ALLIANCE
RESIDENTIAL COMPANY

**Peter Solar**
**Managing Director**

Mr. Gabe Stivala, P.G.
ATC Group Services LLC
915 Highland Point Drive, Suite 250
Roseville, CA 95678

Subject: **Additional Site Assessment Report**
2820 and 2855 Broadway, Oakland, CA
Alameda County LOP No. RO 3198

Dear Mr. Stivala:

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

Sincerely,

Peter Solar
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January 6, 2016

Ms. Dilan Roe
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

**Subject:** **Additional Site Assessment Report**
**Proposed Broadway Valdez Development Site**
2820 and 2855 Broadway
Oakland, California
Alameda County LOP No. RO 3198

Dear Ms. Roe:

On behalf of Broadstone on Broadway, LLC, ATC Group Services LLC (ATC) has prepared this *Additional Site Assessment Report* for supplemental soil and groundwater assessment at the above referenced parcels (the "Site"). The additional site assessment activities described in this report were performed in accordance with ATCs *Revised Work Plan for Additional Site Assessment* dated June 21, 2016. The *Revised Work Plan for Additional Site Assessment* supersedes the original work plan dated March 16, 2016 and clarifies the proposed scope of work agreed to in a meeting with Alliance, ATC, and the ACEH held on June 20, 2016. The proposed scope of work was designed to achieve the following objectives:

- Evaluate if benzene reported in the grab-groundwater sample at Boring B21, in the eastern portion of 2820 Broadway, is related to benzene impacts off-site to the south of the property;
- Determine if trichloroethene (TCE) reported in the grab-groundwater samples at Borings B3, B20, B21, B22, and B23, in the eastern portion of 2820 Broadway, are related to the TCE impacts offsite to the south of the property;
- Further evaluate the extent of metals, petroleum hydrocarbons, and debris identified in shallow soil at boring B21, in the eastern portion of 2820 Broadway;
- Evaluate whether carbon tetrachloride detected in grab-groundwater sample at Boring B11, on the south portion of 2855 Broadway, is from on-site or off-site;
- Evaluate metals in soil and groundwater at 2855 Broadway in preparation for excavation and dewatering necessary for future installation of a subterranean garage; and
- Estimate groundwater flow direction at 2855 and 2820 Broadway.

## 1.0 SITE BACKGROUND

The Site consists of two properties located on opposing sides of Broadway between 28th and 29th Streets in Oakland, California (**Figure 1**). APN 9-865-69-1 at 2820 Broadway is located on the eastern side of Broadway and extends east to the terminus of Valdez Street. APN 9-686-3 at 2855 Broadway is located on the western side of Broadway and bound to the west by Webster Street (**Figure 2**). Both properties are bound to the north and south by commercial properties in an area that is undergoing redevelopment from commercial to mixed use commercial and residential properties. The property at 2820 Broadway is improved with one building located on the western half of the property. The eastern half of the property consists of an asphalt-paved parking lot. The 2855 Broadway property void of structures and is currently used as an asphalt-paved parking lot.

### 1.1 Physical Setting

Both properties are located in an area that is undergoing redevelopment from commercial to mixed use commercial and residential properties and are bound to the north and south by commercial properties. Surface topography across the property is variable.

### 1.2 Site Historical Information

Historical Site information was presented in the *Phase I Environmental Site Assessment* (ESA) prepared by ATC dated September 24, 2015. A summary of the historical site information is provided below:

In 1911, the property at 2820 Broadway was identified as 1920 and 1922 Broadway and was depicted with a garage and carriage painting factory, and was vacant the following year. Property improvements occurred circa 1916. Between 1939 and 2005, the 2820 Broadway property was improved with a commercial and/or industrial building. Records indicate Oakland Volvo, an automobile dealership and service shop, occupied the property at 2820 Broadway from approximately 1989 to October 1991. Saturn of Oakland, an automobile dealership and service shop, occupied the property from January 1991 to approximately 1995. Connell Nissan occupied the property from January 2006 to August 2007. Records indicate that Premier Hyundai of Oakland, the current property occupant, has operated at the 2820 property since January 2014.

Between 1939 and 2005, the property at 2855 Broadway was used as an automotive tire and battery shop, an auto top shop, used car building and some residential use. From 2005 to present, the 2855 Broadway property has been used as a vehicle parking lot.

### 1.3 Summary of Previous Environmental Investigations

Previous environmental assessment activities were performed at the Site between April 2015 and November 2015. Details regarding the previous environmental assessment activities are described in the following reports:

- Limited Phase II Subsurface Investigation performed by AEI Consultants, dated April 2015
- Limited Phase II Environmental Assessment Report, 2800, 2820, 2855 Broadway, Oakland, California, by ATC dated December 29, 2015

The previous environmental assessment activities included the collection and analysis of soil and groundwater samples obtained from the two properties. No groundwater monitoring wells were installed during the previous environmental assessment activities. However, “grab” groundwater samples were obtained from select soil borings following installation of temporary well screens. The results from the previous soil and groundwater sampling activities are summarized in the limited Phase II ESA, dated December 29, 2015.

### 1.4 Applicable Screening Levels

Soil and groundwater data were screened using the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), update February 2016. ESLs applied to soil data are taken from Table S-1 for Direct Exposure Human Health Risk Levels for Any Land Use/ Any Depth Soil Exposure for Construction Workers. These ESLs were selected based on potential direct exposure of construction workers to contaminants in soil during site redevelopment. Following redevelopment, direct exposure of site occupants to residual contaminants in soil is highly unlikely due to the presence of these future structures across the footprints of the 2820 and 2855 Broadway properties.

ESLs for groundwater are derived from Table GW-3 for Groundwater Vapor Intrusion Human Health Risk Levels. Two different sets of health-based, commercial/industrial ESLs (i.e., shallow and deep groundwater) were used for the groundwater vapor intrusion screening evaluation. Use of the shallow and deep groundwater ESLs is intended to allow for consideration of property-specific construction features and

the post-construction distance between the buildings and groundwater. Additional details regarding the rationale for selection and basis for use of the ESLs in light of the planned redevelopment activities are provided below:

- **Shallow Groundwater**. RWQCB ESLs for shallow groundwater are intended to apply to sites where the distance between the building and groundwater is less than or equal to 10 feet bgs. The RWQCB ESLs for shallow groundwater are based on the assumption that the subsurface lithology is comprised of entirely of sand. Following completion of the proposed redevelopment activities, the depth to groundwater will be less than 10 feet bgs across the entire footprint of the 2855 Broadway building. At the 2820 Broadway building, the post-construction depth to groundwater will be less than 10 feet bgs only in locations where elevator pits are installed. The results of laboratory analyses of groundwater samples collected from the 2820 and 2855 Broadway properties were compared to the shallow groundwater screening levels in these areas (i.e., 2820 Broadway elevator pit locations and the entire 2855 Broadway property) in order to determine whether the potential for vapor intrusion represents consideration of additional vapor intrusion mitigation measures.

- **Deep Groundwater**. RWQCB ESLs have been developed for deep groundwater conditions (i.e., sites where the distance between the building and groundwater is greater than or equal to 10 feet bgs. Based on groundwater monitoring data from July 19, 2016, the depth to groundwater at the 2820 Broadway property averages approximately 11.5 feet bgs. Redevelopment of the 2820 Broadway property will involve exclusively slab-on-grade construction. For the deep groundwater condition, ESL values have also been developed to reflect two possible soil types (i.e., sand scenario and fine-coarse scenario). In general, soil within the upper ten to twelve feet at the 2820 Broadway consists primarily of fine-grained silts and clays. In consideration of the observed depth to groundwater and soil lithology, the ESLs for the deep groundwater, fine-coarse scenario are considered to most accurately reflect the site-specific conditions for the 2820 Broadway property. The results of laboratory analyses of groundwater samples collected from the 2820 Broadway property were compared to the deep groundwater screening levels in order to determine whether the potential for vapor intrusion represents consideration of additional vapor intrusion mitigation measures. It should be noted that the features that extend beneath the building slab (e.g., elevator pits) for the 2820 Broadway property were conservatively evaluated for vapor intrusion potential under the shallow groundwater scenario.

In summary, ESLs for groundwater were selected based on the site-specific development activities, the final building grades, and the distance between the base of the building and groundwater following completion of construction activities.

The applicable ESLs for soil and groundwater are included in the data summary tables. (**Tables 1** through **Table 4).**

### 1.5 Previous Soil Sampling Results

Data collected from previous investigations is summarized below. The previously collected data is summarized and compared with applicable ESL in **Table 1** through **Table 4.**

**2820 Broadway**

Between April 8, 2015 and November 5, 2015, a total of twelve soil borings (B1, B3, B18 to B22, and SB7 to SB11) were advanced on the 2820 Broadway property. Soil samples were collected from these borings at depths ranging from approximately 3 to 24 feet below ground surface (bgs), and were analyzed for Volatile Organic Compounds (VOCs) and Total Petroleum Hydrocarbons (TPH) in the gasoline (TPHg) range by EPA Method 8260B, TPH in the diesel and motor oil ranges (TPHd and TPHo) by EPA Method 8015M, and metals by CAM 17 metals, including lead by EPA 200.7, EPA 6010B, EPA 6010C. A summary of the laboratory analytical findings from these investigations is provided below:

- **Total Petroleum Hydrocarbons** –TPHg were detected in five of thirty-four soil samples at concentrations ranging from 2.4 to 40 milligrams per kilogram (mg/kg)(compared to an ESL of

2,800 mg/kg). TPHd were detected in thirteen of thirty-four soil samples at concentrations ranging from 1.2 to 680 mg/kg (compared to an ESL of 880 mg/kg). TPHo were detected in five of thirty-four soil samples at concentrations ranging from 15 to 3,100 mg/kg (compared to an ESL of 32,000 mg/kg). The maximum concentrations of TPHg, TPHd, and TPHo were detected in the soil sample obtained from Boring B21 at a depth of 3 feet bgs.

- **Volatile Organic Compounds** – Trichloroethene (TCE) was detected in detected in one of thirty-four soil samples (B19 at 16 feet bgs) at a concentration of 0.016 mg/kg (compared to an ESL of 23 mg/kg). One additional VOC (sec-butyl benzene) was detected in one of thirty-four soil samples (B20 at 10 feet bgs) at a concentration of 0.0092 mg/kg (there is no ESL established for this compound). No other VOCs were detected in any of the soil samples collected from the 2820 Broadway property.
- **Metals** – Soil samples collected from three soil borings (B1, B3, and B21) advanced on the 2820 Broadway property were analyzed for metals. In general, the concentrations of metals detected in soil are consistent with background concentrations of these naturally-occurring elements. An elevated lead concentration of 1,500 mg/kg, (compared to an ESL of 160 mg/kg) was detected in the soil sample obtained from Boring B21 at a depth of 3 feet bgs.

**2855 Broadway**

Between April 8, 2015 and November 5, 2015, a total of five soil borings (SB1, SB2, SB3, B15 and B16) were advanced on the 2855 Broadway property. Soil samples were collected from these borings at depths ranging from approximately 8 to 28 feet below ground surface (bgs) and analyzed for VOCs and TPHg by EPA Method 8260B, TPHd and TPHo by EPA Method 8015M, and metals by CAM 17 metals, including lead by EPA 200.7, EPA 6010B, EPA 6010C. A summary of the laboratory analytical findings from these investigations is provided below:

- **Total Petroleum Hydrocarbons** –TPHg were detected in two of fifteen soil samples at concentrations ranging from 1.3 and 12 mg/kg (compared to an ESL of 2,800 mg/kg). TPHd were detected in three of fifteen soil samples at concentrations ranging from 1.2 to 290 mg/kg (compared to an ESL of 880 mg/kg). TPHo were detected in two of fifteen soil samples at concentrations of 56 and 590 mg/kg (compared to an ESL of 32,000 mg/kg). The maximum concentrations of TPHg, TPHd, and TPHo were detected in the soil sample obtained from Boring B15 at a depth of 8 feet bgs.
- **Volatile Organic Compounds** – Trace concentrations of VOCs, including toluene, ethylbenzene, total xylenes, chloroform, n-butyl benzene, and sec-butyl benzene were detected in one of fifteen soil samples at concentrations ranging from 0.0076 mg/kg (chloroform) to 0.03 mg/kg (n-butyl benzene), all of which were significantly below applicable ESLs. Naphthalene was detected in two soil samples collected from Boring B15 at depths of 8 and 12 feet bgs at concentrations of 0.15 and 0.056 mg/kg, respectively (compared to an ESL of 350 mg/kg). Carbon tetrachloride was detected at concentrations ranging from 0.01 to 0.016 mg/kg in four soil samples collected from Boring B16 at depths of 16, 20, 24, and 28 feet bgs (compared to an ESL of 13 mg/kg). No other VOCs were detected in any of the soil samples collected from the 2855 Broadway property.
- **Metals** – Soil samples collected from two soil borings (B15 and B16) advanced on the 2855 Broadway property were analyzed for metals. In general, the concentrations of metals detected in soil are consistent with background concentrations of these naturally-occurring elements. Nickel was detected above the ESL of 86 mg/kg in two samples at concentrations of 100 mg/kg and 95 mg/kg in samples B16-8' and B16, 16', respectively. No other metals concentrations exceeded ESLs.

### 1.6 Previous Groundwater Sampling Results

Between September 19 and November 6, 2015, "grab" groundwater samples were obtained from select soil borings advanced within the 2820 and 2855 Broadway properties. The groundwater samples were obtained by inserting a temporary ¾" PVC well screen and casing into the open borehole. Groundwater samples were collected from each casing using a peristaltic pump fitted with downhole tubing. Samples were collected and analyzed for VOCs and TPHg by EPA Method 8260B, TPHd and TPHo by EPA Method

8015M, and metals by CAM 17 metals, including lead by EPA 200.7, EPA 6010B, EPA 6010C. A summary of the laboratory analytical findings from these investigations is provided below:

**2820 Broadway**
Groundwater samples were obtained from nine soil borings (B1, B3, and B17 through B23) at depths ranging from approximately 17 to 28 feet bgs. The shallowest groundwater sample was obtained from Boring B1 at a depth of approximately 17 feet bgs. Groundwater samples were obtained from Borings B3, B17 through B20, and B22 at depths ranging from approximately 20 to 24 feet bgs. The deepest groundwater samples were obtained from Borings B21 and B23 at approximately 28 feet bgs. A summary of the laboratory analytical results of groundwater samples obtained from this property is provided below:

- **Total Petroleum Hydrocarbons** – TPHg were detected in three of nine groundwater samples at concentrations ranging from 75 to 5,500 micrograms per liter (µg/L). TPHd were detected in seven of nine groundwater samples at concentrations ranging from 95 to 1,100 µg/L. TPHo were detected in six of nine groundwater samples at concentrations ranging from 310 to 3,400 µg/L. Groundwater ESLs applicable to petroleum hydrocarbons in this case are for vapor intrusion, only, for which no ESLs have been established for TPH. The maximum concentrations of TPHg and TPHd were detected in the groundwater sample obtained from Boring B21, while the maximum concentration of TPHo was detected in the groundwater sample obtained from Boring B22.
- **Volatile Organic Compounds**– A variety of VOCs were detected in groundwater at concentrations ranging from 0.48 µg/L (MTBE) to 210 µg/L (total xylenes) at concentrations significantly below ESLs. Benzene was detected in two groundwater samples, B21 and B23, at concentrations of 120 and 16 µg/L, respectively (compared to an ESL of 260 µg/L [for deep groundwater]). Carbon tetrachloride was detected in two groundwater samples (B17 and B18) at concentrations of 1.9 and 0.80 µg/L, respectively (compared to an ESL of 69 µg/L [for deep groundwater]). TCE was detected in six groundwater samples (B3, B19, and B20 through B23) at concentrations ranging from 7.9 µg/L (B19) to 79 µg/L (B23) (compared to an ESL of 1,500 µg/L [for deep groundwater]). No other VOCs were detected in groundwater at concentrations in excess of chemical-specific ESLs.
- **Metals** – Groundwater samples collected from two soil borings (B1 and B3) advanced on the 2820 Broadway property were analyzed for metals. Metals detected in these groundwater samples include barium (100 and 140 µg/L) (compared to an ESL of 2,000 µg/L), cobalt (8.2 and 12 µg/L) (compared to an ESL of 6 µg/L), and nickel (18 µg/L) (compared to an ESL of 12 µg/L).

**2855 Broadway**
Groundwater samples were obtained from three soil borings (B11, B15, and B16) at depths ranging from approximately 15 to 22 feet bgs. The shallowest groundwater sample was obtained from Boring B11 at a depth of approximately 15 feet bgs. Groundwater samples were obtained from Borings B15 and B16 at depths of 18 and 22 feet bgs, respectively, and were analyzed for VOCs and TPHg by EPA Method 8260B, and TPHd and TPHo by EPA Method 8015M. A summary of the laboratory analytical findings from these investigations is provided below:

- **Total Petroleum Hydrocarbons** – TPHg were not detected in any of the three groundwater samples collected at this property. TPHd were detected in two of three groundwater samples at concentrations ranging from 120 to 480 µg/L. TPHo were detected in one of three groundwater samples at a concentration of 460 µg/L). Groundwater ESLs applicable to petroleum hydrocarbons in this case are for vapor intrusion, only, for which no ESLs have been established for TPH. The maximum concentrations of TPHd and TPHo were detected in the groundwater sample obtained from Boring B11.
- **Volatile Organic Compounds** – The only VOCs detected in groundwater samples obtained from this property were carbon tetrachloride and chloroform. Carbon tetrachloride was detected in two samples (B11 and B16) at concentrations of 34 and 4.8 µg/L, respectively (compared to an ESL of 1.9 µg/L). Chloroform was detected in two groundwater samples (B11 and B16) at concentrations

of 34 and 4.8 μg/L, respectively (compared to an ESL of 20 μg/L). No other VOCs were detected in groundwater samples obtained at the 2855 Broadway property.

## 2.0 ADDITIONAL SITE ASSESSMENT ACTIVITIES

### 2.1 Soil Boring and Monitoring Well Placement and Sampling Rationale

The soil boring and monitoring well locations were determined based on the results of previous environmental assessment and subsequent discussions with the ACEH. The soil boring and groundwater monitoring well locations were intended to further characterize the lateral distribution of constituents previously detected in soil, to further assess the lateral extent of VOCs in groundwater, and to establish the local groundwater flow direction. The locations of certain soil borings and/or groundwater monitoring wells were also designed to address conditions associated with subsurface features associated with the proposed site redevelopment activities. **Figure 2** depicts the locations of the soil borings and groundwater monitoring wells. The tabular summary presented below describes the rationale for the originally intended boring and monitoring well locations, the soil and groundwater sampling regime, and the laboratory analytical methods for soil and groundwater. The assessment was performed in general accordance with the rationale below:

| Well/Boring | Property Address | Boring Location Rationale | Samples and Analyses |
|---|---|---|---|
| B27 | 2820 Broadway | **Location**: Southwest and cross to downgradient of Boring B21. Immediately north of the trench basin to be removed during site redevelopment activities.<br><br>**Objectives**:<br>1) Further assess the lateral and vertical extent of lead in shallow soil and petroleum hydrocarbons in shallow and deep soil.<br>2) Assess the lateral extent of benzene and TCE in groundwater. | Two soil samples were collected within the upper 5 feet bgs; two additional soil samples collected between 5 feet bgs and first encountered groundwater. Samples were collected based on PID screening and visual observation. Soil samples were analyzed for full VOCs TPHg, TPHd, and TPHo, and lead. The groundwater sample were analyzed for full VOCs and lead (samples laboratory filtered prior to analysis). |
| B28 | 2820 Broadway | **Location**: North and crossgradient relative to B21.<br><br>**Objectives**:<br>1) Further assess the lateral and vertical extent of lead in soil.<br>2) Assess the lateral extent of benzene in groundwater. | Two soil samples were collected within the upper 5 feet bgs; four additional soil samples were collected between 5 feet bgs and first encountered groundwater. Samples were collected based on PID screening and visual observation. Soil samples were analyzed for full VOCs TPHg, TPHd, and TPHo, and lead (samples laboratory filtered prior to analysis). The groundwater sample was analyzed for full VOCs. |
| MW-1/B29 | 2820 Broadway | **Location**: Southeast and upgradient of Boring B21. Immediately south of the trench basin to be removed during site redevelopment activities.<br><br>**Objectives**:<br>1) Assess for lateral and vertical extent of TPH and lead in soil southeast of Boring B21.<br>2) Assess the lateral extent of benzene | Two soil samples were collected within the upper 5 feet bgs; four additional soil samples were collected between 5 feet bgs and first encountered groundwater. Samples were collected based on PID screening and visual observation. Soil samples were analyzed for full VOCs TPHg, TPHd, and TPHo, and lead |

| Well/Boring | Property Address | Boring Location Rationale | Samples and Analyses |
|---|---|---|---|
| | | and TCE in groundwater in a properly installed and developed groundwater monitoring well.<br>3) Provide groundwater elevation data in order to more accurately measure groundwater gradient and flow directions. | (samples laboratory filtered prior to analysis). The groundwater samples were analyzed for full VOCs and the monitoring well sample analyzed for lead. A groundwater sample was collected from the completed monitoring well >48 hours after well development. |
| MW-2/B30 | 2820 Broadway | **Location**: South of Boring B21 and west of Boring B22 located near the southern property line.<br><br>**Objectives**:<br>1) Assess the lateral extent of lead and TPH in soil south of Boring B21<br>2) Assess the lateral extent of benzene and TCE in groundwater in a properly installed and developed groundwater monitoring well.<br>3) Provide groundwater elevation data in order to more accurately measure groundwater gradient and flow directions. | Two soil samples were collected in the top 5 feet bgs; three additional soil samples were collected between 5 feet bgs and first encountered groundwater. Samples were collected based on PID screening and visual observation. Soil samples were analyzed for full VOCs TPHg, TPHd, and TPHo, and lead. The boring and monitoring well groundwater samples were analyzed for full VOCs and lead (samples laboratory filtered prior to analysis). |
| MW-3/B31 | 2820 Broadway | **Location**: Immediately north of previous Boring B22.<br><br>**Objectives**:<br>1) Characterize the concentrations of TPH and TCE in groundwater in a properly installed and developed groundwater monitoring well.<br>2) Provide groundwater elevation data to more accurately measure groundwater gradient and flow directions. | The groundwater sample from the monitoring well was analyzed for full VOCs and lead (samples laboratory filtered prior to analysis). No soil samples were collected because soil samples collected from Boring B22 were already subjected to laboratory analysis. |
| MW-4/B24 | 2855 Broadway | **Location**: Within the approximate center point of a proposed elevator shaft within the northeastern portion of the parcel.<br><br>**Objectives**:<br>1) Assess the lateral extent of carbon tetrachloride in groundwater north of Borings B11 and B16.<br>2) Evaluate the possible presence of an onsite source for VOCs in soil.<br>3) Provide groundwater elevation data to more accurately measure groundwater gradient and flow directions.<br>4) Possible future use of well for aquifer testing to support dewatering associated with proposed subterranean garage construction. | Field soil were screened PID every five feet. Three soil samples were collected for laboratory analysis based on field screening and observations. A groundwater sample was collected from the completed monitoring well >48 hours after well development. Soil samples were analyzed for full VOCs. The monitoring well groundwater sample was analyzed for full VOCs and CAM 17 Metals (samples were lab filtered prior to analysis). |
| MW-5/B25 | 2855 | **Location**: West of Boring B16 along | Field soil was screened using a |

| Well/Boring | Property Address | Boring Location Rationale | Samples and Analyses |
|---|---|---|---|
| | Broadway | the western property line.<br>**Objectives**:<br>1) Further assess the lateral distribution of carbon tetrachloride in groundwater west of Boring B16 and northwest of Boring B11.<br>2) Evaluate the possible presence of an onsite source for VOCs in soil.<br>3) Provide groundwater elevation data to more accurately measure groundwater gradient and flow directions.<br>4) Possible future use of well for aquifer testing to support dewatering associated with proposed subterranean garage construction. | PID every five feet. Three soil samples were collected for laboratory analysis based on field screening and observations. A groundwater sample was collected from the completed monitoring well >48 hours after well development. Soil samples were analyzed for full VOCs. The monitoring well groundwater sample was analyzed for full VOCs and CAM 17 Metals (samples laboratory filtered prior to analysis). |
| MW-6/B26 | 2855 Broadway | **Location**: East of Boring B11 near the eastern property line.<br><br>**Objectives**:<br>1) Further assess the lateral extent of carbon tetrachloride in groundwater within the southeastern portion of the parcel, east of Boring B11 and south of Boring B16.<br>2) Evaluate the possible presence of an onsite source for VOCs in soil.<br>3) Provide groundwater elevation data to more accurately measure groundwater gradient and flow directions.<br>4) Possible future use of well for aquifer testing to support dewatering associated with proposed subterranean garage construction. | Field soil to be screened using a PID every five feet. Three soil samples were collected for laboratory analysis based on field screening and observations. A groundwater sample was collected from the completed monitoring well >48 hours after well development. Soil samples were analyzed for full VOCs. The monitoring well groundwater sample was analyzed for full VOCs and CAM 17 Metals (samples laboratory filtered prior to analysis). |

Notes:
Total VOCs – volatile organic compounds by EPA Method 8260B
TPHg – total petroleum hydrocarbons in the gasoline range by EPA Method 8260B
TPHd – total petroleum hydrocarbons in the diesel range by EPA Method 8015M
TPHo – total petroleum hydrocarbons in the motor oil range by EPA Method 8015M
CAM 17 Metals – CAM 17 metals, including lead by EPA 200.7, EPA 6010B, EPA 6010C

## 2.2 PRE-FIELD ACTIVITIES

### 2.2.1 Planning and Permits

ATC obtained a drilling permit from Alameda County Public Works for the advancement of borings and installation of permanent monitoring wells. A copy of the drilling permit is included in **Attachment A**.

