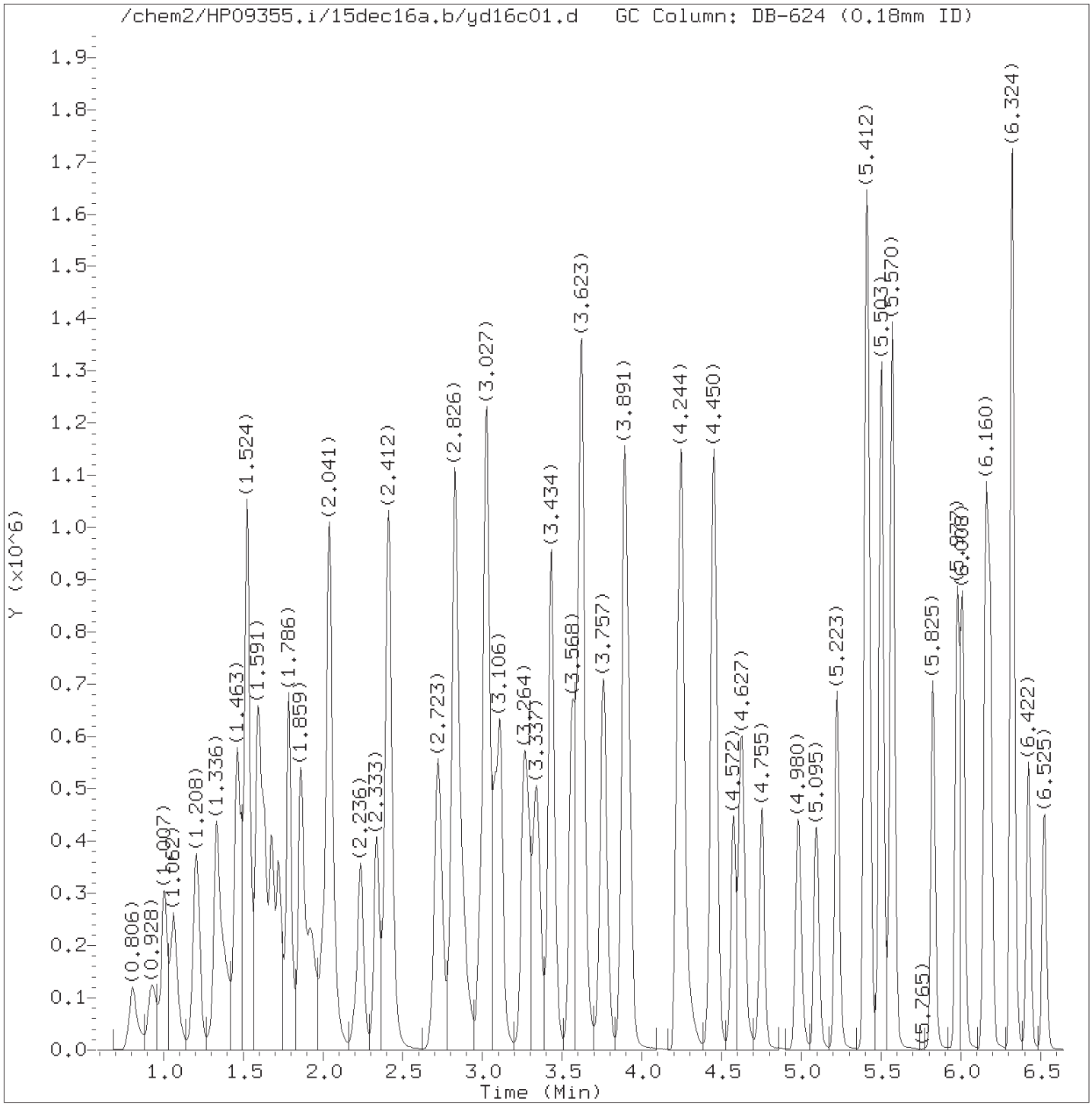
Operator: SAS00403

Column phase: DB-624 Column diameter: 0.18

Data File: yd16t01.d
Spectrum: Avg. Scans 77-79 (3.56), Background Scan 73
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1487	64.00	475	93.00	8552	142.00	193
37.00	8084	65.00	108	94.00	24648	143.00	1991
38.00	7236	67.00	475	95.00	226176	145.00	88
39.00	2962	68.00	19280	96.00	14747	146.00	301
40.00	39	69.00	19824	97.00	392	148.00	546
44.00	827	70.00	1425	104.00	780	150.00	190
45.00	1644	72.00	1068	105.00	231	155.00	643
47.00	2189	73.00	8515	106.00	799	157.00	405
48.00	1000	74.00	32288	107.00	86	159.00	221
49.00	7154	75.00	103096	115.00	96	161.00	222
50.00	34224	76.00	8869	116.00	717	172.00	228
51.00	10994	77.00	1251	117.00	1236	174.00	202176
52.00	395	78.00	743	118.00	683	175.00	14681
55.00	383	79.00	3958	119.00	1011	176.00	193856
56.00	2574	80.00	1274	128.00	701	177.00	12830
57.00	4399	81.00	4113	129.00	315	178.00	369
58.00	84	82.00	874	130.00	755	207.00	281
60.00	1593	87.00	7999	131.00	284		
61.00	8723	88.00	7538	135.00	401		
62.00	8416	91.00	629	137.00	264		
63.00	6278	92.00	5634	141.00	1834		

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

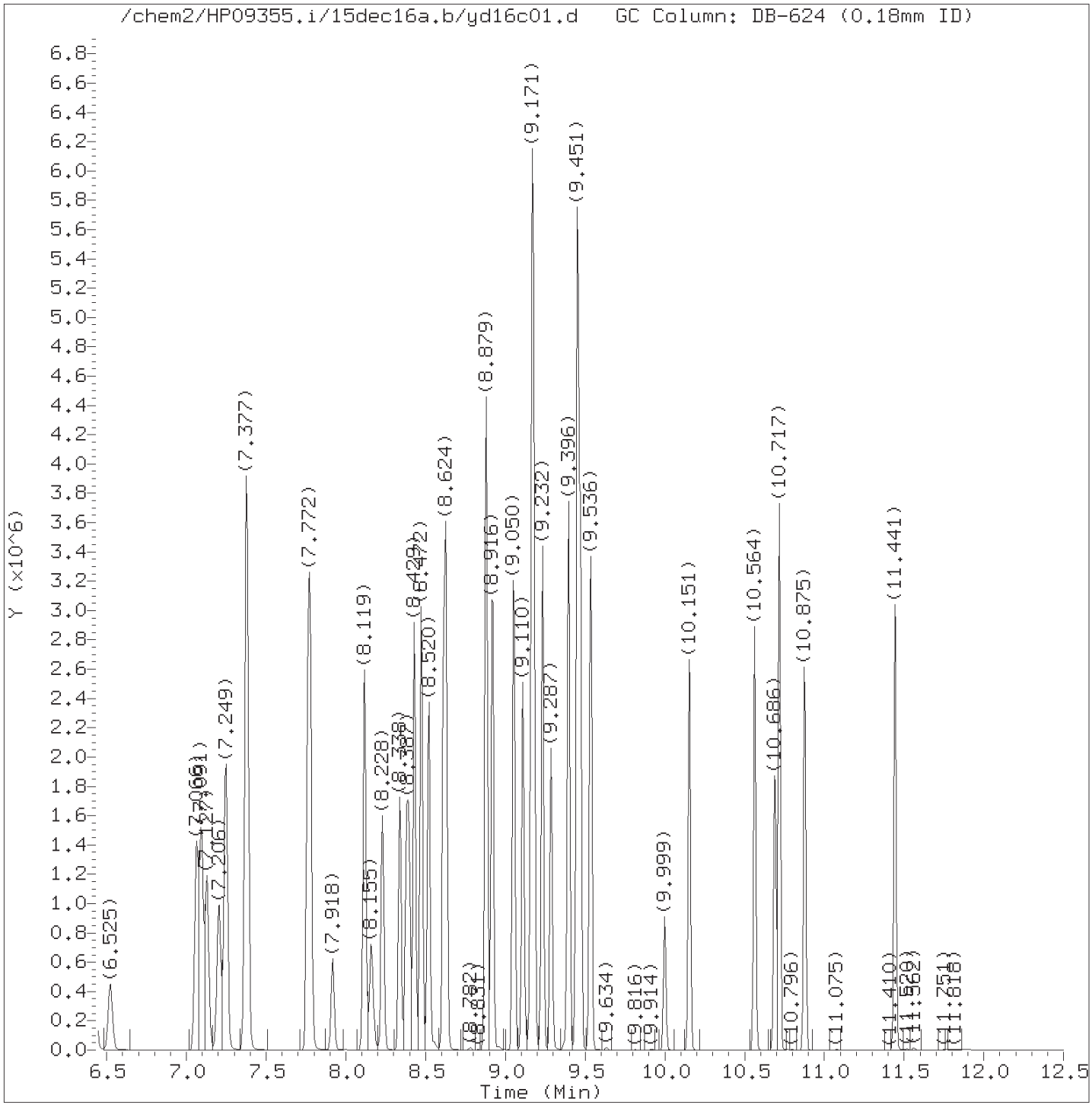
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Stephanie A. Selis
on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Stephanie A. Selis
on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.934	85	329499	53.887
4) Chloromethane	(2)	1.007	50	442708	63.637
6) Vinyl Chloride	(2)	1.062	62	398638	64.654
8) Bromomethane	(2)	1.196	94	260730	61.523
9) Chloroethane	(2)	1.220	64	209445	60.992
10) Dichlorofluoromethane	(2)	1.336	67	461992A	59.530
12) Trichlorofluoromethane	(2)	1.384	101	469467	68.101
14) Ethyl ether	(2)	1.457	59	163630	37.123
15) Freon 123a	(2)	1.488	67	318360M	61.814
16) Acrolein	(1)	1.524	56	1218594	559.376
17) 1,1-Dichloroethene	(2)	1.591	96	224663	55.432
17) 1,1-Dichloroethene	(2)	1.591	63	113353	56.965
18) Acetone	(1)	1.603	58	114015	102.984
19) Freon 113	(2)	1.634	101	213295	54.518
21) 2-Propanol	(1)	1.676	45	247325	376.389
22) Methyl Iodide	(2)	1.682	142	420590	54.517
23) Carbon Disulfide	(2)	1.725	76	504093	32.438
25) Allyl Chloride	(2)	1.786	41	300080	50.565
27) Methyl Acetate	(2)	1.792	43	293003	42.882
28) Methylene Chloride	(2)	1.859	84	239595	50.166
29)*t-Butyl alcohol-d10	(1)	1.877	65	359641	250.000
30) t-Butyl alcohol	(1)	1.926	59	475185	297.750
31) Acrylonitrile	(2)	2.005	53	180407	45.377
32) trans-1,2-Dichloroethene	(2)	2.035	96	239868	51.500
33) Methyl Tertiary Butyl Ether	(2)	2.047	73	811022	49.943
34) n-Hexane	(2)	2.236	57	272857	35.183
36) 1,1-Dichloroethane	(2)	2.333	63	495605	52.309
38) di-Isopropyl ether	(2)	2.406	45	843633	46.442
39) 2-Chloro-1,3-butadiene	(2)	2.412	53	398336	52.163
40) Ethyl t-butyl ether	(2)	2.723	59	854177	48.626
42) cis-1,2-Dichloroethene	(2)	2.826	96	307727	53.819
45) 2,2-Dichloropropane	(2)	2.832	77	353018	52.229
44) 2-Butanone	(2)	2.832	43	700905	101.543
43) 1,2-Dichloroethene (Total)	(2)		96	547595	105.319
47) Propionitrile	(1)	2.881	54	435708	239.116
48) Methacrylonitrile	(2)	3.021	67	504158	120.868
49) Bromochloromethane	(2)	3.033	128	163263	55.502
50) Tetrahydrofuran	(1)	3.082	71	190760	101.147

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Stephanie A. Selis
on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	3.112	83	491815	56.410
52)$Dibromofluoromethane	(2)	3.258	113	274758	52.073
52)$Dibromofluoromethane	(2)	3.258	111	279680	51.758
53) 1,1,1-Trichloroethane	(2)	3.282	97	414351	50.173
54) Cyclohexane	(2)	3.337	56	400906	45.117
54) Cyclohexane	(2)	3.337	84	355679	41.887
54) Cyclohexane	(2)	3.337	69	126206	46.515
55) 1,1-Dichloropropene	(2)	3.428	75	395511	53.868
56) Carbon Tetrachloride	(2)	3.434	117	365135	59.960
57)$1,2-Dichloroethane-d4	(2)	3.562	102	72869	53.263
57)$1,2-Dichloroethane-d4	(2)	3.556	65	351945	55.178
57)$1,2-Dichloroethane-d4	(2)	3.562	104	43696	50.211
58) Isobutyl Alcohol	(1)	3.581	41	393745	747.248
60) Benzene	(2)	3.617	78	1127990	51.709
61) 1,2-Dichloroethane	(2)	3.629	62	425018	55.034
61) 1,2-Dichloroethane	(2)	3.629	98	38385	55.844
65) t-Amyl methyl ether	(2)	3.763	73	839088	50.448
66)*Fluorobenzene	(2)	3.891	96	1124600	50.000
67) n-Heptane	(2)	3.915	43	345874	38.128
69) n-Butanol	(1)	4.225	56	694864	1502.030
71) Trichloroethene	(2)	4.250	95	307795	55.439
72) Methylcyclohexane	(2)	4.444	83	433875	49.153
72) Methylcyclohexane	(2)	4.444	98	199214	50.261
73) 1,2-Dichloropropane	(2)	4.463	63	291439	51.413
74) Dibromomethane	(2)	4.572	93	204798	56.045
75) 1,4-Dioxane	(1)	4.603	88	83123	679.936
76) Methyl Methacrylate	(2)	4.627	69	329677	51.090
78) Bromodichloromethane	(2)	4.755	83	373175	60.241
79) 2-Nitropropane	(2)	4.980	41	387328	132.930
80) 2-Chloroethyl Vinyl Ether	(2)	5.089	63	254339M	49.386
81) cis-1,3-Dichloropropene	(2)	5.223	75	480098	56.099
82) 4-Methyl-2-pentanone	(2)	5.412	43	1494877	114.545
83)$Toluene-d8	(3)	5.503	98	1131497	48.009
83)$Toluene-d8	(3)	5.503	100	747742	48.032
88) Toluene	(3)	5.570	92	745725	51.418
89) trans-1,3-Dichloropropene	(3)	5.825	75	459296	56.335
90) 1,3-Dichloropropene (total)	(3)		100	939394	112.434
91) Ethyl Methacrylate	(3)	5.977	69	530156	51.379

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) 1,1,2-Trichloroethane	(3)	6.008	97	311269	53.716
93) Tetrachloroethene	(3)	6.160	166	349937	57.556
94) 1,3-Dichloropropane	(3)	6.184	76	517921	52.165
96) 2-Hexanone	(3)	6.324	43	1287118	110.888
97) Dibromochloromethane	(3)	6.422	129	332049	66.424
99) 1,2-Dibromoethane	(3)	6.525	107	352170	55.845
100)*Chlorobenzene-d5	(3)	7.066	117	874937	50.000
102) Chlorobenzene	(3)	7.097	112	897731	54.325
101) 1-Chlorohexane	(3)	7.127	91	406072	52.261
103) 1,1,1,2-Tetrachloroethane	(3)	7.206	131	308183	59.741
104) Ethylbenzene	(3)	7.249	91	1487131	54.501
106) m+p-Xylene	(3)	7.377	106	1180584	109.700
107) o-Xylene	(3)	7.766	106	580464	54.157
109) Styrene	(3)	7.778	104	988673	54.600
108) Xylene (Total)	(3)		106	1761048	163.857
110) Bromoform	(3)	7.918	173	260593	61.424
111) Isopropylbenzene	(3)	8.119	105	1487496	54.177
112) Cyclohexanone	(1)	8.155	55	281858	417.554
114)$4-Bromofluorobenzene	(3)	8.228	95	438968	49.658
114)$4-Bromofluorobenzene	(3)	8.228	174	381738	53.733
115) Bromobenzene	(4)	8.338	156	420996	56.646
116) 1,1,2,2-Tetrachloroethane	(4)	8.380	83	540159	52.359
117) 1,2,3-Trichloropropane	(4)	8.399	110	176437	53.549
118) trans-1,4-Dichloro-2-butene	(4)	8.429	53	432557	126.815
119) n-Propylbenzene	(4)	8.472	91	1762857	52.165
120) 2-Chlorotoluene	(4)	8.520	126	384208	53.701
121) 4-Chlorotoluene	(4)	8.612	126	408292	54.305
122) 1,3,5-Trimethylbenzene	(4)	8.630	105	1321572	53.038
125) Pentachloroethane	(4)	8.879	167	234383	57.743
124) tert-Butylbenzene	(4)	8.879	134	298901	53.564
126) 1,2,4-Trimethylbenzene	(4)	8.922	105	1376798M	54.022
127) sec-Butylbenzene	(4)	9.050	105	1654243	53.054
129) 1,3-Dichlorobenzene	(4)	9.110	146	805989	56.394
131)*1,4-Dichlorobenzene-d4	(4)	9.165	152	479722	50.000
130) p-Isopropyltoluene	(4)	9.171	119	1508619M	54.205
133) 1,4-Dichlorobenzene	(4)	9.177	146	819516	56.198
134) 1,2,3-Trimethylbenzene	(4)	9.232	105	1381151	52.606
135) Benzyl Chloride	(4)	9.287	91	1028802	55.212

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
136) 1,3-Diethylbenzene	(4)	9.396	119	891093	53.092
138) 1,2-Dichlorobenzene	(4)	9.451	146	785382	56.475
137) 1,4-Diethylbenzene	(4)	9.457	119	931180	53.235
139) n-Butylbenzene	(4)	9.469	92	730578	52.216
140) 1,2-Diethylbenzene	(4)	9.536	119	735521	52.734
141) Diethylbenzene (total)	(4)		100	2557794	159.062
142) 1,2-Dibromo-3-chloropropane	(4)	9.999	75	146493	53.960
144) 1,3,5-Trichlorobenzene	(4)	10.157	180	627734	57.471
146) 1,2,4-Trichlorobenzene	(4)	10.564	180	603518	57.380
147) Hexachlorobutadiene	(4)	10.692	225	265885	55.069
148) Naphthalene	(4)	10.717	128	1967439	53.796
149) 1,2,3-Trichlorobenzene	(4)	10.875	180	565618	56.461
150) 2-Methylnaphthalene	(4)	11.441	142	1061623	47.984

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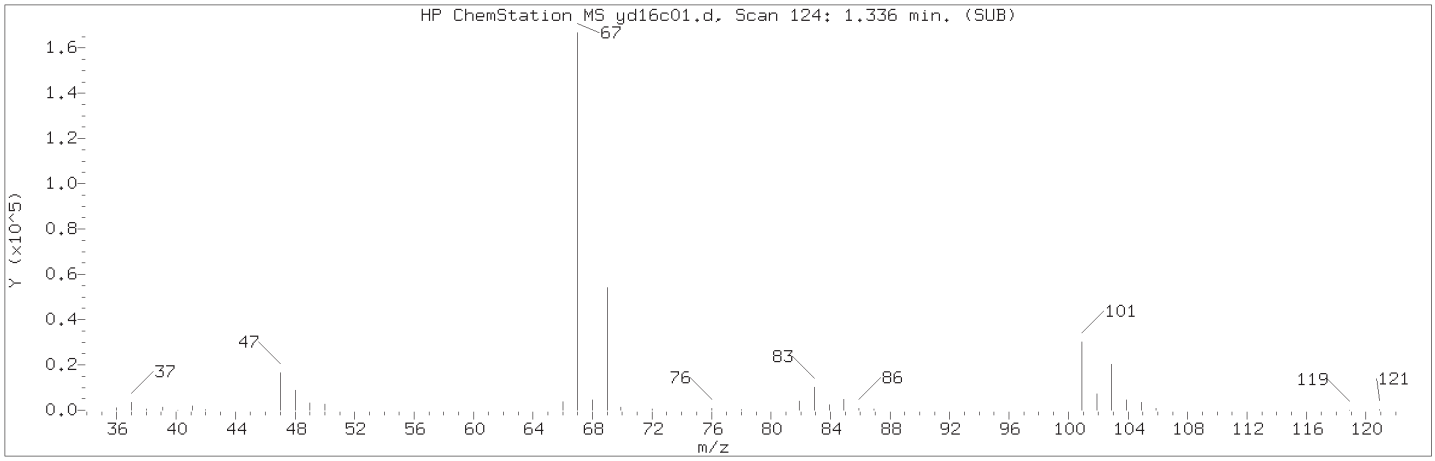
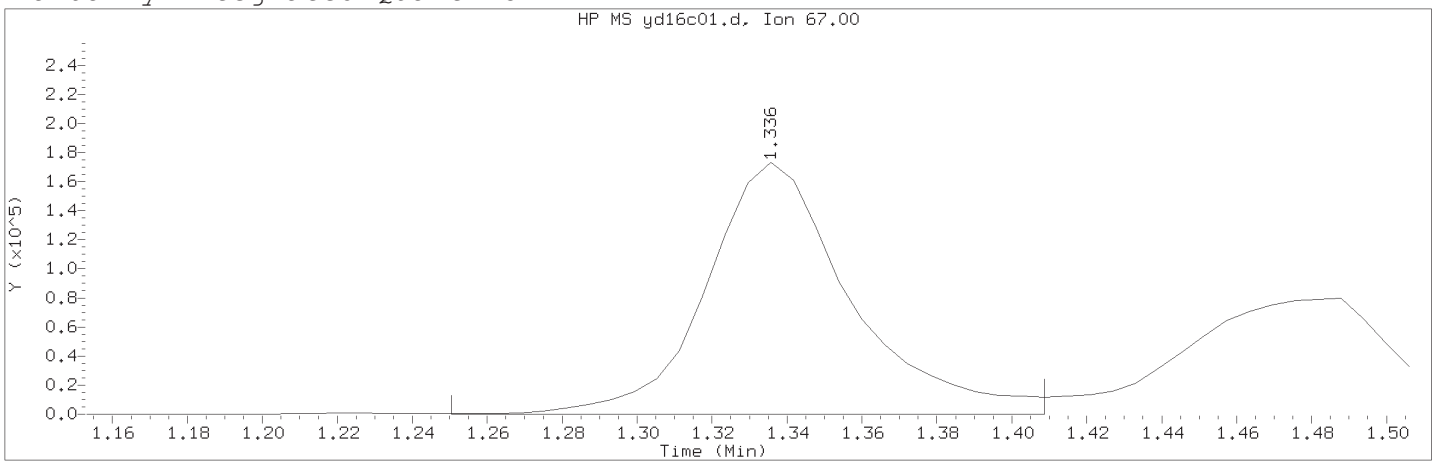
on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

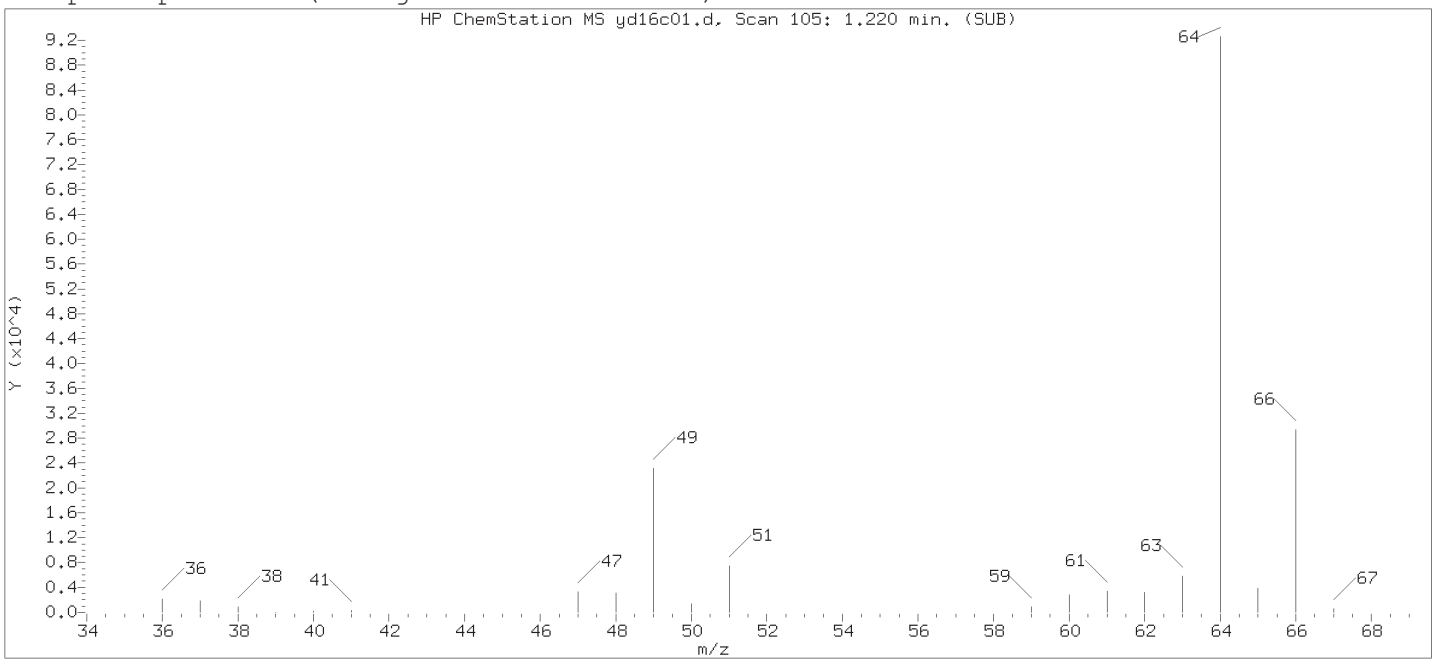
Compound Number : 10
Compound Name : Dichlorofluoromethane
Scan Number : 124
Retention Time (minutes): 1.336
Quant Ion : 67.00
Area (flag) : 461992A
On-Column Amount (ng) : 59.5301
Integration start scan : 109 Integration stop scan: 135
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