### 2.2.2 Health and Safety Plan

As required by the Occupational Safety and Health Administration (OSHA) Standard “Hazardous Waste Operations and Emergency Response” guidelines (29 CFR 1910.120), and by California Occupational Safety and Health Administration (Cal-OSHA) “Hazardous Waste Operations and Emergency Response” guidelines (CCR Title 8, Section 5192), ATC prepared a Site-Specific Health and Safety Plan (HASP) prior to the commencement of fieldwork. The Site-Specific HASP was reviewed and signed by field staff and contractors before beginning field operations at the Site.

### 2.2.3 Underground Utility Locating and Clearance

In advance of field activities, ATC marked the locations of the proposed well and boring in accordance with the Underground Service Alert (USA) guidelines, and notify USA of upcoming subsurface activities in order for existing underground utilities in the area of proposed work to be located and contact avoided. ATC also contracted a private utility locator to confirm the locations of underground utilities in the vicinity of the drilling locations.

## 2.3 SUBSURFACE INVESTIGATION METHODOLOGY

Between July 5 and July 8, 2016, ATC advanced seven direct-push soil borings (B24 through B30). Four of these soil borings (B27, B28, B29, and B30) were advanced within the 2820 Broadway property. Soil borings B29 and B30 were subsequently converted into groundwater monitoring wells MW-1 and MW-2, respectively, by overdrilling the borings with hollow-stem auger. One additional soil boring (B31) was advanced on the 2820 Broadway property and was subsequently converted to groundwater monitoring well MW-3. The three remaining direct-push borings (B24, B25, and B26) were advanced within the 2855 Broadway property and were subsequently converted into groundwater monitoring wells MW-4, MW-5, and MW-6, respectively, by overdrilling the borings with hollow-stem auger.

### 2.3.1 Drilling and Sampling

The soil borings were drilled by Gregg Drilling & Testing, Inc, a C-57 licensed drilling company to depths of five feet below first encountered groundwater or to a maximum depth of 25 feet bgs at the 2820 Broadway property and 30 feet bgs at the 2855 Broadway property. An ATC field scientist, under the responsible charge of a California Registered Professional Geologist, logged the borings and collected soil samples. Soil samples were collected from each boring for lithologic logging and field screening, as well as for laboratory analyses. Soil was logged in general accordance with the American Standards for Testing Materials (ASTM) 2488-06 and the Unified Soil Classification System (USCS). Soil was observed for visual impacts and screened using a photo-ionization detector (PID). Copies of the soil boring logs are included in **Attachment B**.

The soil was extracted from each boring in a 4-foot by 1.5-inch outside diameter (O.D.) core sampler equipped with an acetate liner using direct-push technology. Samples contained in acetate liners were capped with Teflon tape and plastic end caps. Samples were then labeled and stored in a cooler with ice. Samples were transported to a California state-certified analytical laboratory under standard chain-of-custody protocol.

Soil samples were collected as follows:

- 2820 Broadway (APN 9-865-69-1)
  - B27: 2, 4, 10, and 15 feet bgs
  - B28: 2, 4, 10, 15, 20, and 25 feet bgs
  - MW-1/B29: 2, 4, 10, 15, 20, and 25 feet bgs
  - MW-2/B30: 2, 4, 10, and 15 feet bgs
  - MW-3/B31: 2 and 4 feet bgs
- 2855 Broadway (APN 9-686-3)
  - MW-4/B24: 15, 20, and 25 feet bgs
  - MW-5/B25: 15, 20, and 25 feet bgs
  - MW-6/B26: 15, 20, and 25 feet bgs

Soil samples were analyzed for VOCs and TPHg by EPA Method 8260B and TPHd and TPHo by EPA Method 8015M. Soil samples obtained from Borings B24, B25, and B26 located on the 2855 Broadway property were analyzed for only VOCs by EPA Method 8260B. All soil samples obtained from Borings B27 through B31 were also analyzed for lead using EPA Method 6010B.

Groundwater samples were collected from total depth in Borings B27 through B30 at 2820 Broadway prior to well completion using a temporary screened PVC casing installed via direct push technology. Groundwater samples were analyzed for VOCs and TPHg by EPA Method 8260B, and TPHg by EPA Method 8260B and TPHd and TPHo by EPA Method 8015M. No groundwater samples were collected from Borings B24, B25, or B26 advanced on the 2855 Broadway property.

### 2.3.2 Groundwater Monitoring Well Installation

The six permanent monitoring wells, MW-1 through MW-6, were installed using eight-inch hollow stem augers. Wells MW-1 through MW-3 were installed to an approximate total depth of 25 feet bgs, while Monitoring Wells MW-4 through MW-6 were installed to an approximate total depth of 30 feet bgs. Wells are constructed with a 2-inch diameter schedule 40 PVC casing with 15 feet of 0.010-inch slotted screen. A 2/12 Monterey sand filter pack was placed around the screened interval to 2 feet above the top of the screened interval. A two-foot bentonite transition seal was placed above the filter pack. The remaining annulus was sealed with a Portland I/II neat cement slurry. The wells were finished traffic-rated well vaults and fitted with a locking well cap. The well construction details are presented in **Table 1**.

### 2.3.3 Monitoring Well Development and Surveying

Six groundwater Monitoring Wells (Monitoring Wells MW-1, MW-2, and MW-3 installed within the eastern portion of 2820 Broadway and monitoring Wells MW-4, MW-5, and MW-6 installed at 2855 Broadway) were developed on July 14, 2016. The well development activities commenced a minimum of 48-hours following the groundwater monitoring well installations. The well development methods included agitation with a surge over the length of the screened interval following by the hand-bailing and purging of approximately ten casing volumes of groundwater from each well.

Groundwater Monitoring Wells MW-1 through MW-6 were surveyed by a licensed surveyor to a local benchmark relative to mean sea level on August 2, 2016. Survey data including elevation, longitude, and latitude were uploaded to the state GeoTracker database.

Monitoring well development logs are included in **Attachment C.**

### 2.3.4 Groundwater Monitoring and Sampling

On July 19, 2016 ATC mobilized to the site in order to obtain fluid-level measurements and obtain groundwater samples from six groundwater monitoring wells (MW-1 through MW-6). Depth to groundwater in each monitoring well was measured from the top of the casing using an electronic interface probe with conductance sensors. No separate phase hydrocarbons were detected in any of the groundwater monitoring wells. The measured depth to groundwater in the monitoring wells ranged from a minimum of 9.13 feet below top of casing (MW-5) to a maximum of 12.65 feet below top of casing (MW-2).

The groundwater monitoring wells were purged of a maximum of three casing volumes of fluid using a centrifugal pump. New, disposable down-well tubing was changed between each well to prevent cross-contamination. Following well purging, groundwater samples were obtained from each well by lowering a 1.5-inch diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The groundwater samples were transferred from the check-valve equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample was labeled with the project number, well number, sample date, and sampler's initials and then transported to a California state-certified analytical laboratory, under standard chain-of-custody protocol.

Groundwater samples were analyzed for VOCs and TPHg by EPA Method 8260B. Groundwater samples obtained from Monitoring Wells MW-1 through MW-3 were also analyzed for lead by EPA Method 200.7 and groundwater samples obtained from Monitoring Wells MW-4, MW-5, and MW-6 were analyzed for

CAM 17 metals by EPA Methods 6010B/7471A. Groundwater samples analyzed for metals were collected in bottles without preservative and filtered at the laboratory prior to analysis.

Groundwater monitoring logs are included in **Attachment D**.

### 2.3.5 Investigation Derived Waste Disposal

Soil cuttings and purge/rinseate water generated during boring and well installation, well development, and groundwater monitoring and sampling activities were temporarily stored on-site in California DOT approved 55-gallon steel drums pending characterization and disposal. Composite soil samples were collected to profile soil for disposal. The drums are stored on site and will be removed from the site and disposed of at a permitted disposal facility.

## 3.0 FINDINGS

### 3.1 SOIL LITHOLOGY AND HYDROGEOLOGY

Soil encountered during drilling consisted of interlayered silt and clay units from the surface to total explored depth of 25 or 30 feet bgs. Intervals of higher permeability poorly graded sand and gravelly units ranging thickness from 1 to 5 feet were observed at depths ranging from approximately 10 to 25 feet bgs. Cross-sections A-A', BB', and C-C' depicting the subsurface lithology are presented on **Figure 3 through Figure 5**, respectively.

In each of the borings, groundwater was observed to enter the boring slowly and filled to an elevation slightly above the first indication of saturated soil. This observation suggests that groundwater exists under "semi-confined" conditions. Sediments encountered in all soil borings were relatively heterogeneous and no specific lithologic unit representing a water bearing zone was identified to exist continuously across the Site. In general, the soil lithology is dominated by finer sediments (i.e., clays and silts) that can be presumed to be of low permeability. At the 2855 property, the hydrostatic groundwater levels in Monitoring Wells MW-4 through MW-6 exist above the top of the screened intervals. Groundwater recharge in Monitoring Well MW-6 was slow as compared to Monitoring Wells MW-4 and MW-5. The hydrostatic groundwater elevation in MW-6 is significantly lower than the other two wells on this property. The reason for this variation has not been determined. Conversely, final hydrostatic levels in wells on the 2820 Broadway property are essentially equivalent and the groundwater gradient is nearly flat. The groundwater flow direction beneath the 2820 Broadway property during this study was to the west and southwest. The apparent groundwater flow direction beneath the 2855 Broadway property during this study was to the southeast. The hydrostatic groundwater elevations on the 2855 Broadway property are approximately 2 to 5 feet higher than the hydrostatic groundwater elevations on the 2820 Broadway property. However, it should be noted that the groundwater flow direction in the general vicinity of the site is reportedly variable. Historical groundwater monitoring and sampling performed at the former Volkswagen Automobile Dealership located at 2750 Broadway, across 28th Street and south of the property, reported the groundwater flow direction to be oriented to the west to northwest. Based on these observations, the groundwater flow direction appears to be variable likely due to seasonal variation and or topographic variability. The limited monitoring data generated from newly installed monitoring wells is insufficient to determine the overall groundwater flow direction. However, dissolved TPHg and TCE plume geometry on- and offsite appears to be a good indicator of average historical groundwater flow direction, and appears be to the east-northeast on the 2820 Broadway property.

### 3.2 SOIL SAMPLING RESULTS

Soil analytical results are presented in **Table 1 and Table 2**, and select results are presented on **Figures 3 through 6**. Laboratory analytical reports are included in **Attachment C**. The following sections of this report summarize the laboratory analytical results of soil samples obtained at the 2820 and 2855 Broadway properties.

#### *3.2.1 2820 Broadway (APN 9-865-69-1)*

On July 7 and July 8, 2016, a total of five soil borings (B27, B28, B29, B30, and B31) were advanced on the 2820 Broadway property. Soil samples were collected from these borings at depths ranging from approximately 2 to 25 feet bgs. A summary of the laboratory analytical findings from this investigation is provided below:

Soil samples collected had reported concentrations of TPHd, TPHo, BTEX, and naphthalene along with various other VOCs, all below their respective ESLs for direct exposure. Of note are:

- TPHd concentrations ranged from 3.89 mg/kg in B30 at 10 feet bgs to 363 mg/kg in Boring B30 at 15 feet bgs (below the ESL of 880 mg/kg).

- TPHo concentrations ranged from 3.67 mg/kg in B31 at 4 feet bgs to 231 mg/kg in Boring B31 at 2 feet bgs (below the ESL of 32,000 mg/kg).
- TPHg concentrations ranged from 0.104 mg/kg in B28 at 25 feet bgs to 1,570 mg/kg in Boring B28 at 15 feet bgs (below the ESL of 2,800 mg/kg). Several reported detections of TPHg were noted to be above the of the analytical instrument calibration range.
- Benzene concentrations ranged from 0.0316 mg/kg in B27 at 15 feet bgs to 0.937 mg/kg in Boring B29 at 15 feet bgs (below the ESL of 24 mg/kg).
- Toluene concentrations ranged from 0.0092 mg/kg in B28 at 20 feet bgs to 8.9 mg/kg in Boring B28 at 15 feet bgs (below the ESL of 4,100 mg/kg).
- Ethylbenzene concentrations ranged from 0.0066 mg/kg in Boring B28 at 20 feet bgs to 6.86 mg/kg in Boring B29 at 10 feet bgs (below the ESL of 480 mg/kg)
- Total xylenes concentrations ranged from 0.0423 mg/kg in Boring B28 at 20 feet bgs to 40.1 mg/kg in Boring B28 at 15 feet bgs (below the ESL of 2,400 mg/kg).
- Naphthalene concentrations ranged from 0.226 mg/kg in Boring B29 at 15 feet bgs to 1.68 mg/kg in Boring B29 at 2 feet bgs (below the ESL of 350 mg/kg).

Lead was reported in soil samples collected at concentrations ranging from 3.1 mg/kg to 580 mg/kg. One sample, Boring B31 at 2 feet bgs exceeded the ESL for Direct Exposure Human Health Risk of 160 mg/kg with a concentration of 580 mg/kg.

#### *3.2.2 2855 Broadway (APN 9-686-3)*

On July 5 and July 6, 2016, three soil borings (B24, B25, and B26) were advanced on the 2855 Broadway property. Discrete soil samples were collected from these borings at depths ranging from approximately 15 to 25 feet bgs. Soil samples collected from these borings at depths ranging from 5 to 25 feet bgs were also composited for subsequent laboratory analysis for waste disposal profiling.

Soil samples collected had reported concentrations of carbon tetrachloride in two samples at 0.0219 mg/kg in Boring B25 at 20 feet bgs and 0.0237 mg/kg in Boring B25 at 15 feet bgs, both below the ESL of 13 mg/kg. No other VOCs were reported above the laboratory detection limits.

Soil samples were composited in the lab from Borings B24, B25, and B26 for waste disposal profiling. Composite soil samples CompB24 (5-25), CompB25 (5-25), and CompB26 (5-25) reported only TPHd at 16 mg/kg, 13.7 mg/kg, and 7.29 mg/kg, respectively, below the ESL of 850 mg/kg, and all CAM 17 metals, except antimony, below the respective ESLs with lead below the STLC threshold for disposal.

### 3.3 GROUNDWATER MONITORING AND SAMPLING RESULTS

#### *3.3.1 Groundwater Monitoring Results*

Depth to water was measured in each of the six groundwater monitoring wells installed during this investigation. Depth to groundwater measurements were obtained from each well prior to groundwater sampling on July 19, 2016 and during well surveying activities performed on August 2, 2016. **Table 4** below presents the well-specific depth to groundwater and calculated groundwater elevations for these two events.

**TABLE 4**
**Groundwater Elevation Data**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Gauging Date | TOC Elevation (feet above MSL) | Depth to Groundwater (feet below TOC) | GWE (feet above MSL) |
|---|---|---|---|---|
| 2820 Broadway | | | | |
| MW-1 | 7/19/2016 | 36.70 | 12.42 | 24.28 |
| MW-2 | 7/19/2016 | 36.90 | 12.65 | 24.25 |
| MW-3 | 7/19/2016 | 36.58 | 12.25 | 24.33 |
| MW-1 | 8/2/2016 | 36.70 | 12.51 | 24.19 |
| MW-2 | 8/2/2016 | 36.90 | 12.76 | 24.14 |
| MW-3 | 8/2/2016 | 36.58 | 12.37 | 24.21 |
| 2855 Broadway | | | | |
| MW-4 | 7/19/2016 | 41.57 | 11.87 | 29.70 |
| MW-5 | 7/19/2016 | 38.85 | 9.13 | 29.72 |
| MW-6 | 7/19/2016 | 37.07 | 10.93 | 26.14 |
| MW-4 | 8/2/2016 | 41.57 | 11.97 | 29.60 |
| MW-5 | 8/2/2016 | 38.85 | 9.14 | 29.71 |
| MW-6 | 8/2/2016 | 37.07 | 10.95 | 26.12 |

**Definitions/Abbreviations:**

TOC -- Top of casing
MSL -- Mean sea level
GWE -- Groundwater elevation

TOC elevation surveyed to the California Coordinate System, Zone 3, horizontal datum NAVD 1988 from GPS by Tronoff Associates Land Surveying of West Sacramento, California on August 2, 2016.

Based on the measured depth to groundwater recorded on July 19, 2016, groundwater beneath the 2820 Broadway property was determined to flow toward the west-northwest at a gradient of 0.001. Groundwater beneath the 2855 Broadway property was determined to flow to the southeast at a gradient of 0.06. Based on the measured depth to groundwater recorded on August 2, 2016, groundwater beneath the 2820 Broadway property was determined to flow toward the west-northwest at a gradient of 0.001. Groundwater beneath the 2855 Broadway property was determined to flow to the southeast at a gradient of 0.06. Groundwater elevation data and flow directions based on the groundwater measurements are shown on **Figures 7 and 8**.

### *3.3.2 Groundwater Sampling Results*

The laboratory analytical results of groundwater samples obtained during this and previous site investigations are presented in **Table 3** and **Table 4**. The most-recent groundwater sampling results are also presented on **Figures 9 and 10**. Copies of the official laboratory analytical reports for groundwater samples analyzed as a component of this investigation are included in **Attachment E**.

***2820 Broadway (APN 9-865-69-1)***

Groundwater samples collected from the 2820 Broadway property included "grab" groundwater samples obtained from Borings B27, B28, B29, and B30 on July 7 and 8, 2016 during direct-push drilling. Borings B29 and B30 were subsequently converted to groundwater Monitoring Wells MW-1 and MW-2, respectively, and one additional groundwater monitoring well (MW-3) was also installed on this property. Groundwater samples were obtained from Monitoring Wells MW-1, MW-2, and MW-3 on July 19, 2016. It should be noted that the results of groundwater samples obtained from the permanent groundwater monitoring wells is considered to be more representative of the actual groundwater conditions. The discussion provided below differentiates between the laboratory analytical results for grab groundwater samples and groundwater samples obtained from the permanent groundwater monitoring wells.

Grab-groundwater samples collected from Borings B27 through B30 had reported concentrations of benzene and ethylbenzene above their respective ESLs for vapor intrusion, with various other VOCs detected above the laboratory method detection limit. Analytes with ESL exceedances for vapor intrusion are as follows:

- Benzene concentrations ranged from 11.4 µg/L in Boring B27 to 2,820 µg/L in Boring B29 (compared to the ESL of 9.7 µg/L).
- Ethylbenzene concentrations ranged from 61.4 µg/L in Boring B30 to 1,390 µg/L in Boring B29 (compared to the ESL of 110 µg/L)

Groundwater samples collected from monitoring wells MW-1 through MW-3 had reported concentrations of benzene and ethylbenzene above their respective ESLs for vapor intrusion, with various other VOCs detected above the laboratory method detection limit. Analytes with ESL exceedances for vapor intrusion are as follows:

- Benzene, was reported at concentrations ranging from 696 µg/L in Monitoring Well MW-1 to 823 µg/L in Monitoring Well MW-2, compared to the ESL of 9.7 µg/L.

Dissolved lead was not detected in any of the groundwater samples obtained.

***2855 Broadway (APN 9-686-3)***

Groundwater samples obtained from Monitoring Wells MW-4, MW-5, and MW-6 on July 19, 2016 were analyzed for TPHg, VOCs, and dissolved metals. Groundwater samples collected from Monitoring Wells MW-4 through MW-6 had reported concentrations of TPHg, chloroform, TCE, and PCE below their respective ESLs for vapor intrusion. Well MW-5 had reported carbon tetrachloride at a concentration of 57.4 µg/L and MW-6 reported carbon tetrachloride at a concentration of 23.8 µg/L, both in exceedance of the ESL for vapor intrusion of 1.9 µg/L. No lead was reported in any monitoring well samples. Nickel and Zinc were reported for MW-1 only at concentrations of 5.7 µg/L and 38.7 µg/L, respectively, below their respective ESLs for direct contact of 12 µg/L and 6,000 µg/L, respectively.

## 4.0 CONCLUSIONS

The results of this and previous environmental assessment activities conducted on the 2820 and 2855 Broadway properties indicates the presence of petroleum hydrocarbons, VOCs, and metals in soil and/or groundwater. The environmental assessment data generated to date is sufficient to identify the pertinent chemicals of potential concern that warrant consideration and management in light of the planned construction and redevelopment of the properties.

Based on the results of this investigation and the planned site redevelopment activities, ATC offers the following conclusions:

**2820 Broadway (APN 9-868-69-1)**

***Soil***

The results of this and previous environmental assessment activities conducted on the 2820 Broadway property indicate the presence of petroleum hydrocarbons and lead in shallow soil within the eastern portion of the property. Elevated concentrations of lead in soil appear to be limited to the upper 3 feet of soil with the highest concentrations observed in soil borings B21 (1,500 mg/kg at 3 feet bgs) and B31 (580 mg/kg at 2 feet bgs). The lateral extent of lead-impacted soil is adequately characterized to the north by soil boring B28, to the south by Boring B31, and to the west by Boring B27, and to the east by Boring B22. The extent will be further verified through confirmation soil sampling to be performed during grading activities and as part of the site redevelopment. The origin of the lead-impacted soil is not known, but is presumed to be related to historical site activities. The presence of lead impacted soil identified within the eastern portion of the 2820 Broadway property warrants removal and/or mitigation measures. The impacts will be addressed as set forth in the Soil and Groundwater Management Plan prepared for this site.

Elevated concentrations of petroleum hydrocarbons were also detected in soil samples obtained from the eastern portion of the property. Hydrocarbon affected soil in the eastern portion of the site consists predominantly of hydrocarbons within the diesel to oil range. The maximum concentrations of petroleum hydrocarbons within the diesel (680 mg//kg) and oil range (3,100 mg/kg) were detected in the soil sample obtained from Boring B21 at a depth of 3 feet bgs. The soil sample from Boring B21 at a depth of 3 feet bgs contained TPHg at a concentration of 40 mg/kg. Based on the analytical results of Borings B27, B28, B29, and B30, the vertical extent of TPHd and TPHo impacted soil is limited to the upper 4 feet bgs. The lateral extent of shallow, hydrocarbon affected soil is adequately characterized and presumed to be present in shallow soil throughout the eastern portion of the property.

The maximum concentrations of TPHg in soil were detected in soil samples obtained from soil boring B28 at 15 feet bgs (1,570 mg/kg) and Boring B29 at 10 feet bgs (864 mg/kg). TPHo was not detected in either of these soil samples. This finding suggests the possibility that the presence of TPHg in deeper soil may be related to petroleum hydrocarbons identified offsite to the south of the property. It should be noted that the concentrations of TPHg, TPHd, and TPHo detected in soil are below the ESLs for direct contact with soil under both commercial/industrial land uses and for construction worker exposures. The detected presence of petroleum hydrocarbons in soil in this portion of the site warrants appropriate planning, field monitoring, segregation and appropriate disposal of hydrocarbon affected soil encountered during site construction and redevelopment activities, all of which will be performed in compliance with the approved Revised Soil and Groundwater Management Plan, which has been provided under separate cover.

TCE was detected in one soil sample (Boring B19 at a depth of 16 feet bgs) collected from the 2820 Broadway property at a concentration of 0.016 mg/kg. Boring B19 was advanced along the southern portion of the 2820 Broadway property line. The presence of TCE at this location and the absence of TCE in all other soil samples analyzed at this property suggests that TCE is related to an offsite source.

Benzene was detected in four soil samples collected from two soil borings advanced on the 2820 Broadway property. Specifically, benzene was detected in Boring B27 at a depth of 15 feet bgs at a concentration of 0.0316 mg/kg and in Boring B29 at depths of 10, 15, and 20 feet bgs at concentrations ranging from 0.296 to 0.937 mg/kg, which is significantly below the direct exposure ESL for benzene of 24.0 mg/kg. The

presence of benzene in soil samples obtained from Boring B29 could suggest the possibility that some benzene impacts to groundwater in this area may be related to an onsite source as well as an offsite source(s). However, given that the concentrations of benzene in soil are orders of magnitude below the ESL, it is also likely that a potential onsite source of benzene in groundwater (if any) is not the sole source of benzene in groundwater,

While several VOCs were detected in soil samples collected on the 2820 Broadway property, none was detected at concentrations in excess of the ESLs for direct contact with soil under either the commercial/industrial land use or for construction worker exposures. This finding indicates that direct contact with soil containing these constituents (including benzene and TCE) does not represent a significant health risk to site construction workers or future site workers that may come into contact with soil. Additionally, no tenant will have contact with soil because the impacted soil will be excavated or it will be capped with buildings and hardscaping.

***Groundwater***

Based on the results of the fluid-level monitoring performed on July 19, 2016 and August 2, 2016, the groundwater flow direction beneath the 2820 Broadway property ranges from the west to southwest. However, it should be noted that the groundwater flow direction in the general vicinity of the site is reportedly variable. Historical groundwater monitoring and sampling performed at the former Volkswagen Automobile Dealership located at 2750 Broadway, across 28th Street and south of the property, reported the groundwater flow direction to be oriented to the west to northwest. Based on these observations, the groundwater flow direction appears to be variable. The data generated to date is insufficient to determine whether the apparent variations in the inferred groundwater flow direction are related to seasonal fluctuations or the presence of groundwater within unconfined and/or semi-confined groundwater bearing intervals. The dissolved TPHg and TCE plume geometry appears to be a good indicator of average historical flow direction, which appears be to the east-northeast on the 2820 Broadway property.