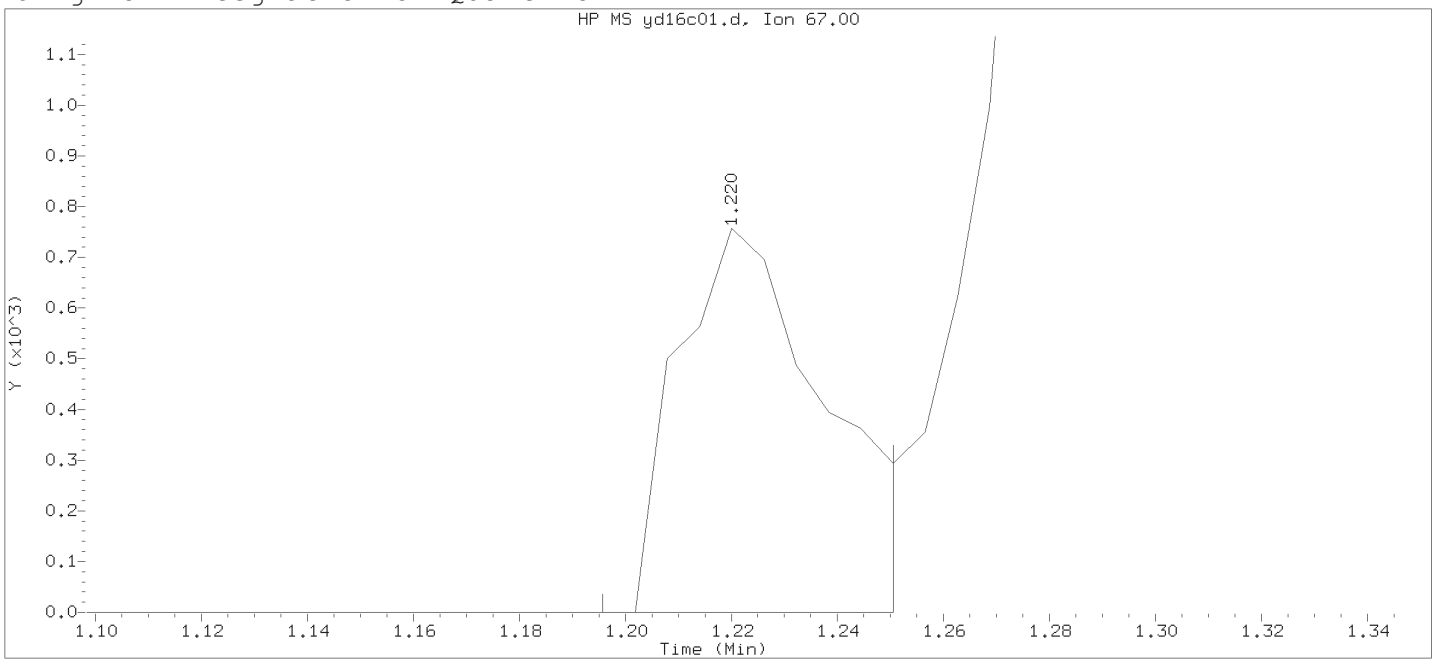
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

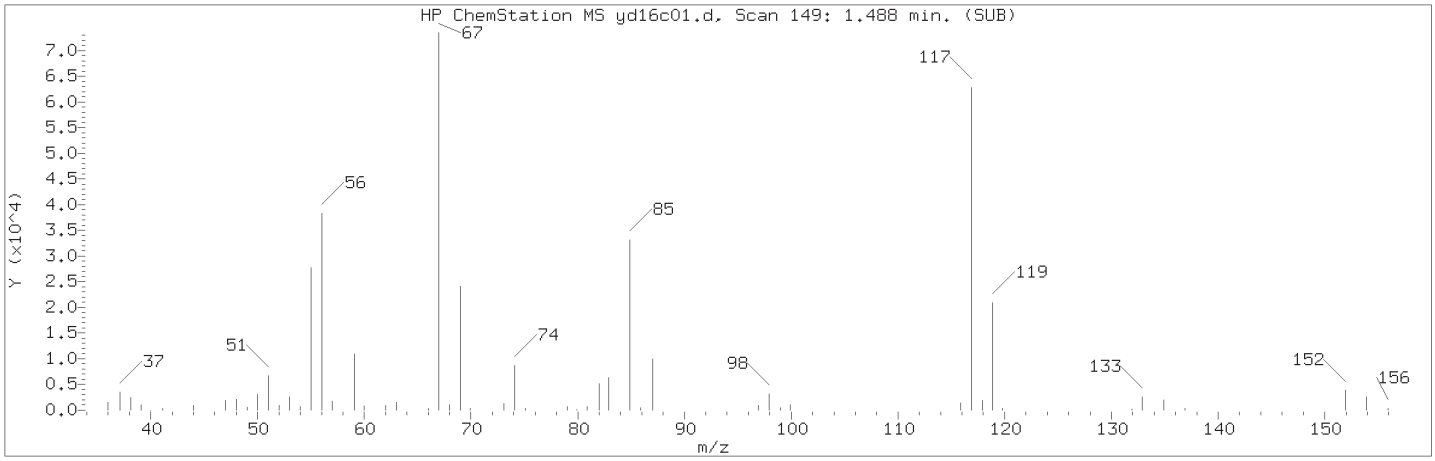
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 16-DEC-2015 01:51
Date, time and analyst ID of latest file update: 16-Dec-2015 01:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

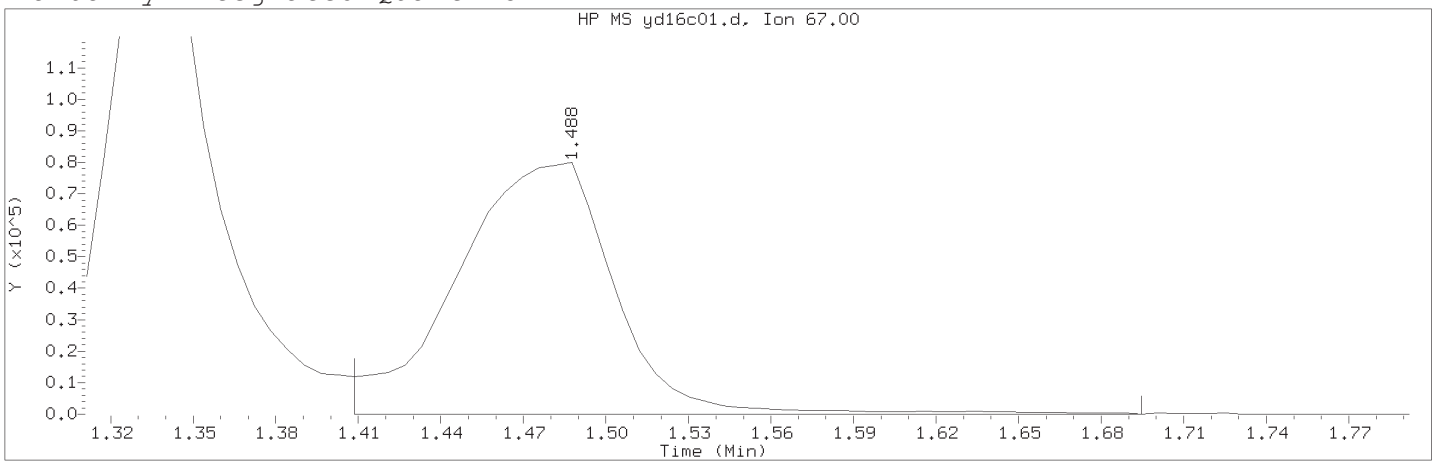
Compound Number : 10
Compound Name : Dichlorofluoromethane
Scan Number : 105
Retention Time (minutes): 1.220
Quant Ion : 67.00
Area : 1426
On-column Amount (ng) : 0.1839
Integration start scan : 100 Integration stop scan: 109
Y at integration start : 0 Y at integration end: 0

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: SAS00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

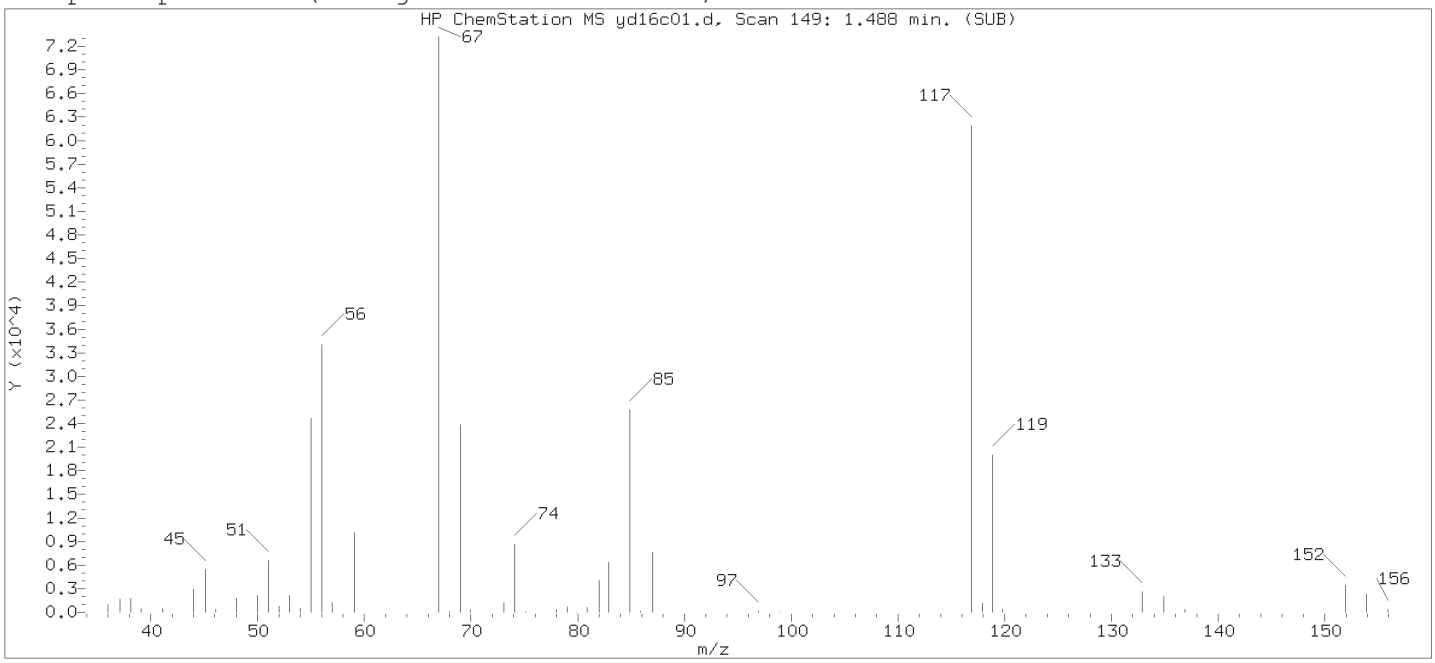
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 149
Retention Time (minutes): 1.488
Quant Ion : 67.00
Area (flag) : 318360M
On-Column Amount (ng) : 61.8136
Integration start scan : 135 Integration stop scan: 182
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

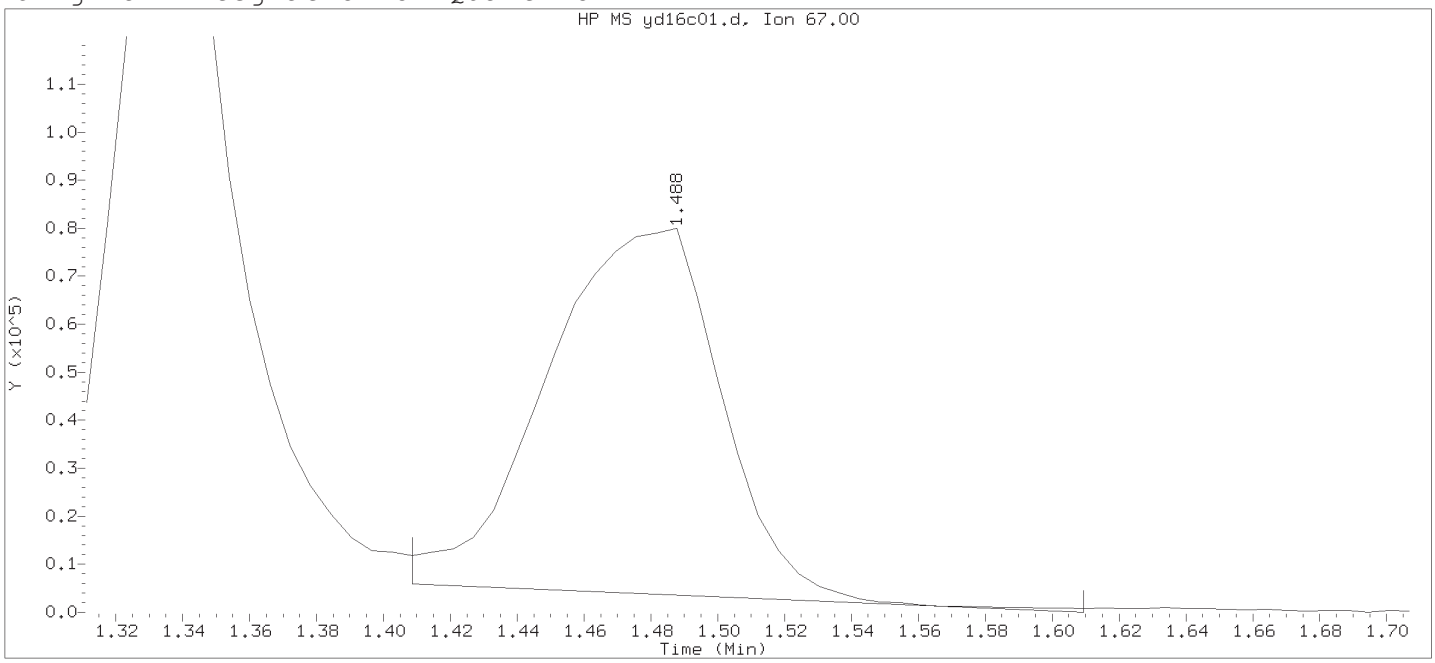
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

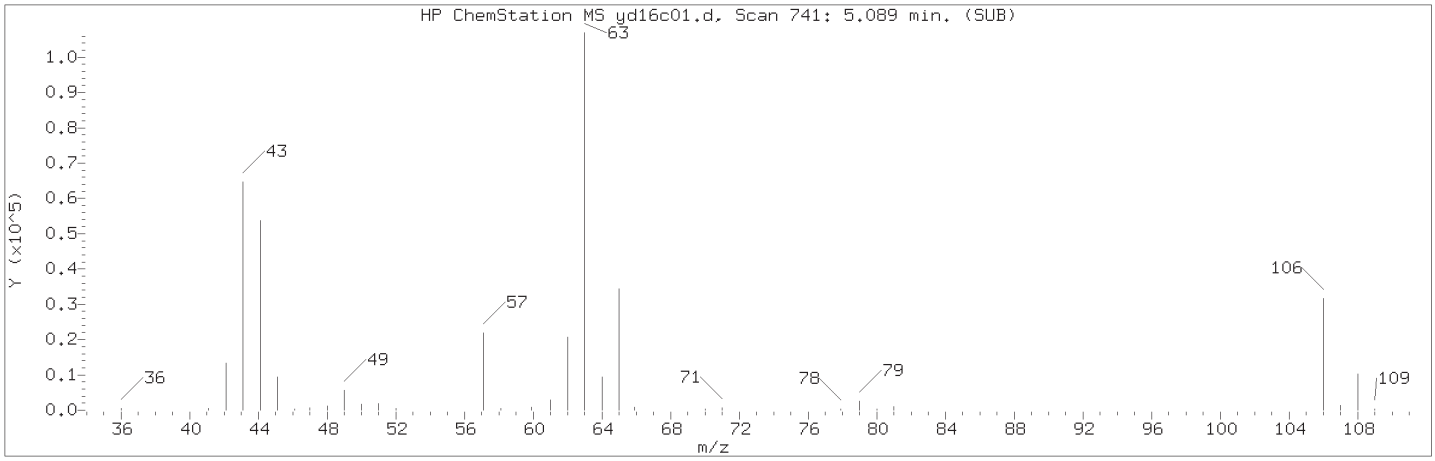
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 16-DEC-2015 01:51
Date, time and analyst ID of latest file update: 16-Dec-2015 01:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

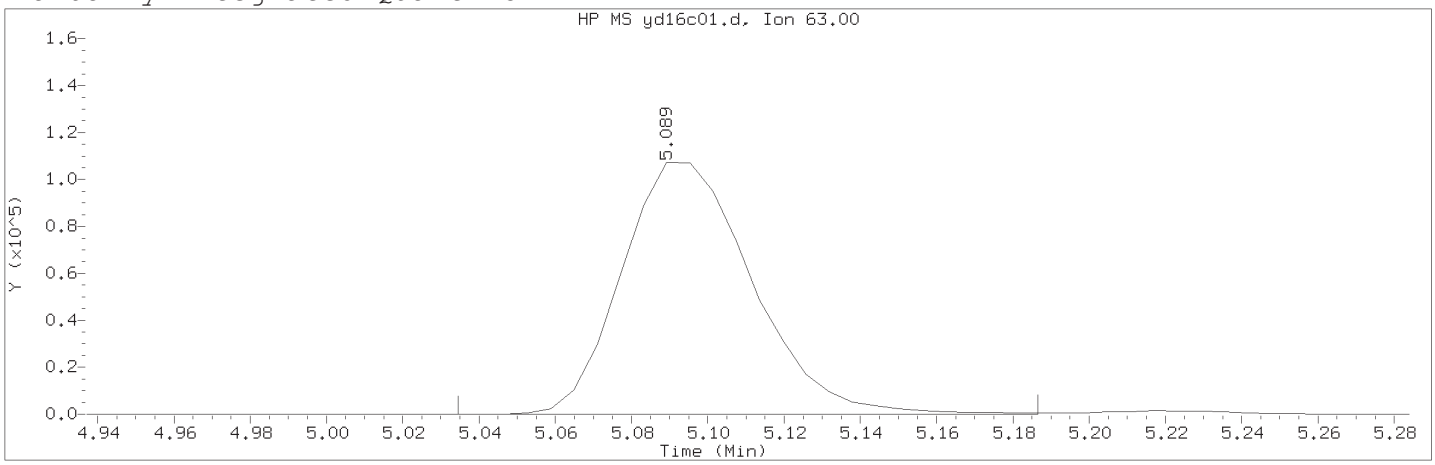
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 149
Retention Time (minutes): 1.488
Quant Ion : 67.00
Area : 277521
On-column Amount (ng) : 53.8842
Integration start scan : 135 Integration stop scan: 168
Y at integration start : 5918 Y at integration end: 0

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: SAS00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

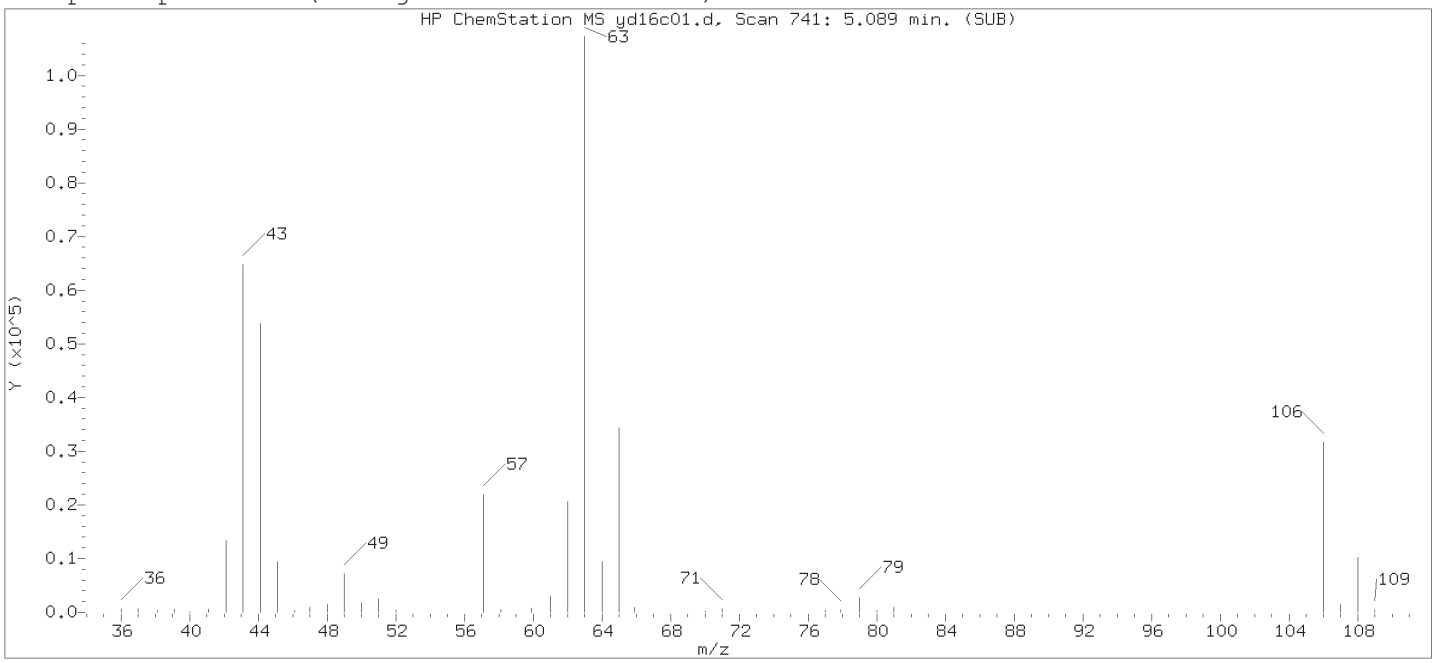
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 741
Retention Time (minutes): 5.089
Quant Ion : 63.00
Area (flag) : 254339M
On-Column Amount (ng) : 49.3865
Integration start scan : 731 Integration stop scan: 756
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

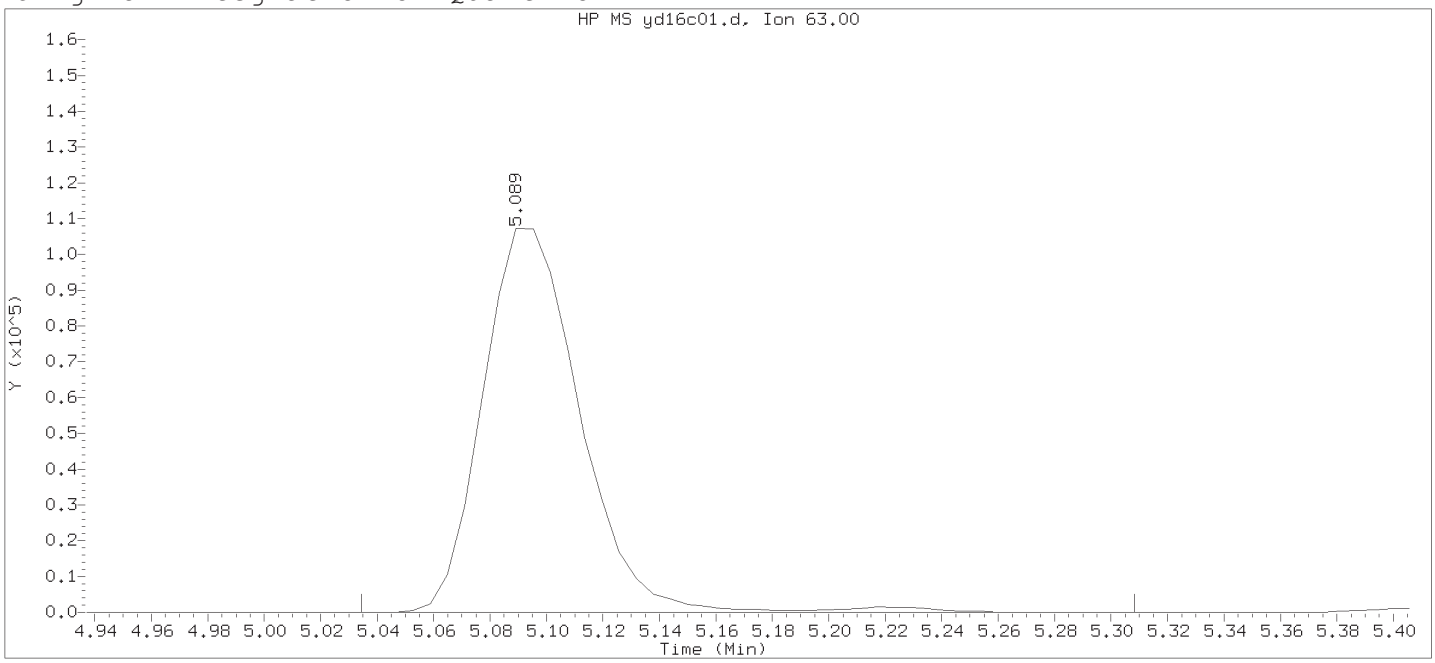
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

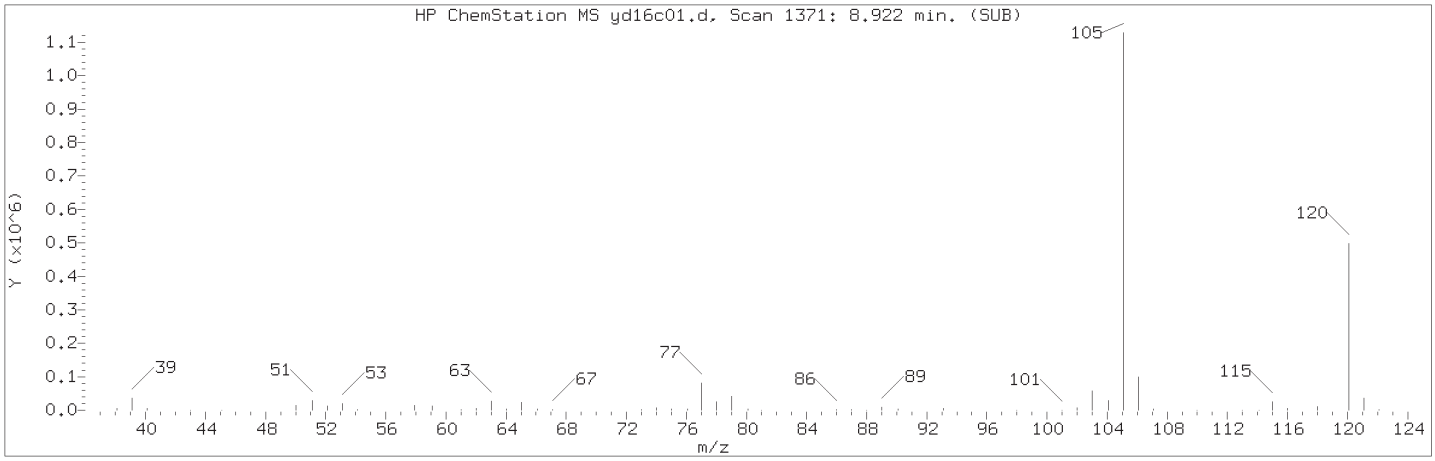
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 16-DEC-2015 01:51
Date, time and analyst ID of latest file update: 16-Dec-2015 01:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