Within the eastern portion of the property, VOCs detected in groundwater at concentrations in excess of ESLs include aromatic hydrocarbons (e.g., benzene) and chlorinated compounds (e.g., TCE). The highest concentration of TCE detected in Monitoring Wells MW-1, MW-2, and MW-3 installed as a component of this investigation (116 μg/L) was observed in MW-3, located within the eastern-most portion of the property. It should be noted that benzene was not detected in the groundwater sample obtained from Monitoring Well MW-3 on July 19, 2016. The concentrations of benzene detected in groundwater samples obtained from Monitoring Wells MW-1 and MW-2 on July 19, 2016 were 696 and 555 μg/L, respectively. The presence of the highest concentration of TCE in upgradient Monitoring Well MW-3 suggests that TCE may be associated with an offsite source located to the east and/or south.

The VOCs detected in groundwater may constitute a vapor intrusion threat to future building occupants. The nature and extent of the potential vapor intrusion threat is influenced by the concentration, depth to groundwater, and proposed building construction details. Mitigation measures for the potential vapor intrusion threat are provided in the Revised Soil and Groundwater Management Plan, provided under separate cover.

**2855 Broadway (APN 9-686-3)**

***Soil***

The results of this and previous environmental assessment activities conducted on the 2855 Broadway property indicate the presence of relatively low concentrations of petroleum hydrocarbons in three of fifteen soil samples analyzed. Soil samples containing detected concentrations of petroleum hydrocarbons include Borings SB3 at 12 feet bgs (TPHd and TPHo concentrations of 4.7 and 56 mg/kg, respectively), B15 at 8 feet bgs ((TPHg, TPHd, and TPHo concentrations of 12, 290 and 590 mg/kg, respectively), and Boring B15 at 12 feet bgs (TPHg and TPHd concentrations of 1.3 and 1.2 mg/kg, respectively). The concentrations of petroleum hydrocarbons detected in soil are not suggestive of a significant release of petroleum hydrocarbons at the 2855 Broadway property.

Only two VOCs (naphthalene and carbon tetrachloride) were detected in more than one of the twenty-four soil samples analyzed during this and previous site investigation activities. Naphthalene was detected in soil samples obtained from Boring B15 at depths of 8 and 12 feet bgs at concentrations of 0.150 and 0.0056 mg/kg, respectively. Carbon tetrachloride was detected in soil samples obtained from Boring B16 at depths of 16, 20, 24, and 28 feet bgs, Boring B25 at depths of 20 and 25 feet bgs, and Boring B26 at a depth of 25 feet bgs. Carbon tetrachloride was detected in soil at concentrations ranging from 0.0089 to 0.0237 mg/kg, with the maximum concentrations detected in Boring B25 at depths to 20 and 25 feet bgs, respectively. The absence of detected concentrations of carbon tetrachloride in shallow soil samples and the presence of carbon tetrachloride in soil samples obtained near or below the saturated zone, suggests that this compound is present as a result of migration from an offsite source.

The concentrations of TPHg, TPHd, TPHo, and VOCs detected in soil are below the ESLs for direct contact with soil under both commercial/industrial land uses and for construction worker exposures. Therefore, the presence of these constituents in soil does not represent a significant health risk to site construction workers that may come into contact with soil.

Nickel was detected in two soil samples (Boring B16 at 8 and 16 feet bgs) at concentrations of 100 and 95 mg/kg, respectively. The concentrations of nickel in these samples slightly exceeds the ESL for direct contact with soil for construction worker exposures. Given that the proposed construction and site development activities will result in excavation of the entire property to a maximum depth of approximately 28 feet below grade, the presence of nickel in soil does not represent a significant risk to site construction workers that may come into contact with soil.

Based on the nature and limited extent of soil impacts identified on this property, the presence of these constituents in soil does not warrant specific removal actions designed exclusively to remove the mass or volume of impacted soil.

***Groundwater***

Based on the results of the fluid-level monitoring performed on July 19, 2016 and August 2, 2016, the groundwater flow direction beneath the 2855 Broadway property is oriented toward the southeast. It should be noted that the determination of the groundwater flow direction for the 2855 Broadway property is influenced by the significantly lower equilibrated groundwater elevation observed in Monitoring Well MW-6 as compared to Monitoring Wells MW-4 and MW-5. The groundwater elevations on the 2855 Broadway property are approximately 2 to 5 feet higher than the groundwater elevations on the 2820 Broadway property.

VOCs detected in groundwater at concentrations in excess of ESLs is limited to carbon tetrachloride. The highest concentration of carbon tetrachloride detected in Monitoring Wells MW-4, MW-5, and MW-6 installed as a component of this investigation (57.4 μg/L) was observed in Monitoring Well MW-5, located within the western portion of the property. Carbon tetrachloride was not detected in Monitoring Well MW-4 located on the northern portion of the property. PCE and TCE were detected in Monitoring Well MW-4 at concentrations of 1.5 and 5.7 μg/L, respectively. The presence of PCE and TCE in Monitoring Well MW-4 and carbon tetrachloride in Monitoring Well MW-5 and MW-6 suggest that groundwater beneath the property has been impacted by an offsite source or sources located to the west and/or northwest.

The VOCs detected in groundwater may constitute a vapor intrusion threat to future building occupants. The nature and extent of the potential vapor intrusion threat is influenced by the concentration, depth to groundwater, and proposed building construction details. Recommendations associated with mitigation measures for the potential vapor intrusion threat are provided in the Revised Soil and Groundwater Management Plan, provided under separate cover.

## 5.0 RECOMMENDATIONS

The environmental assessment results presented in this report demonstrate that the objectives of the investigation have been met as follows:

- Due to the identification of limited benzene impacts in soil, the benzene impact in the vicinity of Boring B21, in the eastern portion of 2820 Broadway, may be partially attributable to an onsite source (along with offsite sources);
- Results confirmed the TCE reported in the grab-groundwater samples at Borings B3, B20, B21, B22, and B23, in the eastern portion of 2820 Broadway, is related to the TCE impacts originating offsite to the south of the property;
- Results indicate the extent of metals, petroleum hydrocarbons, identified in shallow soil at boring B21 extends further to the south and southeast of Boring B2, but is limited to shallow soil (less than 3 feet bgs) on the eastern portion of 2820 Broadway;
- Results indicate carbon tetrachloride detected in grab-groundwater sample at Boring B11, on the south portion of 2855 Broadway, is from an offsite;
- Results for metals analysis for soil and groundwater at 2855 Broadway were obtained for planning of excavation and dewatering necessary for future installation of a subterranean garage; and
- Groundwater flow direction and gradient has been further evaluated.

The environmental assessment data generated to date is sufficient to identify the pertinent chemicals of potential concern and potential exposure pathways that warrant management in light of the planned construction and redevelopment of the properties. Therefore, no additional assessment is needed to identify appropriate soil and groundwater management measures for the proposed site construction and redevelopment activities for either the 2820 Broadway or 2855 Broadway properties. It should be noted that soil beneath the eastern portion of 2820 Broadway property is impacted by petroleum hydrocarbons and lead that will require removal and disposal in accordance with an approved Revised Soil and Groundwater Management Plan, and all applicable standards and regulations. ATC recommends that soil disturbed during redevelopment and impacted with lead in excess of 160 mg/kg and petroleum hydrocarbons be removed in conjunction with the planned redevelopment activities.

Based on the findings of the environmental assessment activities completed to date, ATC has prepared and submitted a Revised *Soil and Groundwater Management Plan*, dated December 7, 2016. Among other elements, the soil and groundwater management plan outlines general health and safety measures to be employed during future construction activities, defines specific measures for soil and ambient air monitoring during site preparation and soil excavation activities, describes measures for management and disposal of soil removed during development in accordance with applicable regulations and decommissioning of existing groundwater monitoring wells that are in conflict with the site redevelopment activities, and identifies specific mitigation measures to mitigate the potential impacts of vapor intrusion into occupied structures and subsurface utilities and features associated with the planned redevelopment of the site.

## 6.0 CLOSING

Please contact Gabe Stivala at (925) 223-7123 if you have questions or comments.

Respectfully submitted,
**ATC Group Service LLC**


Gabe Stivala, P.G.
Senior Project Manager
CA Professional Geologist No.7780

Andrew D. Stuart
National Program Director

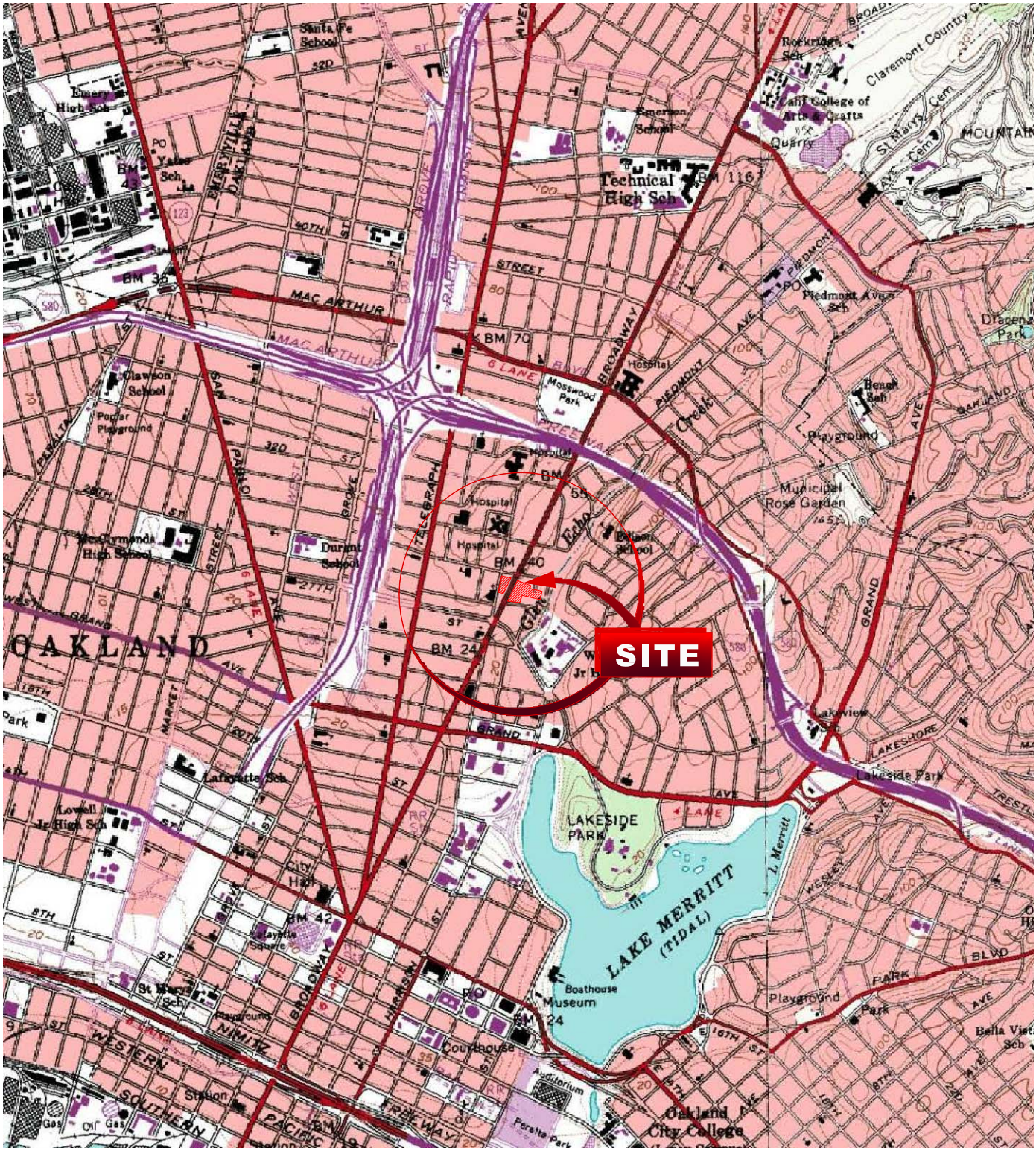
Attachments:
Figure 1 – Site Vicinity Map
Figure 2 – Site Plan
Figure 3 – Cross-Section A-A'
Figure 4 – Cross-Section B-B'
Figure 5 – TPHg, TPHd, TPHo, and Lead in Shallow Soil
Figure 6 – Groundwater Potentiometric Map - July 19, 2016
Figure 7 – Groundwater Potentiometric Map - August 2, 2016
Figure 8 – Groundwater IsoConcentration Map – Benzene and TPHg
Figure 9 – Groundwater IsoConcentration Map – TCE and Carbon Tetrachloride

Table 1 – Well Construction Details
Table 2 – Summary of Soil Laboratory Analytical Data - Organics
Table 3 – Summary of Soil Laboratory Analytical Data – Metals
Table 5 – Summary of Groundwater Laboratory Analytical Data - Organics
Table 6 – Summary of Groundwater Laboratory Analytical Data - Metals

Attachment A – Alameda County Drilling Permits
Attachment B – Boring Logs
Attachment C – Monitoring Well Development Logs
Attachment D – Monitoring Well Sampling Logs
Attachment E - Laboratory Analytical Reports and Chain Of Custody Documents

cc Peter Solar, Alliance
Elizabeth Mack, Locke Lord
Geotracker upload
Alameda County EH FTP upload

# FIGURES




OAKLAND WEST, CALIFORNIA QUADRANGLE (PROVISIONAL EDITION 1980)

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MILES

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## SITE VICINITY MAP

PROPOSED BROADWAY VALDEZ
2800, 2820, AND 2855 BROADWAY
OAKLAND, CALIFORNIA

| | | |
|---|---|---|
| PROJECT NUMBER: 118EM01075 | DATE: 9/16/16 | FIGURE 1 |
| REVIEW BY: G. STIVALA | DRAWN BY: DAW | |

ATC
915 Highland Point Dr., Ste. 250
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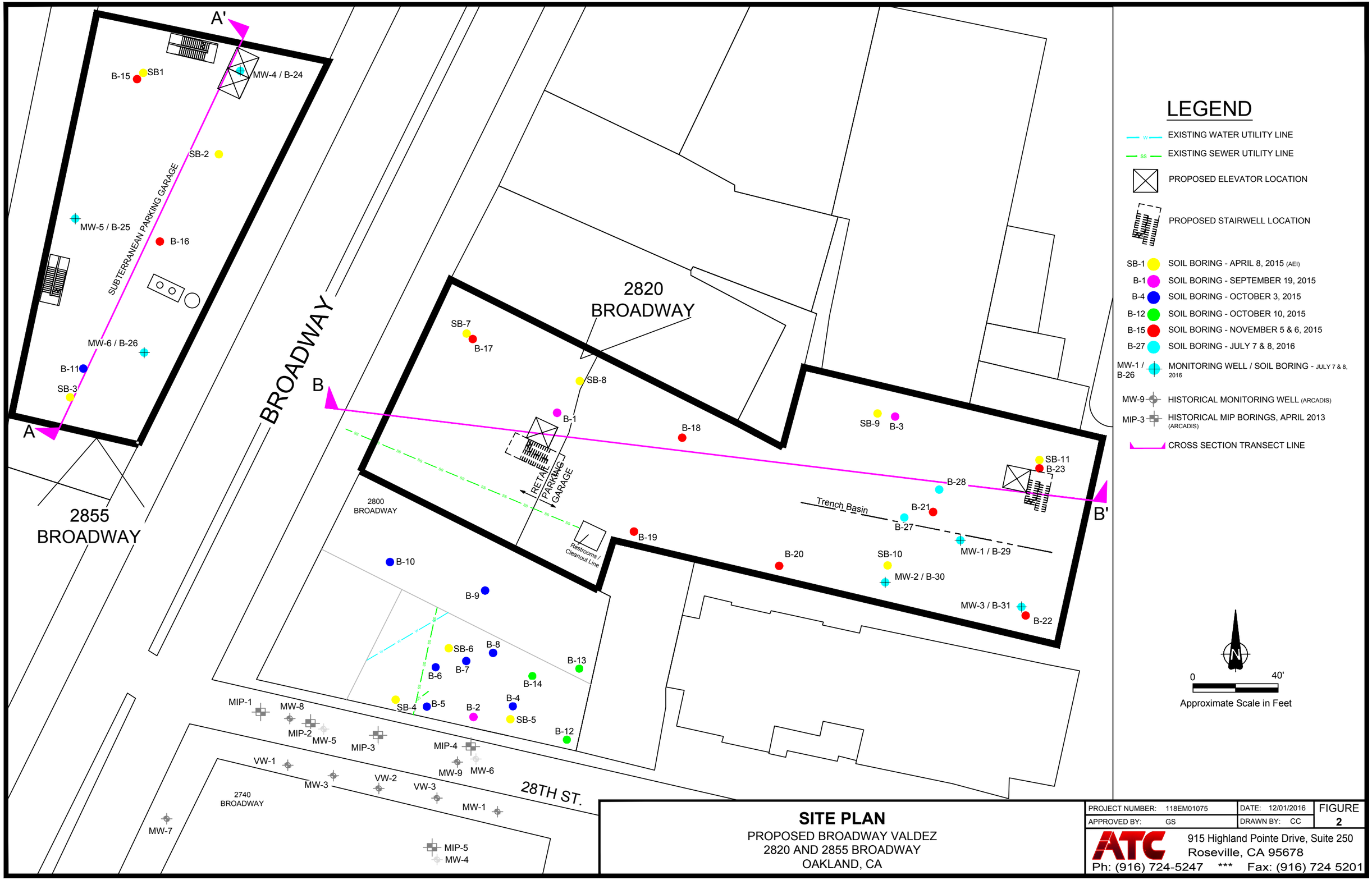
Ph: (916) 924-5247 *** Fax: (916) 724-5201

FILE: W:\San Luis Obispo\Allinace Broadway_SVM.dwg Dec 28, 2016

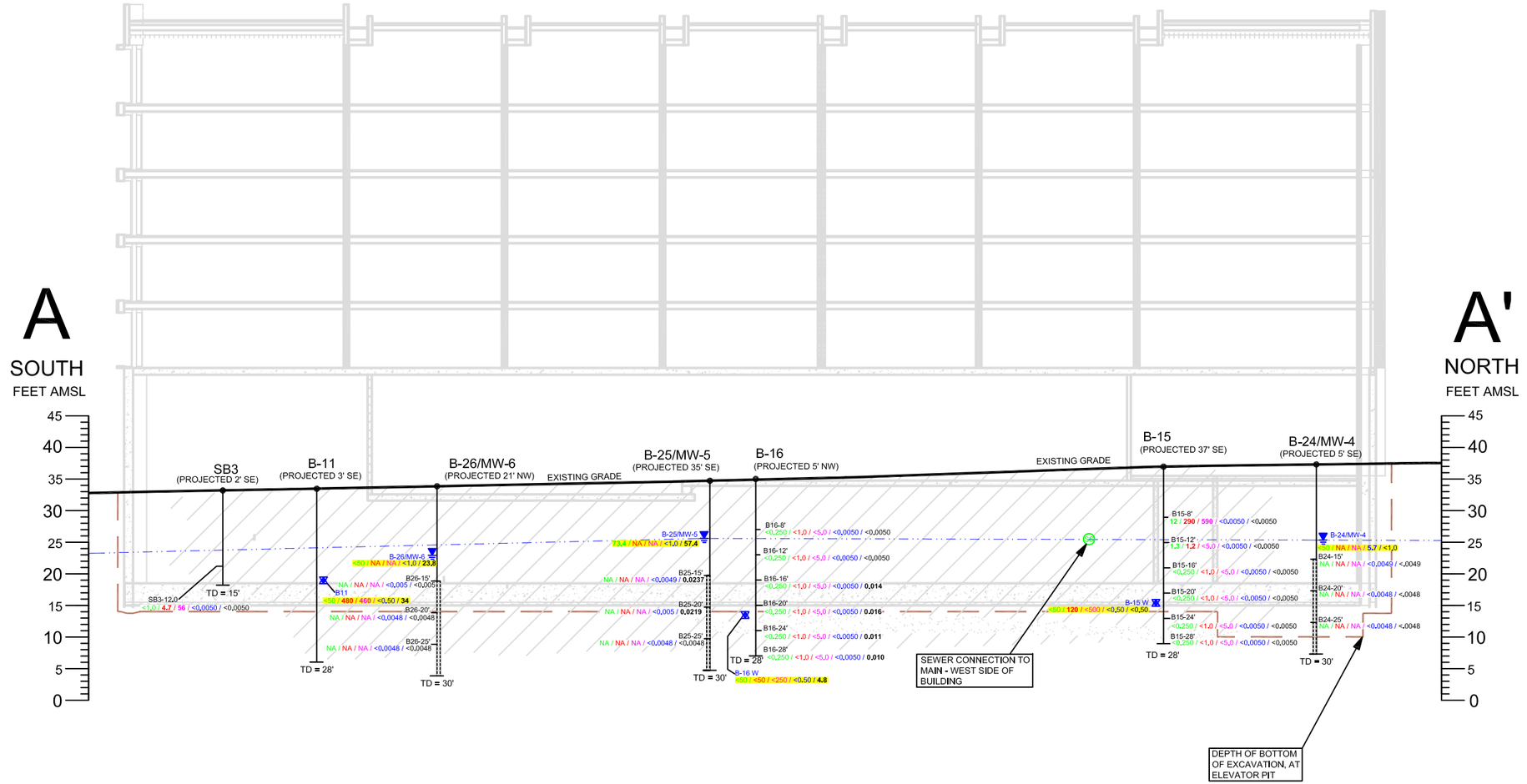



# SITE PLAN

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/01/2016 | FIGURE 2 |
| APPROVED BY: GS | | DRAWN BY: CC | |


ATC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678
Ph: (916) 724-5247 *** Fax: (916) 724 5201




## LEGEND

TOP OF BORING

SOIL SAMPLE ID AND LOCATION

SCREENED INTERVALS

ND / 4.7 / 56 / <0,0050 / <0,0050 — TPHg / TPHd / TPHo / TCE / CARBON TETRACHLORIDE - SOIL SAMPLE RESULTS (mg/kg).

<50 / <50 / <250 / <0,50 / 4,8 — TPHg / TPHd / TPHo / TCE / CARBON TETRACHLORIDE - GROUNDWATER SAMPLE RESULTS (ug/L).

SAND WITH CLAY (SP-SC), SILTY SAND (SM), CLAYEY SAND (SC) COARSE GRAINED SOILS: SAND (SP/SW).