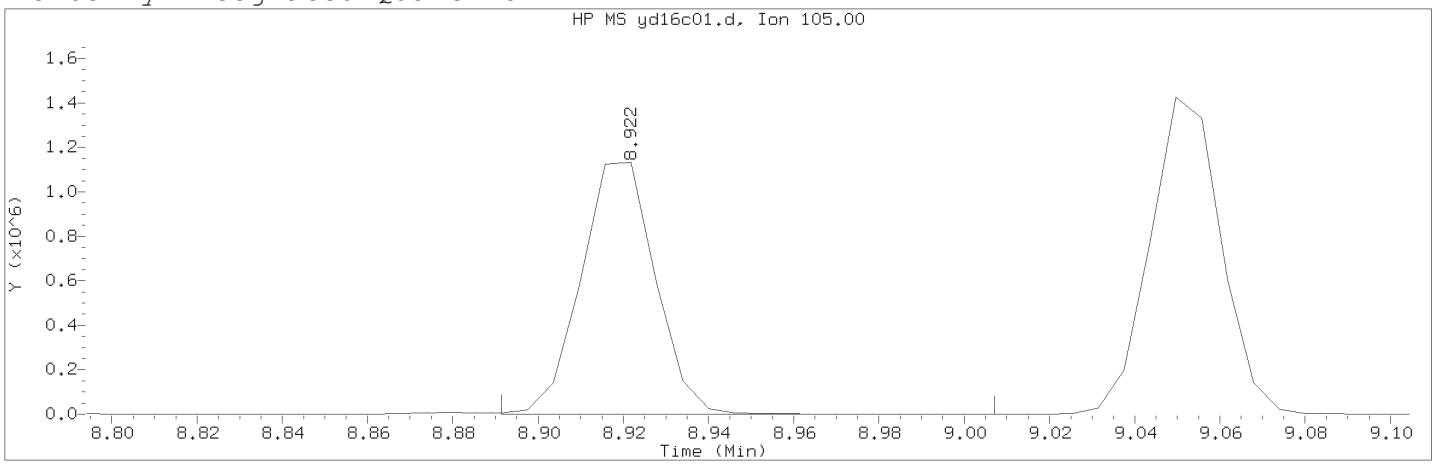
Compound Number : 80
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 741
Retention Time (minutes): 5.089
Quant Ion : 63.00
Area : 257781
On-column Amount (ng) : 50.0548
Integration start scan : 731 Integration stop scan: 776
Y at integration start : 0 Y at integration end: 0

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: SAS00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

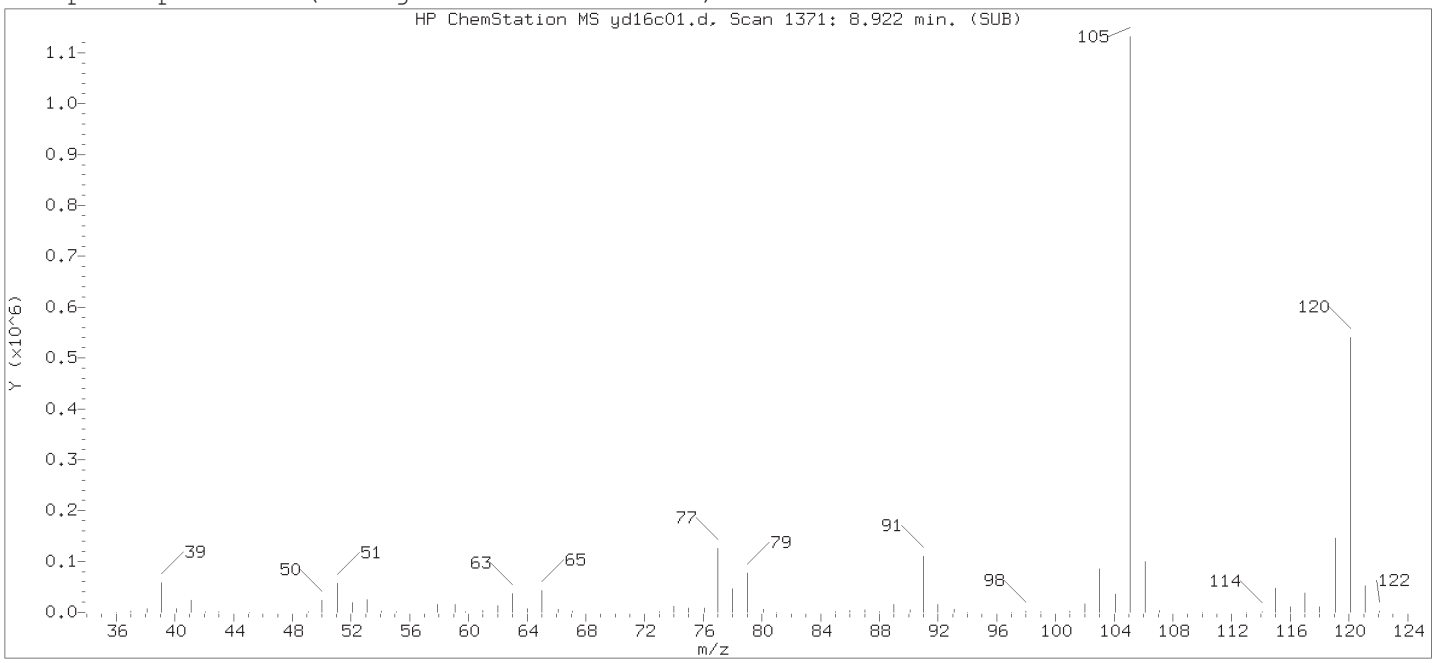
Compound Number : 126
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1371
Retention Time (minutes): 8.922
Quant Ion : 105.00
Area (flag) : 1376798M
On-Column Amount (ng) : 54.0216
Integration start scan : 1365 Integration stop scan: 1384
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

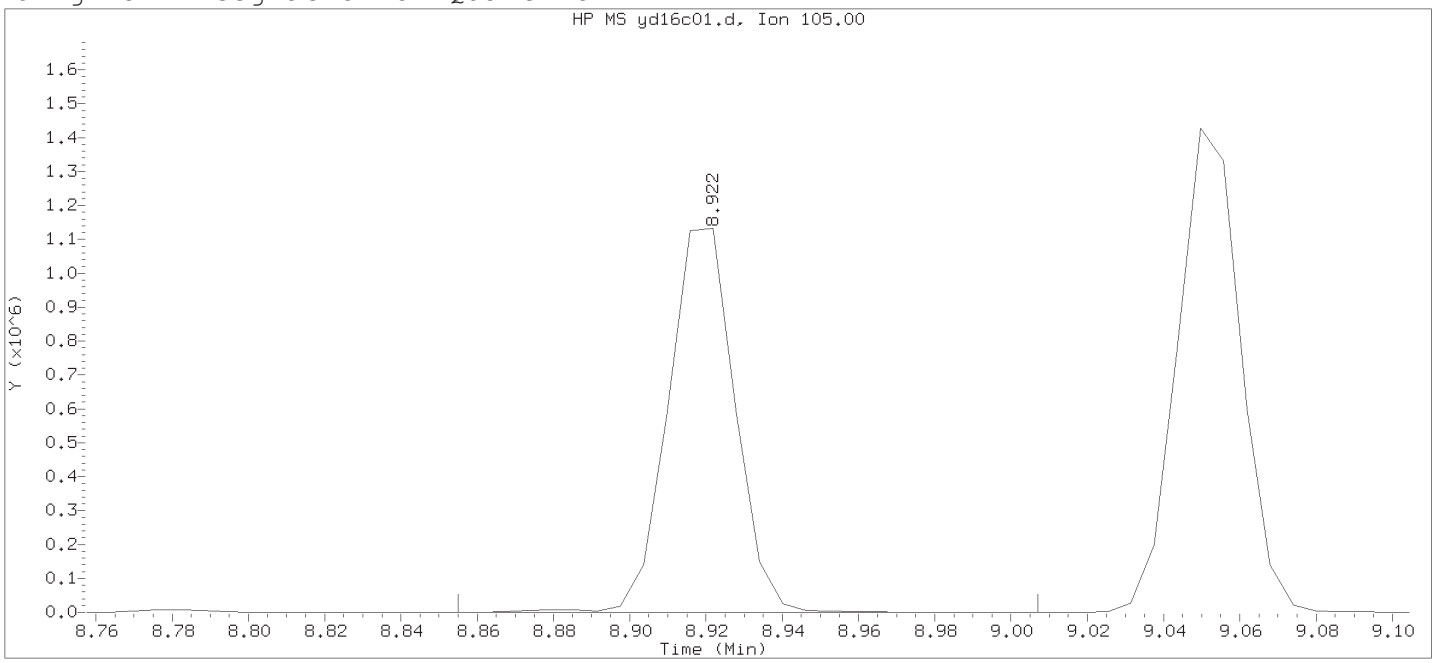
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

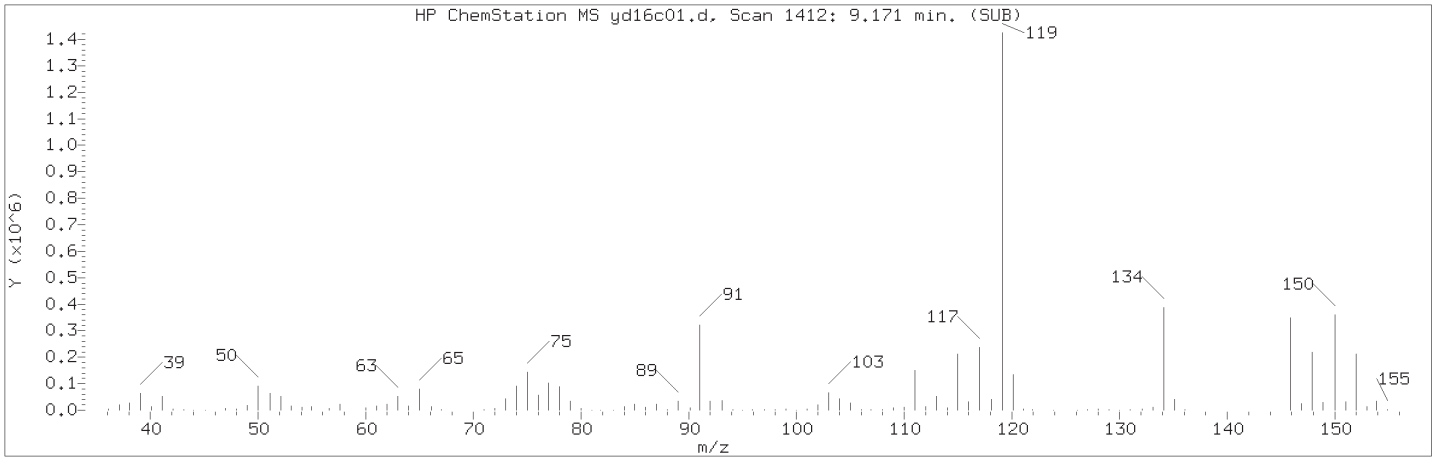
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 16-DEC-2015 01:51
Date, time and analyst ID of latest file update: 16-Dec-2015 01:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

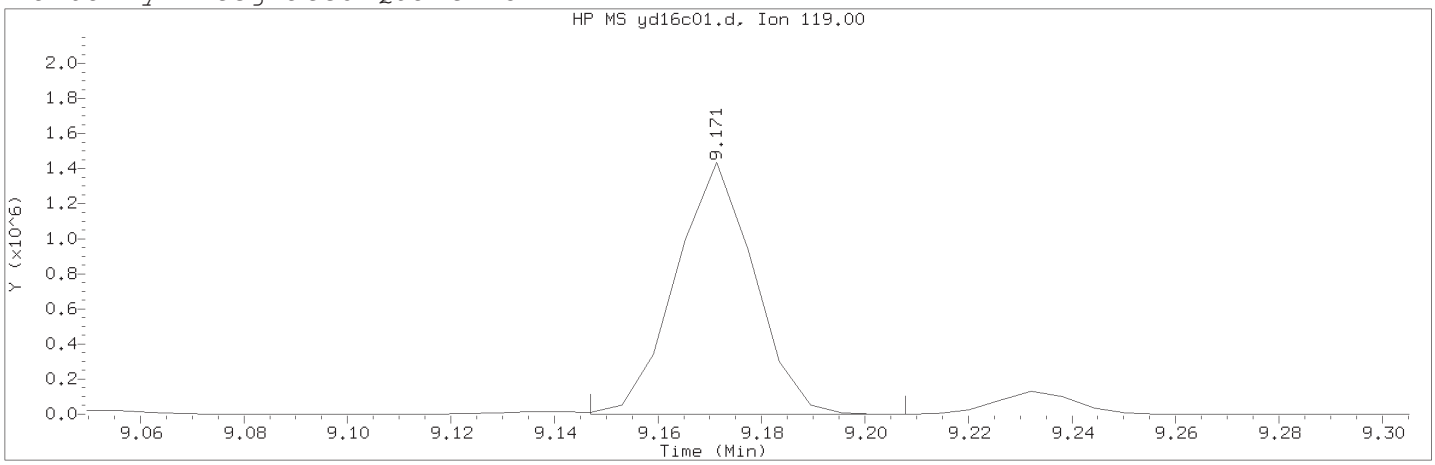
Compound Number : 126
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1371
Retention Time (minutes): 8.922
Quant Ion : 105.00
Area : 1384503
On-column Amount (ng) : 54.3240
Integration start scan : 1359 Integration stop scan: 1384
Y at integration start : 0 Y at integration end: 0

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: SAS00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:07 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

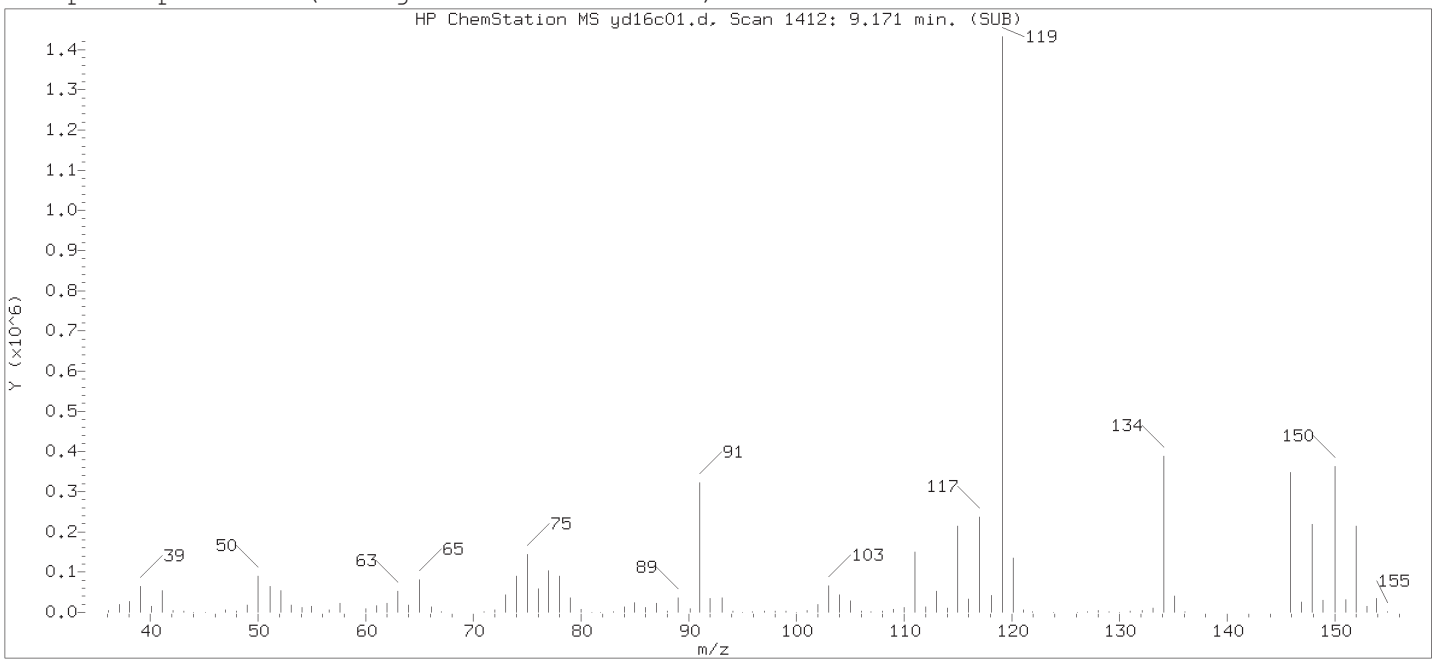
Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1412
Retention Time (minutes): 9.171
Quant Ion : 119.00
Area (flag) : 1508619M
On-Column Amount (ng) : 54.2052
Integration start scan : 1407 Integration stop scan: 1417
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

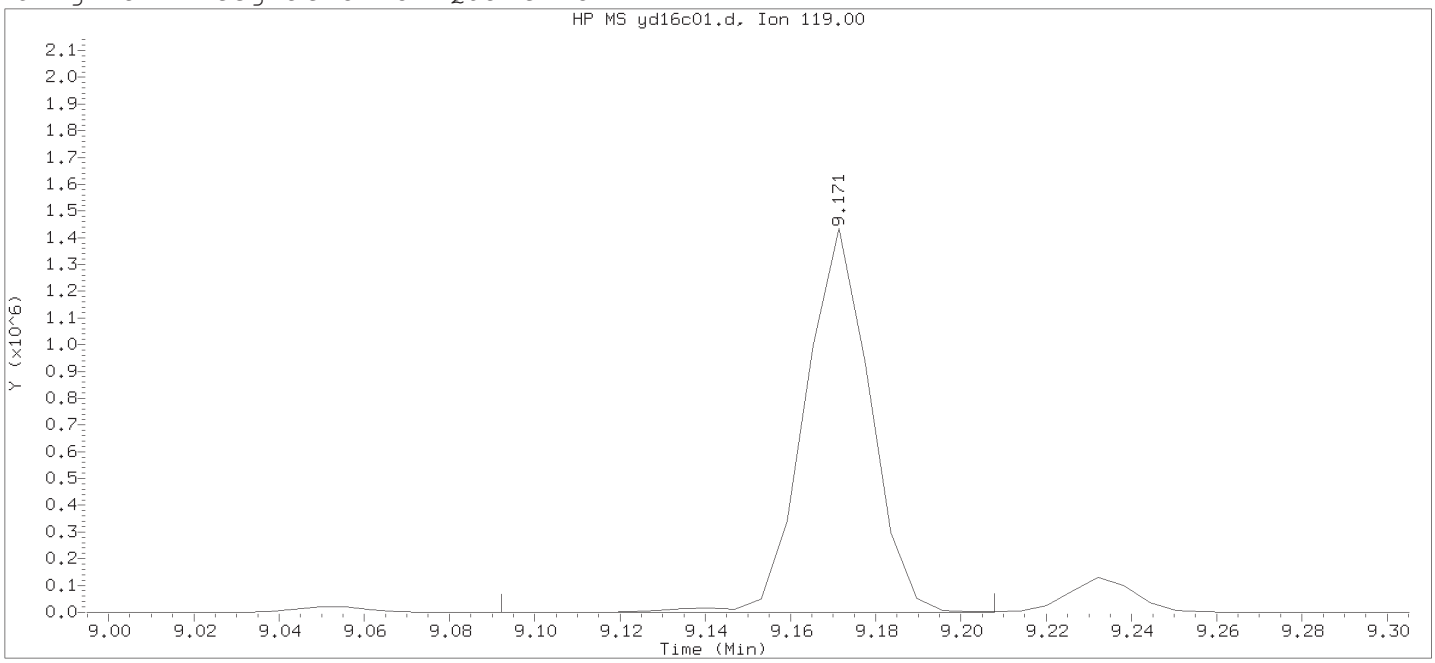
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16c01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:35 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 16-DEC-2015 01:51
Date, time and analyst ID of latest file update: 16-Dec-2015 01:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 130
Compound Name : p-Isopropyltoluene
Scan Number : 1412
Retention Time (minutes): 9.171
Quant Ion : 119.00
Area : 1523784
On-column Amount (ng) : 54.7501
Integration start scan : 1398 Integration stop scan: 1417
Y at integration start : 0 Y at integration end: 0

Digitally signed by Stephanie A. Selis on 12/16/2015 at 02:07.
Target 3.5 esignature user ID: SAS00403

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/15dec16a.b/yd16b01.d Injection date and time: **16-DEC-2015 01:56**
Data file Sample Info. Line: VBLKY87;VBLKY87;1;3;;;;;; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:04
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.883	(-0.006)	214	65	366635	(2)	250.00	
66) Fluorobenzene	3.891	(0.000)	544	96	1137187	(1)	50.00	
100) Chlorobenzene-d5	7.060	(0.006)	1065	117	861346	(-2)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159	(0.006)	1410	152	455884	(-5)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.258	(0.000)	113	271810	50.944	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.562	(0.000)	102	67945	49.114	98%		77 - 113
83) Toluene-d8	(3)	5.497	(0.000)	98	1114721	48.044	96%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.228	(-0.001)	95	421451	48.429	97%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)				Not Detected					0.5	1
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
10) Dichlorofluoromethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
14) Ethyl ether	(2)				Not Detected					2	5
15) Freon 123a	(2)				Not Detected					2	5
16) Acrolein	(1)				Not Detected					40	100
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
18) Acetone	(1)				Not Detected					6	20
19) Freon 113	(2)				Not Detected					2	10
21) 2-Propanol	(1)				Not Detected					50	100
22) Methyl Iodide	(2)				Not Detected					0.5	1
23) Carbon Disulfide	(2)				Not Detected					1	5
25) Allyl Chloride	(2)				Not Detected					1	5
27) Methyl Acetate	(2)				Not Detected					1	5
28) Methylene Chloride	(2)				Not Detected					2	4
30) t-Butyl alcohol	(1)				Not Detected					5	20
31) Acrylonitrile	(2)				Not Detected					4	20
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
34) n-Hexane	(2)				Not Detected					2	5
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
38) di-Isopropyl ether	(2)				Not Detected					0.5	1
39) 2-Chloro-1,3-butadiene	(2)				Not Detected					1	5
40) Ethyl t-butyl ether	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
44) 2-Butanone	(2)				Not Detected					3	10

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16b01.d Injection date and time: **16-DEC-2015 01:56**
Data file Sample Info. Line: VBLKY87;VBLKY87;1;3;;;;;; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:04
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
45) 2,2-Dichloropropane	(2)				Not Detected					0.5	1
47) Propionitrile	(1)				Not Detected					30	100
48) Methacrylonitrile	(2)				Not Detected					10	50
49) Bromochloromethane	(2)				Not Detected					1	5
50) Tetrahydrofuran	(1)				Not Detected					4	10
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
54) Cyclohexane	(2)				Not Detected					2	5
55) 1,1-Dichloropropene	(2)				Not Detected					1	5
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
58) Isobutyl Alcohol	(1)				Not Detected					100	250
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
65) t-Amyl methyl ether	(2)				Not Detected					0.5	1
67) n-Heptane	(2)				Not Detected					2	5
69) n-Butanol	(1)				Not Detected					100	250
71) Trichloroethene	(2)				Not Detected					0.5	1
72) Methylcyclohexane	(2)				Not Detected					1	5
73) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
74) Dibromomethane	(2)				Not Detected					0.5	1
75) 1,4-Dioxane	(1)				Not Detected					70	250
76) Methyl Methacrylate	(2)				Not Detected					1	5
78) Bromodichloromethane	(2)				Not Detected					0.5	1
79) 2-Nitropropane	(2)				Not Detected					2	10
80) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
81) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
82) 4-Methyl-2-pentanone	(2)				Not Detected					3	10
88) Toluene	(3)				Not Detected					0.5	1
89) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
90) 1,3-Dichloropropene (total)	(3)				Not Detected					1	5
91) Ethyl Methacrylate	(3)				Not Detected					1	5
92) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
93) Tetrachloroethene	(3)				Not Detected					0.5	1
94) 1,3-Dichloropropane	(3)				Not Detected					0.5	1
96) 2-Hexanone	(3)				Not Detected					3	10
97) Dibromochloromethane	(3)				Not Detected					0.5	1
99) 1,2-Dibromoethane	(3)				Not Detected					0.5	1
101) 1-Chlorohexane	(3)				Not Detected					1	5
102) Chlorobenzene	(3)				Not Detected					0.5	1
103) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.5	1
104) Ethylbenzene	(3)				Not Detected					0.5	1
106) m+p-Xylene	(3)				Not Detected					0.5	1
107) o-Xylene	(3)				Not Detected					0.5	1
108) Xylene (Total)	(3)				Not Detected					0.5	1
109) Styrene	(3)				Not Detected					1	5
110) Bromoform	(3)				Not Detected					0.5	4
111) Isopropylbenzene	(3)				Not Detected					1	5
112) Cyclohexanone	(1)				Not Detected					25	100
115) Bromobenzene	(4)				Not Detected					1	5
116) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
117) 1,2,3-Trichloropropane	(4)				Not Detected					1	5
118) trans-1,4-Dichloro-2-butene	(4)				Not Detected					15	50
119) n-Propylbenzene	(4)				Not Detected					1	5
120) 2-Chlorotoluene	(4)				Not Detected					1	5

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16b01.d Injection date and time: **16-DEC-2015 01:56**
Data file Sample Info. Line: VBLKY87;VBLKY87;1;3;;;;;; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:04
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

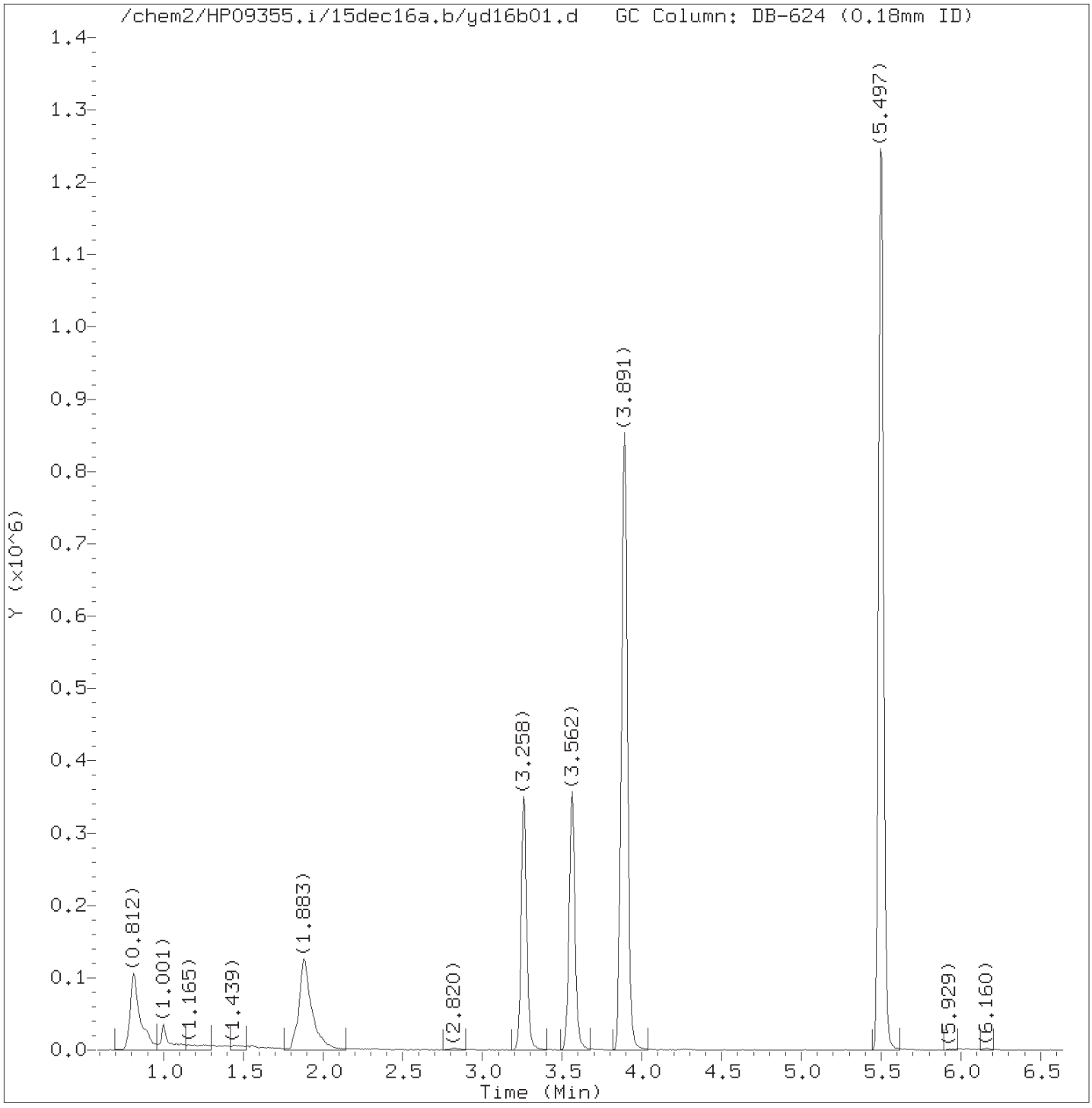
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
121) 4-Chlorotoluene	(4)				Not Detected					1	5
122) 1,3,5-Trimethylbenzene	(4)				Not Detected					1	5
124) tert-Butylbenzene	(4)				Not Detected					1	5
125) Pentachloroethane	(4)				Not Detected					1	5
126) 1,2,4-Trimethylbenzene	(4)				Not Detected					1	5
127) sec-Butylbenzene	(4)				Not Detected					1	5
129) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
130) p-Isopropyltoluene	(4)				Not Detected					1	5
133) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,2,3-Trimethylbenzene	(4)				Not Detected					1	5
135) Benzyl Chloride	(4)				Not Detected					1	5
136) 1,3-Diethylbenzene	(4)				Not Detected					1	5
137) 1,4-Diethylbenzene	(4)				Not Detected					1	5
138) 1,2-Dichlorobenzene	(4)				Not Detected					1	5
139) n-Butylbenzene	(4)				Not Detected					1	5
140) 1,2-Diethylbenzene	(4)				Not Detected					1	5
141) Diethylbenzene (total)	(4)				Not Detected					1	5
142) 1,2-Dibromo-3-chloropropane	(4)				Not Detected					2	5
144) 1,3,5-Trichlorobenzene	(4)				Not Detected					1	5
146) 1,2,4-Trichlorobenzene	(4)				Not Detected					1	5
147) Hexachlorobutadiene	(4)				Not Detected					2	5
148) Naphthalene	(4)				Not Detected					1	5
149) 1,2,3-Trichlorobenzene	(4)				Not Detected					1	5
150) 2-Methylnaphthalene	(4)				Not Detected					2	5

Total number of targets = 109

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

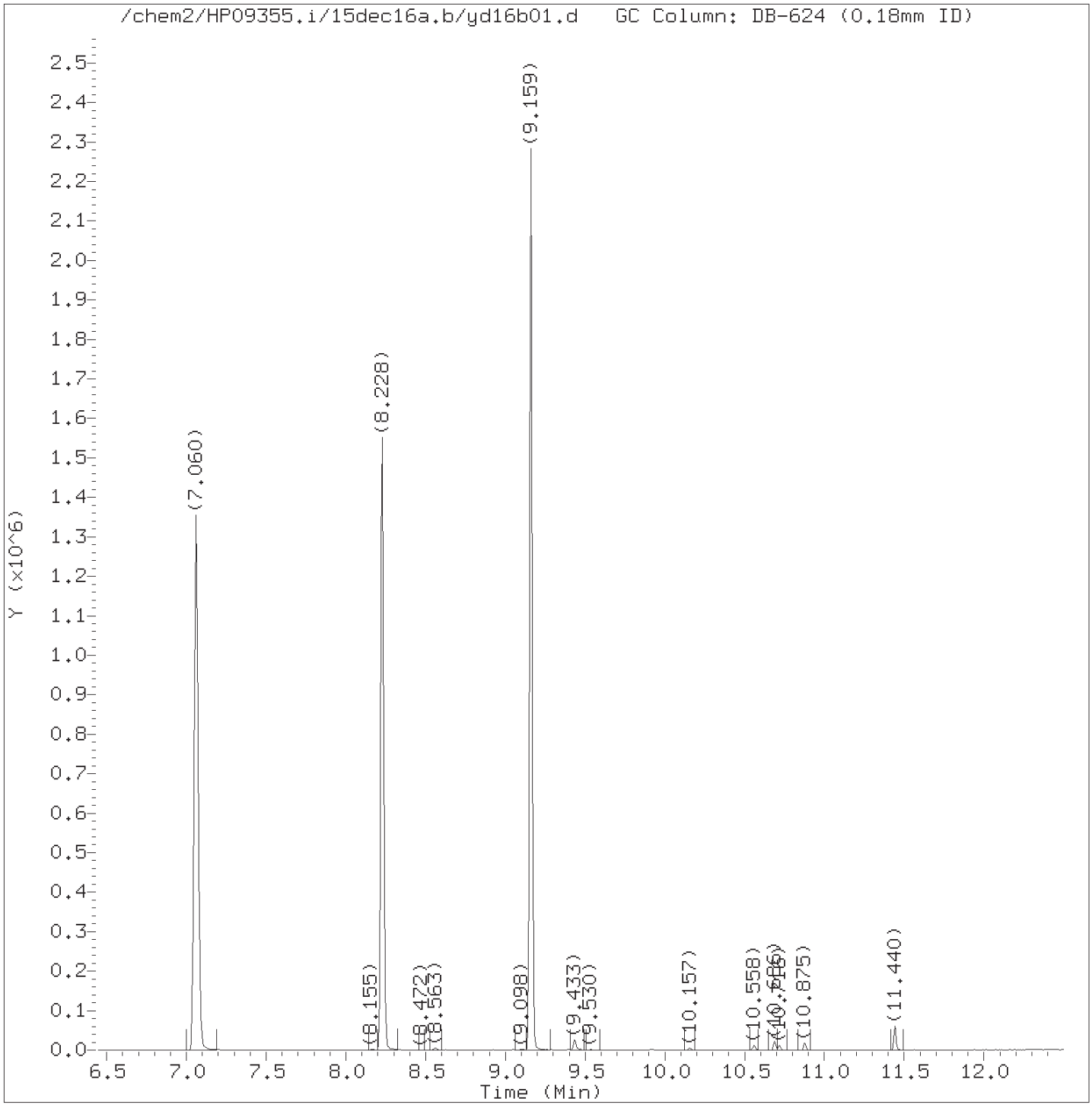
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16b01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Sample Name: VBLKY87 Lab Sample ID: VBLKY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16b01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Sample Name: VBLKY87 Lab Sample ID: VBLKY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16b01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 01:56 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:04
Date, time and analyst ID of latest file update: 16-Dec-2015 02:43 sas00403

Sample Name: VBLKY87 Lab Sample ID: VBLKY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	1.883	65	366635	250.000
52)$Dibromofluoromethane	(2)	3.258	113	271810	50.944
57)$1,2-Dichloroethane-d4	(2)	3.562	102	67945	49.114
66)*Fluorobenzene	(2)	3.891	96	1137187	50.000
83)$Toluene-d8	(3)	5.497	98	1114721	48.044
100)*Chlorobenzene-d5	(3)	7.060	117	861346	50.000
114)$4-Bromofluorobenzene	(3)	8.228	95	421451	48.429
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	455884	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	17	
74-87-3	Chloromethane	22	
75-01-4	Vinyl Chloride	23	
74-83-9	Bromomethane	17	
75-00-3	Chloroethane	16	
75-43-4	Dichlorofluoromethane	17	
75-69-4	Trichlorofluoromethane	22	
60-29-7	Ethyl ether	23	
354-23-4	Freon 123a	21	
107-02-8	Acrolein	150	
75-35-4	1,1-Dichloroethene	23	
67-64-1	Acetone	130	
76-13-1	Freon 113	23	
67-63-0	2-Propanol	180	
74-88-4	Methyl Iodide	22	
75-15-0	Carbon Disulfide	12	
107-05-1	Allyl Chloride	19	
79-20-9	Methyl Acetate	16	
75-09-2	Methylene Chloride	20	
75-65-0	t-Butyl alcohol	210	
107-13-1	Acrylonitrile	78	
156-60-5	trans-1,2-Dichloroethene	21	
1634-04-4	Methyl Tertiary Butyl Ether	20	
110-54-3	n-Hexane	15	
75-34-3	1,1-Dichloroethane	17	
108-20-3	di-Isopropyl ether	17	
126-99-8	2-Chloro-1,3-butadiene	18	
637-92-3	Ethyl t-butyl ether	19	
156-59-2	cis-1,2-Dichloroethene	21	
540-59-0	1,2-Dichloroethene (Total)	42	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
78-93-3	2-Butanone	120	
594-20-7	2,2-Dichloropropane	19	
107-12-0	Propionitrile	140	
126-98-7	Methacrylonitrile	140	
74-97-5	Bromochloromethane	21	
109-99-9	Tetrahydrofuran	83	
67-66-3	Chloroform	22	
71-55-6	1,1,1-Trichloroethane	21	
110-82-7	Cyclohexane	18	
563-58-6	1,1-Dichloropropene	20	
56-23-5	Carbon Tetrachloride	22	
78-83-1	Isobutyl Alcohol	500	
71-43-2	Benzene	20	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	19	
142-82-5	n-Heptane	16	
71-36-3	n-Butanol	980	
79-01-6	Trichloroethene	22	
108-87-2	Methylcyclohexane	20	
78-87-5	1,2-Dichloropropane	20	
74-95-3	Dibromomethane	21	
123-91-1	1,4-Dioxane	530	
80-62-6	Methyl Methacrylate	18	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	16	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	20	
108-10-1	4-Methyl-2-pentanone	78	
108-88-3	Toluene	20	
10061-02-6	trans-1,3-Dichloropropene	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
542-75-6	1,3-Dichloropropene (total)	40	
97-63-2	Ethyl Methacrylate	19	
79-00-5	1,1,2-Trichloroethane	20	
127-18-4	Tetrachloroethene	23	
142-28-9	1,3-Dichloropropane	20	
591-78-6	2-Hexanone	71	
124-48-1	Dibromochloromethane	22	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	20	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	22	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	21	
1330-20-7	Xylene (Total)	63	
100-42-5	Styrene	21	
75-25-2	Bromoform	19	
98-82-8	Isopropylbenzene	21	
108-94-1	Cyclohexanone	340	
108-86-1	Bromobenzene	22	
79-34-5	1,1,2,2-Tetrachloroethane	19	
96-18-4	1,2,3-Trichloropropane	20	
110-57-6	trans-1,4-Dichloro-2-butene	90	
103-65-1	n-Propylbenzene	20	
95-49-8	2-Chlorotoluene	21	
106-43-4	4-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	21	
76-01-7	Pentachloroethane	21	
95-63-6	1,2,4-Trimethylbenzene	21	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
135-98-8	sec-Butylbenzene		21	
541-73-1	1,3-Dichlorobenzene		22	
99-87-6	p-Isopropyltoluene		21	
106-46-7	1,4-Dichlorobenzene		22	
526-73-8	1,2,3-Trimethylbenzene		21	
100-44-7	Benzyl Chloride		18	
141-93-5	1,3-Diethylbenzene		21	
105-05-5	1,4-Diethylbenzene		21	
95-50-1	1,2-Dichlorobenzene		22	
104-51-8	n-Butylbenzene		20	
135-01-3	1,2-Diethylbenzene		21	
25340-17-4	Diethylbenzene (total)		63	
96-12-8	1,2-Dibromo-3-chloropropane		17	
108-70-3	1,3,5-Trichlorobenzene		22	
120-82-1	1,2,4-Trichlorobenzene		21	
87-68-3	Hexachlorobutadiene		21	
91-20-3	Naphthalene		20	
87-61-6	1,2,3-Trichlorobenzene		21	
91-57-6	2-Methylnaphthalene		17	

Data file: /chem2/HP09355.i/15dec16a.b/yd16l01.d Injection date and time: **16-DEC-2015 02:17**
Data file Sample Info. Line: LCSY87;LCSY87;1;3;LCS;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.883	(-0.006)	214	65	367231	(2)	250.00	
66) Fluorobenzene	3.891	(0.000)	544	96	1129150	(0)	50.00	
100) Chlorobenzene-d5	7.060	(0.006)	1065	117	863484	(-1)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159	(0.006)	1410	152	466765	(-3)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.258	(0.000)	113	270632	51.084	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.556	(0.002)	102	69726	50.760	102%		77 - 113
83) Toluene-d8	(3)	5.497	(0.000)	98	1122327	48.252	97%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222	(0.000)	95	428785M	49.149	98%		78 - 113

M = Surrogate Standard was manually integrated.

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	0.940	(-0.001)	85	106542	17.354	17.35			0.5	1
4) Chloromethane	(2)	1.001	(0.001)	50	154755	22.155	22.16			0.5	1
6) Vinyl Chloride	(2)	1.068	(-0.001)	62	140488	22.693	22.69			0.5	1
8) Bromomethane	(2)	1.196	(0.000)	94	72696	17.085	17.08			0.5	1
9) Chloroethane	(2)	1.220	(0.000)	64	53885	15.628	15.63			0.5	1
10) Dichlorofluoromethane	(2)	1.336	(0.000)	67	135837	17.433	17.43			0.5	1
12) Trichlorofluoromethane	(2)	1.390	(-0.001)	101	155336	22.442	22.44			0.5	1
14) Ethyl ether	(2)	1.463	(-0.001)	59	103866	23.469	23.47			2	5
15) Freon 123a	(2)	1.476	(0.003)	67	109470	21.169	21.17			2	5
16) Acrolein	(1)	1.530	(-0.000)	56	332408	149.433	149.43			40	100
17) 1,1-Dichloroethene	(2)	1.591	(0.000)	96	94588	23.244	23.24			0.5	1
18) Acetone	(1)	1.609	(-0.000)	58	147284	130.285	130.28			6	20
19) Freon 113	(2)	1.634	(0.000)	101	91775	23.363	23.36			2	10
21) 2-Propanol	(1)	1.688	(-0.003)	45	121773	181.489	181.49			50	100
22) Methyl Iodide	(2)	1.682	(0.000)	142	173256	22.367	22.37			0.5	1
23) Carbon Disulfide	(2)	1.725	(0.000)	76	188245M	12.065	12.06			1	5
25) Allyl Chloride	(2)	1.786	(0.000)	41	115025	19.304	19.30			1	5
27) Methyl Acetate	(2)	1.798	(-0.001)	43	113186	16.498	16.50			1	5
28) Methylene Chloride	(2)	1.865	(-0.001)	84	94109	19.625	19.62			2	4
30) t-Butyl alcohol	(1)	1.938	(-0.003)	59	335905	206.127	206.13			5	20
31) Acrylonitrile	(2)	2.005	(0.000)	53	312274	78.228	78.23			4	20
32) trans-1,2-Dichloroethene	(2)	2.041	(-0.001)	96	96452	20.625	20.62			0.5	1
33) Methyl Tertiary Butyl Ether	(2)	2.047	(0.000)	73	322082	19.754	19.75			0.5	1
34) n-Hexane	(2)	2.236	(0.000)	57	116121	14.912	14.91			2	5
36) 1,1-Dichloroethane	(2)	2.339	(-0.001)	63	166006	17.451	17.45			0.5	1
38) di-Isopropyl ether	(2)	2.418	(-0.003)	45	311026	17.053	17.05			0.5	1
39) 2-Chloro-1,3-butadiene	(2)	2.412	(0.000)	53	135656	17.693	17.69			1	5
40) Ethyl t-butyl ether	(2)	2.723	(0.000)	59	332878	18.873	18.87			0.5	1
42) cis-1,2-Dichloroethene	(2)	2.826	(0.000)	96	120578	21.003	21.00			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	217030	41.628	41.63			0.5	1

M = Compound was manually integrated.

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16l01.d Injection date and time: **16-DEC-2015 02:17**
Data file Sample Info. Line: LCSY87;LCSY87;1;3;LCS;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
44) 2-Butanone	(2)	2.838(-0.001)	43	839638	121.152	121.15			3	10
45) 2,2-Dichloropropane	(2)	2.838(-0.001)	77	129052	19.016	19.02			0.5	1
47) Propionitrile	(1)	2.887(0.001)	54	257641	138.471	138.47			30	100
48) Methacrylonitrile	(2)	3.021(0.000)	67	598689	142.953	142.95			10	50
49) Bromochloromethane	(2)	3.033(0.000)	128	63016	21.336	21.34			1	5
50) Tetrahydrofuran	(1)	3.082(0.005)	71	159399	82.772	82.77			4	10
51) Chloroform	(2)	3.112(0.000)	83	189800	21.682	21.68			0.5	1
53) 1,1,1-Trichloroethane	(2)	3.282(0.000)	97	170015	20.504	20.50			0.5	1
54) Cyclohexane	(2)	3.337(0.000)	56	161281	18.077	18.08			2	5
55) 1,1-Dichloropropene	(2)	3.428(0.000)	75	144865	19.651	19.65			1	5
56) Carbon Tetrachloride	(2)	3.440(-0.001)	117	133673	21.862	21.86			0.5	1
58) Isobutyl Alcohol	(1)	3.587(0.002)	41	266641M	495.572	495.57			100	250
60) Benzene	(2)	3.617(0.000)	78	442239	20.191	20.19			0.5	1
61) 1,2-Dichloroethane	(2)	3.629(0.000)	62	164217	21.178	21.18			0.5	1
65) t-Amyl methyl ether	(2)	3.757(0.001)	73	323277	19.358	19.36			0.5	1
67) n-Heptane	(2)	3.915(0.000)	43	149053	16.365	16.36			2	5
69) n-Butanol	(1)	4.225(0.007)	56	463857	981.958	981.96			100	250
71) Trichloroethene	(2)	4.250(0.000)	95	121558	21.806	21.81			0.5	1
72) Methylcyclohexane	(2)	4.444(0.000)	83	176042	19.863	19.86			1	5
73) 1,2-Dichloropropane	(2)	4.456(0.001)	63	114245	20.073	20.07			0.5	1
74) Dibromomethane	(2)	4.572(0.000)	93	77809	21.207	21.21			0.5	1
75) 1,4-Dioxane	(1)	4.602(0.007)	88	66329	531.349	531.35			70	250
76) Methyl Methacrylate	(2)	4.627(0.000)	69	117658	18.160	18.16			1	5
78) Bromodichloromethane	(2)	4.748(0.001)	83	129683	20.850	20.85			0.5	1
79) 2-Nitropropane	(2)	4.974(0.001)	41	48103	16.442	16.44			2	10
80) 2-Chloroethyl Vinyl Ether	(2)	5.095(-0.001)	63	97088	18.776	18.78			2	10
81) cis-1,3-Dichloropropene	(2)	5.223(0.000)	75	172861	20.117	20.12			0.5	1
82) 4-Methyl-2-pentanone	(2)	5.406(0.001)	43	1017130	77.624	77.62			3	10
88) Toluene	(3)	5.564(0.000)	92	292719	20.451	20.45			0.5	1
89) trans-1,3-Dichloropropene	(3)	5.819(0.000)	75	163146	20.276	20.28			0.5	1
90) 1,3-Dichloropropene (total)	(3)		100	336007	40.393	40.39			1	5
91) Ethyl Methacrylate	(3)	5.971(0.000)	69	190008	18.658	18.66			1	5
92) 1,1,2-Trichloroethane	(3)	6.008(-0.000)	97	115458	20.189	20.19			0.5	1
93) Tetrachloroethene	(3)	6.154(0.000)	166	136737	22.788	22.79			0.5	1
94) 1,3-Dichloropropane	(3)	6.178(0.000)	76	194863	19.887	19.89			0.5	1
96) 2-Hexanone	(3)	6.318(0.000)	43	816313	71.260	71.26			3	10
97) Dibromochloromethane	(3)	6.422(-0.000)	129	107813	21.853	21.85			0.5	1
99) 1,2-Dibromoethane	(3)	6.519(0.000)	107	133296	21.418	21.42			0.5	1
101) 1-Chlorohexane	(3)	7.127(-0.000)	91	151944	19.814	19.81			1	5
102) Chlorobenzene	(3)	7.091(-0.000)	112	343136	21.040	21.04			0.5	1
103) 1,1,1,2-Tetrachloroethane	(3)	7.200(-0.000)	131	110617	21.727	21.73			0.5	1
104) Ethylbenzene	(3)	7.243(-0.000)	91	569547	21.150	21.15			0.5	1
106) m+p-Xylene	(3)	7.370(-0.000)	106	449778	42.348	42.35			0.5	1
107) o-Xylene	(3)	7.760(-0.000)	106	217099	20.524	20.52			0.5	1
108) Xylene (Total)	(3)		106	666877	62.871	62.87			0.5	1
109) Styrene	(3)	7.772(-0.000)	104	369367	20.669	20.67			1	5
110) Bromoform	(3)	7.912(-0.000)	173	77828	18.588	18.59			0.5	4
111) Isopropylbenzene	(3)	8.113(-0.000)	105	566816	20.918	20.92			1	5
112) Cyclohexanone	(1)	8.155(0.014)	55	236563	343.209	343.21			25	100
115) Bromobenzene	(4)	8.338(-0.000)	156	156706	21.670	21.67			1	5
116) 1,1,2,2-Tetrachloroethane	(4)	8.374(0.000)	83	191260	19.054	19.05			0.5	1
117) 1,2,3-Trichloropropane	(4)	8.393(0.000)	110	64154	20.012	20.01			1	5
118) trans-1,4-Dichloro-2-butene	(4)	8.423(0.000)	53	298276	89.875	89.87			15	50
119) n-Propylbenzene	(4)	8.466(0.000)	91	672922	20.465	20.47			1	5

M = Compound was manually integrated.