FINE GRAINED SOILS: SILT (ML), CLAY (CL)

APPROXIMATE EXTENT OF EXCAVATION FOR LAND DEVELPOMENT

APPROXIMATE EXISTING GRADE

APPROXIMATE DEPTH TO WATER NOTED IN BORING LOG

DEPTH TO WATER GAUGED AUGUST 2, 2016

ND= NOT DETECTED ABOVE LABORATORY REPORTING LIMIT

NA= NOT ANALYZED

TD= TOTAL DEPTH EXPLORED AT EACH BORING LOCATION

(mg/kg) = MILLIGRAMS PER KILOGRAMS

(ug/L) = MICROGRAMS PER LITER

0 20'

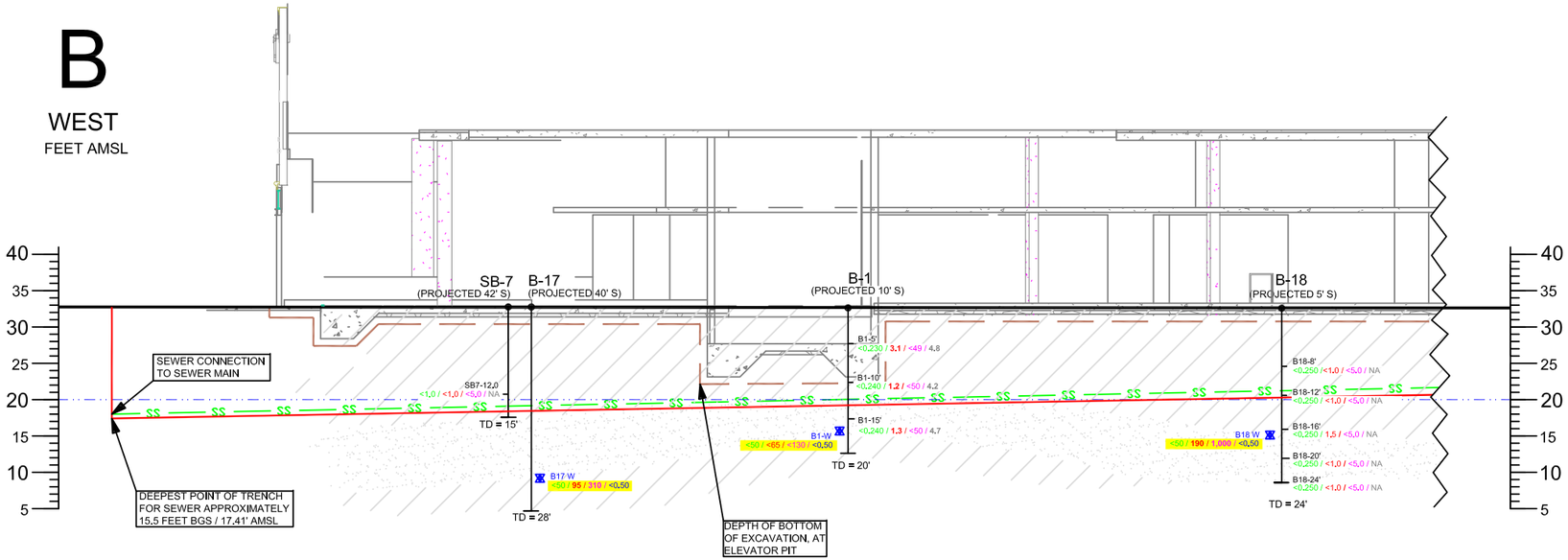
SCALE IN FEET

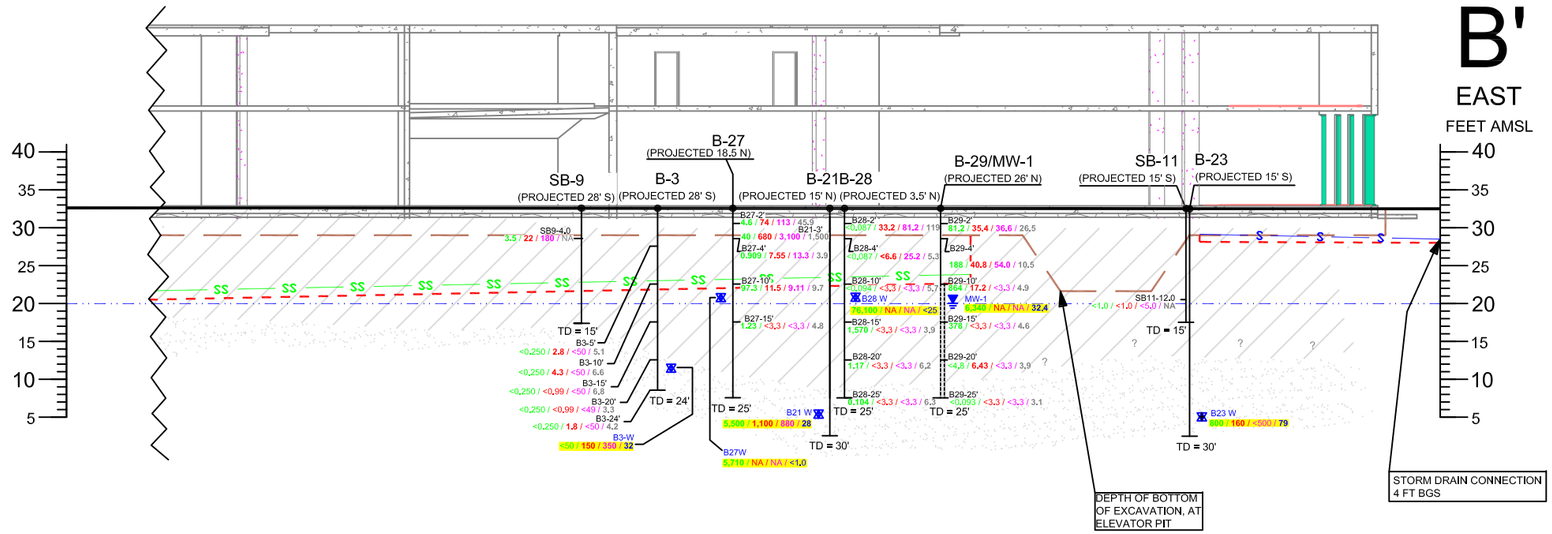
# CROSS-SECTION A-A' WITH PROJECTED STRATIGRAPHY AND PROPOSED DEVELOPMENT PLANS

ALLIANCE REALTY
2855 BROADWAY
OAKLAND, CALIFORNIA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/05/16 | FIGURE 3 |
| APPROVED BY: GS | | DRAWN BY: CC | |

ATC
915 Highland Pointe Drive Suite 250
Roseville, California 95678
Ph: (916) 724-5201 *** Fax: (916) 223-5201




## LEGEND

- TOP OF BORING
- SOIL SAMPLE ID AND LOCATION
- SCREENED INTERVALS
- <0,230 / 3,1 / <49 / 4,8 — TPHg / TPHd / TPHo / LEAD - SOIL SAMPLE RESULTS (mg/kg).
- <50 / 95 / 310 / <0,50 — TPHg / TPHd / TPHo / TCE - GROUNDWATER SAMPLE RESULTS (ug/L).
- SAND WITH CLAY (SP-SC), SILTY SAND (SM), CLAYEY SAND (SC) COARSE GRAINED SOILS: SAND (SP/SW).
- FINE GRAINED SOILS: SILT (ML), CLAY (CL)
- APPROXIMATE EXTENT OF EXCAVATION FOR LAND DEVELPOMENT
- APPROXIMATE DEEPEST EXTENT OF EXCAVATION FOR SEWER INSTALLATION TRENCH
- SS — PROPOSED SEWER LOCATION
- APPROXIMATE WATER TABLE
- APPROXIMATE EXISTING GRADE
- DEPTH TO WATER GAUGED JULY 19, 2016
- GROUNDWATER SAMPLE LOCATION
- ND= NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
- TD= TOTAL DEPTH EXPLORED AT EACH BORING LOCATION
- (mg/kg) = MILLIGRAMS PER KILOGRAMS
- (ug/L) = MICROGRAMS PER LITER

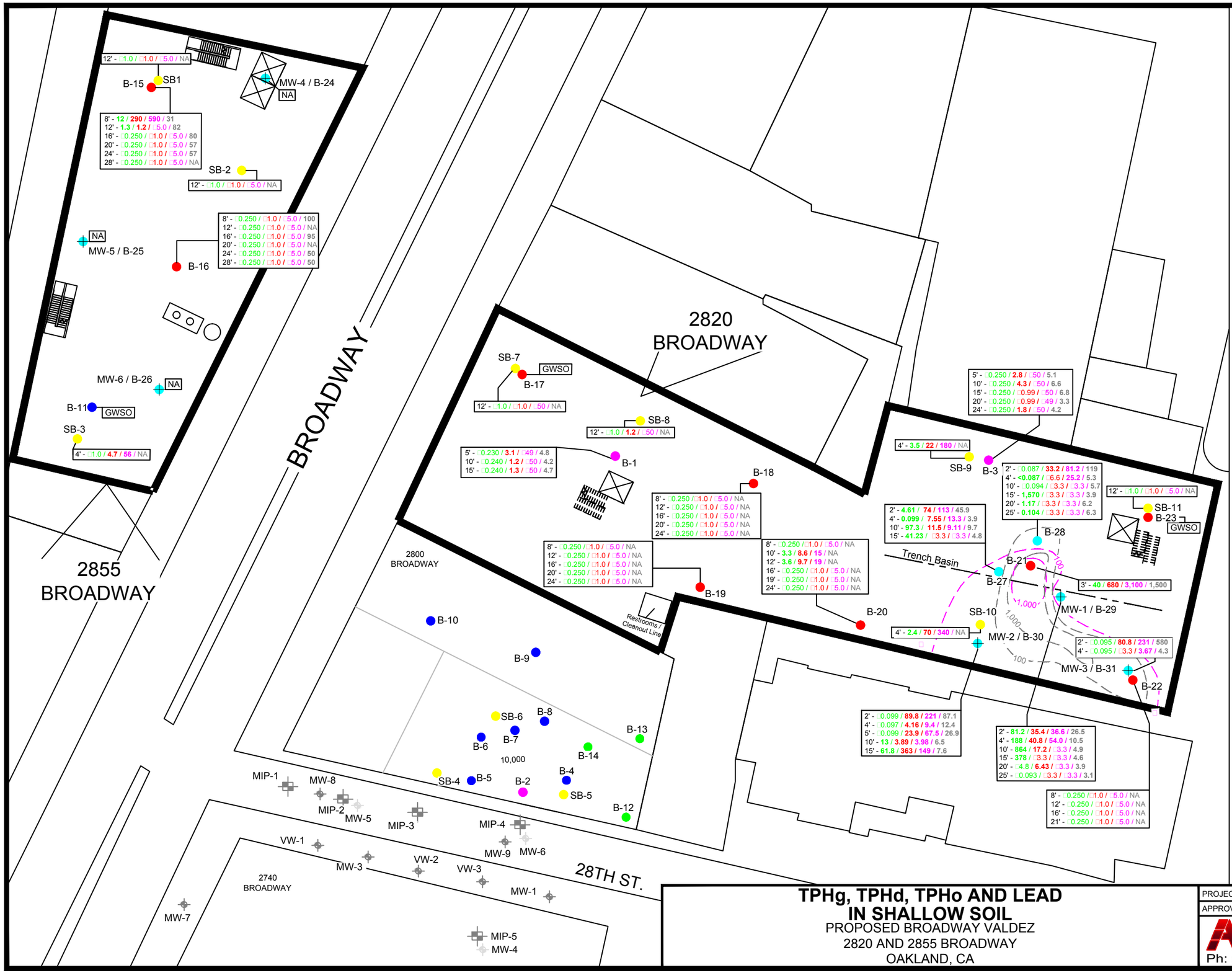
0 20
SCALE IN FEET

# CROSS-SECTION B-B' - TPHg, TPHd, TPHo, LEAD AND TCE RESULTS WITH PROJECTED STRATIGRAPHY AND PROPOSED DEVELOPMENT PLANS

ALLIANCE REALTY
2820 BROADWAY
OAKLAND, CALIFORNIA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/05/16 | FIGURE 4 |
| APPROVED BY: GS | | DRAWN BY: CC | |

ATC
915 Highland Pointe Drive Suite 250
Roseville, California 95678
Ph: (916) 724-5201 *** Fax: (916) 223-5201




# TPHg, TPHd, TPHo AND LEAD IN SHALLOW SOIL

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/01/16 | FIGURE 5 |
| APPROVED BY: GS | | DRAWN BY: CC | |

ATC
915 Highland Pointe Drive, Suite 250
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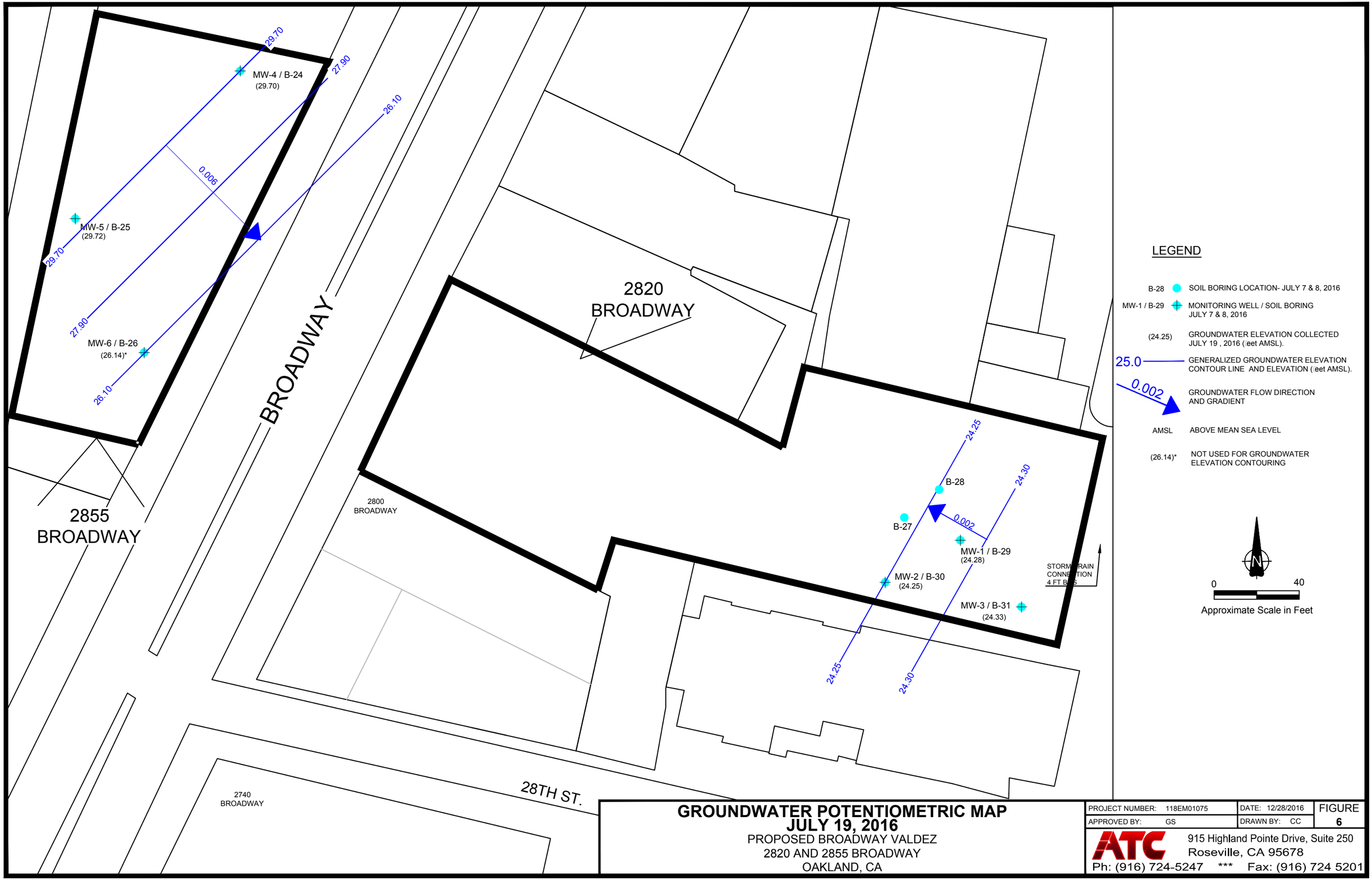
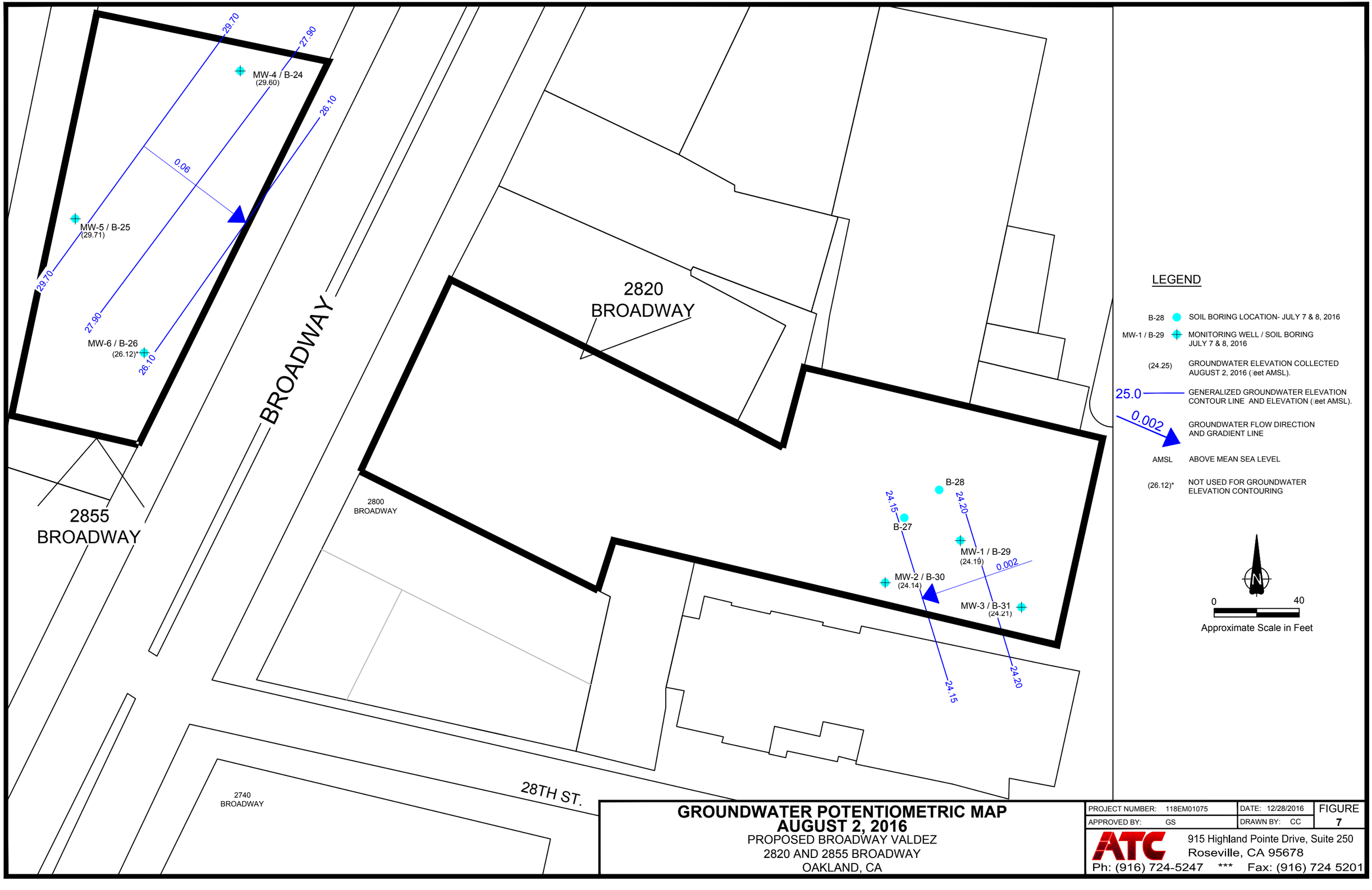



# GROUNDWATER POTENTIOMETRIC MAP
# JULY 19, 2016

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/28/2016 | FIGURE |
| APPROVED BY: GS | | DRAWN BY: CC | 6 |

ATC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678
Ph: (916) 724-5247 *** Fax: (916) 724 5201

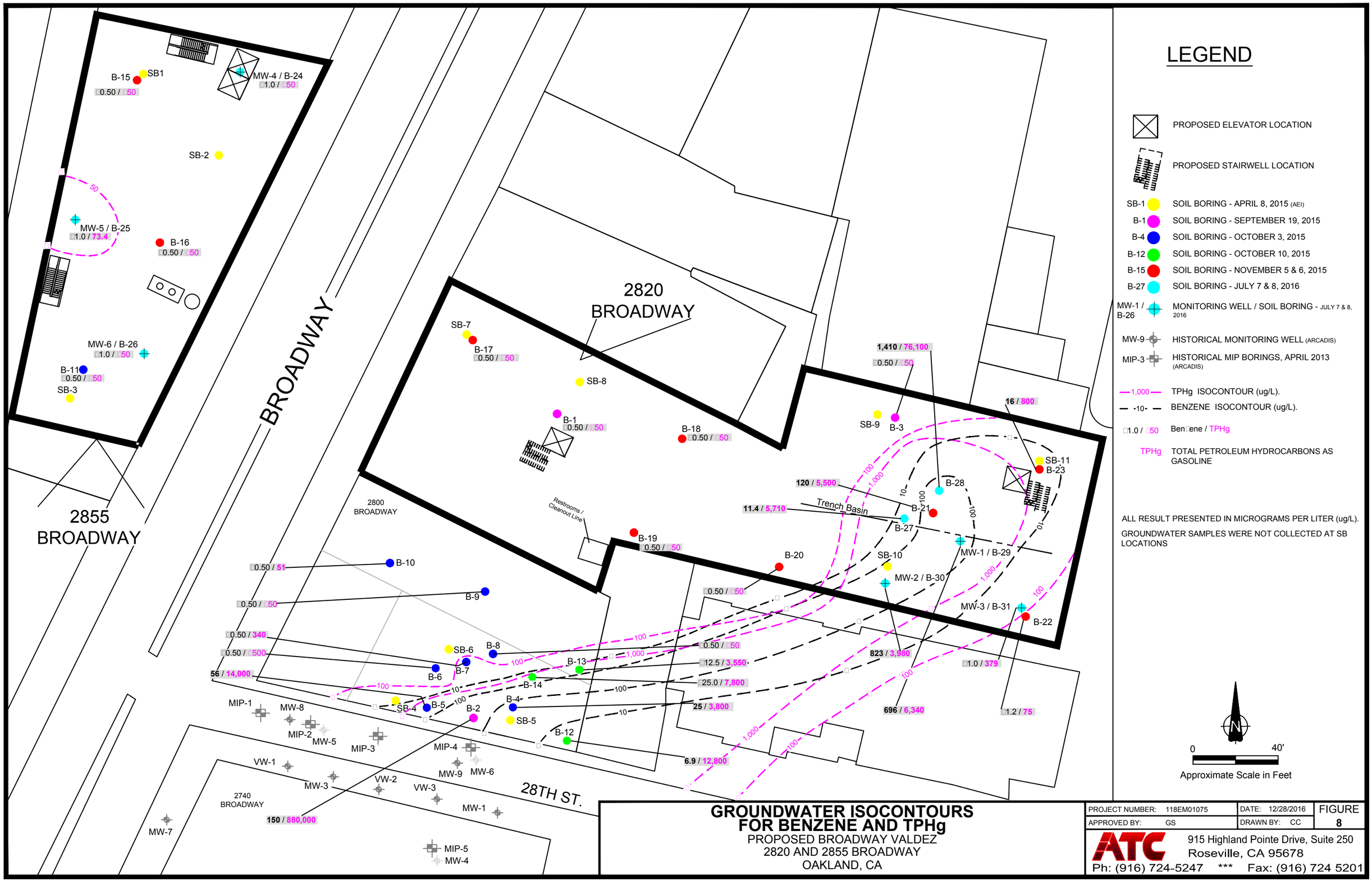



# GROUNDWATER POTENTIOMETRIC MAP
# AUGUST 2, 2016

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/28/2016 | FIGURE |
| APPROVED BY: GS | | DRAWN BY: CC | 7 |

ATC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678
Ph: (916) 724-5247 *** Fax: (916) 724 5201




# LEGEND

- PROPOSED ELEVATOR LOCATION
- PROPOSED STAIRWELL LOCATION
- SB-1 — SOIL BORING - APRIL 8, 2015 (AEI)
- B-1 — SOIL BORING - SEPTEMBER 19, 2015
- B-4 — SOIL BORING - OCTOBER 3, 2015
- B-12 — SOIL BORING - OCTOBER 10, 2015
- B-15 — SOIL BORING - NOVEMBER 5 & 6, 2015
- B-27 — SOIL BORING - JULY 7 & 8, 2016
- MW-1 / B-26 — MONITORING WELL / SOIL BORING - JULY 7 & 8, 2016
- MW-9 — HISTORICAL MONITORING WELL (ARCADIS)
- MIP-3 — HISTORICAL MIP BORINGS, APRIL 2013 (ARCADIS)
- 1,000 — TPHg ISOCONTOUR (ug/L).
- 10 — BENZENE ISOCONTOUR (ug/L).
- 1.0 / 50 — Ben□ene / TPHg
- TPHg — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

ALL RESULT PRESENTED IN MICROGRAMS PER LITER (ug/L).