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/15dec16a.b/yd16l01.d Injection date and time: **16-DEC-2015 02:17**
Data file Sample Info. Line: LCSY87;LCSY87;1;3;LCS;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

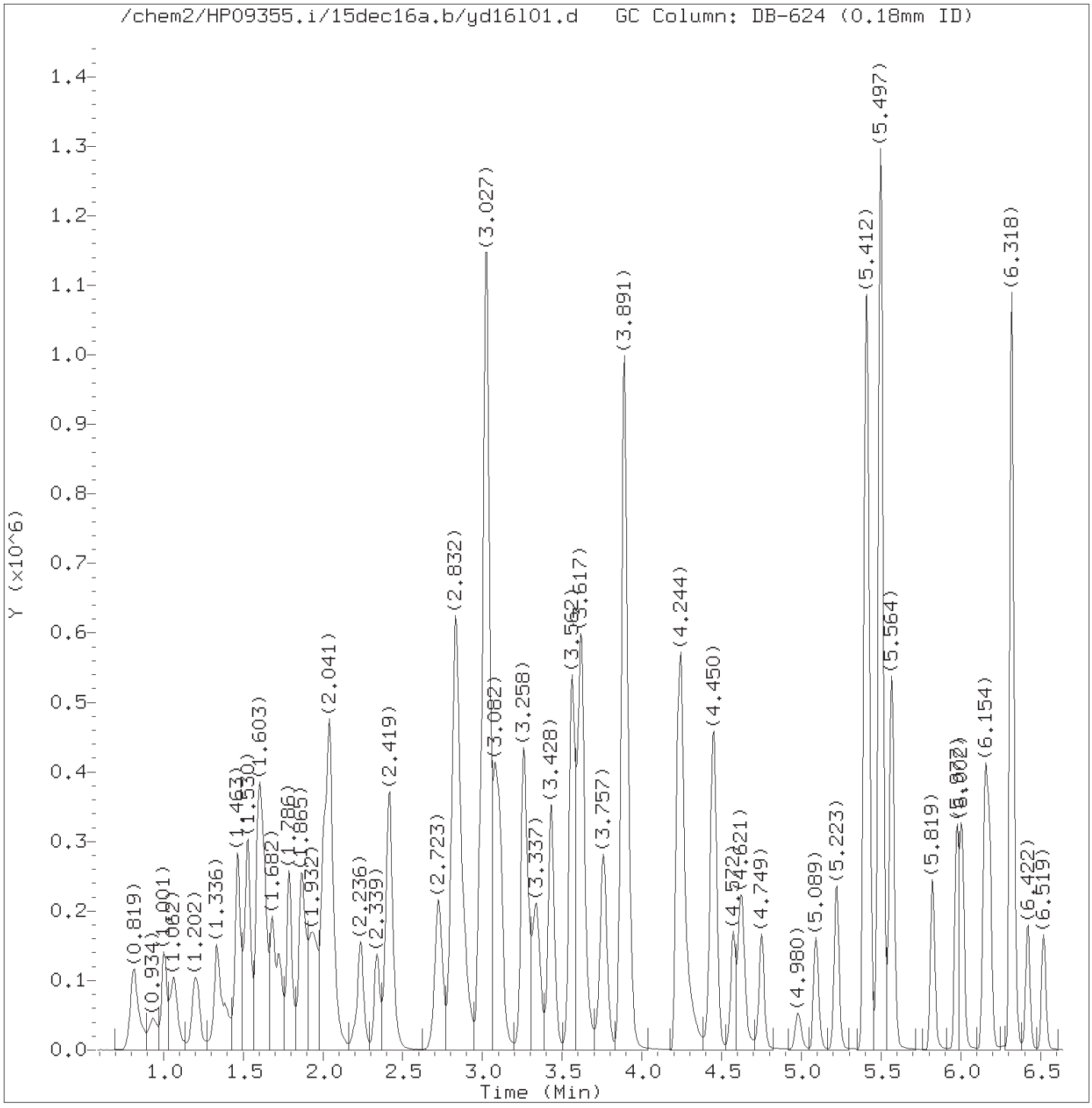
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
120) 2-Chlorotoluene	(4)	8.514(0.000)	126	143501	20.614	20.61			1	5
121) 4-Chlorotoluene	(4)	8.606(0.000)	126	152233	20.810	20.81			1	5
122) 1,3,5-Trimethylbenzene	(4)	8.624(0.000)	105	502348	20.720	20.72			1	5
124) tert-Butylbenzene	(4)	8.879(-0.000)	134	111710	20.574	20.57			1	5
125) Pentachloroethane	(4)	8.873(0.000)	167	83829	21.226	21.23			1	5
126) 1,2,4-Trimethylbenzene	(4)	8.916(0.000)	105	519287	20.941	20.94			1	5
127) sec-Butylbenzene	(4)	9.050(-0.000)	105	627104	20.671	20.67			1	5
129) 1,3-Dichlorobenzene	(4)	9.104(0.000)	146	300616	21.617	21.62			1	5
130) p-Isopropyltoluene	(4)	9.165(-0.000)	119	560163	20.686	20.69			1	5
133) 1,4-Dichlorobenzene	(4)	9.177(-0.000)	146	309648	21.823	21.82			1	5
134) 1,2,3-Trimethylbenzene	(4)	9.232(-0.000)	105	531250	20.796	20.80			1	5
135) Benzyl Chloride	(4)	9.281(-0.000)	91	329621	18.181	18.18			1	5
136) 1,3-Diethylbenzene	(4)	9.390(-0.000)	119	337094	20.642	20.64			1	5
137) 1,4-Diethylbenzene	(4)	9.451(-0.000)	119	362455	21.297	21.30			1	5
138) 1,2-Dichlorobenzene	(4)	9.445(-0.000)	146	294816	21.788	21.79			1	5
139) n-Butylbenzene	(4)	9.469(-0.000)	92	273572	20.095	20.10			1	5
140) 1,2-Diethylbenzene	(4)	9.530(-0.000)	119	283627	20.900	20.90			1	5
141) Diethylbenzene (total)	(4)		100	983176	62.838	62.84			1	5
142) 1,2-Dibromo-3-chloropropane	(4)	9.993(-0.000)	75	45616	17.269	17.27			2	5
144) 1,3,5-Trichlorobenzene	(4)	10.151(-0.000)	180	231937	21.824	21.82			1	5
146) 1,2,4-Trichlorobenzene	(4)	10.558(-0.000)	180	218209	21.322	21.32			1	5
147) Hexachlorobutadiene	(4)	10.686(-0.000)	225	97250	20.701	20.70			2	5
148) Naphthalene	(4)	10.716(-0.000)	128	701510	19.714	19.71			1	5
149) 1,2,3-Trichlorobenzene	(4)	10.875(-0.000)	180	205746	21.108	21.11			1	5
150) 2-Methylnaphthalene	(4)	11.440(-0.000)	142	371043	17.236	17.24			2	5

Total number of targets = 109

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

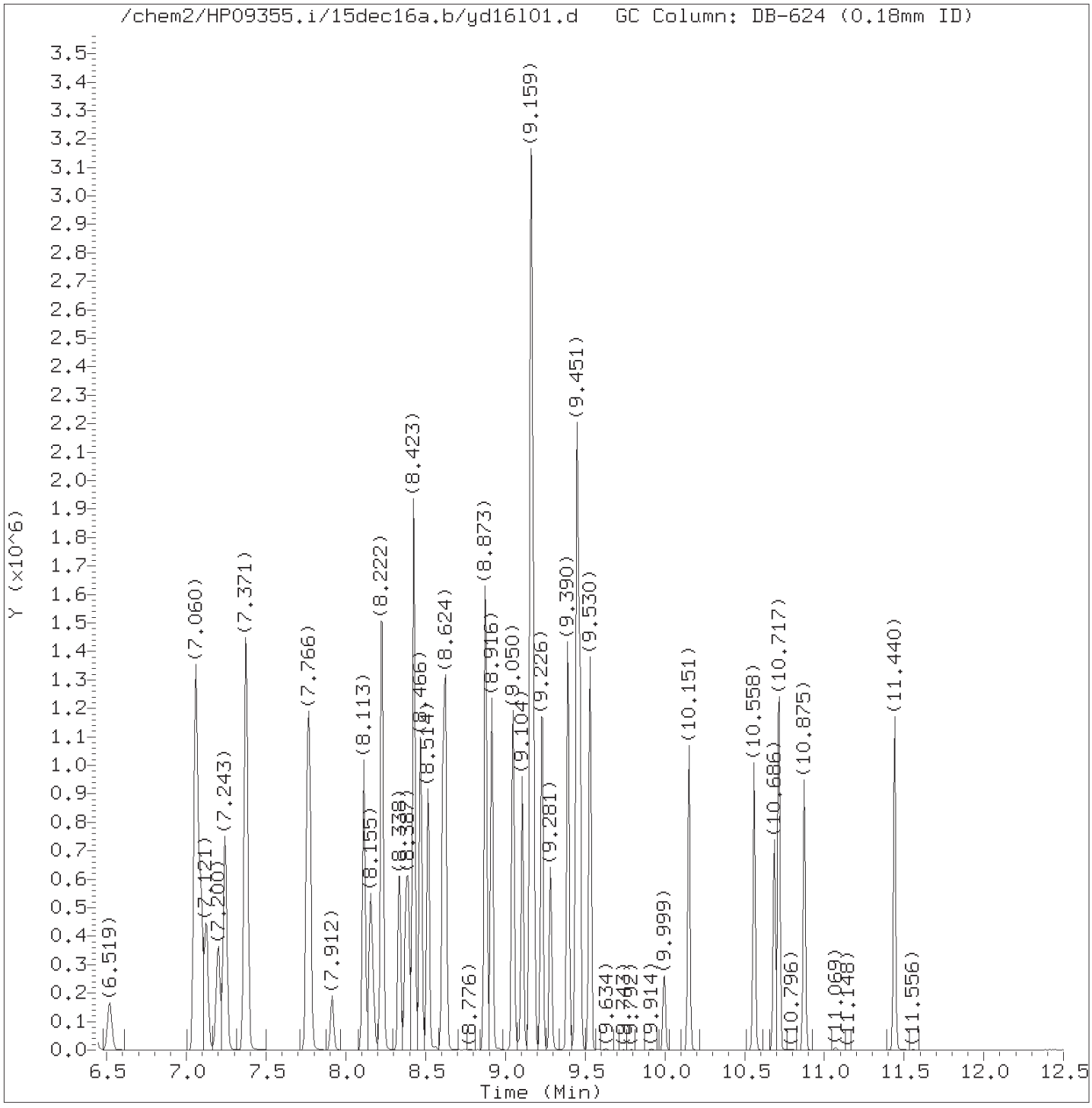
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.940	85	106542	17.354
4) Chloromethane	(2)	1.001	50	154755	22.155
6) Vinyl Chloride	(2)	1.068	62	140488	22.693
8) Bromomethane	(2)	1.196	94	72696	17.085
9) Chloroethane	(2)	1.220	64	53885	15.628
10) Dichlorofluoromethane	(2)	1.336	67	135837	17.433
12) Trichlorofluoromethane	(2)	1.390	101	155336	22.442
14) Ethyl ether	(2)	1.463	59	103866	23.469
15) Freon 123a	(2)	1.476	67	109470	21.169
16) Acrolein	(1)	1.530	56	332408	149.433
17) 1,1-Dichloroethene	(2)	1.591	96	94588	23.244
18) Acetone	(1)	1.609	58	147284	130.285
19) Freon 113	(2)	1.634	101	91775	23.363
22) Methyl Iodide	(2)	1.682	142	173256	22.367
21) 2-Propanol	(1)	1.689	45	121773	181.489
23) Carbon Disulfide	(2)	1.725	76	188245M	12.065
25) Allyl Chloride	(2)	1.786	41	115025	19.304
27) Methyl Acetate	(2)	1.798	43	113186	16.498
28) Methylene Chloride	(2)	1.865	84	94109	19.625
29)*t-Butyl alcohol-d10	(1)	1.883	65	367231	250.000
30) t-Butyl alcohol	(1)	1.938	59	335905	206.127
31) Acrylonitrile	(2)	2.005	53	312274	78.228
32) trans-1,2-Dichloroethene	(2)	2.041	96	96452	20.625
33) Methyl Tertiary Butyl Ether	(2)	2.047	73	322082	19.754
34) n-Hexane	(2)	2.236	57	116121	14.912
36) 1,1-Dichloroethane	(2)	2.339	63	166006	17.451
39) 2-Chloro-1,3-butadiene	(2)	2.412	53	135656	17.693
38) di-Isopropyl ether	(2)	2.419	45	311026	17.053
40) Ethyl t-butyl ether	(2)	2.723	59	332878	18.873
42) cis-1,2-Dichloroethene	(2)	2.826	96	120578	21.003
45) 2,2-Dichloropropane	(2)	2.838	77	129052	19.016
44) 2-Butanone	(2)	2.838	43	839638	121.152
43) 1,2-Dichloroethene (Total)	(2)		96	217030	41.628
47) Propionitrile	(1)	2.887	54	257641	138.471
48) Methacrylonitrile	(2)	3.021	67	598689	142.953
49) Bromochloromethane	(2)	3.033	128	63016	21.336
50) Tetrahydrofuran	(1)	3.082	71	159399	82.772
51) Chloroform	(2)	3.112	83	189800	21.682

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(2)	3.258	113	270632	51.084
53) 1,1,1-Trichloroethane	(2)	3.282	97	170015	20.504
54) Cyclohexane	(2)	3.337	56	161281	18.077
55) 1,1-Dichloropropene	(2)	3.428	75	144865	19.651
56) Carbon Tetrachloride	(2)	3.441	117	133673	21.862
57)$1,2-Dichloroethane-d4	(2)	3.556	102	69726	50.760
58) Isobutyl Alcohol	(1)	3.587	41	266641M	495.572
60) Benzene	(2)	3.617	78	442239	20.191
61) 1,2-Dichloroethane	(2)	3.629	62	164217	21.178
65) t-Amyl methyl ether	(2)	3.757	73	323277	19.358
66)*Fluorobenzene	(2)	3.891	96	1129150	50.000
67) n-Heptane	(2)	3.915	43	149053	16.365
69) n-Butanol	(1)	4.225	56	463857	981.958
71) Trichloroethene	(2)	4.250	95	121558	21.806
72) Methylcyclohexane	(2)	4.444	83	176042	19.863
73) 1,2-Dichloropropane	(2)	4.457	63	114245	20.073
74) Dibromomethane	(2)	4.572	93	77809	21.207
75) 1,4-Dioxane	(1)	4.603	88	66329	531.349
76) Methyl Methacrylate	(2)	4.627	69	117658	18.160
78) Bromodichloromethane	(2)	4.749	83	129683	20.850
79) 2-Nitropropane	(2)	4.974	41	48103	16.442
80) 2-Chloroethyl Vinyl Ether	(2)	5.095	63	97088	18.776
81) cis-1,3-Dichloropropene	(2)	5.223	75	172861	20.117
82) 4-Methyl-2-pentanone	(2)	5.406	43	1017130	77.624
83)$Toluene-d8	(3)	5.497	98	1122327	48.252
88) Toluene	(3)	5.564	92	292719	20.451
89) trans-1,3-Dichloropropene	(3)	5.819	75	163146	20.276
90) 1,3-Dichloropropene (total)	(3)		100	336007	40.393
91) Ethyl Methacrylate	(3)	5.971	69	190008	18.658
92) 1,1,2-Trichloroethane	(3)	6.008	97	115458	20.189
93) Tetrachloroethene	(3)	6.154	166	136737	22.788
94) 1,3-Dichloropropane	(3)	6.178	76	194863	19.887
96) 2-Hexanone	(3)	6.318	43	816313	71.260
97) Dibromochloromethane	(3)	6.422	129	107813	21.853
99) 1,2-Dibromoethane	(3)	6.519	107	133296	21.418
100)*Chlorobenzene-d5	(3)	7.060	117	863484	50.000
102) Chlorobenzene	(3)	7.091	112	343136	21.040
101) 1-Chlorohexane	(3)	7.127	91	151944	19.814

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$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) 1,1,1,2-Tetrachloroethane	(3)	7.200	131	110617	21.727
104) Ethylbenzene	(3)	7.243	91	569547	21.150
106) m+p-Xylene	(3)	7.371	106	449778	42.348
107) o-Xylene	(3)	7.760	106	217099	20.524
109) Styrene	(3)	7.772	104	369367	20.669
108) Xylene (Total)	(3)		106	666877	62.871
110) Bromoform	(3)	7.912	173	77828	18.588
111) Isopropylbenzene	(3)	8.113	105	566816	20.918
112) Cyclohexanone	(1)	8.155	55	236563	343.209
114)$4-Bromofluorobenzene	(3)	8.222	95	428785M	49.149
115) Bromobenzene	(4)	8.338	156	156706	21.670
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	191260	19.054
117) 1,2,3-Trichloropropane	(4)	8.393	110	64154	20.012
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	298276	89.875
119) n-Propylbenzene	(4)	8.466	91	672922	20.465
120) 2-Chlorotoluene	(4)	8.514	126	143501	20.614
121) 4-Chlorotoluene	(4)	8.606	126	152233	20.810
122) 1,3,5-Trimethylbenzene	(4)	8.624	105	502348	20.720
125) Pentachloroethane	(4)	8.873	167	83829	21.226
124) tert-Butylbenzene	(4)	8.879	134	111710	20.574
126) 1,2,4-Trimethylbenzene	(4)	8.916	105	519287	20.941
127) sec-Butylbenzene	(4)	9.050	105	627104	20.671
129) 1,3-Dichlorobenzene	(4)	9.104	146	300616	21.617
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	466765	50.000
130) p-Isopropyltoluene	(4)	9.165	119	560163	20.686
133) 1,4-Dichlorobenzene	(4)	9.177	146	309648	21.823
134) 1,2,3-Trimethylbenzene	(4)	9.232	105	531250	20.796
135) Benzyl Chloride	(4)	9.281	91	329621	18.181
136) 1,3-Diethylbenzene	(4)	9.390	119	337094	20.642
138) 1,2-Dichlorobenzene	(4)	9.445	146	294816	21.788
137) 1,4-Diethylbenzene	(4)	9.451	119	362455	21.297
139) n-Butylbenzene	(4)	9.469	92	273572	20.095
140) 1,2-Diethylbenzene	(4)	9.530	119	283627	20.900
141) Diethylbenzene (total)	(4)		100	983176	62.838
142) 1,2-Dibromo-3-chloropropane	(4)	9.993	75	45616	17.269
144) 1,3,5-Trichlorobenzene	(4)	10.151	180	231937	21.824
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	218209	21.322
147) Hexachlorobutadiene	(4)	10.686	225	97250	20.701

M = Compound was manually integrated.
* = Compound is an internal standard.
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Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

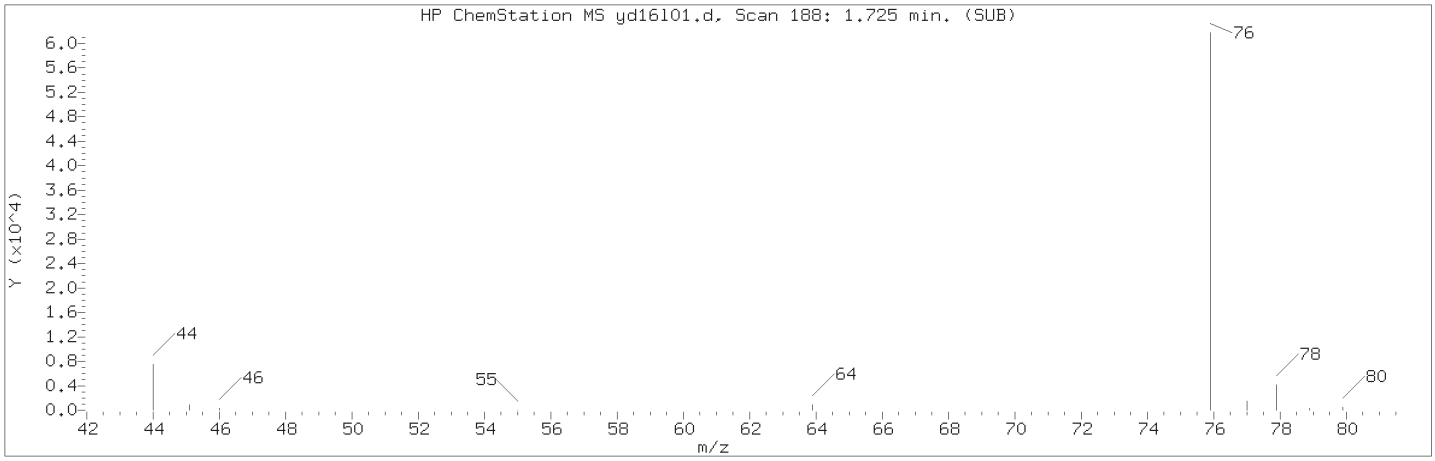
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

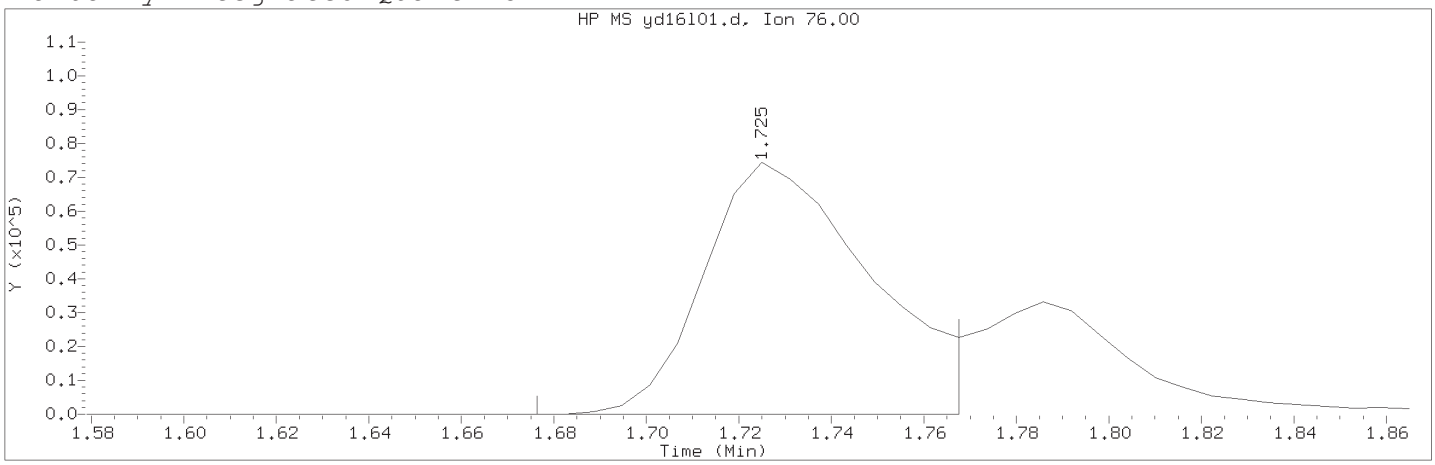
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
148) Naphthalene	(4)	10.717	128	701510	19.714
149) 1,2,3-Trichlorobenzene	(4)	10.875	180	205746	21.108
150) 2-Methylnaphthalene	(4)	11.440	142	371043	17.236

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

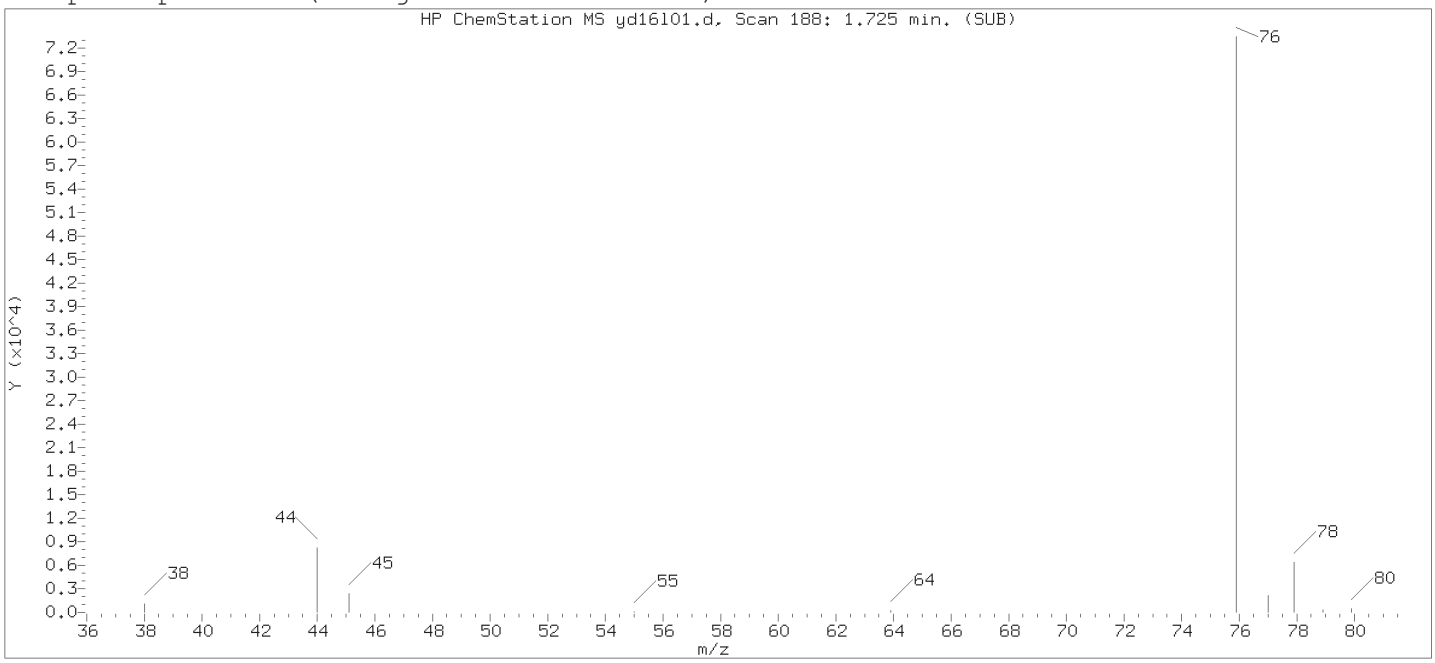
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 188
Retention Time (minutes): 1.725
Quant Ion : 76.00
Area (flag) : 188245M
On-Column Amount (ng) : 12.0646
Integration start scan : 179 Integration stop scan: 194
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

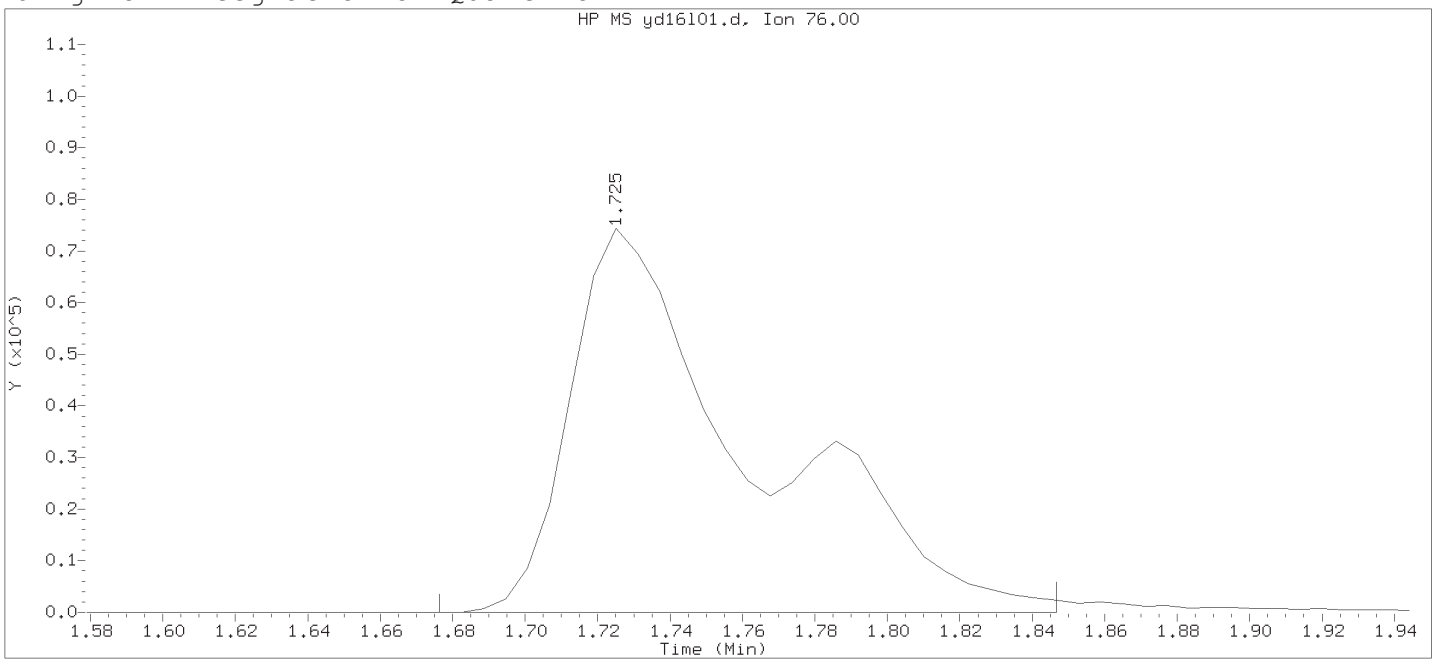
Analyst responsible for change: Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