GROUNDWATER SAMPLES WERE NOT COLLECTED AT SB LOCATIONS

N

0 40'

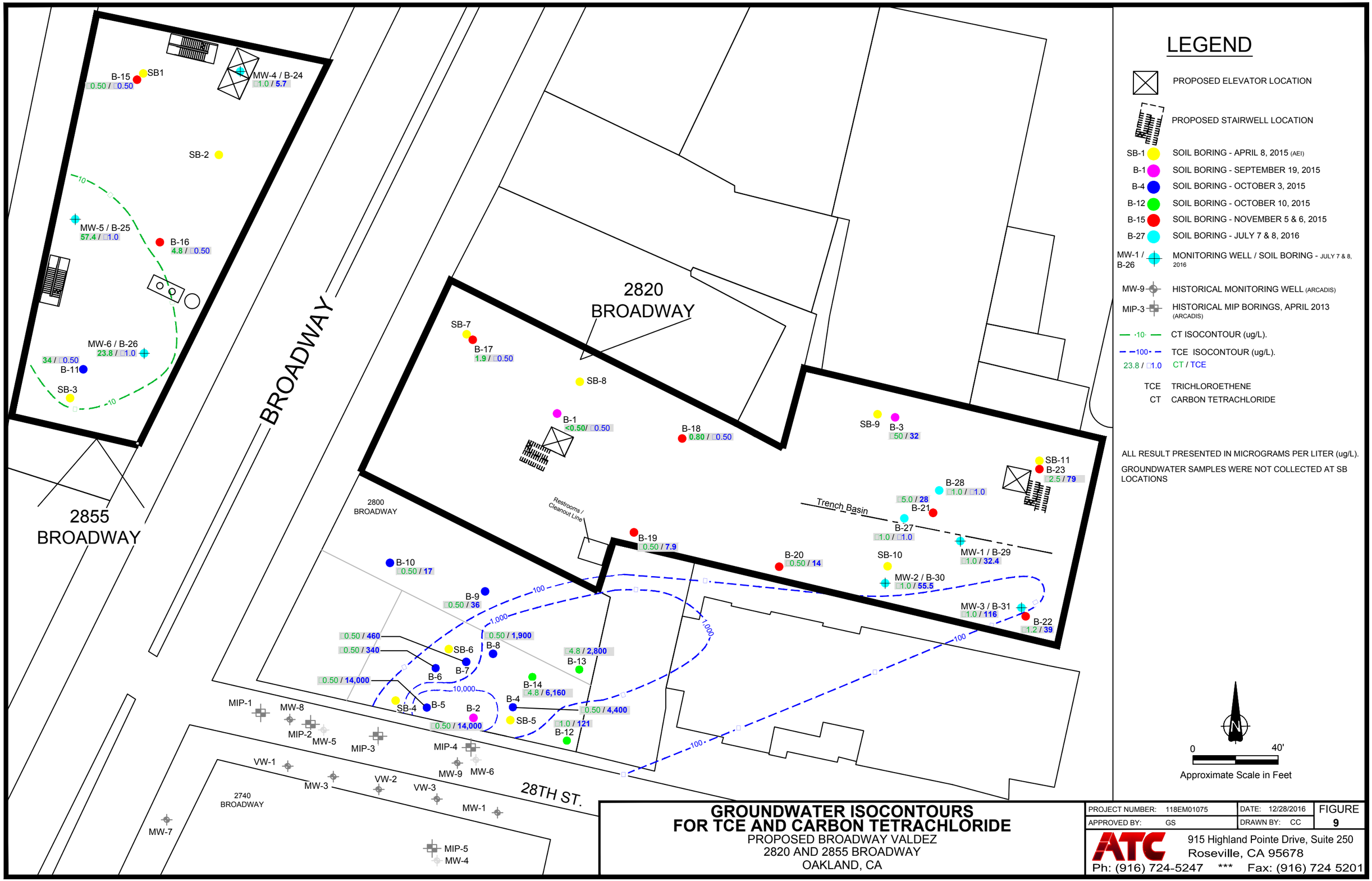
Approximate Scale in Feet

# GROUNDWATER ISOCONTOURS FOR BENZENE AND TPHg

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/28/2016 | FIGURE |
| APPROVED BY: GS | | DRAWN BY: CC | 8 |

ATC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678
Ph: (916) 724-5247 *** Fax: (916) 724 5201




# LEGEND

- PROPOSED ELEVATOR LOCATION
- PROPOSED STAIRWELL LOCATION
- SB-1 — SOIL BORING - APRIL 8, 2015 (AEI)
- B-1 — SOIL BORING - SEPTEMBER 19, 2015
- B-4 — SOIL BORING - OCTOBER 3, 2015
- B-12 — SOIL BORING - OCTOBER 10, 2015
- B-15 — SOIL BORING - NOVEMBER 5 & 6, 2015
- B-27 — SOIL BORING - JULY 7 & 8, 2016
- MW-1 / B-26 — MONITORING WELL / SOIL BORING - JULY 7 & 8, 2016
- MW-9 — HISTORICAL MONITORING WELL (ARCADIS)
- MIP-3 — HISTORICAL MIP BORINGS, APRIL 2013 (ARCADIS)
- ·10· — CT ISOCONTOUR (ug/L).
- –100– — TCE ISOCONTOUR (ug/L).
- 23.8 / 1.0 — CT / TCE

TCE TRICHLOROETHENE
CT CARBON TETRACHLORIDE

ALL RESULT PRESENTED IN MICROGRAMS PER LITER (ug/L).

GROUNDWATER SAMPLES WERE NOT COLLECTED AT SB LOCATIONS

N

0 40'

Approximate Scale in Feet

## GROUNDWATER ISOCONTOURS FOR TCE AND CARBON TETRACHLORIDE

PROPOSED BROADWAY VALDEZ
2820 AND 2855 BROADWAY
OAKLAND, CA

| | | | |
|---|---|---|---|
| PROJECT NUMBER: 118EM01075 | | DATE: 12/28/2016 | FIGURE |
| APPROVED BY: GS | | DRAWN BY: CC | 9 |

ATC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678
Ph: (916) 724-5247 *** Fax: (916) 724 5201

# TABLES

**TABLE 1**
**Summary of Soil Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Depth (ft bgs) | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | cis-1,2-Dichloroethene | Trichloroethene (TCE) | Naphthalene | Carbon Tetrachloride | Chloroform | Other VOCs * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | | SOIL ESLs (mg/kg) [1] | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 2,800 | 880 | 32,000 | 24 | 4,100 | 480 | 2,400 | 3,700 | 82 | 23 | 350 | 13 | 32 | NL |
| | | | | | | | | | | | | | | | | |
| **2820 Broadway** | | | | | | | | | | | | | | | | |
| SB7-12.0 | 12 | 4/8/2015 | <1.0 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <MRL |
| SB8-12.0 | 12 | 4/8/2015 | <1.0 | **1.2** | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <MRL |
| SB9-4.0 | 4 | 4/8/2015 | **3.5** | **22** | **180** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <MRL |
| SB10-4.0 | 4 | 4/8/2015 | **2.4** | **70** | **340** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <MRL |
| SB11-12.0 | 12 | 4/8/2015 | <1.0 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <MRL |
| | | | | | | | | | | | | | | | | |
| B1-5' | 5 | 09/19/15 | <0.230 | **3.1** | <49 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0046 | <0.0046 | ND |
| B1-10' | 10 | 09/19/15 | <0.240 | **1.2** | <50 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0048 | <0.0048 | ND |
| B1-15' | 15 | 09/19/15 | <0.240 | **1.3** | <50 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0049 | <0.0049 | ND |
| B3-5' | 5 | 09/19/15 | <0.250 | **2.8** | <50 | <0.0050 | <0.0050 | <0.0050 | <0.0098 | <0.0050 | <0.0050 | <0.0050 | <0.0098 | <0.0050 | <0.0050 | ND |
| B3-10' | 10 | 09/19/15 | <0.250 | **4.3** | <50 | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0049 | <0.0049 | ND |
| B3-15' | 15 | 09/19/15 | <0.250 | <0.99 | <50 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <0.0050 | ND |
| B3-20' | 20 | 09/19/15 | <0.250 | <0.99 | <49 | <0.0050 | <0.0050 | <0.0050 | <0.0099 | <0.0050 | <0.0050 | <0.0050 | <0.0099 | <0.0050 | <0.0050 | ND |
| B3-24' | 24 | 09/19/15 | <0.250 | **1.8** | <50 | <0.0050 | <0.0050 | <0.0050 | <0.0099 | <0.0050 | <0.0050 | <0.0050 | <0.0099 | <0.0050 | <0.0050 | ND |
| | | | | | | | | | | | | | | | | |
| B17 | na | 11/05/15 | Collected groundwater sample only. No soil samples collected. | | | | | | | | | | | | | |
| B18-8' | 8 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B18-12' | 12 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B18-16' | 16 | 11/05/15 | <0.250 | **1.5** | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B18-20' | 20 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B18-24' | 24 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B19-8' | 8 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B19-12' | 12 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B19-16' | 16 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.016** | <0.0050 | <0.0050 | <0.0050 | ND |
| B19-20' | 20 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B19-24' | 24 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B20-8' | 8 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B20-10' | 10 | 11/06/15 | **3.3** | **8.6** | **15** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | sec-Butyl benzene - **0.0092** |
| B20-12' | 12 | 11/06/15 | **3.6** | **9.7** | **19** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B20-16' | 16 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B20-19' | 19 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B20-24' | 24 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B21-3' | 3 | 11/06/15 | **40** | **680** | **3,100** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B22-8' | 8 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B22-12' | 12 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B22-16' | 16 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B22-21' | 21 | 11/06/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |

**TABLE 1**
**Summary of Soil Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Depth (ft bgs) | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | cis-1,2-Dichloroethene | Trichloroethene (TCE) | Naphthalene | Carbon Tetrachloride | Chloroform | Other VOCs * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | | SOIL ESLs (mg/kg) [1] | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 2,800 | 880 | 32,000 | 24 | 4,100 | 480 | 2,400 | 3,700 | 82 | 23 | 350 | 13 | 32 | NL |
| | | | | | | | | | | | | | | | | |
| **2820 Broadway** | | | | | | | | | | | | | | | | |
| B23 | na | 11/06/15 | Collected groundwater sample only. No soil samples collected. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| B27-2' | 2 | 07/07/16 | **4.61**† | **74** | **113** | <0.0044 | <0.0044 | <0.0044 | <0.0088 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | Acetone - **0.213**<br>2-Butanone (MEK) - **0.0383** |
| B27-4' | 4 | 07/07/16 | **0.909** | **7.55** | **13.3** | <0.0049 | <0.0049 | <0.0049 | <0.0097 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | Acetone - **0.0833** |
| B27-10' | 10 | 07/07/16 | **97.3** † | **11.5** | **9.11** | <0.25 | <0.25 | <0.25 | <0.49 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | ND |
| B27-15' | 15 | 07/07/16 | **1.23** | <3.3 | <3.3 | **0.0316** | <0.0049 | **0.0067** | <0.0097 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | ND |
| B28-2' | 2 | 07/07/16 | <0.087 | **33.2** | **81.2** | <0.0043 | <0.0043 | <0.0043 | <0.0087 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | ND |
| B28-4' | 4 | 07/07/16 | <0.087 | <6.6 | **25.2** | <0.0043 | <0.0043 | <0.0043 | <0.0087 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | ND |
| B28-10' | 10 | 07/07/16 | <0.094 | <3.3 | <3.3 | <0.0047 | <0.0047 | <0.0047 | <0.0094 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | ND |
| B28-15' | 15 | 07/07/16 | **1,570**† | <3.3 | <3.3 | <1.2 | **8.9** | **6.6** | **40.1** | <1.2 | <1.2 | <1.2 | **1.21** | <1.2 | <1.2 | Isopropylbenzene - **1.94**<br>n-Propylbenzene - **2.44**<br>1,2,4-Trimethylbenzene - **11.2**<br>1,3,5-Trimethylbenzene - **3.83** |
| B28-20' | 20 | 07/07/16 | **1.17** | <3.3 | <3.3 | <0.0045 | **0.0092** | **0.0066** | **0.0423** | <0.0045 | <0.0045 | <0.0045 | **0.0052** | <0.0045 | <0.0045 | Acetone - **0.0454**<br>1,2,4-Trimethylbenzene - **0.0136** |
| B28-25' | 25 | 07/07/16 | **0.104** | <3.3 | <3.3 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | ND |
| B29-2' | 2 | 07/07/16 | **81.2** † | **35.4** | **36.6** | <0.23 | <0.23 | **0.288** | **0.648** | <0.23 | <0.23 | <0.23 | **1.68** | <0.23 | <0.23 | n-Butylbenzene - **0.353**<br>Isopropylbenzene - **0.434**<br>n-Propylbenzene - **0.691**<br>1,2,4-Trimethylbenzene - **1.5**<br>1,3,5-Trimethylbenzene - **0.707** |
| B29-4' | 4 | 07/07/16 | **188** † | **40.8** | **54.0** | <0.24 | <0.24 | **0.436** | **0.704** | <0.24 | <0.24 | <0.24 | **0.486** | <0.24 | <0.24 | n-Butylbenzene - **0.304**<br>Isopropylbenzene - **0.487**<br>n-Propylbenzene - **0.653**<br>1,2,4-Trimethylbenzene - **1.34**<br>1,3,5-Trimethylbenzene - **0.765** |
| B29-10' | 10 | 07/07/16 | **864** † | **17.2** | <3.3 | **0.884** | <0.56 | **6.86** | **18.9** | <0.56 | <0.56 | <0.56 | **1.0** | <0.56 | <0.56 | Isopropylbenzene - **1.37**<br>n-Propylbenzene - **1.69**<br>1,2,4-Trimethylbenzene - **8.13**<br>1,3,5-Trimethylbenzene - **2.38** |
| B29-15' | 15 | 07/07/16 | **378** † | <3.3 | <3.3 | **0.937** | **1.62** | **1.93** | **8.69** | <0.22 | <0.22 | <0.22 | **0.226** | <0.22 | <0.22 | Isopropylbenzene - **0.383**<br>n-Propylbenzene - **0.406**<br>1,2,4-Trimethylbenzene - **1.69**<br>1,3,5-Trimethylbenzene - **0.625** |
| B29-20' | 20 | 07/07/16 | <4.8 | **6.43** | <3.3 | **0.296** | <0.24 | <0.24 | <0.48 | <0.24 | <0.24 | <0.24 | <0.24 | <0.24 | <0.24 | ND |
| B29-25' | 25 | 07/07/16 | <0.093 | <3.3 | <3.3 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | ND |
| B30-2' | 2 | 07/08/16 | <0.099 | **89.8** | **221** | <0.005 | <0.005 | <0.005 | <0.0099 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | ND |

**TABLE 1**
**Summary of Soil Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Depth (ft bgs) | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | cis-1,2-Dichloroethene | Trichloroethene (TCE) | Naphthalene | Carbon Tetrachloride | Chloroform | Other VOCs * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | | SOIL ESLs (mg/kg) [1] | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 2,800 | 880 | 32,000 | 24 | 4,100 | 480 | 2,400 | 3,700 | 82 | 23 | 350 | 13 | 32 | NL |
| | | | | | | | | | | | | | | | | |
| **2820 Broadway** | | | | | | | | | | | | | | | | |
| B30-4' | 4 | 07/08/16 | <0.097 | **4.16** | **9.4** | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| B30-5' | 5 | 07/08/16 | <0.099 | **23.9** | **67.5** | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | ND |
| B30-10' | 10 | 07/08/16 | **13** | **3.89** | **3.98** | <0.22 | <0.22 | <0.22 | <0.45 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | ND |
| B30-15' | 15 | 07/08/16 | **61.8** | **363** | **149** | <0.21 | <0.21 | <0.21 | <0.42 | <0.21 | <0.21 | <0.21 | **0.244** | <0.21 | <0.21 | sec-Butylbenzene - **0.642**<br>Isopropylbenzene - **0.264** |
| B31-2' | 2 | 07/08/16 | <0.095 | **80.8** | **231** | <0.0048 | <0.0048 | <0.0048 | <0.0095 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| B31-4' | 4 | 07/08/16 | <0.095 | <3.3 | **3.67** | <0.0048 | <0.0048 | <0.0048 | <0.0095 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| | | | | | | | | | | | | | | | | |
| **2855 Broadway** | | | | | | | | | | | | | | | | |
| SB1-12.0 | 12 | 4/8/2015 | <1.0 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| SB2-12.0 | 12 | 4/8/2015 | <1.0 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| SB3-12.0 | 12 | 4/8/2015 | <1.0 | **4.7** | **56** | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B11 | na | 10/03/15 | Collected groundwater sample only. No soil samples collected. | | | | | | | | | | | | | |
| B15-8' | 8 | 11/05/15 | **12** | **290** | **590** | <0.0050 | **0.0063** | **0.0097** | **0.076** | <0.0050 | <0.0050 | <0.0050 | **0.150** | <0.0050 | <0.0050 | n-Butyl benzene - **0.030**<br>sec-Butyl benzene - **0.016**<br>Isopropylbenzene - **0.011**<br>n-Propyl benzene - **0.017**<br>1,2,4-Trimethylbenzene - **0.120**<br>1,3,5-Trimethylbenzene - **0.047** |
| B15-12' | 12 | 11/05/15 | **1.3** | **1.2** | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.0056** | <0.0050 | <0.0050 | ND |
| B15-16' | 16 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B15-20' | 20 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B15-24' | 24 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B15-28' | 28 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B16-8' | 8 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B16-12' | 12 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0049 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | ND |
| B16-16' | 16 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.014** | <0.0050 | ND |
| B16-20' | 20 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.016** | <0.0050 | ND |
| B16-24' | 24 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.011** | <0.0050 | ND |
| B16-28 | 28 | 11/05/15 | <0.250 | <1.0 | <5.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | **0.010** | **0.0076** | ND |
| | | | | | | | | | | | | | | | | |
| B24-15' | 15 | 07/05/16 | -- | -- | -- | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | ND |
| B24-20' | 20 | 07/05/16 | -- | -- | -- | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| B24-25' | 25 | 07/05/16 | -- | -- | -- | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| B25-15' | 15 | 07/06/16 | -- | -- | -- | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | **0.0237** | <0.0049 | ND |
| B25-20' | 20 | 07/06/16 | -- | -- | -- | <0.005 | <0.005 | <0.005 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | **0.0219** | <0.005 | ND |
| B25-25' | 25 | 07/06/16 | -- | -- | -- | <0.0048 | <0.0048 | <0.0048 | <0.0095 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |

**TABLE 1**
**Summary of Soil Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Depth (ft bgs) | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | cis-1,2-Dichloroethene | Trichloroethene (TCE) | Naphthalene | Carbon Tetrachloride | Chloroform | Other VOCs * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | | SOIL ESLs (mg/kg) [1] | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 2,800 | 880 | 32,000 | 24 | 4,100 | 480 | 2,400 | 3,700 | 82 | 23 | 350 | 13 | 32 | NL |
| | | | | | | | | | | | | | | | | |
| **2855 Broadway** | | | | | | | | | | | | | | | | |
| B26-15' | 15 | 07/06/16 | -- | -- | -- | <0.005 | <0.005 | <0.005 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | ND |
| B26-20' | 20 | 07/16/16 | -- | -- | -- | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | ND |
| B26-25' | 25 | 07/06/16 | -- | -- | -- | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | **0.0089** | <0.0048 | ND |
| | | | | | | | | | | | | | | | | |
| COMPB24(5-25) | 5-25' | 07/05/16 | <4.2 | **16.0** | <1.3 | <0.21 | <0.21 | <0.21 | <0.42 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | ND |
| COMPB25(5-25) | 5-25' | 07/05/16 | <4.4 | **13.7** | <1.3 | <0.22 | <0.22 | <0.22 | <0.44 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | ND |
| COMPB26(5-25) | 5-25' | 07/05/16 | <4.8 | **7.29** | <1.3 | <0.24 | <0.24 | <0.24 | <0.48 | <0.24 | <0.24 | <0.24 | <0.24 | <0.24 | <0.24 | ND |
| | | | | | | | | | | | | | | | | |

**Definitions/Abbreviations:**

| | |
|---|---|
| EPA | -- Environmental Protection Agency |
| TPHg | -- Gasoline Range Organics ([GRO] C5-C12) by EPA 8015 Gas chromatograph (GC) |
| TPHd | -- Extractable fuel hydrocarbons ([EFC] C10 - C28) by EPA 8015 GC |
| TPHo | -- Extractable fuel hydrocarbons ([EFC] C24 - C36) by EPA 8015 GC |
| mg/kg | -- Milligrams per kilogram (equivalent to parts per million [ppm]) |
| Total Xylenes | -- Meta-, ortho-, and para-xylenes by EPA Method 8260B |
| MTBE | -- Methyl tertiary-butyl ether by EPA Test Method 8260B |
| bgs | -- Below Ground Surface |
| ft | -- feet |
| -- | -- not analyzed |
| † | -- Exceeded calibration range |

Grayed out results represent soil to be excavated

**Definitions/Abbreviations:**

| | |
|---|---|
| < | -- Less than the laboratory reporting limit indicated. |
| ND | -- not detected above laboratory method detection limits |
| J | -- Estimated value between method detection limit and reporting limit. |
| NL | -- Not listed |
| * | -- VOCs that are not listed in the ESL table |

**Notes:**

1 San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), (ESL Workbook, Interim Final, 22Feb16, Rev3). <http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/esl.shtml> Viewed June 13, 2016.

Soil borings preceded by "SB" (SB-1) were drilled by AEI

Results reported above the laboratory reporting limit (RL) are presented in **bold** font.

Results reported above the ESL are highlighted in yellow

Date -- Newest results

# TABLE 2
## Summary of Soil Laboratory Analytical Data - Metals
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Depth (ft bgs) | Sample Date | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium [1] | Cobalt | Copper | Nickel | Vanadium | Zinc | Lead | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| **SOIL ESLs (mg/kg) [2]** | | | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 140 | 0.98 | 3,000 | 42 | 43 | 530,000 | 28 | 14,000 | 86 | 470 | 110,000 | 160 | 44 |
| **2820 Broadway** | | | | | | | | | | | | | | | |
| B1-5' | 5 | 9/19/2015 | <1.5 | <3.1 | **95** | **0.45** | <0.38 | **23** | **5.1** | **9.7** | **21** | **22** | **24** | **4.8** | **0.049** |
| B1-10' | 10 | 9/19/2015 | <0.33 | **2.8** | **120** | **0.45** | <0.083 | **26** | **5.1** | **9.3** | **38** | **25** | **17** | **4.2** | **0.031** |
| B1-15' | 15 | 9/19/2015 | <0.44 | **3.9** | **88** | **0.28** | **0.11** | **22** | **7.0** | **12** | **34** | **22** | **28** | **4.7** | <0.0094 |
| B3-5' | 5 | 9/19/2015 | <0.32 | **3.0** | **95** | **0.33** | <0.081 | **29** | **18** | **10** | **29** | **28** | **20** | **5.1** | **0.057** |
| B3-10' | 10 | 9/19/2015 | <1.6 | **4.3** | **160** | **0.48** | <0.39 | **42** | **17** | **16** | **56** | **36** | **32** | **6.6** | **0.034** |
| B3-15' | 15 | 9/19/2015 | <1.4 | <2.7 | **100** | **0.46** | <0.34 | **41** | **16** | **22** | **57** | **19** | **55** | **6.8** | **0.061** |
| B3-20' | 20 | 9/19/2015 | <0.34 | **6.5** | **86** | **0.17** | **0.33** | **28** | **7.9** | **10** | **35** | **34** | **23** | **3.3** | **0.068** |
| B3-24' | 24 | 9/19/2015 | **1.4** | **9.6** | **100** | **0.28** | <0.30 | **38** | **11** | **15** | **50** | **36** | **41** | **4.2** | **0.044** |
| B21-3' | 3 | 11/6/2015 | **45** | **7.1** | **470** | **0.52** | <0.25 | **48** | **7.7** | **870** | **40** | **27** | **960** | **1,500** | **0.25** |
| B27-2' | 2 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **45.9** | -- |
| B27-4' | 4 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3.9** | -- |
| B27-10' | 10 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **9.7** | -- |
| B27-15' | 15 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **4.8** | -- |
| B28-2' | 2 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **119** | -- |
| B28-4' | 4 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **5.3** | -- |
| B28-10' | 10 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **5.7** | -- |
| B28-15' | 15 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3.9** | -- |
| B28-20' | 20 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **6.2** | -- |
| B28-25' | 25 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **6.3** | -- |
| B29-2' | 2 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **26.5** | -- |
| B29-4' | 4 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **10.5** | -- |
| B29-10' | 10 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **4.9** | -- |
| B29-15' | 15 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **4.6** | -- |
| B29-20' | 20 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3.9** | -- |
| B29-25' | 25 | 07/07/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **3.1** | -- |

# TABLE 2
## Summary of Soil Laboratory Analytical Data - Metals
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Depth (ft bgs) | Sample Date | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium [1] | Cobalt | Copper | Nickel | Vanadium | Zinc | Lead | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| **SOIL ESLs (mg/kg) [2]** | | | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 140 | 0.98 | 3,000 | 42 | 43 | 530,000 | 28 | 14,000 | 86 | 470 | 110,000 | 160 | 44 |
| **2820 Broadway** | | | | | | | | | | | | | | | |
| B-30-2' | 2 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **87.1** | -- |
| B-30-4' | 4 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **12.4** | -- |
| B-30-5' | 5 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **26.9** | -- |
| B-30-10' | 10 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **6.5** | -- |
| B-30-15' | 15 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **7.6** | -- |
| B-31-2' | 2 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **580** | -- |
| B-31-4' | 4 | 07/08/16 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | **4.3** | -- |
| **2855 Broadway** | | | | | | | | | | | | | | | |
| B15-8' | 8 | 11/05/15 | <0.5 | **6.8** | **150** | <0.5 | <0.25 | **30** | **8.4** | **23** | **31** | **34** | **79** | **72** | **0.21** |
| B15-12' | 12 | 11/05/15 | <0.5 | **3.4** | **170** | **0.61** | <0.25 | **63** | **11** | **23** | **82** | **45** | **56** | **7.3** | **0.07** |
| B15-16' | 16 | 11/05/15 | <0.5 | **3.3** | **160** | **0.70** | <0.25 | **70** | **12** | **28** | **80** | **46** | **68** | **8.9** | **0.061** |
| B15-20' | 20 | 11/05/15 | **0.54** | **4.7** | **160** | **0.56** | **0.30** | **47** | **9.7** | **22** | **57** | **44** | **52** | **7.9** | <0.05 |
| B15-24' | 24 | 11/05/15 | <0.5 | **11** | **160** | **0.58** | <0.25 | **48** | **10** | **23** | **57** | **45** | **56** | **8.1** | <0.05 |
| B16-8' | 8 | 11/05/15 | <0.5 | **5.1** | **250** | **0.94** | <0.25 | **67** | **11** | **28** | **100** | **50** | **260** | **7.1** | **0.16** |
| B16-16' | 16 | 11/05/15 | <0.5 | **4.0** | **200** | **0.83** | **0.29** | **72** | **16** | **32** | **95** | **52** | **79** | **10** | **0.074** |
| B16-24' | 24 | 11/05/15 | <0.5 | **8.0** | **150** | **0.55** | <0.25 | **45** | **8.7** | **18** | **50** | **39** | **48** | **6.1** | **0.12** |
| B16-28 | 28 | 11/05/15 | <0.5 | **11** | **140** | <0.5 | <0.25 | **44** | **8.7** | **20** | **50** | **38** | **49** | **6.4** | **0.16** |

# TABLE 2
## Summary of Soil Laboratory Analytical Data - Metals
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Depth (ft bgs) | Sample Date | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium [1] | Cobalt | Copper | Nickel | Vanadium | Zinc | Lead | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| **SOIL ESLs (mg/kg) [2]** | | | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table S-1). Any Land Use/ Any Depth Soil Exposure: Construction Worker | | | 140 | 0.98 | 3,000 | 42 | 43 | 530,000 | 28 | 14,000 | 86 | 470 | 110,000 | 160 | 44 |
| COMPB24(5-25) | 5-25 | 7/5/2016 | <1.8 | **4.1** | **125** | <0.91 | <0.91 | **46** | **8.3** | **20.5** | **59.4** | **33.6** | **42.7** | **5.6** | **0.056** |
| COMPB25(5-25) | 5-25 | 7/5/2016 | <1.8 | **4.4** | **168** | <0.92 | <0.92 | **54.8** | **10.4** | **23.8** | **71.2** | **35.1** | **47.8** | **10.3** | **0.068** |
| COMPB26(5-25) | 5-25 | 7/5/2016 | <1.9 | **4.4** | **124** | <0.94 | <0.94 | **41.2** | **10.6** | **19.7** | **50.3** | **33.2** | **41.3** | **6.6** | **0.025** |

**Definitions/Abbreviations:**

Laboratory analysis for metals was conducted via EPA method 6010B/6020 except for Mercury.
Analysis for Mercury was conducted via EPA method 7471A

| | |
|---|---|
| EPA | -- Environmental Protection Agency |
| bgs | -- Below Ground Surface |
| ft | -- feet |
| J | -- Estimated value between method detection limit and reporting limit. |
| mg/kg | -- Milligrams per kilogram |
| <0.0048 | -- Constituent not detected above specific laboratory reporting limit indicated |
| NL | -- Not listed |

**Notes:**

1 ESL Value for Chromium III

2 San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) , Environmental Screening Levels (ESLs), (ESL Workbook, Interim Final, 22Feb16, Rev3). <http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/esl.shtml> Viewed June 13, 2016.

Soil borings preceded by "SB" (SB-1) were drilled by AEI

Results reported above the laboratory reporting limit (RL) are presented in **bold** font.

Results reported above the ESL are highlighted in yellow

Date -- Newest results

Grayed out results represent soil to be excavated

**TABLE 3**
**Summary of Groundwater Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethylbenzene | Total Xylenes | Acetone | Dichlorobromomethane (Bromodichloromethane) | Carbon tetra-chloride | Chloroform | Chloro-methane | 1,2,-Dichloro-ethane | 1,1-Dichloro-ethene | cis-1,2-Dichloro-ethene | trans-1,2-Dichloro-ethene | MTBE | Tetrachloro-ethene (PCE) | 1,1,2-Trichloro-ethane | Trichloro-ethene (TCE) | 2-Butanone (MEK) | Naphthalene | Other VOCs* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| **GROUNDWATER ESLs (µg/L) [1]** | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Shallow Groundwater. Commercial/Industrial | | NL | NL | NL | 9.7 | 30,000 | 110 | 11,000 | 290,000,000 | NL | 1.9 | 20 | 3,700 | 53 | 1,400 | 950 | 11,000 | 11,000 | 26 | NL | 49 | 36,000,000 | 170 | NL |
| Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Deep Groundwater. Fine To Coarse Scenario, Commercial/Industrial. | | NL | NL | NL | 260 | NL | 3,300 | NL | NL | NL | 69 | 470 | 110,000 | 790 | 48,000 | 130,000 | 260,000 | 130,000 | 880 | NL | 1,500 | 180,000,000 | 1,600 | NL |
| **2820 Broadway** | | | | | | | | | | | | | | | | | | | | | | | | |
| B1-W | 09/19/15 | <50 | <65 | <130 | <0.50 | <0.50 | <0.50 | <1.0 | <50 | <0.50 | <0.50 | <1.0 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | **1.6** | <0.50 | <0.50 | <0.50 | <50 | <1.0 | ND |
| B3-W | 09/19/15 | <50 | **160** | **350** | <0.50 | <0.50 | <0.50 | <1.0 | <50 | <0.50 | <0.50 | <1.0 | <1.0 | <0.50 | <0.50 | **0.79** | <0.50 | <0.50 | <0.50 | <0.50 | **32** | <50 | <1.0 | ND |
| B17 W | 11/05/15 | <50 | **95** | **310** | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | **1.9** | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | ND |
| B18 W | 11/05/15 | <50 | **190** | **1,000** | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | **0.80** | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | **0.58** | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | ND |
| B19 W | 11/06/15 | <50 | <150 | <750 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | **1.1** | <0.50 | <0.50 | **7.9** | <2.0 | <0.50 | ND |
| B20 W | 11/06/15 | <50 | **640** | **1,800** | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | **0.72** | <0.50 | <0.50 | <0.50 | <0.50 | **14** | <2.0 | <0.50 | ND |
| B21 W | 11/06/15 | **5,500** | **1,100** | **880** | **120** | **42** | **83** | **210** | <100 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **28** | **64** | **13** | 2-Hexanone - 10<br>Isopropylbenzene - 26<br>n-Propyl benzene - 21<br>1,2,4-Trimethylbenzene - 130<br>1,3,5-Trimethylbenzene - 39 |
| B22 W | 11/06/15 | **75** | **420** | **3,400** | <1.2 | <1.2 | <1.2 | <1.2 | <25 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | **3.3** | <1.2 | <1.2 | <1.2 | <1.2 | **39** | <5.0 | <1.2 | ND |
| B23 W | 11/06/15 | **800** | **160** | <500 | **16** | **3.2** | **3.1** | <2.5 | <50 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | **4.7** | <2.5 | <2.5 | <2.5 | <2.5 | **79** | <10 | <2.5 | Isopropylbenzene - 6.2<br>n-Propyl benzene - 2.5<br>1,3,5-Trimethylbenzene - 6.8 |
| B27W | 07/07/16 | **5,710** | -- | -- | **11.4** | **1.8** | **65.5** | **18.3** | **88.9** | <1.0 | <1.0 | **1.0** | <1.0 | <1.0 | <1.0 | **1.0** | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | **20.1** | **8.3** | sec-Butylbenzene - 2.1<br>Isopropylbenzene - 19.0<br>p-Isopropyltoluene - 2.5<br>n-Propylbenzene - 22.7<br>1,2,4-Trimethylbenzene - 5.1<br>1,3,5-Trimethylbenzene - 14.2 |
| B28W | 07/08/16 | **76,100** | -- | -- | **1,410** | **4,900** | **1,340** | **5,790** | <500 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <250 | **160** | Isopropylbenzene - 168<br>n-Propyl benzene - 216<br>p-Isopropyltoluene - 27.3 J<br>1,2,4-Trymethylbenzene - 1,140<br>1,3,5-Trimethylbenzene - 369<br>n-Butylbenzene - 24.1 J<br>sec-Butylbenzene - 17.6 J |
| MW-1/B29 | 07/19/16 | **6,340** | -- | -- | **696** | **180** | **65.4** | **276** | **291** | <1.0 | <1.0 | <1.0 | <1.0 | **27.9** | <1.0 | **1.2** | <1.0 | <1.0 | <1.0 | <1.0 | **32.4** | **74.3** | **9.2** | n-Butylbenzene - 2.4<br>Di-Isopropyl ether - 6.6<br>2,2-Dichloropropane - 4.5<br>Isopropylbenzene - 10.0<br>p-Isopropyltoluene - 2.3<br>n-Propylbenzene - 7.7<br>Styrene - 3.4<br>Tert-Butyl Alcohol - 30.4<br>1,2,4-Trimethylbenzene - 44<br>1,3,5-Trimethylbenzene - 25.1 |

**TABLE 3**
**Summary of Groundwater Laboratory Analytical Data - Organics**
2820 and 2855 Broadway
Oakland, CA

| Sample ID | Sample Date | TPHg | TPHd | TPHo | Benzene | Toluene | Ethylbenzene | Total Xylenes | Acetone | Dichlorobromomethane (Bromodichloromethane) | Carbon tetra-chloride | Chloroform | Chloro-methane | 1,2,-Dichloro-ethane | 1,1-Dichloro-ethene | cis-1,2-Dichloro-ethene | trans-1,2-Dichloro-ethene | MTBE | Tetrachloro-ethene (PCE) | 1,1,2-Trichloro-ethane | Trichloro-ethene (TCE) | 2-Butanone (MEK) | Naphthalene | Other VOCs* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| **GROUNDWATER ESLs (µg/L) [1]** | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Shallow Groundwater. Commercial/Industrial | | NL | NL | NL | 9.7 | 30,000 | 110 | 11,000 | 290,000,000 | NL | 1.9 | 20 | 3,700 | 53 | 1,400 | 950 | 11,000 | 11,000 | 26 | NL | 49 | 36,000,000 | 170 | NL |
| Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Deep Groundwater. Fine To Coarse Scenario, Commercial/Industrial. | | NL | NL | NL | 260 | NL | 3,300 | NL | NL | NL | 69 | 470 | 110,000 | 790 | 48,000 | 130,000 | 260,000 | 130,000 | 880 | NL | 1,500 | 180,000,000 | 1,600 | NL |
| **2820 Broadway** | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-2/B30 | 07/19/16 | **3,980** | -- | -- | **823** | **113** | **52.3** | **169** | **231** | <1.0 | <1.0 | <1.0 | <1.0 | **23.7** | <1.0 | **3.6** | <1.0 | <1.0 | <1.0 | <1.0 | **55.5** | **38.1** | **9.9** | Chloroethane - 1.1<br>1,2-Dichloropropane - 4.4<br>Di-Isopropyl ether - 6.2<br>Isopropylbenzene - 10.4<br>n-Propylbenzene - 8.0<br>Styrene - 2.5<br>Tert-Butyl Alcohol - 35.6<br>1,2,4-Trimethylbenzene - 39<br>1,3,5-Trimethylbenzene - 12.9 |
| MW-3/B-31 | 07/19/16 | **379** | -- | -- | <1.0 | <1.0 | <1.0 | <2.0 | <20 | <1.0 | <1.0 | **2.9** | <1.0 | **6.9** | <1.0 | **9.0** | <1.0 | <1.0 | **1.6** | <1.0 | **116** | <10 | <5.0 | ND |
| **2855 Broadway** | | | | | | | | | | | | | | | | | | | | | | | | |
| B11 | 10/04/15 | <50 | **480** | **460** | <0.50 | <0.50 | <0.50 | <1.0 | <.50 | <1.0 | **34** | **8.3** | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <.50 | <1.0 | |
| B15 W | 11/05/15 | <50 | **120** | <500 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | ND |
| B16 W | 11/05/15 | <50 | <50 | <250 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | **4.8** | **9.5** | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | ND |
| MW-4/B24 | 07/19/16 | <50 | -- | -- | <1.0 | <1.0 | <1.0 | <2.0 | <20 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | **1.5** | <1.0 | **5.7** | <10 | <5.0 | ND |
| MW-5/ B25 | 07/19/16 | **73.4** | -- | -- | <1.0 | <1.0 | <1.0 | <2.0 | <20 | <1.0 | **57.4** | **6.4** | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | <5.0 | ND |
| MW-6/B26 | 07/19/16 | <50 | -- | -- | <1.0 | <1.0 | <1.0 | <2.0 | <20 | <1.0 | **23.8** | **6.4** | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | <5.0 | ND |

**Definitions/Abbreviations:**

| | |
|---|---|
| EPA | -- Environmental Protection Agency |
| TPHg | -- Gasoline Range Organics ([GRO] C5-C12) by EPA 8015 Gas chromatograph (GC) |
| TPHd | -- Extractable fuel hydrocarbons ([EFC] C10 - C28) by EPA 8015 GC |
| TPHo | -- Extractable fuel hydrocarbons ([EFC] C24 - C36) by EPA 8015 GC |
| µg/L | -- micrograms per Liter |
| Total Xylenes | -- Meta-, ortho-, and para-xylenes by EPA Method 8260B |
| MTBE | -- Methyl tertiary-butyl ether by EPA Test Method 8260B |
| Ethanol | -- Analyzed by EPA Test Method by 8260B |
| bgs | -- Below Ground Surface |
| ft | -- feet |
| -- | -- not analyzed |
| Date | -- Newest results |

**Definitions/Abbreviations:**

| | |
|---|---|
| < | -- Less than the laboratory reporting limit indicated. |
| J | -- Estimated value between method detection limit and reporting limit. |
| NL | -- Not listed |
| * | -- VOCs that are not listed in the ESL table |

**Notes:**

1 San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) , Environmental Screening Levels (ESLs), (ESL Workbook, Interim Final, 22Feb16, Rev3). <http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/esl.shtml> Viewed June 13, 2016.

2 TPH motor oil is not soluble. TPH motor oil detections in water most likely are petroleum degradates or less likely NAPL. If the detections are degradates, add TPH motor oil and TPH diesel results and compare to TPH diesel criterion (SFBRWQCB User's Guide, Chapter 9).

Soil borings preceded by "SB" (SB-1) were drilled by AEI

Results reported above the laboratory reporting limit (RL) are presented in **bold** font.

Results reported at or above the Shallow Groundwater ESL are highlighted

Results reported at or above the Deep and Shallow Groundwater ESL are highlighted

**TABLE 4**

**Summary of Groundwater Laboratory Analytical Data - Metals**

2820 and 2855 Broadway

Oakland, CA

| Sample ID | Sample Date | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium [1] | Cobalt | Copper | Nickel | Vanadium | Zinc | Lead | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| **GROUNDWATER ESLs (µg/L) [2, 3]** | | | | | | | | | | | | | | |
| Direct Exposure Human Health Risk Levels (Table GW-1). Human Health Risk Based Only. | | 7.8 | 0.004 | 2,000 | 1.0 | 0.04 | 22,000 | 6.0 | 300 | 12 | 50 | 6,000 | 0.2 | 1.2 |
| **2820 Broadway** | | | | | | | | | | | | | | |
| B1-W | 9/19/2015 | <10 | <10 | **140** | <20 | <20 | <10 | **8.2** | <20 | **18** | <10 | <20 | <5.0 | <0.20 |
| B3-W | 9/19/2015 | <10 | <10 | **100** | <20 | <20 | <10 | **12** | <20 | <21 | <10 | <20 | <5.0 | <0.20 |
| MW-1 | 7/19/2016 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <10 | -- |
| MW-2 | 7/19/2016 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <10 | -- |
| MW-3 | 7/19/2016 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <10 | -- |
| **2855 Broadway** | | | | | | | | | | | | | | |
| MW-4 | 7/19/2016 | <6.0 | <10 | <200 | <5.0 | <2.0 | <10 | <5.0 | <10 | **5.7** | <10 | **38.7** | <10 | <0.20 |
| MW-5 | 7/19/2016 | <6.0 | <10 | <200 | <5.0 | <2.0 | <10 | <5.0 | <10 | <5.0 | <10 | <20 | <10 | <0.20 |
| MW-6 | 7/19/2016 | <6.0 | <10 | <200 | <5.0 | <2.0 | <10 | <5.0 | <10 | <5.0 | <10 | <20 | <10 | <0.20 |

**Definitions/Abbreviations:**

Laboratory analysis for metals was conducted via EPA method 6010B except for Mercury.

Analysis for Mercury was conducted via EPA method 7471A

EPA -- Environmental Protection Agency

bgs -- Below Ground Surface

ft -- feet

J -- Estimated value between method detection limit and reporting limit.

µg/L -- micrograms per Liter

<0.0048 -- Constituent not detected above specific laboratory reporting limit indicated

NL -- Not listed

**Notes:**

1 ESL Value for Chromium III

2 San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) , Environmental Screening Levels (ESLs), (ESL Workbook, Interim Final, 22Feb16, Rev3). <http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/esl.shtml> Viewed June 13, 2016.

3 Laboratory results for metals in groundwater were reported in mg/L Therefore, ESL Units are converted from mg/L to ug/L to allow direct comparison with laboratory results.

Soil borings preceded by "SB" (SB-1) were drilled by AEI

Results reported above the laboratory reporting limit (RL) are presented in **bold** font.

Results reported above the ESL are highlighted in yellow

Date -- Newest results

# ATTACHMENT A

# ALAMEDA COUNTY DRILLING PERMIT

# Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

**Application Approved on: 06/28/2016 By jamesy**

**Permit Numbers: W2016-0448 to W2016-0454**
**Permits Valid from 07/05/2016 to 07/08/2016**

**Application Id:** 1467050786634 **City of Project Site:** Oakland
**Site Location:** 2820 and 2855 Broadway, Oakland-Premier Hyundai, Oakland
**Project Start Date:** 07/05/2016 **Completion Date:** 07/08/2016
**Assigned Inspector:** Contact Marcelino Valpando at (510) 670-5760 or Marcelino@acpwa.org

| | | |
|---|---|---|
| **Applicant:** | ATC Group Services LLC - Gabriel Stivala<br>1353 Longfellow Circle, Roseville, CA 95747 | **Phone:** 925-223-7123 |
| **Property Owner:** | Samir Rohayem<br>Premier Hyundai of Oakland, Oakland, CA 94611 | **Phone:** 510-908-8206 |
| **Client:** | Broadstone on Broadway<br>477 Pacific Avenue, Suite One, San Francisco, CA 94133 | **Phone:** -- |
| **Contact:** | Jim Kundert | **Phone:** 209-996-2767<br>**Cell:** 209-996-2787 |

**Total Due:** $2647.00
**Receipt Number: WR2016-0317** **Total Amount Paid:** $2647.00
**Payer Name : Kim Neep** Paid By: VISA **PAID IN FULL**

**Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 6 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: auger **Work Total: $2382.00**

**Specifications**

| Permit # | Issued Date | Expire Date | Owner Well Id | Hole Diam. | Casing Diam. | Seal Depth | Max. Depth |
|---|---|---|---|---|---|---|---|
| W2016-0448 | 06/28/2016 | 10/03/2016 | MW-1 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |
| W2016-0449 | 06/28/2016 | 10/03/2016 | MW-2 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |
| W2016-0450 | 06/28/2016 | 10/03/2016 | MW-3 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |
| W2016-0451 | 06/28/2016 | 10/03/2016 | MW-4 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |
| W2016-0452 | 06/28/2016 | 10/03/2016 | MW-5 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |
| W2016-0453 | 06/28/2016 | 10/03/2016 | MW-6 | 8.00 in. | 2.00 in. | 5.00 ft | 25.00 ft |

**Specific Work Permit Conditions**

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground

Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.

6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

11. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

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Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 7 Boreholes
Driller: Gregg Drilling - Lic #: 485165 - Method: auger **Work Total: $265.00**

**Specifications**

| Permit Number | Issued Dt | Expire Dt | # Boreholes | Hole Diam | Max Depth |
|---|---|---|---|---|---|
| W2016-0454 | 06/28/2016 | 10/03/2016 | 7 | 3.00 in. | 25.00 ft |

**Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will

need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

# ATTACHMENT B

## BORING LOGS

ATC Group Services
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

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# WELL NUMBER B24/MW4



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/5/16 **COMPLETED** 7/5/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push followed by HSA
▽ **AT TIME OF DRILLING** 26.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
▼ **AFTER DRILLING** 11.87 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA | WELL DIAGRAM |
|---|---|---|---|---|---|---|---|
| 0 | | | | | 0.3 Concrete | | |
| | | | ML | | SILT, (ML) 100 % fines, dark brown, moist, soft, medium plasticity, no odor, no organics | | |
| | | | | | 3.0 | | |
| | | | ML | | GRAVELLY SILT, (ML) 30 % gravel, 70 % fines, reddish brown, well graded, subangular, dry to moist, hard, non plastic, no odor, no organics | | |
| 5 | B24-5 | 100 | | | 5.0 | | |
| | | | CH | | CLAY, (CH) 100 % fines, yellowish brown, moist, very soft, high plasticity, no odor, no organics | PID = 10.7<br>PID = 1.2 | Portland Type I/II Cement Seal |
| 10 | B24-10' | 100 | | | | PID = 32.2 | Hydrated Bentonite Transition Seal |
| | | | CH | | 11.0 | | |
| | | | | | 12.0 ▽ CLAY WITH SAND, (CH) 20 % sand, 80 % fines, reddish brown, well graded, subangular, dry, hard, medium plasticity, no odor, no organics | | |
| | | | CH | | CLAY, (CH) 100 % fines, yellowish brown, moist, very soft, high plasticity, no odor, no organics | | 2" Diameter PVC Casing |
| 15 | B24-15' | 100 | | | | PID = 30.1 | |
| | | | | | 17.0 | | |
| | | | CH | | 18.0 CLAY, (CH) 100 % fines, dark brown, moist, firm, medium plasticity, no odor, no organics | | |
| | | | CH | | CLAY, (CH) 100 % fines, brown, moist, very soft, high plasticity, no odor, no organics | PID = 0.9 | |
| 20 | B24-20' | 100 | | | | PID = 0.6 | Filter pack, size 2/12 sand |
| | | | | | 22.0 | | |
| | | | CL | | CLAY, (CL) 100 % fines, yellowish brown, moist, hard, medium plasticity, no odor, no organics | | 2" Diameter PVC Screen, 0.020 Slot Size |
| 25 | B24-25' | 100 | | | ▽ | PID = 0.3 | |
| | B24-W | | | | | | |
| | | | | | 29.0 | | |
| 30 | | | CL | | 30.0 CLAY, (CL) 100 % fines, black, moist, very soft, medium plasticity, no odor, no organics | | |

Bottom of borehole at 30.0 feet.

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# WELL NUMBER B25/MW5



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/6/16 **COMPLETED** 7/6/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push followed by HSA
▽ **AT TIME OF DRILLING** 29.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
▼ **AFTER DRILLING** 9.13 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA | WELL DIAGRAM |
|---|---|---|---|---|---|---|---|
| 0 | | | CL | | CLAY WITH GRAVEL, (CL) 20 % gravel, 80 % fines, reddish brown, well graded, subangular, moist, firm, medium plasticity, no cementation | | |
| | | | | | 4.0 | | |
| 5 | B25-5' | 100 | CL | | CLAY, (CL) 100 % fines, reddish brown, moist, hard, medium plasticity, no cementation | PID = 0 | Portland Type I/II Cement Seal |
| | | | | | 7.0 | | |
| | | | CL | | GRAVELLY CLAY, (CL) 20 % gravel, 10 % sand, 70 % fines, dark brown to reddish brown, well graded, subangular, dry, firm, medium plasticity, no cementation | | |
| | | | | | 8.0 | | |
| | | | | | ▼ CLAY, (CL) 100 % fines, brown, moist, firm, medium plasticity, no cementation | | |
| 10 | B25-10' | 100 | CL | | | PID = 0 | Hydrated Bentonite Transition Seal |
| | | | | | 13.0 | | |
| | | | CL | | CLAY WITH GRAVEL, (CL) 15 % gravel, 10 % sand, 75 %fines, dark brown, well graded, subangular, moist, hard, medium plasticity, no cementation | | 2" Diameter PVC Casing |
| | | | | | 14.0 | | |
| 15 | B25-15' | 100 | | | CLAY, (CL) 100 % fines, brown to yellowish brown, moist, hard, medium plasticity, no cementation | PID = 0 | |
| | | | | | | PID = 0 | |
| | | | CL | | | | |
| 20 | B25-20' | 100 | | | | PID = 0 | Filter pack, size 2/12 sand |
| | | | | | | | 2" Diameter PVC Screen, 0.020 Slot Size |
| | | | | | 24.0 | | |
| 25 | B25-25' | 100 | SP | | POORLY GRADED SAND, (SP) 100 % sand, yellowish brown, poorly graded, fine grained, wet, loose, no cementation | PID = 0 | |
| | | | | | 25.0 | | |
| | | | CL | | CLAY, (CL) 100 % fines, yellowish brown, wet, firm, medium plasticity, no cementation | | |
| | | | | | 29.0 ▽ | | |
| 30 | B25-30' | 100 | SM | | SILTY SAND, (SM) 60 % sand, 40 % fines, brown, well graded, rounded, wet, dense, no cementation | | |
| | | | | | 30.0 | | |
| | | | | | Bottom of borehole at 30.0 feet. | PID = 0 | |

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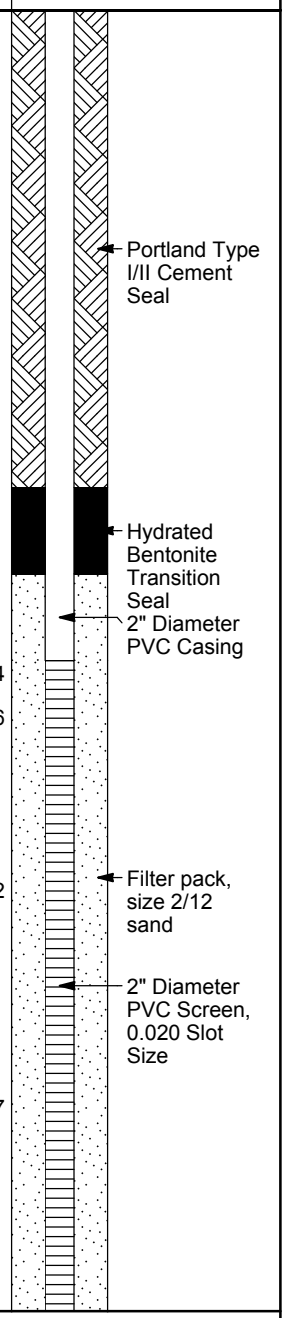
# WELL NUMBER B26/MW6



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/6/16 **COMPLETED** 7/6/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push followed by HSA
**AT TIME OF DRILLING** --- No water observed during drilling
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 10.93 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | | | | | CLAY, (CH) 100 % fines, light brown, moist, firm, high plasticity | |
| 5 | B26-5' | 100 | CH | | | PID = 0 |
| | | | | | 7.0 | |
| | | | CL | | CLAY, (CL) 5 % sand, 95 % fines, brown, moist, firm, medium plasticity, no cementation | |
| | | | | | 9.0 | |
| 10 | B26-10' | 100 | | | CLAY, (CL) 100 % fines, brown, moist, firm, medium plasticity, no cementation | PID = 0 |
| | | | CL | | | |
| 15 | B26-15' | 100 | | | | PID = 45.4 |
| | | | | | | PID = 48.6 |
| | | | | | 19.0 | |
| 20 | B26-20' | 100 | ML | | SILT, (ML) 100 % fines, brown to yellowish brown, moist, firm, low plasticity, no cementation | PID = 75.2 |
| | | | | | 20.0 | |
| | | | | | CLAY, (CH) 100 % fines, yellowish brown, moist to wet, hard, high plasticity, no cementation | |
| 25 | B26-25' | 100 | CH | | | PID = 43.7 |
| 30 | | | | | 30.0 | |
| | | | | | Bottom of borehole at 30.0 feet. | PID = 0.5 |



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# BORING NUMBER B27



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/7/16 **COMPLETED** 7/7/16
**GROUND ELEVATION** **HOLE SIZE** 2 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push
▽ **AT TIME OF DRILLING** 24.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** ---

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | B27-2' | 100 | ML | | SILT, (ML) 100 % fines, dark brown, moist | PID = 3.4 |
| | B27-4' | 100 | | | 4.0 | |
| 5 | | | CL | | CLAY, (CL) 100 % fines, light greenish gray, hard, medium plasticity, no cementation | PID = 9.9 |
| | | | | | 9.0 | |
| 10 | B27-10' | 100 | ML | | SILT, (ML) 10 % sand, 90 % fines, greenish gray, dry to moist, firm, low plasticity, no cementation | PID = 54.7 |
| | | | | | 14.0 | |
| 15 | B27-15' | 100 | CL | | CLAY, (CL) 100 % fines, reddish brown, moist, hard, medium plasticity, no cementation | PID = 16.7 |
| 20 | B27-20' | 100 | | | 20.0 | |
| | | | ML | | SILT WITH SAND, (ML) 5 % gravel, 10 % sand, 85 % fines, yellowish brown, dry to moist | PID = 0 |
| | | | | | 24.0 ▽ | |
| 25 | B27-25' | 100 | ML | | GRAVELLY SILT WITH SAND, (ML) 30 % gravel, 10 % sand, 60 % fines, brown to reddish brown, well graded, subrounded, firm, non plastic, no cementation | PID = 0 |
| | | | | | 25.0 | |

Bottom of borehole at 25.0 feet.