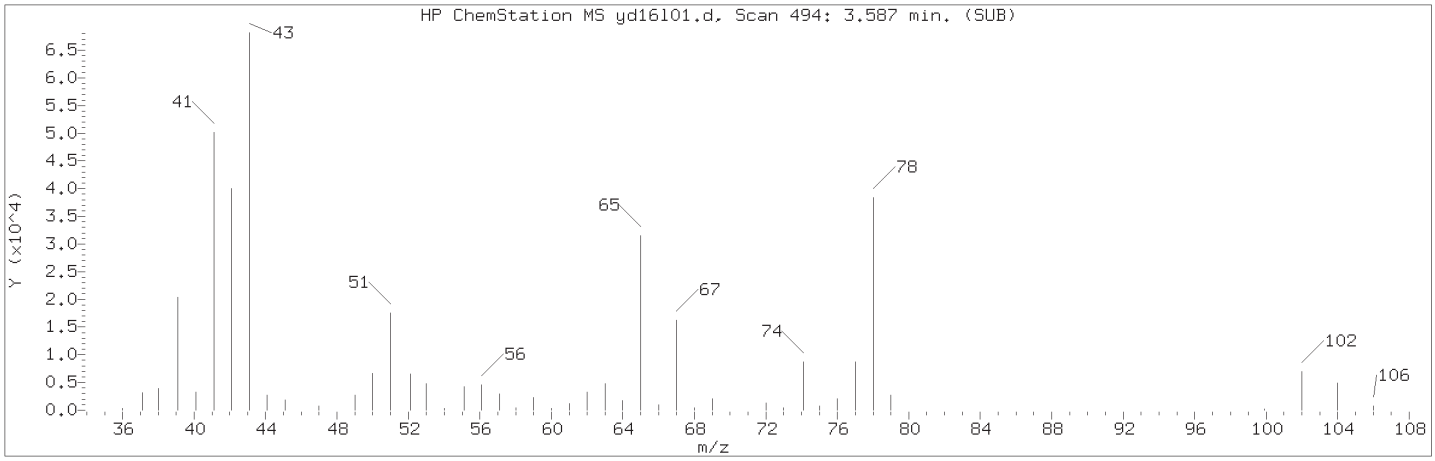
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:33 Automation

Sample Name: LCSY87 Lab Sample ID: LCSY87

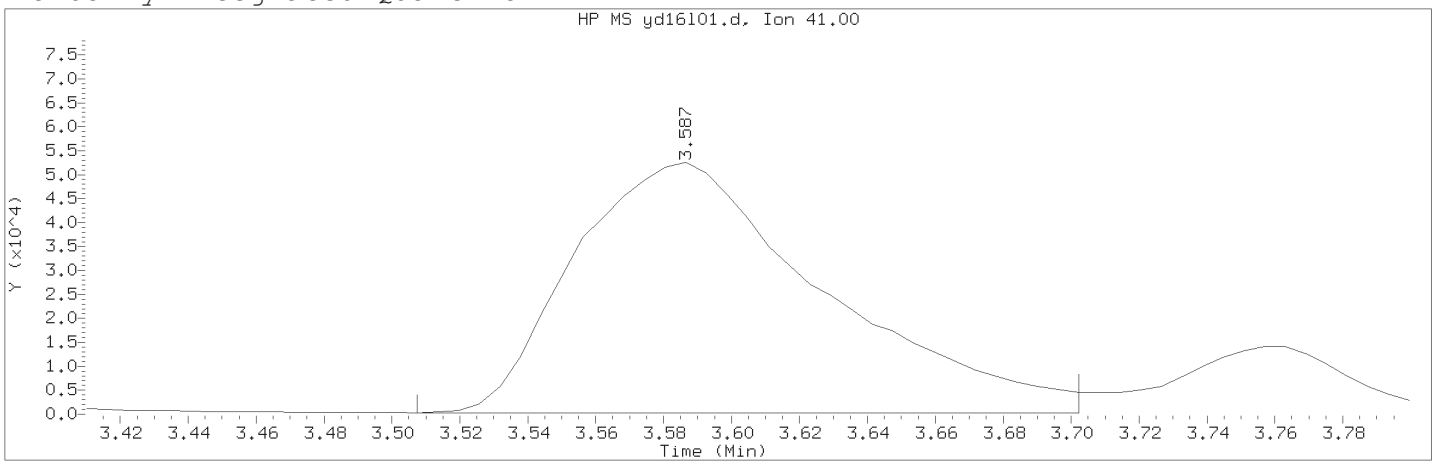
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 188
Retention Time (minutes): 1.725
Quant Ion : 76.00
Area : 259149
On-column Amount (ng) : 16.6088
Integration start scan : 179 Integration stop scan: 207
Y at integration start : 0 Y at integration end: 0

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: DHH02035

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

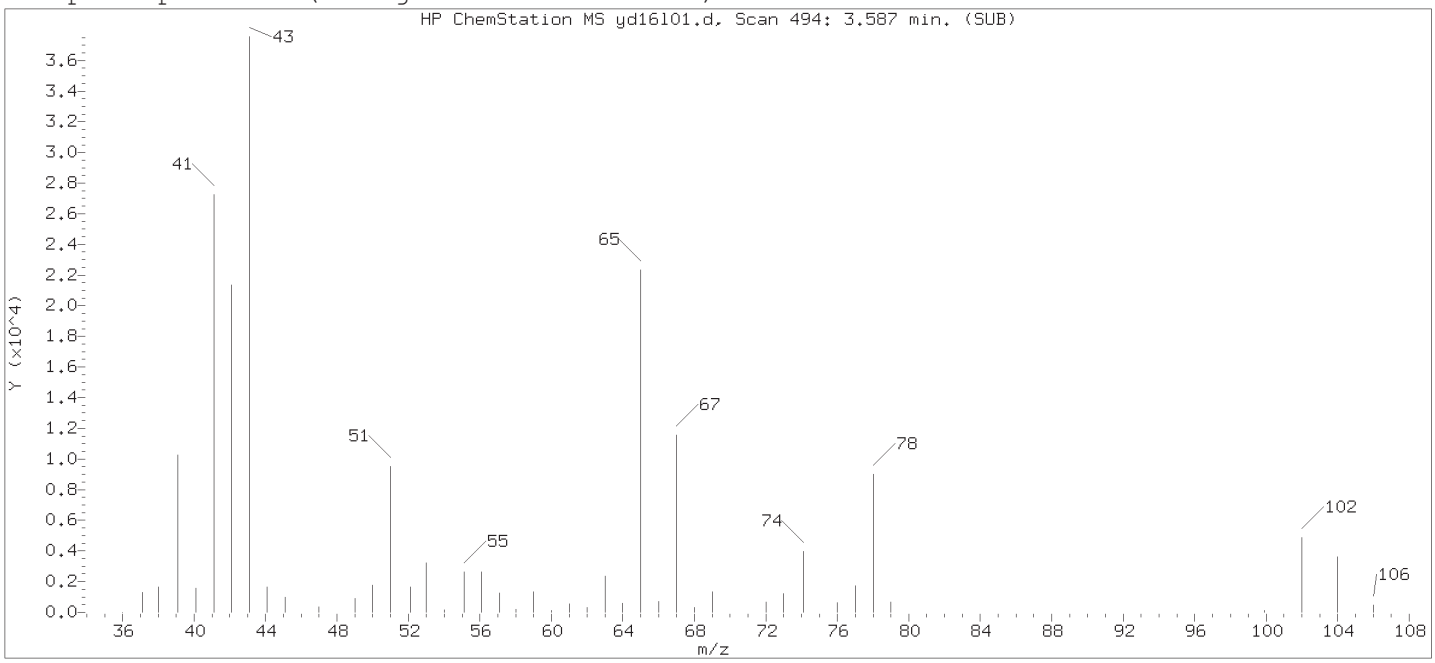
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 494
Retention Time (minutes): 3.587
Quant Ion : 41.00
Area (flag) : 266641M
On-Column Amount (ng) : 495.5718
Integration start scan : 480 Integration stop scan: 512
Y at integration start : 272 Y at integration end: 272

Reason for manual integration: improper integration

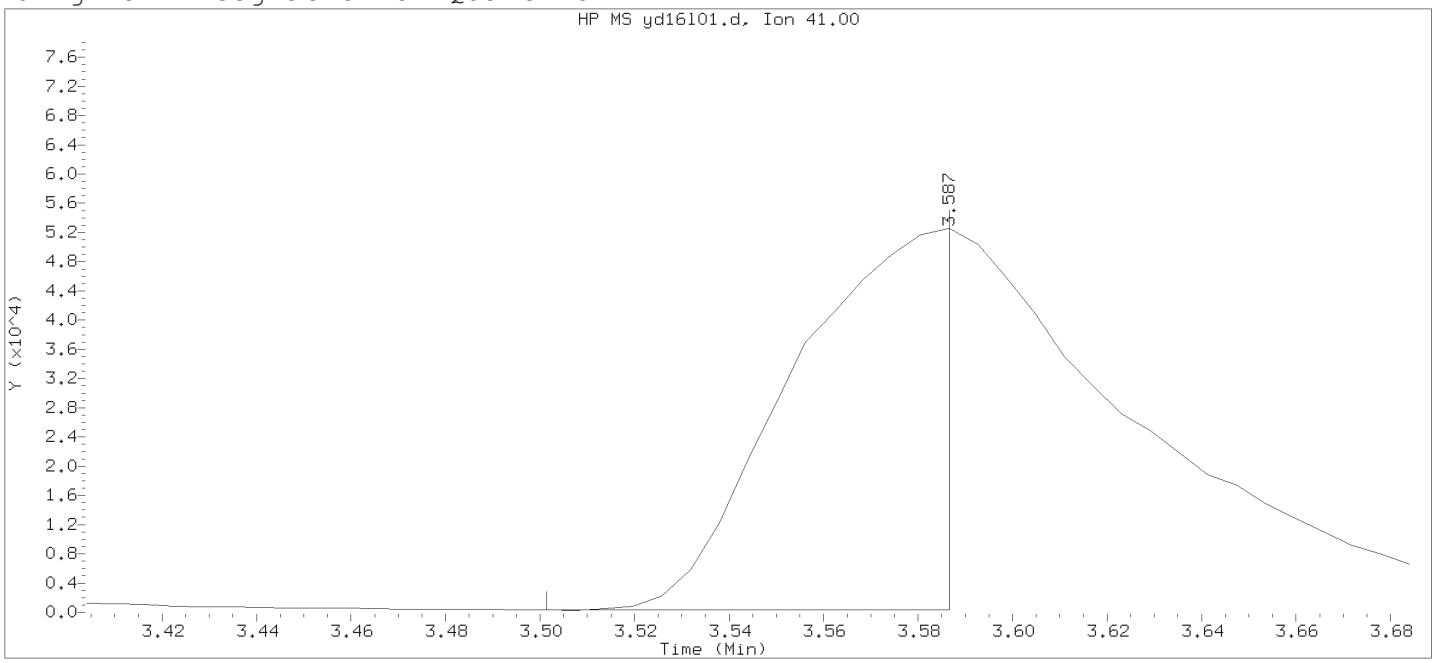
Analyst responsible for change: Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

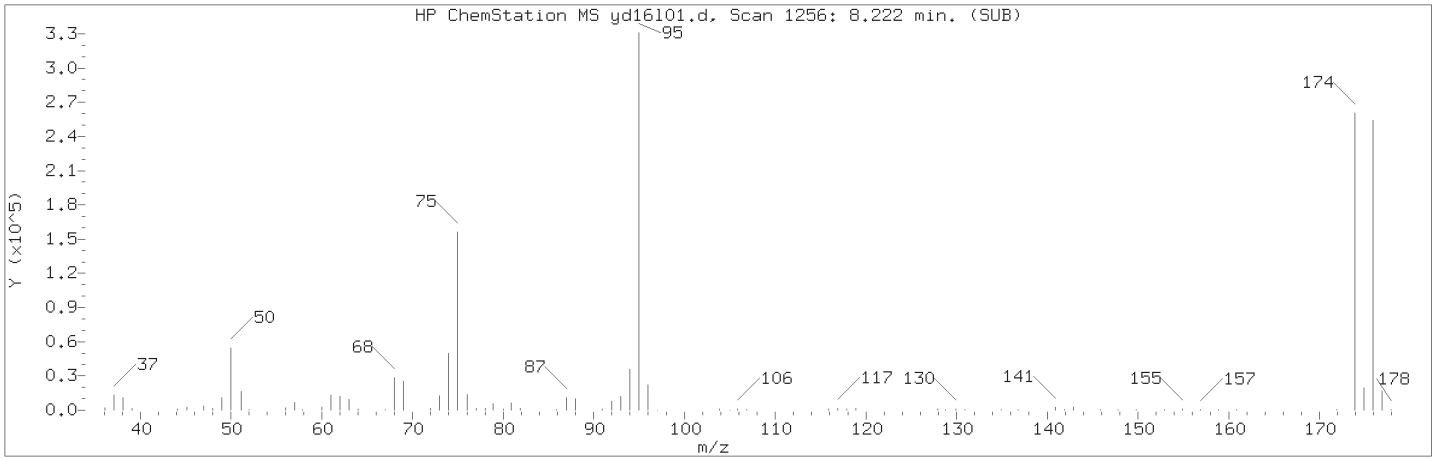
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:33 Automation

Sample Name: LCSY87 Lab Sample ID: LCSY87

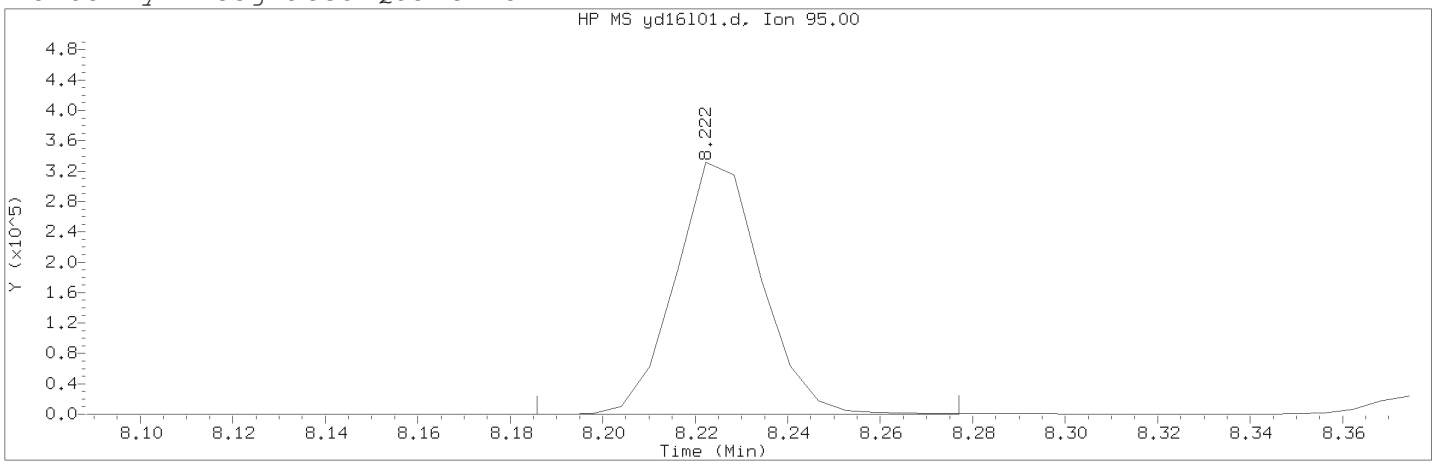
Compound Number	: 58		
Compound Name	: Isobutyl Alcohol		
Scan Number	: 494		
Retention Time (minutes)	: 3.587		
Quant Ion	: 41.00		
Area	: 115777		
On-column Amount (ng)	: 215.1803		
Integration start scan	: 479	Integration stop scan:	493
Y at integration start	: 343	Y at integration end:	343

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: DHH02035

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:46 sas00403

Sample Name: LCSY87 Lab Sample ID: LCSY87

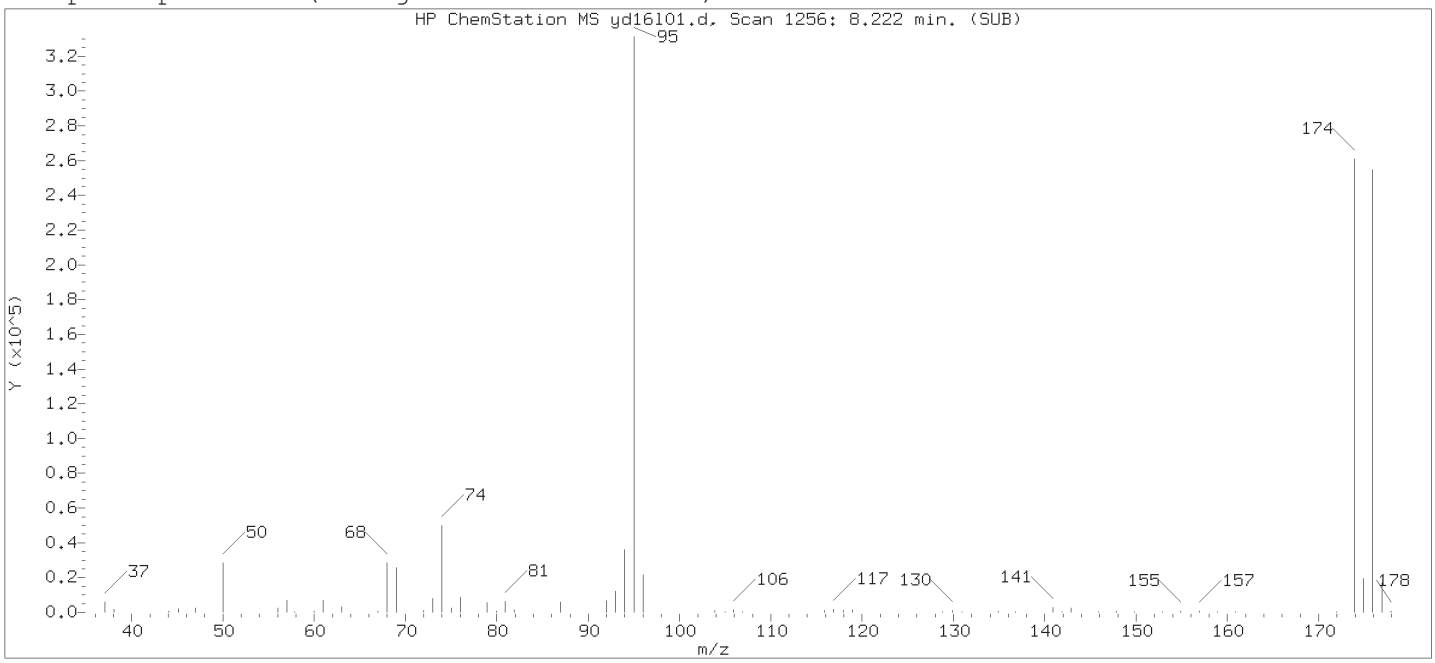
Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area (flag) : 428785M
On-Column Amount (ng) : 49.1493
Integration start scan : 1249 Integration stop scan: 1264
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

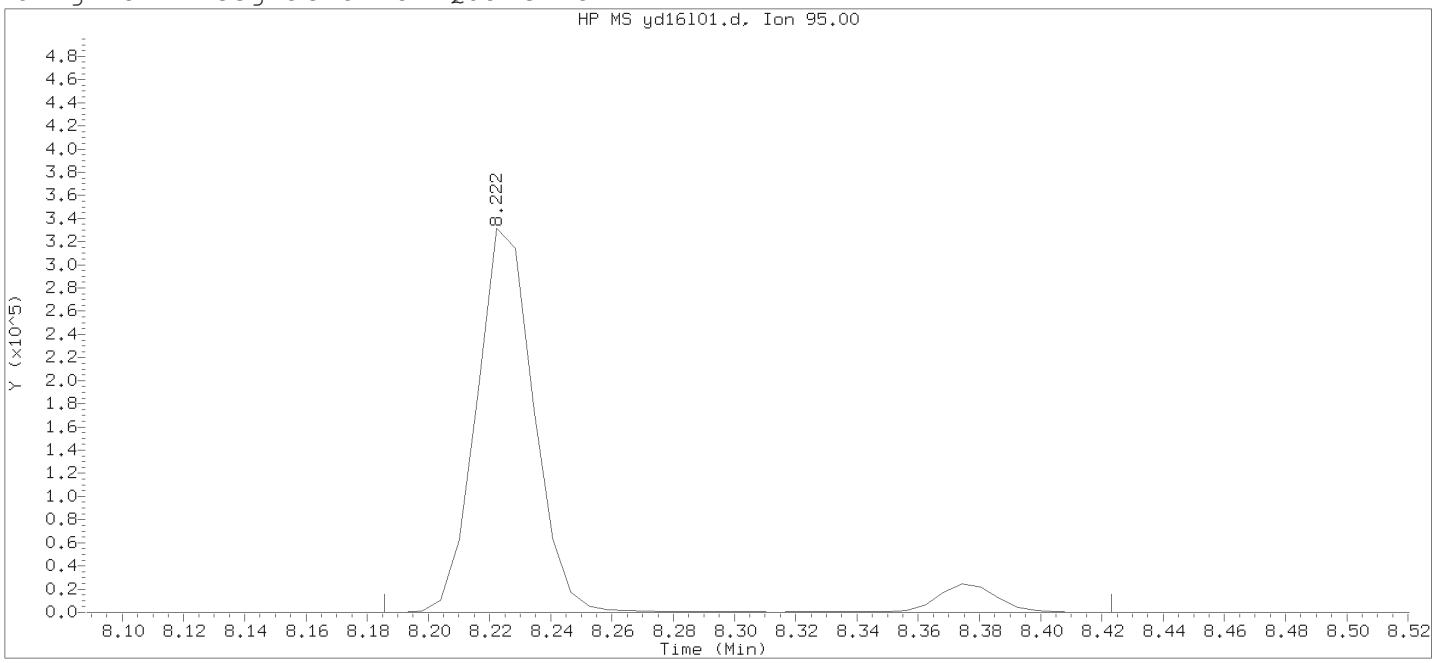
Analyst responsible for change: Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l01.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:17 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:33 Automation

Sample Name: LCSY87 Lab Sample ID: LCSY87

Compound Number : 114
Compound Name : 4-Bromofluorobenzene
Scan Number : 1256
Retention Time (minutes): 8.222
Quant Ion : 95.00
Area : 462688
On-column Amount (ng) : 53.0355
Integration start scan : 1249 Integration stop scan: 1288
Y at integration start : 0 Y at integration end: 0

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:34.
Target 3.5 esignature user ID: DHH02035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCDY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	17	
74-87-3	Chloromethane	20	
75-01-4	Vinyl Chloride	21	
74-83-9	Bromomethane	17	
75-00-3	Chloroethane	16	
75-43-4	Dichlorofluoromethane	19	
75-69-4	Trichlorofluoromethane	23	
60-29-7	Ethyl ether	25	
354-23-4	Freon 123a	23	
107-02-8	Acrolein	160	
75-35-4	1,1-Dichloroethene	27	
67-64-1	Acetone	160	
76-13-1	Freon 113	27	
67-63-0	2-Propanol	190	
74-88-4	Methyl Iodide	22	
75-15-0	Carbon Disulfide	12	
107-05-1	Allyl Chloride	19	
79-20-9	Methyl Acetate	16	
75-09-2	Methylene Chloride	19	
75-65-0	t-Butyl alcohol	210	
107-13-1	Acrylonitrile	78	
156-60-5	trans-1,2-Dichloroethene	21	
1634-04-4	Methyl Tertiary Butyl Ether	20	
110-54-3	n-Hexane	15	
75-34-3	1,1-Dichloroethane	20	
108-20-3	di-Isopropyl ether	19	
126-99-8	2-Chloro-1,3-butadiene	19	
637-92-3	Ethyl t-butyl ether	19	
156-59-2	cis-1,2-Dichloroethene	21	
540-59-0	1,2-Dichloroethene (Total)	42	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCDY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
78-93-3	2-Butanone	120	
594-20-7	2,2-Dichloropropane	19	
107-12-0	Propionitrile	140	
126-98-7	Methacrylonitrile	140	
74-97-5	Bromochloromethane	21	
109-99-9	Tetrahydrofuran	86	
67-66-3	Chloroform	22	
71-55-6	1,1,1-Trichloroethane	20	
110-82-7	Cyclohexane	18	
563-58-6	1,1-Dichloropropene	20	
56-23-5	Carbon Tetrachloride	22	
78-83-1	Isobutyl Alcohol	510	
71-43-2	Benzene	20	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	20	
142-82-5	n-Heptane	16	
71-36-3	n-Butanol	990	
79-01-6	Trichloroethene	22	
108-87-2	Methylcyclohexane	20	
78-87-5	1,2-Dichloropropane	20	
74-95-3	Dibromomethane	21	
123-91-1	1,4-Dioxane	470	
80-62-6	Methyl Methacrylate	19	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	17	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	20	
108-10-1	4-Methyl-2-pentanone	78	
108-88-3	Toluene	21	
10061-02-6	trans-1,3-Dichloropropene	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCDY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
542-75-6	1,3-Dichloropropene (total)	41	
97-63-2	Ethyl Methacrylate	19	
79-00-5	1,1,2-Trichloroethane	20	
127-18-4	Tetrachloroethene	22	
142-28-9	1,3-Dichloropropane	20	
591-78-6	2-Hexanone	72	
124-48-1	Dibromochloromethane	22	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	20	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	21	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	43	
95-47-6	o-Xylene	20	
1330-20-7	Xylene (Total)	63	
100-42-5	Styrene	21	
75-25-2	Bromoform	19	
98-82-8	Isopropylbenzene	21	
108-94-1	Cyclohexanone	330	
108-86-1	Bromobenzene	22	
79-34-5	1,1,2,2-Tetrachloroethane	19	
96-18-4	1,2,3-Trichloropropane	20	
110-57-6	trans-1,4-Dichloro-2-butene	92	
103-65-1	n-Propylbenzene	20	
95-49-8	2-Chlorotoluene	21	
106-43-4	4-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	20	
76-01-7	Pentachloroethane	21	
95-63-6	1,2,4-Trimethylbenzene	21	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCDY87

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCDY87

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/15dec16a.b/yd16l02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 12/16/15