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# BORING NUMBER B28



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/7/16 **COMPLETED** 7/7/16
**GROUND ELEVATION** **HOLE SIZE** 2 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push
▽ **AT TIME OF DRILLING** 20.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** ---

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | | | ML | | SILT, (ML) 5 % sand, 95 % fines, dark brown, dry to moist, firm, low plasticity, no cementation | |
| | B28-2' | 100 | | | | PID = 0 |
| | | | | | 3.0 | |
| | B28-4' | 100 | CL | | CLAY, (CL) 100 % fines, brown, dry to moist, hard, medium plasticity, no cementation | PID = 0 |
| 5 | | | | | | |
| | | | | | 9.0 | |
| 10 | B28-10' | 100 | SM | | SILTY SAND, (SM) 10 % gravel, 70 % sand, 20 % fines, reddish brown, well graded, subangular, dry to moist, medium dense, non plastic, no cementation | PID = 0 |
| | | | | | 14.0 | |
| 15 | B28-15' | 100 | ML | | SANDY SILT, (ML) 15 % gravel, 30 % sand, 55 % fines, grayish brown, well graded, subangular, moist, loose, medium plasticity, no cementation | PID = 1945 |
| | | | | | 17.0 | |
| | | | CL | | SANDY CLAY WITH GRAVEL, (CL) 15 % gravel, 30 % sand, 45 % fines, grayish green, well graded, subangular, moist, soft, non plastic, no cementation | |
| 20 | B28-20' | 100 | | | 20.0 ▽ | |
| | | | SW | | SAND WITH GRAVEL, (SW) 15 % gravel, 80 % sand, 5 % fines, yellowish brown, well graded, subangular, wet, loose, non plastic, no cementation | PID = 58.6 |
| 25 | B28-25' | 100 | | | 25.0 | |
| | | | | | Bottom of borehole at 25.0 feet. | PID = 0 |

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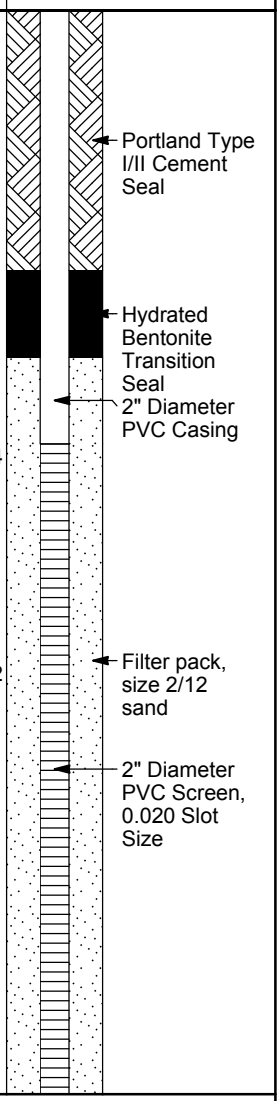
# WELL NUMBER B29/MW1



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/7/16 **COMPLETED** 7/7/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push followed by HSA
**AT TIME OF DRILLING** 23.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 12.42 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | B29-2' | 100 | ML | | SILT, (ML) 100 % fines, dark brown to black, moist, firm, low plasticity, hydrocarbon odor, no cementation, brick fragments observed | PID = 77 |
| | | | | | 3.0 | |
| | B29-4' | 100 | CL | | CLAY, (CL) 100 % fines, light greenish gray, moist, hard, medium plasticity, hydrocarbon odor, no cementation | PID = 145 |
| 5 | | | | | | |
| | | | | | 9.0 | |
| 10 | B29-10' | 100 | ML | | SILT, (ML) 100 % fines, light greenish gray, moist, firm, medium plasticity, no cementation | PID = 2404 |
| | | | | | 14.0 | |
| 15 | B29-15' | 100 | CL | | CLAY, (CL) 100 % fines, brown, dry, firm, medium plasticity, no cementation | PID = 1522 |
| | | | | | 19.0 | |
| 20 | B29-20' | 100 | SM | | SILTY SAND, (SM) 70 % sand, 30 % fines, brown to yellowish brown, poorly graded, rounded, moist, loose, no cementation | PID = 219 |
| | | | | | 24.0 | |
| 25 | B29-25' | 100 | ML | | GRAVELLY SILT, (ML) 30 % gravel, 10 % sand, 60 % fines, brown, well graded, subrounded, firm, non plastic, no cementation | PID = 0 |
| | | | | | 25.0 | |

Bottom of borehole at 25.0 feet.

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# WELL NUMBER B30/MW2

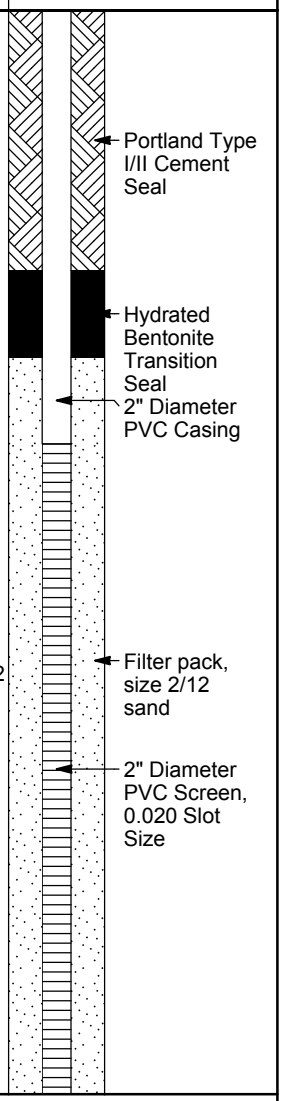


**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/8/16 **COMPLETED** 7/8/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Direct Push followed by HSA
**AT TIME OF DRILLING** 23.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 12.65 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | | | | | 0.3 Asphalt and concrete | |
| | B30-2' | 100 | ML | | SILT, (ML) 100 % fines, dark brown, dry to moist, soft, medium plasticity, no cementation | PID = 0 |
| | B30-4' | 100 | | | 4.0 | PID = 0 |
| 5 | B30-5' | 100 | ML | | SILT WITH SAND, (ML) 20 % sand, 80 % fines, brown, subrounded, firm, low plasticity, no cementation | PID = 0 |
| | | | | | 9.0 | |
| 10 | B30-10' | 100 | ML | | SANDY SILT, (ML) 30 % sand, 70 % fines, brown to greenish gray, rounded, firm, non plastic, no cementation | PID = 224 |
| | | | | | 14.0 | |
| 15 | B30-15' | 100 | ML | | SILT, (ML) 10 % sand, 90 % fines, greenish gray, rounded, firm, low plasticity, no cementation | PID = 1332 |
| | | | | | 19.0 | |
| 20 | B30-20' | 100 | SW | | WELL GRADED SAND WITH SILT AND GRAVEL, (SW) 30 % gravel, 60 % sand, 10 % fines, grayish gray, well graded, subrounded, moist to wet, medium dense, non plastic, no cementation | PID = 2 |
| | | | | | 24.0 | |
| 25 | B30-25' | 100 | SP | | 25.0 POORLY GRADED SAND WITH SILT, (SP) 10 % gravel, 80 % sand, 10 % fines, yellowish brown, well graded, subrounded, medium dense, non plastic, no cementation | PID = 0 |

Bottom of borehole at 25.0 feet.

WELL DIAGRAM



ATC Group Services
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

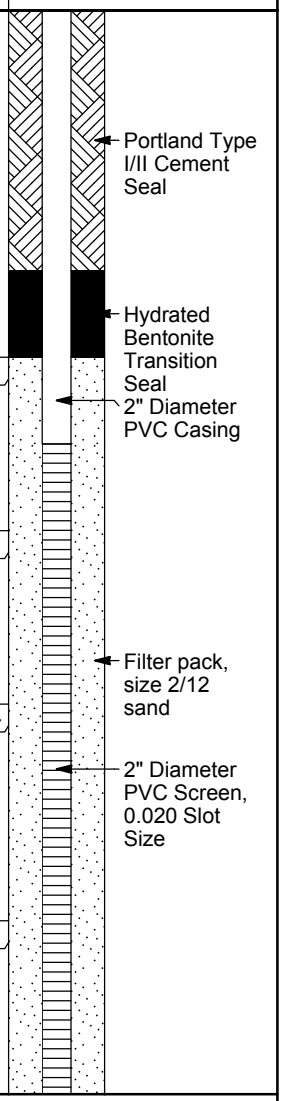
# WELL NUMBER MW-3



**CLIENT** Broadway Valdez
**PROJECT NAME**
**PROJECT NUMBER** 118EM01075
**PROJECT LOCATION** 2855 Broadway, Oakland, CA
**DATE STARTED** 7/8/16 **COMPLETED** 7/8/16
**GROUND ELEVATION** **HOLE SIZE** 8 inches
**DRILLING CONTRACTOR** Gregg Drilling
**GROUND WATER LEVELS:**
**DRILLING METHOD** Hollow Stem Auger
**AT TIME OF DRILLING** 18.00 ft
**LOGGED BY** J. Kundert **CHECKED BY** C. Klinesteker P.G.
**AT END OF DRILLING** ---
**NOTES**
**AFTER DRILLING** 12.25 ft (7/19/2016)

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | ENVIRONMENTAL DATA |
|---|---|---|---|---|---|---|
| 0 | | | | | Monitoring well MW-3 was installed at the location of boring B-22. Lithology shown here is from boring B-22, which was drilled and logged on 11/6/2015. | |
| | | | | | 1.0 Fill material | |
| | | | | | 4.0 CLAY, (CL) 100 % fines, yellowish brown, dry, firm, medium plasticity, no odor, No organics | |
| 5 | | | | | | |
| | B22-8' | 100 | CL | | | PID = 1.8 |
| 10 | | | | | | |
| | B22-12' | 100 | | | CLAY, (CL) 100 % fines, brown, moist, firm, medium plasticity, no odor, No organics | PID = 0.8 |
| | | | CL | | | |
| 15 | | | | | | |
| | B22-16' | 100 | CL | | CLAY, (CL) 10 % gravel, 90 % fines, brown, angular, moist, soft to firm, no odor, low to medium plasticity, no organics | PID = 16.4 |
| | | | | | 18.0 | |
| | | | GM | | SILTY GRAVEL WITH SAND, (GM) 40 % gravel, 30 % sand, 30 % fines, brown, well graded, angular, wet, loose, no odor, no organics | |
| 20 | | | | | 20.0 | |
| | B22-W' | 100 | SP | | POORLY GRADED SAND WITH GRAVEL, (SP) 40 % gravel, 60 %sand, brown, angular, dry, medium dense, no odor, no cementation, no organics | |
| | B22-21' | 100 | | | 21.0 | PID = 8.5 |
| 25 | | | | | | |

Bottom of borehole at 25.0 feet.



# ATTACHMENT C

## MONITORING WELL DEVELOPMENT LOGS

# ATC Group Services LLC

**915 Highland Pointe Drive Suite 205**
**Roseville, CA 95678**
(916) 724-5247 Phone
(916) 724-5201 Fax


## Service Request Form
**Well Development**

**Date of SRF** 7/13/2016

### Site Information

Site Name: Premier Hyundai of Oakland | Project No. 118M01075 | Task No. 1

Contact: Gabe Stivala | Phone No. (925) 223-7123 | Labor Code No. 09012

### Scope of Work

1. Conduct tailgate H&S meeting.
2. Contact potential stakeholders and discuss scope, obtain contact info for future work.
3. Gauge and develop the wells: MW-1 through MW-6.
4. Open all wells before gauging and sampling, allow at least 15 min to equalize.
5. Gauge wells in order: MW-5, MW-4, MW-6, MW-3, MW-1 and MW-2
6. Develop all monitoring wells in the same order.
7. Waste water to be transferred to 55-gallon drums, take four drums.
8. Scan and send field forms to sara.bostick@atcassociates.com and gabe.stivala@atcassociates.com

### Attachments

Budget _____ Workplan _____ Map X Chain-of Custody _____

Other: _____ Well ConstructDiagram _____

### Project Manager Information

Work Requested By: Alex Flores | Project Manager: Gabe Stivala

Date needed: 7/15/2016 | Time Needed: _____ | Hours Budgeted: _____

### Field Completion Data

Was the scope of work completed? X Y ___ N
If "No", describe work completed.

Completed by: Alex Flores
Date Completed 071416

Flowmeter:
Time: _____ Gals
Oxidizer: _____ hrs
Time: _____ hrs
_____ hrs

**Comments:**

# Montoring Well Gauging Log

FLD-102
Revision 0.0
Jul-08

| | | |
|---|---|---|
| Cardno Branch: Modesto, CA; 54 | Date: 071416 | Page 1 of 1 |
| Cardno Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Boradway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: 118EM01075 | Task No: 01 |
| | Weather: Sunny | Temperature: 68°F |
| Water Level Meter Model/ID: Solinist 101/ 223605 | Interface Probe Model/ID: N/A | |

| Well ID | Casing Diameter (inches) / Type | Time of Well Cap Removal* | Time of Gauging* | Depth To LNAPL (feet) | Depth To Water (feet) | LNAPL Thickness (feet) | Total Well Depth (feet) | Other |
|---|---|---|---|---|---|---|---|---|
| MW-1 | 2" / PVC | 0830-0850 | 0946 | | 12.25 | | 24.74 | |
| MW-2 | 2" / PVC | ↓ | 0954 | | 12.51 | | 24.83 | |
| MW-3 | 2" / PVC | ↓ | 0940 | | 12.11 | | 24.54 | |
| MW-4 | 2" / PVC | ↓ | 0917 | | 11.97 | | 29.91 | |
| MW-5 | 2" / PVC | ↓ | 0910 | | 9.13 | | 29.90 | |
| MW-6 | 2" / PVC | ↓ | 0925 | | 10.92 | | 29.87 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Comments:

**MW-5, 4, 6, 3, 1 & 2.**

Notes:

* If top of screen is submerged, allow at least 15 minutes for well equilibration following well cap removal.
All measurements to be reported to nearest 0.01 ft.

ID = Identification.
LNAPL = Light Non-Aqueous Phase Liquid.
Sheen = Discontinuous, non-measurable thickness of LNAPL (less than 0.01 ft).
Trace = Continuous, non-measurable thickness of LNAPL.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 07/14/16 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW- 1** | Contractor: | |
| | Weather: Sunny | Temperature: 76°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 122605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ~~bottom~~ -13

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV):
WC 12.49 x CM 0.16 = 2.0 (CV)(gal) x 10 / 3.0 CV (gal) = 20.0 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.74 |
| Depth to Water (DTW)(feet): 12.25 | Water Column (WC)(feet): 12.49 |
| LNAPL Thickness (ft): | Purging Start Time: 1520 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1520 | 12.25 | 0.5 | 19.37 | 1.948 | 5.01 | 6.78 | 82.0 | Begin hand bailing brownish silty H2O |
| 1523 | — | 2 | 18.43 | 1.676 | 5.26 | 6.73 | 77.3 | gas odor |
| 1526 | — | 4 | 18.19 | 1.378 | 5.35 | 6.74 | 70.6 | fine silt |
| 1529 | 12.71 | 6 | 18.06 | 1.071 | 5.28 | 6.80 | 66.4 | Stop |
| | | | | | | | | @bottom |
| 1540 | 12.33 | 8 | 18.86 | 0.918 | 3.62 | 6.74 | 62.1 | Begin pumping brownish silty H2O |
| 1543 | — | 10 | 18.71 | 0.845 | 3.21 | 6.71 | 57.1 | gas odor. |

## Sample Data

| Sample ID: MW- | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| | | | | |

No Samples collected. Well development.

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 1.11 | Approximate Flow Rate (GPM): 0.733 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 91.11 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock

# Monitoring Well Purging and Sampling Log

MW-1

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1546 | 12.89 | 12 | 18.61 | 0.768 | 2.46 | 6.70 | 54.1 | fine silty |
| 1549 | 13.06 | 14 | 18.67 | 0.706 | 2.29 | 6.67 | 51.9 | begin to clear |
| 1552 | 13.29 | 16 | 18.59 | 0.683 | 2.16 | 6.68 | 50.3 | gal purged @20' |
| 1555 | 13.48 | 18 | 18.64 | 0.659 | 2.03 | 6.65 | 43.8 | clear H2O @16' |
| 1558 | 13.41 | 20 | 18.70 | 0.668 | 2.11 | 6.62 | 44.6 | clear H2O @13' |
| 1601 | 13.36 | 22 | 18.66 | 0.663 | 2.07 | 6.60 | 43.2 | pump off. |

Comments: 22 gals purged.

Final depth = 24.80

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-2** | Contractor: | |
| | Weather: Sunny | Temperature: 75°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 1223608 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11J77 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ Bailer.

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom - 15

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 12.32 x CM 0.16 = 1.971 (CV)(gal) x 3.0 CV (gal) = 19.71 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.83 |
| Depth to Water (DTW)(feet): 12.51 | Water Column (WC)(feet): 12.32 |
| LNAPL Thickness (ft): | Purging Start Time: 1616 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1616 | 12.51 | 0.5 | 17.44 | 2.557 | 4.51 | 6.55 | 72.8 | light brownish H2O |
| 1619 | — | 2.5 | 17.29 | 2.649 | 4.07 | 6.62 | 70.1 | gas odor |
| 1622 | — | 4.5 | 17.20 | 2.580 | 3.39 | 6.67 | 67.6 | fine silt- |
| 1625 | — | 6.5 | 17.04 | 1.899 | 3.14 | 6.71 | 62.1 | gas odor |
| 1627 | 12.86 | 8.5 | 16.98 | 1.451 | 3.26 | 6.83 | 55.3 | Stop hand bailing |
| | | | | | | | | |
| 1640 | 12.55 | 10.5 | 18.84 | 1.287 | 3.71 | 6.73 | 57.6 | pump on @ bottom |

## Sample Data

| Sample ID: MW-2 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |

No samples collected. Well development.

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 1.61 | Approximate Flow Rate (GPM): 0.765 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 86.93 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:

# Monitoring Well Purging and Sampling Log

MW-2

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1643 | — | 12.5 | 18.46 | 1.121 | 3.10 | 6.61 | 59.8 | brownish silty/HO |
| 1646 | — | 14.5 | 18.32 | 1.046 | 2.54 | 6.63 | 57.1 | fine silt - |
| 1649 | 13.81 | 16.5 | 18.40 | 1.014 | 2.26 | 6.60 | 58.6 | gas odor |
| 1652 | 13.92 | 18.5 | 18.29 | 1.032 | 2.11 | 6.56 | 61.2 | cleaning |
| 1655 | 13.99 | 20.5 | 18.12 | 1.023 | 2.17 | 6.58 | 60.8 | gas odor pump @ 20' |
| 1658 | 14.00 | 22.5 | 18.15 | 1.005 | 2.13 | 6.56 | 61.4 | clear pump @ 15' |
| 1701 | 14.12 | 24.5 | 18.11 | 1.001 | 1.96 | 6.54 | 61.9 | pump off. |

Comments: Final depth = 24.84

24.5g purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-3** | Contractor: | |
| | Weather: Sunny | Temperature: 75°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom-13'

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 15.43 x CM 0.16 = 2.468 (CV)(gal) x 3.0 CV (gal) = 24.68 PV (10)

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.54 |
| Depth to Water (DTW)(feet): 12.11 | Water Column (WC)(feet): 15.43 |
| LNAPL Thickness (ft): | Purging Start Time: 1410 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1410 | 12.11 | 1q | 17.89 | 1.429 | 2.99 | 8.11 | 39.8 | Clear H2O. |
| 1416 | — | 3.5 | 17.66 | 1.194 | 3.07 | 8.26 | 38.1 | brownish silty H2O |
| 1421 | — | 6.0 | 17.59 | 1.111 | 3.15 | 8.16 | 30.7 | No odor |
| 1426 | 12.28 | 8.5 | 17.46 | 1.152 | 3.26 | 7.81 | 34.6 | Stop hand bailing |
| | | | | | | | | |
| 1440 | 12.13 | 11.0 | 18.14 | 1.190 | 3.98 | 7.59 | 43.1 | Begin pumping with well pump & bottle |
| 1444 | 12.26 | 13.5 | 17.89 | 1.109 | 4.06 | 7.52 | 41.3 | brownish silty H2O |

## Sample Data

| Sample ID: MW- | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| No samples collected. Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 0.19 | Approximate Flow Rate (GPM): 0.65 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 98.77 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock.