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
135-98-8	sec-Butylbenzene		21	
541-73-1	1,3-Dichlorobenzene		21	
99-87-6	p-Isopropyltoluene		21	
106-46-7	1,4-Dichlorobenzene		22	
526-73-8	1,2,3-Trimethylbenzene		21	
100-44-7	Benzyl Chloride		18	
141-93-5	1,3-Diethylbenzene		21	
105-05-5	1,4-Diethylbenzene		21	
95-50-1	1,2-Dichlorobenzene		22	
104-51-8	n-Butylbenzene		20	
135-01-3	1,2-Diethylbenzene		21	
25340-17-4	Diethylbenzene (total)		63	
96-12-8	1,2-Dibromo-3-chloropropane		17	
108-70-3	1,3,5-Trichlorobenzene		22	
120-82-1	1,2,4-Trichlorobenzene		21	
87-68-3	Hexachlorobutadiene		21	
91-20-3	Naphthalene		20	
87-61-6	1,2,3-Trichlorobenzene		21	
91-57-6	2-Methylnaphthalene		18	

Data file: /chem2/HP09355.i/15dec16a.b/yd16l02.d Injection date and time: **16-DEC-2015 02:39**
Data file Sample Info. Line: LCDY87;LCDY87;1;3;LCSD;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	1.871	(0.006)	212	65	359124	(0)	250.00	
66) Fluorobenzene	3.878	(0.012)	542	96	1142794	(2)	50.00	
100) Chlorobenzene-d5	7.054	(0.012)	1064	117	874662	(0)	50.00	
131) 1,4-Dichlorobenzene-d4	9.159	(0.006)	1410	152	473085	(-1)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	3.246	(0.001)	113	272264	50.778	102%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	3.550	(0.000)	102	71534	51.455	103%		77 - 113
83) Toluene-d8	(3)	5.491	(0.000)	98	1140060	48.388	97%		80 - 113
114) 4-Bromofluorobenzene	(3)	8.222	(-0.001)	95	436629	49.409	99%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	0.922	(0.002)	85	104584	16.832	16.83			0.5	1
4) Chloromethane	(2)	0.995	(0.002)	50	138225	19.553	19.55			0.5	1
6) Vinyl Chloride	(2)	1.056	(0.000)	62	134146	21.410	21.41			0.5	1
8) Bromomethane	(2)	1.183	(0.002)	94	72330	16.796	16.80			0.5	1
9) Chloroethane	(2)	1.208	(0.002)	64	54813	15.708	15.71			0.5	1
10) Dichlorofluoromethane	(2)	1.323	(0.002)	67	151677	19.233	19.23			0.5	1
12) Trichlorofluoromethane	(2)	1.372	(0.002)	101	162052	23.133	23.13			0.5	1
14) Ethyl ether	(2)	1.451	(0.000)	59	114087	25.471	25.47			2	5
15) Freon 123a	(2)	1.469	(0.003)	67	119579	22.848	22.85			2	5
16) Acrolein	(1)	1.524	(-0.002)	56	347391	159.694	159.69			40	100
17) 1,1-Dichloroethene	(2)	1.585	(0.000)	96	110850	26.915	26.91			0.5	1
18) Acetone	(1)	1.597	(0.000)	58	181224	163.926	163.93			6	20
19) Freon 113	(2)	1.621	(0.001)	101	106578	26.808	26.81			2	10
21) 2-Propanol	(1)	1.676	(-0.002)	45	127159	193.794	193.79			50	100
22) Methyl Iodide	(2)	1.670	(0.001)	142	176092	22.462	22.46			0.5	1
23) Carbon Disulfide	(2)	1.713	(0.001)	76	184244	11.667	11.67			1	5
25) Allyl Chloride	(2)	1.780	(0.000)	41	114021	18.907	18.91			1	5
27) Methyl Acetate	(2)	1.786	(0.000)	43	114419	16.479	16.48			1	5
28) Methylene Chloride	(2)	1.853	(0.000)	84	93773	19.321	19.32			2	4
30) t-Butyl alcohol	(1)	1.932	(-0.006)	59	336442	211.117	211.12			5	20
31) Acrylonitrile	(2)	1.999	(-0.000)	53	314102	77.746	77.75			4	20
32) trans-1,2-Dichloroethene	(2)	2.029	(-0.000)	96	97298	20.557	20.56			0.5	1
33) Methyl Tertiary Butyl Ether	(2)	2.035	(0.001)	73	322764	19.559	19.56			0.5	1
34) n-Hexane	(2)	2.224	(0.001)	57	117898	14.960	14.96			2	5
36) 1,1-Dichloroethane	(2)	2.327	(-0.000)	63	189883	19.722	19.72			0.5	1
38) di-Isopropyl ether	(2)	2.400	(-0.000)	45	343988	18.635	18.63			0.5	1
39) 2-Chloro-1,3-butadiene	(2)	2.400	(0.001)	53	143721	18.521	18.52			1	5
40) Ethyl t-butyl ether	(2)	2.716	(-0.000)	59	339238	19.004	19.00			0.5	1
42) cis-1,2-Dichloroethene	(2)	2.814	(0.000)	96	122755	21.127	21.13			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	220053	41.684	41.68			0.5	1
44) 2-Butanone	(2)	2.826	(-0.000)	43	860338	122.657	122.66			3	10

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:35. Target 3.5 esignature user ID: dhh02035

Data file: /chem2/HP09355.i/15dec16a.b/yd16l02.d Injection date and time: **16-DEC-2015 02:39**
Data file Sample Info. Line: LCDY87;LCDY87;1;3;LCSD;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
45) 2,2-Dichloropropane	(2)	2.826(-0.000)	77	129857	18.907	18.91			0.5	1
47) Propionitrile	(1)	2.875(-0.001)	54	259128	142.414	142.41			30	100
48) Methacrylonitrile	(2)	3.008(0.000)	67	609448	143.785	143.78			10	50
49) Bromochloromethane	(2)	3.021(0.000)	128	63498	21.243	21.24			1	5
50) Tetrahydrofuran	(1)	3.069(0.001)	71	162313	86.188	86.19			4	10
51) Chloroform	(2)	3.106(-0.000)	83	193892	21.885	21.88			0.5	1
53) 1,1,1-Trichloroethane	(2)	3.270(0.000)	97	170915	20.366	20.37			0.5	1
54) Cyclohexane	(2)	3.325(0.000)	56	161869	17.927	17.93			2	5
55) 1,1-Dichloropropene	(2)	3.422(-0.001)	75	148036	19.841	19.84			1	5
56) Carbon Tetrachloride	(2)	3.428(-0.001)	117	133641	21.596	21.60			0.5	1
58) Isobutyl Alcohol	(1)	3.580(-0.006)	41	269274M	511.764	511.76			100	250
60) Benzene	(2)	3.611(-0.001)	78	449491	20.278	20.28			0.5	1
61) 1,2-Dichloroethane	(2)	3.623(-0.001)	62	165742	21.120	21.12			0.5	1
65) t-Amyl methyl ether	(2)	3.751(0.000)	73	329852	19.516	19.52			0.5	1
67) n-Heptane	(2)	3.909(-0.001)	43	148892	16.152	16.15			2	5
69) n-Butanol	(1)	4.219(-0.004)	56	457339	990.015	990.02			100	250
71) Trichloroethene	(2)	4.243(-0.001)	95	123167	21.831	21.83			0.5	1
72) Methylcyclohexane	(2)	4.438(-0.002)	83	178227	19.870	19.87			1	5
73) 1,2-Dichloropropane	(2)	4.450(-0.000)	63	116845	20.284	20.28			0.5	1
74) Dibromomethane	(2)	4.566(-0.002)	93	78303	21.087	21.09			0.5	1
75) 1,4-Dioxane	(1)	4.596(-0.004)	88	57544	471.381	471.38			70	250
76) Methyl Methacrylate	(2)	4.614(-0.000)	69	122322	18.654	18.65			1	5
78) Bromodichloromethane	(2)	4.742(-0.000)	83	130662	20.757	20.76			0.5	1
79) 2-Nitropropane	(2)	4.967(-0.000)	41	49096	16.581	16.58			2	10
80) 2-Chloroethyl Vinyl Ether	(2)	5.083(-0.002)	63	99363	18.987	18.99			2	10
81) cis-1,3-Dichloropropene	(2)	5.217(-0.002)	75	176381	20.282	20.28			0.5	1
82) 4-Methyl-2-pentanone	(2)	5.405(-0.002)	43	1032859	77.883	77.88			3	10
88) Toluene	(3)	5.564(-0.000)	92	297804	20.540	20.54			0.5	1
89) trans-1,3-Dichloropropene	(3)	5.819(-0.000)	75	165966	20.363	20.36			0.5	1
90) 1,3-Dichloropropene (total)	(3)		100	342347	40.645	40.64			1	5
91) Ethyl Methacrylate	(3)	5.971(-0.000)	69	193705	18.778	18.78			1	5
92) 1,1,2-Trichloroethane	(3)	6.002(-0.000)	97	117995	20.369	20.37			0.5	1
93) Tetrachloroethene	(3)	6.148(0.000)	166	136282	22.422	22.42			0.5	1
94) 1,3-Dichloropropane	(3)	6.172(0.000)	76	195548	19.702	19.70			0.5	1
96) 2-Hexanone	(3)	6.312(0.000)	43	836746	72.110	72.11			3	10
97) Dibromochloromethane	(3)	6.415(-0.000)	129	110054	22.023	22.02			0.5	1
99) 1,2-Dibromoethane	(3)	6.513(0.000)	107	135290	21.460	21.46			0.5	1
101) 1-Chlorohexane	(3)	7.121(-0.000)	91	153930	19.817	19.82			1	5
102) Chlorobenzene	(3)	7.084(-0.000)	112	345701	20.926	20.93			0.5	1
103) 1,1,1,2-Tetrachloroethane	(3)	7.194(-0.000)	131	109023	21.141	21.14			0.5	1
104) Ethylbenzene	(3)	7.237(-0.000)	91	568512	20.842	20.84			0.5	1
106) m+p-Xylene	(3)	7.370(-0.000)	106	458618	42.628	42.63			0.5	1
107) o-Xylene	(3)	7.754(-0.000)	106	218199	20.364	20.36			0.5	1
108) Xylene (Total)	(3)		106	676817	62.992	62.99			0.5	1
109) Styrene	(3)	7.772(-0.001)	104	372389	20.572	20.57			1	5
110) Bromoform	(3)	7.912(-0.001)	173	78678	18.551	18.55			0.5	4
111) Isopropylbenzene	(3)	8.113(-0.001)	105	573278	20.886	20.89			1	5
112) Cyclohexanone	(1)	8.155(-0.014)	55	224372	332.870	332.87			25	100
115) Bromobenzene	(4)	8.332(0.000)	156	159019	21.696	21.70			1	5
116) 1,1,2,2-Tetrachloroethane	(4)	8.374(0.000)	83	195091	19.176	19.18			0.5	1
117) 1,2,3-Trichloropropane	(4)	8.392(0.000)	110	65912	20.285	20.29			1	5
118) trans-1,4-Dichloro-2-butene	(4)	8.423(0.000)	53	308535	91.724	91.72			15	50
119) n-Propylbenzene	(4)	8.465(0.000)	91	682277	20.473	20.47			1	5
120) 2-Chlorotoluene	(4)	8.514(0.000)	126	145193	20.578	20.58			1	5

M = Compound was manually integrated.

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:35. Target 3.5 esignature user ID: dhh02035

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/15dec16a.b/yd16l02.d Injection date and time: **16-DEC-2015 02:39**
Data file Sample Info. Line: LCDY87;LCDY87;1;3;LCSD;;;;yd16b01; Instrument ID: **HP09355.i** Batch: **Y153501AA**
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Blank Data file reference: **/chem2/HP09355.i/15dec16a.b/yd16b01.d**

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: **8260W-X**
Calibration date and time (Last Method Edit): 16-DEC-2015 02:25
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/15dec16a.b/yd16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

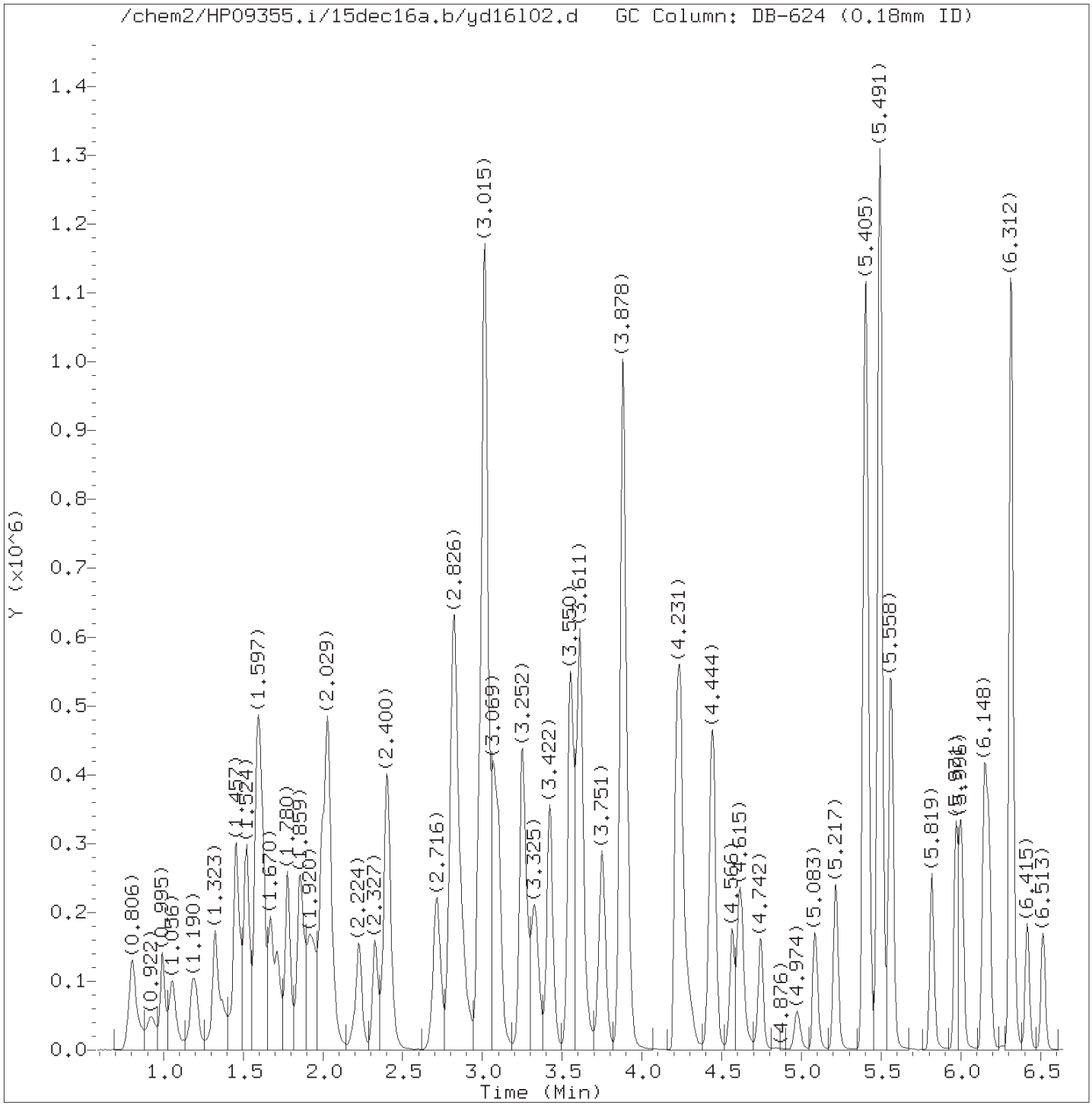
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
121) 4-Chlorotoluene	(4)	8.605(0.000)	126	152969	20.631	20.63			1	5
122) 1,3,5-Trimethylbenzene	(4)	8.624(0.000)	105	510243	20.765	20.76			1	5
124) tert-Butylbenzene	(4)	8.873(0.000)	134	112730	20.485	20.48			1	5
125) Pentachloroethane	(4)	8.873(0.000)	167	85544	21.371	21.37			1	5
126) 1,2,4-Trimethylbenzene	(4)	8.916(0.000)	105	515669	20.517	20.52			1	5
127) sec-Butylbenzene	(4)	9.050(-0.000)	105	631920	20.551	20.55			1	5
129) 1,3-Dichlorobenzene	(4)	9.104(0.000)	146	301785	21.412	21.41			1	5
130) p-Isopropyltoluene	(4)	9.165(-0.000)	119	565203	20.593	20.59			1	5
133) 1,4-Dichlorobenzene	(4)	9.177(-0.000)	146	311838	21.684	21.68			1	5
134) 1,2,3-Trimethylbenzene	(4)	9.226(-0.000)	105	533317	20.598	20.60			1	5
135) Benzyl Chloride	(4)	9.281(-0.000)	91	335183	18.240	18.24			1	5
136) 1,3-Diethylbenzene	(4)	9.390(-0.000)	119	339818	20.531	20.53			1	5
137) 1,4-Diethylbenzene	(4)	9.451(-0.000)	119	365248	21.174	21.17			1	5
138) 1,2-Dichlorobenzene	(4)	9.445(-0.000)	146	297436	21.688	21.69			1	5
139) n-Butylbenzene	(4)	9.463(-0.000)	92	274347	19.883	19.88			1	5
140) 1,2-Diethylbenzene	(4)	9.530(-0.000)	119	286641	20.840	20.84			1	5
141) Diethylbenzene (total)	(4)		100	991707	62.544	62.54			1	5
142) 1,2-Dibromo-3-chloropropane	(4)	9.992(-0.000)	75	46696	17.442	17.44			2	5
144) 1,3,5-Trichlorobenzene	(4)	10.151(-0.000)	180	232189	21.556	21.56			1	5
146) 1,2,4-Trichlorobenzene	(4)	10.558(-0.000)	180	218428	21.058	21.06			1	5
147) Hexachlorobutadiene	(4)	10.686(-0.000)	225	98261	20.637	20.64			2	5
148) Naphthalene	(4)	10.710(-0.000)	128	712099	19.744	19.74			1	5
149) 1,2,3-Trichlorobenzene	(4)	10.874(-0.000)	180	206188	20.871	20.87			1	5
150) 2-Methylnaphthalene	(4)	11.440(-0.000)	142	383703	17.586	17.59			2	5

Total number of targets = 109

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:35. Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35. Parallax ID: cbs01947



Total Ion Chromatogram (TIC)

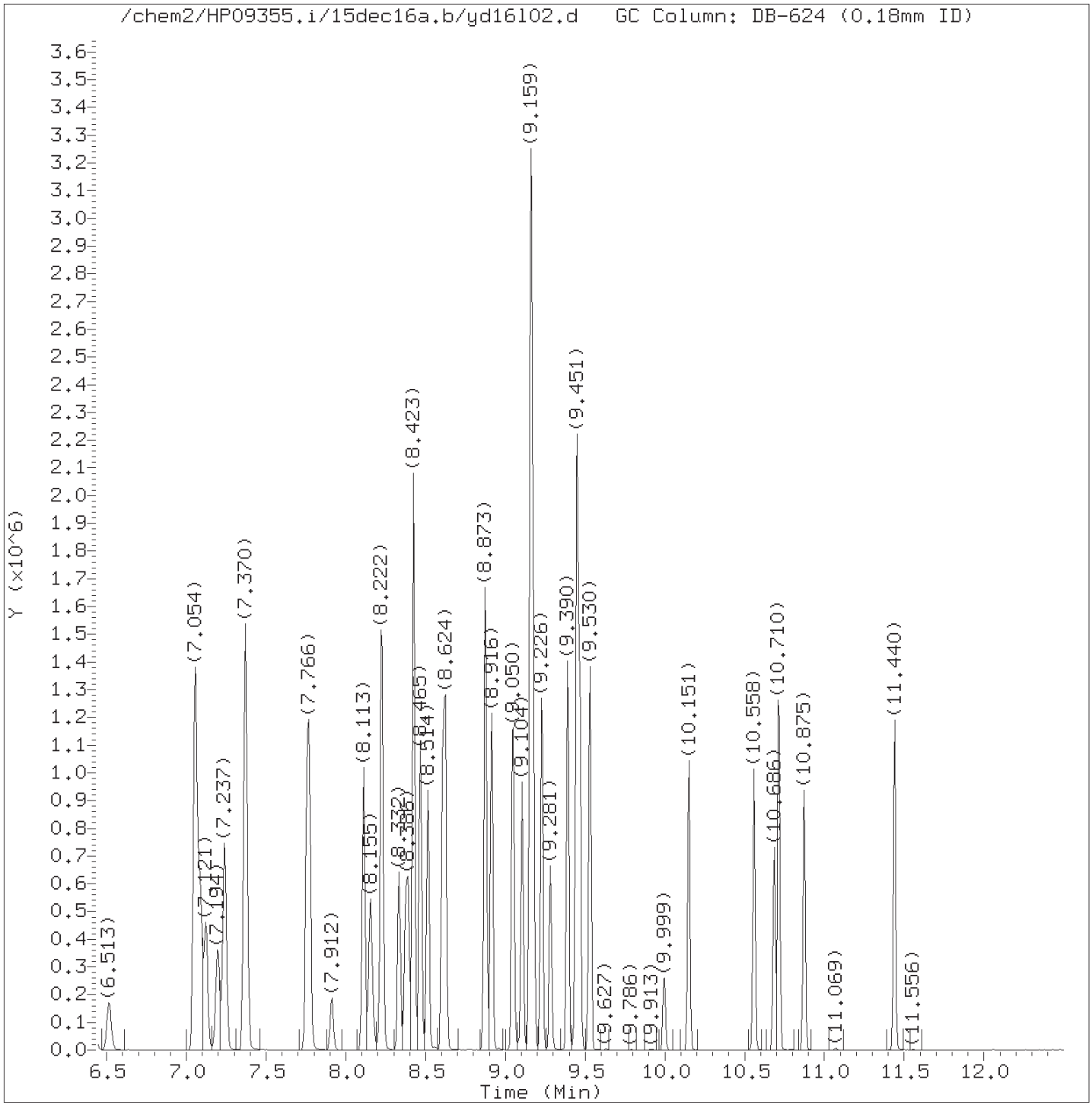
Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	0.922	85	104584	16.832
4) Chloromethane	(2)	0.995	50	138225	19.553
6) Vinyl Chloride	(2)	1.056	62	134146	21.410
8) Bromomethane	(2)	1.183	94	72330	16.796
9) Chloroethane	(2)	1.208	64	54813	15.708
10) Dichlorofluoromethane	(2)	1.323	67	151677	19.233
12) Trichlorofluoromethane	(2)	1.372	101	162052	23.133
14) Ethyl ether	(2)	1.451	59	114087	25.471
15) Freon 123a	(2)	1.469	67	119579	22.848
16) Acrolein	(1)	1.524	56	347391	159.694
17) 1,1-Dichloroethene	(2)	1.585	96	110850	26.915
18) Acetone	(1)	1.597	58	181224	163.926
19) Freon 113	(2)	1.621	101	106578	26.808
22) Methyl Iodide	(2)	1.670	142	176092	22.462
21) 2-Propanol	(1)	1.676	45	127159	193.794
23) Carbon Disulfide	(2)	1.713	76	184244	11.667
25) Allyl Chloride	(2)	1.780	41	114021	18.907
27) Methyl Acetate	(2)	1.786	43	114419	16.479
28) Methylene Chloride	(2)	1.853	84	93773	19.321
29)*t-Butyl alcohol-d10	(1)	1.871	65	359124	250.000
30) t-Butyl alcohol	(1)	1.932	59	336442	211.117
31) Acrylonitrile	(2)	1.999	53	314102	77.746
32) trans-1,2-Dichloroethene	(2)	2.029	96	97298	20.557
33) Methyl Tertiary Butyl Ether	(2)	2.035	73	322764	19.559
34) n-Hexane	(2)	2.224	57	117898	14.960
36) 1,1-Dichloroethane	(2)	2.327	63	189883	19.722
38) di-Isopropyl ether	(2)	2.400	45	343988	18.635
39) 2-Chloro-1,3-butadiene	(2)	2.400	53	143721	18.521
40) Ethyl t-butyl ether	(2)	2.716	59	339238	19.004
42) cis-1,2-Dichloroethene	(2)	2.814	96	122755	21.127
45) 2,2-Dichloropropane	(2)	2.826	77	129857	18.907
44) 2-Butanone	(2)	2.826	43	860338	122.657
47) Propionitrile	(1)	2.875	54	259128	142.414
43) 1,2-Dichloroethene (Total)	(2)		96	220053	41.684
48) Methacrylonitrile	(2)	3.009	67	609448	143.785
49) Bromochloromethane	(2)	3.021	128	63498	21.243
50) Tetrahydrofuran	(1)	3.069	71	162313	86.188
51) Chloroform	(2)	3.106	83	193892	21.885

* = Compound is an internal standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(2)	3.246	113	272264	50.778
53) 1,1,1-Trichloroethane	(2)	3.270	97	170915	20.366
54) Cyclohexane	(2)	3.325	56	161869	17.927
55) 1,1-Dichloropropene	(2)	3.422	75	148036	19.841
56) Carbon Tetrachloride	(2)	3.428	117	133641	21.596
57)$1,2-Dichloroethane-d4	(2)	3.550	102	71534	51.455
58) Isobutyl Alcohol	(1)	3.580	41	269274M	511.764
60) Benzene	(2)	3.611	78	449491	20.278
61) 1,2-Dichloroethane	(2)	3.623	62	165742	21.120
65) t-Amyl methyl ether	(2)	3.751	73	329852	19.516
66)*Fluorobenzene	(2)	3.878	96	1142794	50.000
67) n-Heptane	(2)	3.909	43	148892	16.152
69) n-Butanol	(1)	4.219	56	457339	990.015
71) Trichloroethene	(2)	4.243	95	123167	21.831
72) Methylcyclohexane	(2)	4.438	83	178227	19.870
73) 1,2-Dichloropropane	(2)	4.450	63	116845	20.284
74) Dibromomethane	(2)	4.566	93	78303	21.087
75) 1,4-Dioxane	(1)	4.596	88	57544	471.381
76) Methyl Methacrylate	(2)	4.615	69	122322	18.654
78) Bromodichloromethane	(2)	4.742	83	130662	20.757
79) 2-Nitropropane	(2)	4.967	41	49096	16.581
80) 2-Chloroethyl Vinyl Ether	(2)	5.083	63	99363	18.987
81) cis-1,3-Dichloropropene	(2)	5.217	75	176381	20.282
82) 4-Methyl-2-pentanone	(2)	5.405	43	1032859	77.883
83)$Toluene-d8	(3)	5.491	98	1140060	48.388
88) Toluene	(3)	5.564	92	297804	20.540
89) trans-1,3-Dichloropropene	(3)	5.819	75	165966	20.363
90) 1,3-Dichloropropene (total)	(3)		100	342347	40.645
91) Ethyl Methacrylate	(3)	5.971	69	193705	18.778
92) 1,1,2-Trichloroethane	(3)	6.002	97	117995	20.369
93) Tetrachloroethene	(3)	6.148	166	136282	22.422
94) 1,3-Dichloropropane	(3)	6.172	76	195548	19.702
96) 2-Hexanone	(3)	6.312	43	836746	72.110
97) Dibromochloromethane	(3)	6.415	129	110054	22.023
99) 1,2-Dibromoethane	(3)	6.513	107	135290	21.460
100)*Chlorobenzene-d5	(3)	7.054	117	874662	50.000
102) Chlorobenzene	(3)	7.085	112	345701	20.926
101) 1-Chlorohexane	(3)	7.121	91	153930	19.817

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) 1,1,1,2-Tetrachloroethane	(3)	7.194	131	109023	21.141
104) Ethylbenzene	(3)	7.237	91	568512	20.842
106) m+p-Xylene	(3)	7.370	106	458618	42.628
107) o-Xylene	(3)	7.754	106	218199	20.364
109) Styrene	(3)	7.772	104	372389	20.572
108) Xylene (Total)	(3)		106	676817	62.992
110) Bromoform	(3)	7.912	173	78678	18.551
111) Isopropylbenzene	(3)	8.113	105	573278	20.886
112) Cyclohexanone	(1)	8.155	55	224372	332.870
114)$4-Bromofluorobenzene	(3)	8.222	95	436629	49.409
115) Bromobenzene	(4)	8.332	156	159019	21.696
116) 1,1,2,2-Tetrachloroethane	(4)	8.374	83	195091	19.176
117) 1,2,3-Trichloropropane	(4)	8.392	110	65912	20.285
118) trans-1,4-Dichloro-2-butene	(4)	8.423	53	308535	91.724
119) n-Propylbenzene	(4)	8.465	91	682277	20.473
120) 2-Chlorotoluene	(4)	8.514	126	145193	20.578
121) 4-Chlorotoluene	(4)	8.605	126	152969	20.631
122) 1,3,5-Trimethylbenzene	(4)	8.624	105	510243	20.765
125) Pentachloroethane	(4)	8.873	167	85544	21.371
124) tert-Butylbenzene	(4)	8.873	134	112730	20.485
126) 1,2,4-Trimethylbenzene	(4)	8.916	105	515669	20.517
127) sec-Butylbenzene	(4)	9.050	105	631920	20.551
129) 1,3-Dichlorobenzene	(4)	9.104	146	301785	21.412
131)*1,4-Dichlorobenzene-d4	(4)	9.159	152	473085	50.000
130) p-Isopropyltoluene	(4)	9.165	119	565203	20.593
133) 1,4-Dichlorobenzene	(4)	9.177	146	311838	21.684
134) 1,2,3-Trimethylbenzene	(4)	9.226	105	533317	20.598
135) Benzyl Chloride	(4)	9.281	91	335183	18.240
136) 1,3-Diethylbenzene	(4)	9.390	119	339818	20.531
138) 1,2-Dichlorobenzene	(4)	9.445	146	297436	21.688
137) 1,4-Diethylbenzene	(4)	9.451	119	365248	21.174
139) n-Butylbenzene	(4)	9.463	92	274347	19.883
140) 1,2-Diethylbenzene	(4)	9.530	119	286641	20.840
141) Diethylbenzene (total)	(4)		100	991707	62.544
142) 1,2-Dibromo-3-chloropropane	(4)	9.992	75	46696	17.442
144) 1,3,5-Trichlorobenzene	(4)	10.151	180	232189	21.556
146) 1,2,4-Trichlorobenzene	(4)	10.558	180	218428	21.058
147) Hexachlorobutadiene	(4)	10.686	225	98261	20.637

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

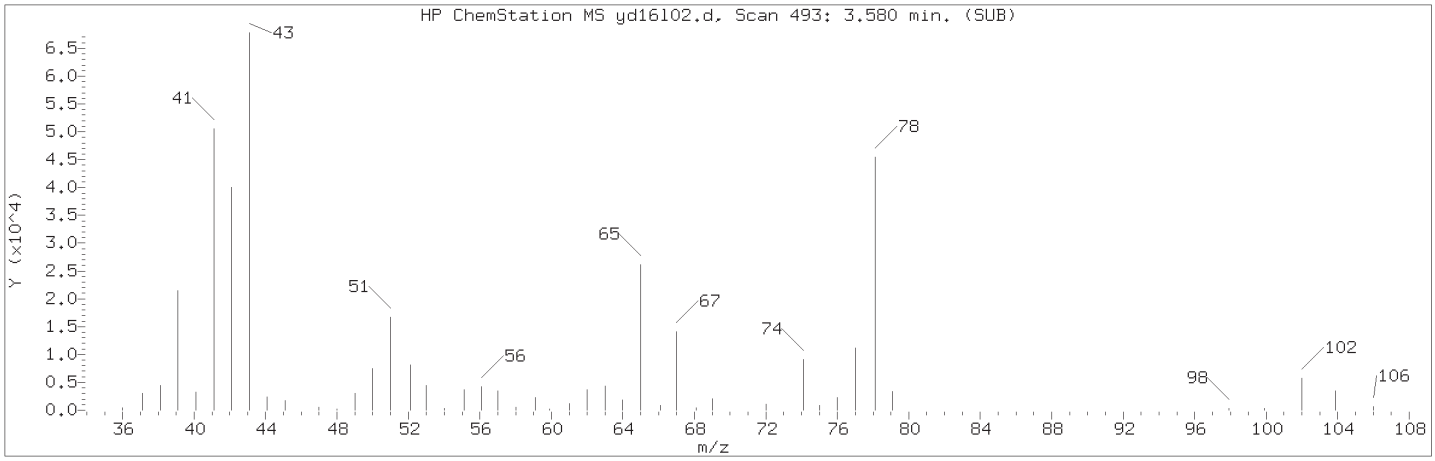
Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

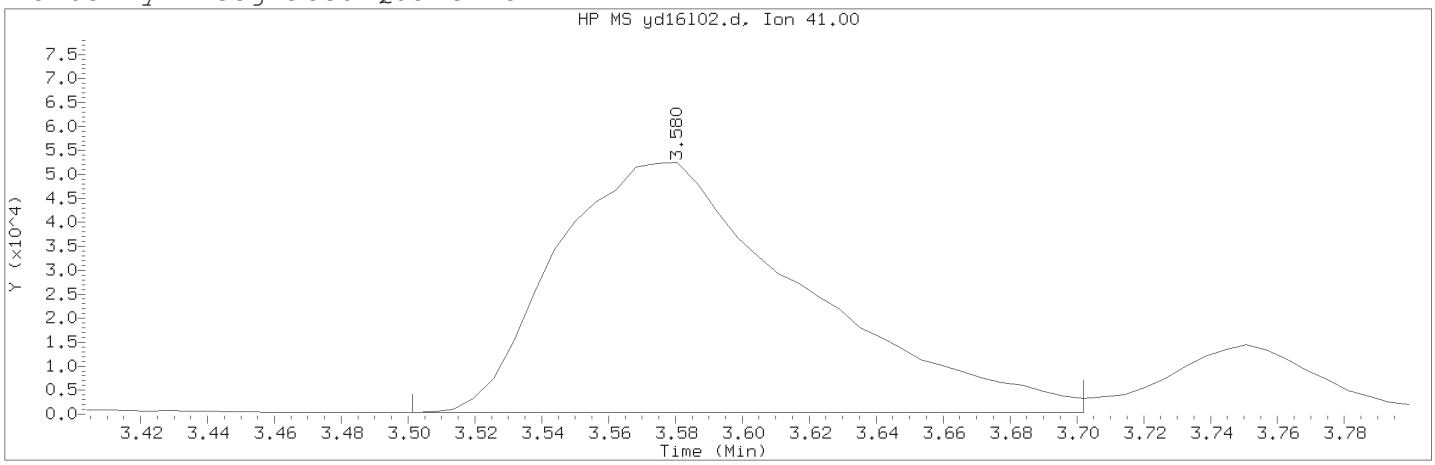
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
148) Naphthalene	(4)	10.710	128	712099	19.744
149) 1,2,3-Trichlorobenzene	(4)	10.875	180	206188	20.871
150) 2-Methylnaphthalene	(4)	11.440	142	383703	17.586

Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 03:23 sas00403

Sample Name: LCDY87 Lab Sample ID: LCDY87

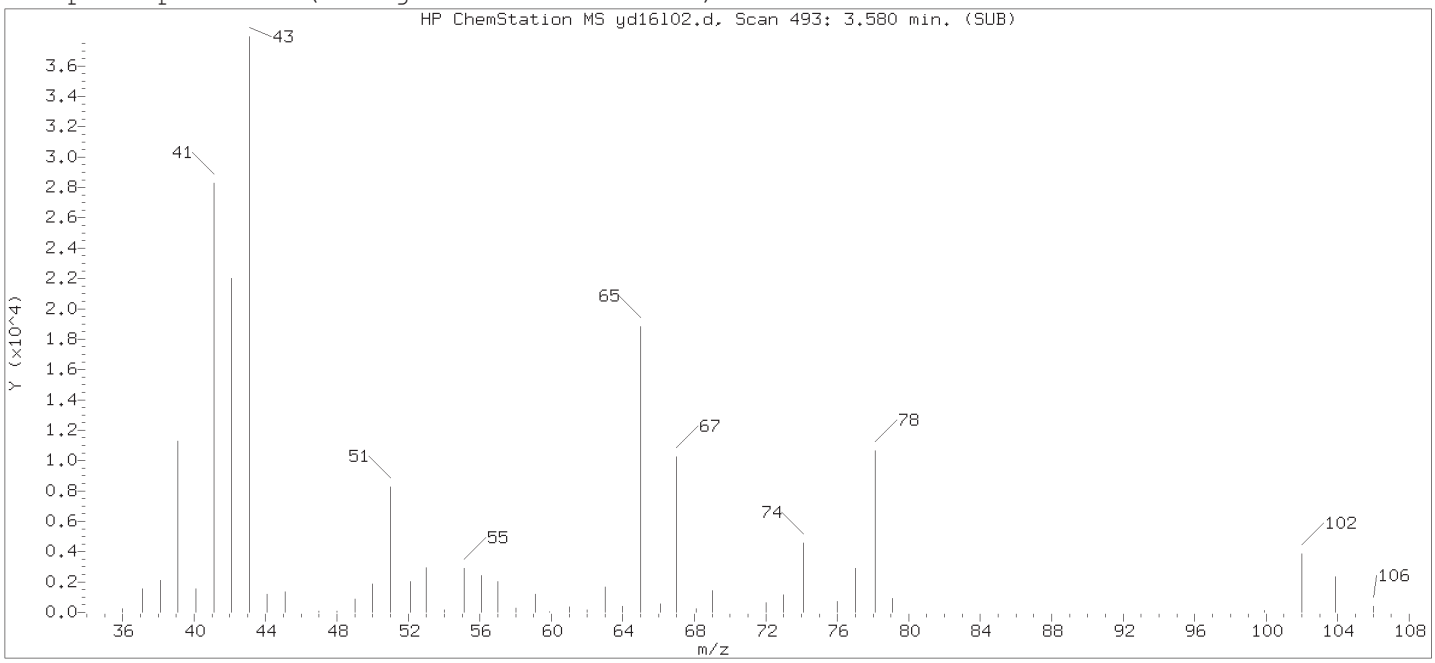
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 493
Retention Time (minutes): 3.580
Quant Ion : 41.00
Area (flag) : 269274M
On-Column Amount (ng) : 511.7636
Integration start scan : 479 Integration stop scan: 512
Y at integration start : 318 Y at integration end: 318

Reason for manual integration: improper integration

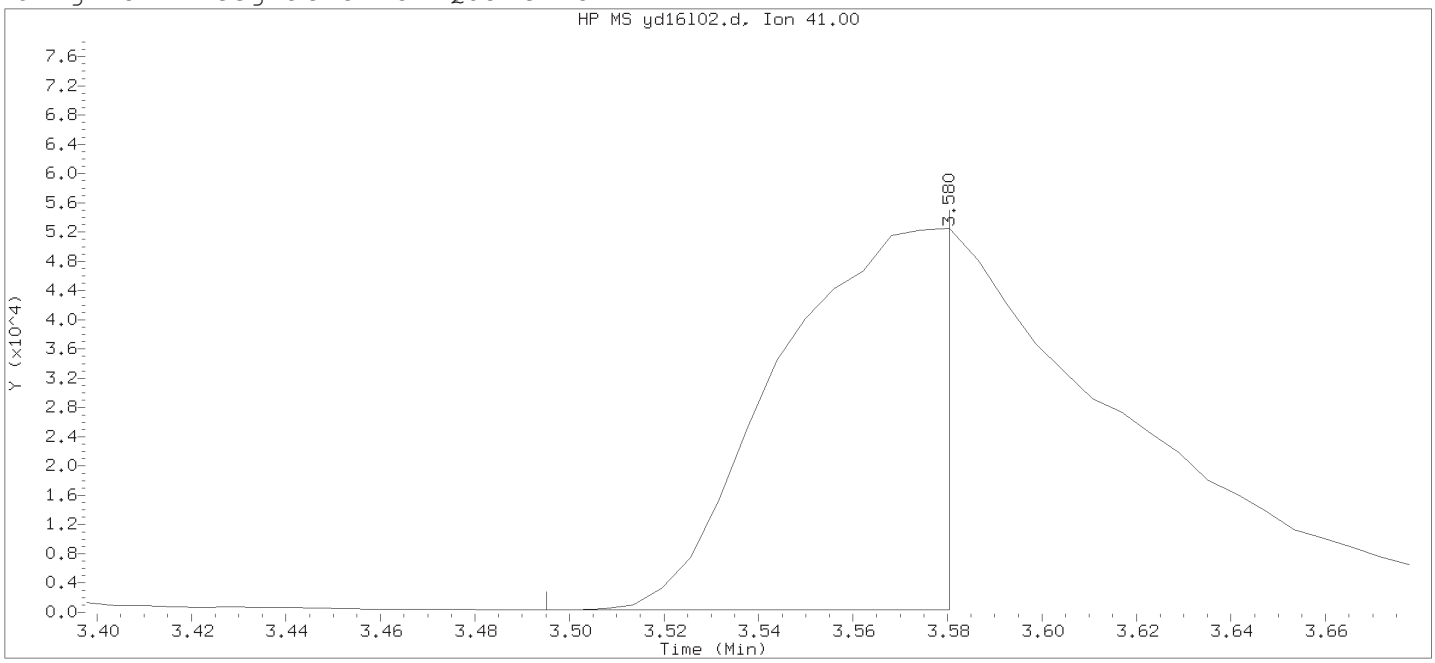
Analyst responsible for change: Digitally signed by Daniel H. Heller
on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: dhh02035

Secondary review performed and digitally signed by Chelsea B. Stong on 12/17/2015 at 11:35.
Parallax ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/15dec16a.b/yd16l02.d Instrument ID: HP09355.i
Injection date and time: 16-DEC-2015 02:39 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/15dec16a.b/m8260c5.m Sublist used: 8260W-X
Calibration date and time: 16-DEC-2015 02:25
Date, time and analyst ID of latest file update: 16-Dec-2015 02:54 Automation

Sample Name: LCDY87 Lab Sample ID: LCDY87

Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 493
Retention Time (minutes): 3.580
Quant Ion : 41.00
Area : 125765
On-column Amount (ng) : 239.0205
Integration start scan : 478 Integration stop scan: 492
Y at integration start : 334 Y at integration end: 334

Digitally signed by Daniel H. Heller on 12/16/2015 at 14:35.
Target 3.5 esignature user ID: DHH02035

APPENDIX E
GROUNDWATER SAMPLING DATA USABILITY SUMMARY REPORT

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

June 8, 2016

Mark Zunich
Reliance Environmental, Inc.
235 North Duke Street
Lancaster, PA 17602

RE: **D**ata **U**sability **S**ummary **R**eport for the BK Oceanside Plaza Site
Lancaster SDG No. OSP22

Dear Mr. Zunich:

Review has been completed for the analytical data packages generated by Eurofins Lancaster Laboratories that pertain to samples collected 12/09/15 at the BK Oceanside site. Two aqueous samples and an aqueous field duplicate were processed for Target Compound List (TCL) volatile by USEPA SW846 method EPA8260B. Field and trip blanks were also processed.

The data packages that were submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOP HW-33, the USEPA CLP National Functional Guidelines for Organic Data Review, the specific laboratory methodologies, and professional judgment, as affects the usability of the data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Field Duplicate Correlation
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, sample analyte values/reporting limits are usable as reported.

A copy of the laboratory case narrative is attached to this text, and should be reviewed in conjunction with this report. Also included in this report are the sample results forms.

The following text discusses quality issues of concern.

Volatiles by EPA 8260B

Holding time requirements were met, and the surrogate and internal standard recoveries are within the required limits.

The calibration standards show acceptable response. Field, trip, and method blanks show no contamination.

No sample matrix spikes were performed. Historically, accuracy and precision of the matrix were good. The LCSs show compliant recoveries.

The field duplicate evaluation was performed on BKO-MW4, and shows good correlations.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVE

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Sample Reference List for SDG Number OSP22
with a Data Package Type of NYSDEC B

12577 - Reliance Environmental, Inc.
Project: Oceanside Plaza

Lab Sample Number	Client Sample ID	Collection Date	Date Received
8167916	BKO-MW5	12/09/2015 10:12	12/09/2015 15:06
8167917	BKO-MW4	12/09/2015 10:55	12/09/2015 15:06
8167918	BKO-DUP	12/09/2015 11:00	12/09/2015 15:06
8167919	BKO-FB	12/09/2015 10:00	12/09/2015 15:06
8167920	BKO-TB	12/09/2015 00:00	12/09/2015 15:06

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Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP22

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
8167916	BKO-MW5	X		1	
8167917	BKO-MW4	X		1	
8167918	BKO-DUP	X		1	Field Duplicate Sample
8167919	BKO-FB	X		1	Field Blank
8167920	BKO-TB	X		1	Trip Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

Batch#: Y153501AA (Sample number(s): 8167916-8167920)
The recovery for the LCSD exceeds the acceptance window indicating a positive bias in 1,1-Dichloroethene, Freon 113

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP22

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

(Sample number(s): 8167916-8167920: Analysis: 11997)
A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

SAMPLE RESULTS FORMS

Sample Description: BKO-MW5 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167916
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:12 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW5 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167916
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:12 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 05:26	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 05:26	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW4 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167917
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:55 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-MW4 Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167917
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:55 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKO04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 05:47	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 05:47	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-DUP Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167918
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 11:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFD

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	3	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-DUP Grab Groundwater
Oceanside Plaza

LL Sample # WW 8167918
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 11:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFD

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:08	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:08	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-FB Grab Water
Oceanside Plaza

LL Sample # WW 8167919
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-FB Grab Water
Oceanside Plaza

LL Sample # WW 8167919
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015 10:00 by APH

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOFB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:29	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:29	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

Sample Description: BKO-TB Water
Oceanside Plaza

LL Sample # WW 8167920
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Acetone	67-64-1	N.D.	6	20	1
11997	Benzene	71-43-2	N.D.	0.5	1	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1	1
11997	Bromoform	75-25-2	N.D.	0.5	4	1
11997	Bromomethane	74-83-9	N.D.	0.5	1	1
11997	2-Butanone	78-93-3	N.D.	3	10	1
11997	Carbon Disulfide	75-15-0	N.D.	1	5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1	1
11997	Chloroethane	75-00-3	N.D.	0.5	1	1
11997	Chloroform	67-66-3	N.D.	0.5	1	1
11997	Chloromethane	74-87-3	N.D.	0.5	1	1
11997	Cyclohexane	110-82-7	N.D.	2	5	1
11997	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1	1
11997	1,2-Dibromoethane	106-93-4	N.D.	0.5	1	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	5	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	5	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	5	1
11997	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1	1
11997	Freon 113	76-13-1	N.D.	2	10	1
11997	2-Hexanone	591-78-6	N.D.	3	10	1
11997	Isopropylbenzene	98-82-8	N.D.	1	5	1
11997	Methyl Acetate	79-20-9	N.D.	1	5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1	1
11997	4-Methyl-2-pentanone	108-10-1	N.D.	3	10	1
11997	Methylcyclohexane	108-87-2	N.D.	1	5	1
11997	Methylene Chloride	75-09-2	N.D.	2	4	1
11997	Styrene	100-42-5	N.D.	1	5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1	1
11997	Toluene	108-88-3	N.D.	0.5	1	1
11997	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1	1

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside

*=This limit was used in the evaluation of the final result

Sample Description: BKO-TB Water
Oceanside Plaza

LL Sample # WW 8167920
LL Group # 1615773
Account # 12577

Project Name: Oceanside Plaza

Collected: 12/09/2015

Submitted: 12/09/2015 15:06
Reported: 12/17/2015 12:56

Reliance Environmental, Inc.
235 N. Duke Street
Lancaster PA 17602

BKOTB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

General Sample Comments

State of New York Certification No. 10670

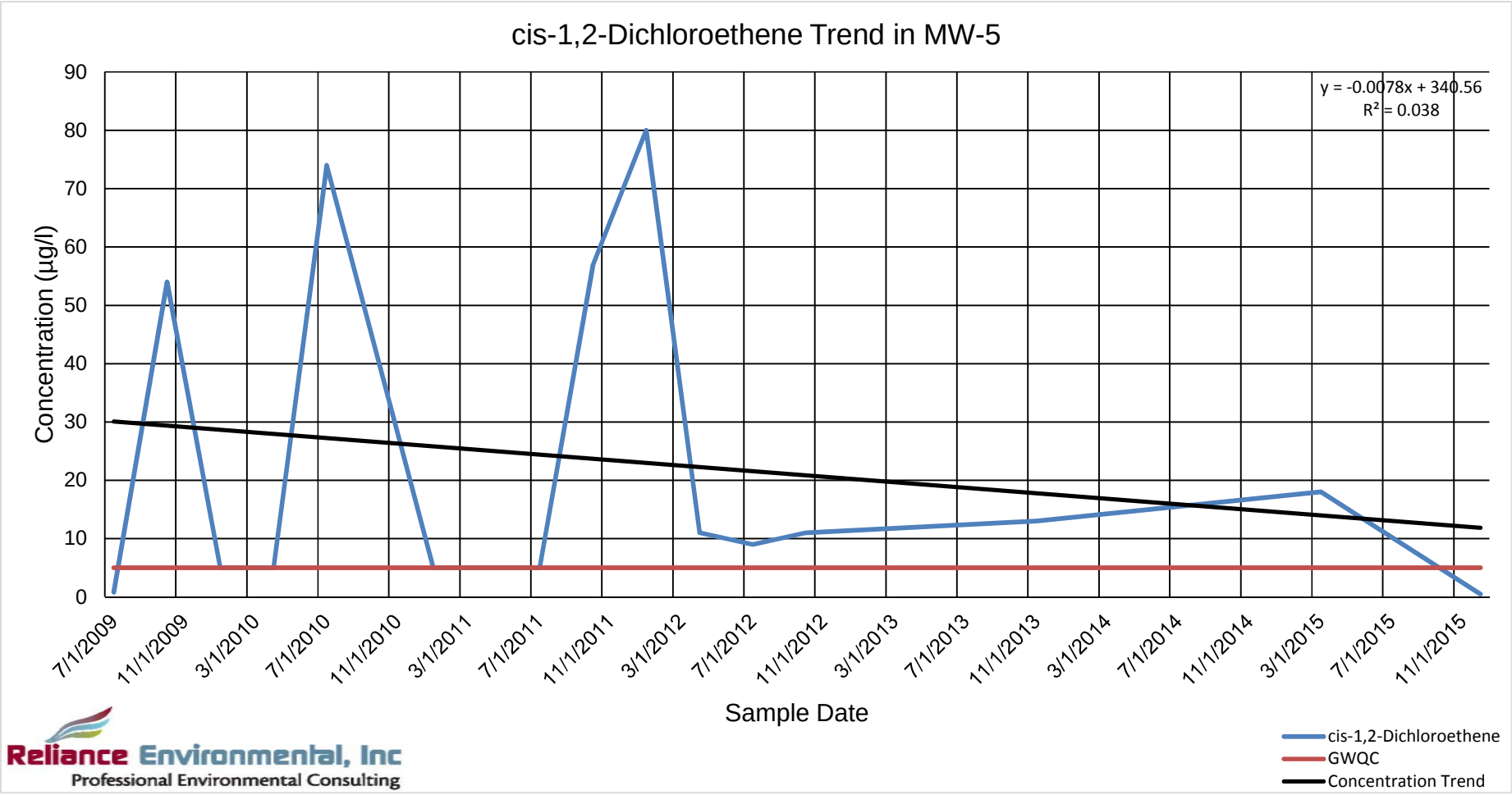
All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	Y153501AA	12/16/2015 06:50	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	Y153501AA	12/16/2015 06:50	Stephanie A Selis	1

*=This limit was used in the evaluation of the final result

APPENDIX F
GROUNDWATER CONCENTRATION GRAPHS



Reliance Environmental, Inc
Professional Environmental Consulting

APPENDIX G
SITE INSPECTION AND NON-ROUTINE CHECKLISTS

SITE INSPECTION FORM

Date: December 9, 2015

Inspector: Alex Huber

Weather Conditions: Overcast, 45^0

Observations	Yes	No	Comments
1. Has the site usage changed since the previous inspection?		X	
2. Are any new structures present on-site?		X	
3. Has the usage of any retail spaces changed since the previous inspection?		X	
4. Have any structures been demolished since the previous inspection?		X	
5. Is there any evidence of recent excavation activities on-site? (i.e. disturbed earth, patched pavement, etc.)		X	
6. Are any modifications evident within the Environmental Easement designated area?		X	
7. Is there any contaminant related surface staining present?		X	
8. Are there any contaminant related odors present?	X		Dry cleaning machine room only.
9. Are the stormwater drains in need of repair?		X	
10. Are the ground water monitoring wells in need of repair?		X	
11. Is the sub-slab depressurization system operational?		X	
12. Are the sub-slab depressurization system checklists up-to-date?		X	System is not operational.
13. Is the soil vapor/indoor air quality monitoring sampling events up-to-date?	X		
14. Has there been any changes to the neighboring properties?		X	