# Monitoring Well Purging and Sampling Log

MW-3

FLD-103a

Page of

Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1448 | 12.30 | 16.0 | 17.84 | 1.078 | 3.77 | 7.39 | 41.9 | cloudy - Noodor |
| 1452 | 12.27 | 18.5 | 17.72 | 1.057 | 3.49 | 7.31 | 40.6 | Clear H2O |
| 1456 | 12.21 | 21.0 | 17.65 | 1.049 | 3.37 | 7.24 | 41.1 | pump @ 17' No odor |
| 1500 | 12.18 | 23.5 | 17.70 | 1.043 | 3.22 | 7.16 | 43.5 | pump @ 13' Clear H2O |
| 1504 | 12.19 | 26.0 | 17.63 | 1.040 | 3.09 | 7.07 | 45.1 | pump off. |

Comments: 26 gallons purged.
Final depth = 24.86

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-4** | Contractor: | |
| | Weather: Sunny | Temperature: 72 °F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11377 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

| Casing Volume Information | Purging Calculations |
|---|---|
| Casing Diameter (Circle): (2") 4" 6" Other | Casing Volumes (CV): WC 17.94 x CM 0.16 = 2.870 (CV)(gal) x 10 CV (gal) = 28.70 PV |
| Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47 | |

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 29.91 |
| Depth to Water (DTW)(feet): 11.97 | Water Column (WC)(feet): 17.94 |
| LNAPL Thickness (ft): | Purging Start Time: 1142 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1142 | 11.97 | 1g | 21.34 | 1.504 | 2.60 | 7.52 | 56.9 | Begin hand bailing / light brownish tint |
| 1149 | — | 4g | 20.91 | 2.393 | 2.09 | 7.41 | 67.1 | Strong odor |
| 1155 | — | 7g | 20.42 | 1.599 | 2.88 | 7.38 | 59.9 | No odor / light brownish tint |
| 1201 | 21.23 | 10g | 20.33 | 1.877 | 3.01 | 7.33 | 62.0 | Stop hand bailing |
| | | | | | | | | |
| 1216 | 17.88 | 13g | 21.68 | 1.539 | 3.65 | 7.24 | 55.6 | Begin pumping |
| 1222 | — | 16g | 21.49 | 1.352 | 3.96 | 7.20 | 54.1 | light brownish - fine silt |

## Sample Data

| Sample ID: MW-4 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| No Samples collected. Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 16.32 | Approximate Flow Rate (GPM): 0.564 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 67.06 in 15 minutes |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock

# Monitoring Well Purging and Sampling Log

MW-4

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1228 | 24.49 | 19 | 22.17 | 1.426 | 3.99 | 7.16 | 57.2 | Cleaning |
| 1234 | 24.71 | 22 | 22.25 | 1.439 | 4.11 | 7.13 | 63.1 | No odor |
| 1240 | 25.63 | 25 | 22.30 | 1.485 | 3.86 | 7.07 | 67.7 | Clear H2O. |
| 1246 | 27.45 | 28 | 22.49 | 1.528 | 3.70 | 7.10 | 66.4 | No odor |
| 1252 | 28.29 | 31 | 22.57 | 1.563 | 3.62 | 7.12 | 65.6 | pump off. |

Comments: Final depth to bottom = 29.91

31 gallons purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW- 5** | Contractor: | |
| | Weather: Sunny | Temperature: 70 °F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom. 29.9'

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): ~~0.16~~ 0.65 1.47

## Purging Calculations

Casing Volumes (CV):

WC 20.77 x CM 0.16 = 3.323 (CV)(gal) x 10 CV (gal) = 33.23 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 29.90 |
| Depth to Water (DTW)(feet): 9.13 | Water Column (WC)(feet): 20.77 |
| LNAPL Thickness (ft): | Purging Start Time: 1015 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1015 | 9.13 | 0.5 | 20.61 | 2.813 | 3.51 | 6.90 | 138.4 | light brownish H2O |
| 1020 | — | 3.8 | 20.25 | 1.989 | 3.66 | 7.01 | 120.1 | No odor |
| 1024 | — | 7.1 | 20.18 | 1.576 | 3.80 | 7.09 | 114.6 | light brownish fine silt |
| 1028 | 20.72 | 10.4 | 20.11 | 1.601 | 3.91 | 7.12 | 116.9 | Stop hand bailing |
| | | | | | | | | Begin pumping |
| 1040 | 18.61 | 13.7 | 20.24 | 1.711 | 3.98 | 7.20 | 110.1 | Pump @ bottom light grayish H2O |
| 1047 | 20.00 | 17.0 | 20.88 | 1.632 | 3.79 | 7.24 | 105.6 | No odor |

## Sample Data

| Sample ID: MW- 5 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| No Samples Collected - Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): ✓ | Approximate Flow Rate (GPM): 0.56 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 45.64 in 12 min. |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: installed new padlock 12" twco 2 bolt (15/16).

# Monitoring Well Purging and Sampling Log

MW-5

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1056 | — | 20.3 | 21.17 | 1.466 | 4.29 | 7.30 | 96.6 | Clearing |
| 1103 | 25.62 | 23.6 | 21.32 | 1.217 | 4.38 | 7.33 | 92.7 | No odor |
| 1110 | 26.96 | 26.9 | 21.54 | 1.392 | 4.23 | 7.35 | 95.1 | Purge H2O @ bottom |
| 1117 | 28.11 | 30.3 | 21.80 | 1.429 | 4.06 | 7.32 | 91.7 | No odor |
| 1127 | 28.49 | 33.6 | 21.93 | 1.411 | 4.01 | 7.36 | 90.8 | pump off |

Comments: Final depth = 29.91

33.6 gallons purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

ATC Branch: 54; Modesto, CA | Date: 07/14/16 | Page 1 of 2

ATC Representative(s): Alex Flores | Project: Broadway Valdez

Location: 2820 and 2855 Broadway, Oakland, CA

Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01

**Well ID: MW- 6** | Contractor:

Weather: | Temperature: 74°F

## Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101 / 1223605 | Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 / 11157 | Decontamination Method: Alconox/ Rinse

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 18.95 x CM 0.16 = 3.032 (CV)(gal) x 10 CV (gal) = 30.32 PV

## Monitoring Measurements

Depth to LNAPL (feet): | Total Well Depth (feet): 29.87

Depth to Water (DTW)(feet): 10.92 | Water Column (WC)(feet): 18.95

LNAPL Thickness (ft): | Purging Start Time:

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1310 | 10.92 | 19 | 20.79 | 3.487 | 4.21 | 7.93 | 64.7 | Clear H2O |
| 1315 | — | 4.1 | 20.57 | 2.496 | 4.87 | 8.09 | 58.3 | No odor. |
| 1322 | — | 7.2 | 20.25 | 2.450 | 4.91 | 8.07 | 59.2 | light brownish H2O |
| 1328 | — | 10.3 | 20.23 | 2.458 | 5.22 | 8.05 | 59.9 | fine silt. |
| 1333 | Dry | 13.3 | 20.29 | 2.471 | 4.97 | 7.91 | 66.2 | Well dry |
| | | | | | | | | |
| 1353 | 25.91 | | | | | | | |

## Sample Data

Sample ID: MW- 6 | Time of Sample:

Container Types, Volumes, & Quantities:

| Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|
| | | |

No sample collected. Well development.

## Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): | Approximate Flow Rate (GPM): 0.578 / 0.140

Recovery Type: ____ Fast ✓ Slow | % Recovery = 40% in 4 hrs.

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

MW-6 @ 1726 = 22.21 = 40.42 % recharged.

Comments:

# Monitoring Well Purging and Sampling Log

MW-6

FLD-103a

Page 2 of 2

Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1735 | 22.01 | 14.0 | 21.99 | 1.792 | 5.42 | 7.32 | 90.4 | Pump on @ bottom light brownish $H_2O$ |
| 1742 | 27.10 | 17.0 | 21.90 | 1.307 | 5.16 | 7.20 | 83.6 | Clear $H_2O$ |
| 1748 | Dry | 18.5 | 21.82 | 1.429 | 4.83 | 7.14 | 91.1 | No odor |

Comments: Final depth = 29.87

18.5 gallons purged.

# Monitoring Well Inspection Log

FLD-104
Revision 0.0
Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 07/4/16 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Coulterville General Store | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: Z054000094 | Task No: 01 |

Well ID: **MW-1** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emco box 2-15/16 bolts
Installed new padlock

Well ID: **MW-2** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emco box 2-15/16 bolts
Installed new padlock

Well ID: **MW-3** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emcobox 2-15/16 bolts
Installed new padlock

Well ID: **MW-4** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box 2-15/16 bolts.
Installed new padlock

Well ID: **MW-5** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box 2-15/16 bolts.
Installed new padlock

Well ID: **MW-6** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box
2-15/16 bolts
installed new padlock

# Field Report

FLD-100
Revision 0.0
Jul-16

| | | |
|---|---|---|
| Cardno Branch: Modesto, CA; 54 | Date: 071416 | Page 1 of 1 |
| Cardno Representative(s): Alex Flores | Project: Broadway Valdez Premier Hyundai of Oakland. | |
| Role: Technician | Location: 2820 and 2855 Boradway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: 118EM01075 | Task No: 01 |
| Scope of Work: | Weather: Sunny | Temperature: 68°F |
| _X_ Monitoring ___ Assessment ___ Remediation ___ Closure | Contractor: | |

| Time: | Comments: |
|---|---|
| 0812 | Arrived to site. Check in with Service Manager. |
| | request vehicles move from MW-1-3 to get well |
| | access. HASP. JSA- Tailgate Safety meeting. |
| | Set up equipment decon - Alconox & rinsate water. |
| | Begin opening MW-1-6. |
| 0910 | Begin gauging: MW-5, 4, 6, 3, 1 & 2 |
| 1000 | Completed well gauging - |
| | pH meter calibration YSI 556. |
| 1015 | Begin well development. MW-5, 4, 6 (Dewatered x2) |
| | ↑Very slow recharge - MW-3, MW-1 & 2. |
| | Dewatered MW-6 x2. |
| | Install padlocks in all wells. Contained well development |
| | water in four drums. Labeled 55g drums. |
| | Clean up - Load up. |
| 1812 | left site |

| Calibration of: | Dissolved Oxygen | pH | pH | Cond. | ORP | Unit Inspection: (Pass) / Fail | |
|---|---|---|---|---|---|---|---|
| meter type: YSI 556 | (%) | (7.00) | (4.00) | (1.413) (mS/cm) | (220) (mV) | Battery levels: | 80 |
| | | | | | | Screen / Casing: | Good |
| Pre / Post | 99.1 / 100.0 | 6.94 / 7.00 | 4.02 / 4.00 | 1.410 / 1.413 | 219.1 / 220 | Commets: | |

| | |
|---|---|
| Calibration Solution Expiration Date: 01/2017 | Cable Unit Serial No.: 11377 |
| | Handheld Unit Serial No.: |
| Copies To: Gabe Stivala. | Project Manager: Gabe Stivala |
| | Reviewed By: |

# ATTACHMENT D

## MONITORING WELL SAMPLING LOGS

# ATC Group Services LLC

**915 Highland Pointe Drive Suite 205**
**Roseville, CA 95678**
(916) 724-5247 Phone
(916) 724-5201 Fax


## Service Request Form
**Well Development**

**Date of SRF** 7/13/2016

### Site Information

Site Name: Premier Hyundai of Oakland | Project No. 118M01075 | Task No. 1

Contact: Gabe Stivala | Phone No. (925) 223-7123 | Labor Code No. 09012

### Scope of Work

1. Conduct tailgate H&S meeting.
2. Contact potential stakeholders and discuss scope, obtain contact info for future work.
3. Gauge and develop the wells: MW-1 through MW-6.
4. Open all wells before gauging and sampling, allow at least 15 min to equalize.
5. Gauge wells in order: MW-5, MW-4, MW-6, MW-3, MW-1 and MW-2
6. Develop all monitoring wells in the same order.
7. Waste water to be transferred to 55-gallon drums, take four drums.
8. Scan and send field forms to sara.bostick@atcassociates.com and gabe.stivala@atcassociates.com

### Attachments

Budget _____ Workplan _____ Map X Chain-of Custody _____

Other: _____ Well ConstructDiagram _____

### Project Manager Information

Work Requested By: Alex Flores | Project Manager: Gabe Stivala

Date needed: 7/15/2016 | Time Needed: _____ | Hours Budgeted: _____

### Field Completion Data

Was the scope of work completed? X Y ___ N
If "No", describe work completed.

Completed by: Alex Flores
Date Completed 071416

Flowmeter:
Time: _____ Gals
Oxidizer: _____ hrs
Time: _____ hrs
_____ hrs

**Comments:**

# Montoring Well Gauging Log

FLD-102
Revision 0.0
Jul-08

| | | |
|---|---|---|
| Cardno Branch: Modesto, CA; 54 | Date: 071416 | Page 1 of 1 |
| Cardno Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Boradway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: 118EM01075 | Task No: 01 |
| | Weather: Sunny | Temperature: 68°F |
| Water Level Meter Model/ID: Solinist 101/ 223605 | Interface Probe Model/ID: N/A | |

| Well ID | Casing Diameter (inches) / Type | Time of Well Cap Removal* | Time of Gauging* | Depth To LNAPL (feet) | Depth To Water (feet) | LNAPL Thickness (feet) | Total Well Depth (feet) | Other |
|---|---|---|---|---|---|---|---|---|
| MW-1 | 2" / PVC | 0830-0850 | 0946 | | 12.25 | | 24.74 | |
| MW-2 | 2" / PVC | ↓ | 0954 | | 12.51 | | 24.83 | |
| MW-3 | 2" / PVC | ↓ | 0940 | | 12.11 | | 24.54 | |
| MW-4 | 2" / PVC | ↓ | 0917 | | 11.97 | | 29.91 | |
| MW-5 | 2" / PVC | ↓ | 0910 | | 9.13 | | 29.90 | |
| MW-6 | 2" / PVC | ↓ | 0925 | | 10.92 | | 29.87 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Comments:

**MW-5, 4, 6, 3, 1 & 2.**

Notes:

* If top of screen is submerged, allow at least 15 minutes for well equilibration following well cap removal.
All measurements to be reported to nearest 0.01 ft.

ID = Identification.
LNAPL = Light Non-Aqueous Phase Liquid.
Sheen = Discontinuous, non-measurable thickness of LNAPL (less than 0.01 ft).
Trace = Continuous, non-measurable thickness of LNAPL.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 07/14/16 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW- 1** | Contractor: | |
| | Weather: Sunny | Temperature: 76°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 122605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ~~bottom~~ -13

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV):
WC 12.49 x CM 0.16 = 2.0 (CV)(gal) x 10 / 3.0 CV (gal) = 20.0 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.74 |
| Depth to Water (DTW)(feet): 12.25 | Water Column (WC)(feet): 12.49 |
| LNAPL Thickness (ft): | Purging Start Time: 1520 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1520 | 12.25 | 0.5 | 19.37 | 1.948 | 5.01 | 6.78 | 82.0 | Begin hand bailing brownish silty H2O |
| 1523 | — | 2 | 18.43 | 1.676 | 5.26 | 6.73 | 77.3 | gas odor |
| 1526 | — | 4 | 18.19 | 1.378 | 5.35 | 6.74 | 70.6 | fine silt |
| 1529 | 12.71 | 6 | 18.06 | 1.071 | 5.28 | 6.80 | 66.4 | Stop |
| | | | | | | | | @bottom |
| 1540 | 12.33 | 8 | 18.86 | 0.918 | 3.62 | 6.74 | 62.1 | Begin pumping brownish silty H2O |
| 1543 | — | 10 | 18.71 | 0.845 | 3.21 | 6.71 | 57.1 | gas odor. |

## Sample Data

| Sample ID: MW- | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| | | | | |

No Samples collected. Well development.

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 1.11 | Approximate Flow Rate (GPM): 0.733 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 91.11 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock

# Monitoring Well Purging and Sampling Log

MW-1

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1546 | 12.89 | 12 | 18.61 | 0.768 | 2.46 | 6.70 | 54.1 | fine silty |
| 1549 | 13.06 | 14 | 18.67 | 0.706 | 2.29 | 6.67 | 51.9 | begin to clear |
| 1552 | 13.29 | 16 | 18.59 | 0.683 | 2.16 | 6.68 | 50.3 | gal purged @20' |
| 1555 | 13.48 | 18 | 18.64 | 0.659 | 2.03 | 6.65 | 43.8 | clear H2O @16' |
| 1558 | 13.41 | 20 | 18.70 | 0.668 | 2.11 | 6.62 | 44.6 | clear H2O @13' |
| 1601 | 13.36 | 22 | 18.66 | 0.663 | 2.07 | 6.60 | 43.2 | pump off. |

Comments: 22 gals purged.

Final depth = 24.80

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-2** | Contractor: | |
| | Weather: Sunny | Temperature: 75°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 1223608 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11J77 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ Bailer.

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom - 15

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 12.32 x CM 0.16 = 1.971 (CV)(gal) x 3.0 CV (gal) = 19.71 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.83 |
| Depth to Water (DTW)(feet): 12.51 | Water Column (WC)(feet): 12.32 |
| LNAPL Thickness (ft): | Purging Start Time: 1616 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1616 | 12.51 | 0.5 | 17.44 | 2.557 | 4.51 | 6.55 | 72.8 | light brownish H2O |
| 1619 | — | 2.5 | 17.29 | 2.649 | 4.07 | 6.62 | 70.1 | gas odor |
| 1622 | — | 4.5 | 17.20 | 2.580 | 3.39 | 6.67 | 67.6 | fine silt- |
| 1625 | — | 6.5 | 17.04 | 1.899 | 3.14 | 6.71 | 62.1 | gas odor |
| 1627 | 12.86 | 8.5 | 16.98 | 1.451 | 3.26 | 6.83 | 55.3 | Stop hand bailing |
| | | | | | | | | |
| 1640 | 12.55 | 10.5 | 18.84 | 1.287 | 3.71 | 6.73 | 57.6 | pump on @ bottom |

## Sample Data

| Sample ID: MW-2 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |

No samples collected. Well development.

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 1.61 | Approximate Flow Rate (GPM): 0.765 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 86.93 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:

# Monitoring Well Purging and Sampling Log

MW-2

FLD-103a



Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1643 | — | 12.5 | 18.46 | 1.121 | 3.10 | 6.61 | 59.8 | brownish silty/HO |
| 1646 | — | 14.5 | 18.32 | 1.046 | 2.54 | 6.63 | 57.1 | fine silt - |
| 1649 | 13.81 | 16.5 | 18.40 | 1.014 | 2.26 | 6.60 | 58.6 | gas odor |
| 1652 | 13.92 | 18.5 | 18.29 | 1.032 | 2.11 | 6.56 | 61.2 | cleaning |
| 1655 | 13.99 | 20.5 | 18.12 | 1.023 | 2.17 | 6.58 | 60.8 | gas odor pump @ 20' |
| 1658 | 14.00 | 22.5 | 18.15 | 1.005 | 2.13 | 6.56 | 61.4 | clear pump @ 15' |
| 1701 | 14.12 | 24.5 | 18.11 | 1.001 | 1.96 | 6.54 | 61.9 | pump off. |

Comments: Final depth = 24.84

24.5g purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-3** | Contractor: | |
| | Weather: Sunny | Temperature: 75°F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom-13'

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 15.43 x CM 0.16 = 2.468 (CV)(gal) x 3.0 CV (gal) = 24.68 PV (10)

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 24.54 |
| Depth to Water (DTW)(feet): 12.11 | Water Column (WC)(feet): 15.43 |
| LNAPL Thickness (ft): | Purging Start Time: 1410 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1410 | 12.11 | 1q | 17.89 | 1.429 | 2.99 | 8.11 | 39.8 | Clear H2O. |
| 1416 | — | 3.5 | 17.66 | 1.194 | 3.07 | 8.26 | 38.1 | brownish silty H2O |
| 1421 | — | 6.0 | 17.59 | 1.111 | 3.15 | 8.16 | 30.7 | No odor |
| 1426 | 12.28 | 8.5 | 17.46 | 1.152 | 3.26 | 7.81 | 34.6 | Stop hand bailing |
| | | | | | | | | |
| 1440 | 12.13 | 11.0 | 18.14 | 1.190 | 3.98 | 7.59 | 43.1 | Begin pumping with well pump & bottle |
| 1444 | 12.26 | 13.5 | 17.89 | 1.109 | 4.06 | 7.52 | 41.3 | brownish silty H2O |

## Sample Data

| Sample ID: MW- | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| No samples collected. Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 0.19 | Approximate Flow Rate (GPM): 0.65 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 98.77 |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock.

# Monitoring Well Purging and Sampling Log

MW-3

FLD-103a

Page of

Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1448 | 12.30 | 16.0 | 17.84 | 1.078 | 3.77 | 7.39 | 41.9 | cloudy - Noodor |
| 1452 | 12.27 | 18.5 | 17.72 | 1.057 | 3.49 | 7.31 | 40.6 | Clear H2O |
| 1456 | 12.21 | 21.0 | 17.65 | 1.049 | 3.37 | 7.24 | 41.1 | pump @ 17' No odor |
| 1500 | 12.18 | 23.5 | 17.70 | 1.043 | 3.22 | 7.16 | 43.5 | pump @ 13' Clear H2O |
| 1504 | 12.19 | 26.0 | 17.63 | 1.040 | 3.09 | 7.07 | 45.1 | pump off. |

Comments: 26 gallons purged.
Final depth = 24.86

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW-4** | Contractor: | |
| | Weather: Sunny | Temperature: 72 °F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11377 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

| Casing Volume Information | Purging Calculations |
|---|---|
| Casing Diameter (Circle): (2") 4" 6" Other | Casing Volumes (CV): WC 17.94 x CM 0.16 = 2.870 (CV)(gal) x 10 CV (gal) = 28.70 PV |
| Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47 | |

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 29.91 |
| Depth to Water (DTW)(feet): 11.97 | Water Column (WC)(feet): 17.94 |
| LNAPL Thickness (ft): | Purging Start Time: 1142 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1142 | 11.97 | 1g | 21.34 | 1.504 | 2.60 | 7.52 | 56.9 | Begin hand bailing / light brownish tint |
| 1149 | — | 4g | 20.91 | 2.393 | 2.09 | 7.41 | 67.1 | Strong odor |
| 1155 | — | 7g | 20.42 | 1.599 | 2.88 | 7.38 | 59.9 | No odor / light brownish tint |
| 1201 | 21.23 | 10g | 20.33 | 1.877 | 3.01 | 7.33 | 62.0 | Stop hand bailing |
| | | | | | | | | |
| 1216 | 17.88 | 13g | 21.68 | 1.539 | 3.65 | 7.24 | 55.6 | Begin pumping |
| 1222 | — | 16g | 21.49 | 1.352 | 3.96 | 7.20 | 54.1 | light brownish - fine silt |

## Sample Data

| Sample ID: MW-4 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| | | | | |
| No Samples collected. Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): 16.32 | Approximate Flow Rate (GPM): 0.564 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 67.06 in 15 minutes |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: Installed new padlock

# Monitoring Well Purging and Sampling Log

MW-4

FLD-103a



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| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1228 | 24.49 | 19 | 22.17 | 1.426 | 3.99 | 7.16 | 57.2 | Cleaning |
| 1234 | 24.71 | 22 | 22.25 | 1.439 | 4.11 | 7.13 | 63.1 | No odor |
| 1240 | 25.63 | 25 | 22.30 | 1.485 | 3.86 | 7.07 | 67.7 | Clear H2O. |
| 1246 | 27.45 | 28 | 22.49 | 1.528 | 3.70 | 7.10 | 66.4 | No odor |
| 1252 | 28.29 | 31 | 22.57 | 1.563 | 3.62 | 7.12 | 65.6 | pump off. |

Comments: Final depth to bottom = 29.91

31 gallons purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 071416 | Page 1 of 2 |
| ATC Representative(s): Alex Flores | Project: Broadway Valdez | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01 |
| **Well ID: MW- 5** | Contractor: | |
| | Weather: Sunny | Temperature: 70 °F |

## Purging & Sampling Instrumentation & Method

| | |
|---|---|
| Water Level Meter (Model/ID): Solinist 101 / 223605 | Interface Probe (Model/ID): NA |
| Water Quality Meter (Model/ID): YSI 556 / 11577 | Decontamination Method: Alconox/ Rinse |

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) bottom. 29.9'

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): ~~0.16~~ 0.65 1.47

## Purging Calculations

Casing Volumes (CV):

WC 20.77 x CM 0.16 = 3.323 (CV)(gal) x 10 CV (gal) = 33.23 PV

## Monitoring Measurements

| | |
|---|---|
| Depth to LNAPL (feet): | Total Well Depth (feet): 29.90 |
| Depth to Water (DTW)(feet): 9.13 | Water Column (WC)(feet): 20.77 |
| LNAPL Thickness (ft): | Purging Start Time: 1015 |

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1015 | 9.13 | 0.5 | 20.61 | 2.813 | 3.51 | 6.90 | 138.4 | light brownish H2O |
| 1020 | — | 3.8 | 20.25 | 1.989 | 3.66 | 7.01 | 120.1 | No odor |
| 1024 | — | 7.1 | 20.18 | 1.576 | 3.80 | 7.09 | 114.6 | light brownish fine silt |
| 1028 | 20.72 | 10.4 | 20.11 | 1.601 | 3.91 | 7.12 | 116.9 | Stop hand bailing |
| | | | | | | | | Begin pumping |
| 1040 | 18.61 | 13.7 | 20.24 | 1.711 | 3.98 | 7.20 | 110.1 | Pump @ bottom light grayish H2O |
| 1047 | 20.00 | 17.0 | 20.88 | 1.632 | 3.79 | 7.24 | 105.6 | No odor |

## Sample Data

| Sample ID: MW- 5 | Time of Sample: | Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|---|---|
| Container Types, Volumes, & Quantities: | | | | |
| No Samples Collected - Well development. | | | | |

## Well Recovery Data

| | |
|---|---|
| Maximum Drawdown (DTW*m*)(feet): ✓ | Approximate Flow Rate (GPM): 0.56 |
| Recovery Type: ✓ Fast ____ Slow | % Recovery = 45.64 in 12 min. |

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments: installed new padlock 12" twco 2 bolt (15/16).

# Monitoring Well Purging and Sampling Log

MW-5

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| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1056 | — | 20.3 | 21.17 | 1.466 | 4.29 | 7.30 | 96.6 | Clearing |
| 1103 | 25.62 | 23.6 | 21.32 | 1.217 | 4.38 | 7.33 | 92.7 | No odor |
| 1110 | 26.96 | 26.9 | 21.54 | 1.392 | 4.23 | 7.35 | 95.1 | Purge H2O @ bottom |
| 1117 | 28.11 | 30.3 | 21.80 | 1.429 | 4.06 | 7.32 | 91.7 | No odor |
| 1127 | 28.49 | 33.6 | 21.93 | 1.411 | 4.01 | 7.36 | 90.8 | pump off |

Comments: Final depth = 29.91

33.6 gallons purged.

# Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Jul-16

ATC Branch: 54; Modesto, CA | Date: 07/14/16 | Page 1 of 2

ATC Representative(s): Alex Flores | Project: Broadway Valdez

Location: 2820 and 2855 Broadway, Oakland, CA

Contact Information: **Gabe Stivala** | Project No: 118EM01075 | Task No: 01

**Well ID: MW- 6** | Contractor:

Weather: | Temperature: 74°F

## Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101 / 1223605 | Interface Probe (Model/ID): NA

Water Quality Meter (Model/ID): YSI 556 / 11157 | Decontamination Method: Alconox/ Rinse

Purging Method: ____ Disp. Bailer ✓ Centrifugal Pump ____ Submersible Pump ____ Waterra Other: ✓ PVC bailer

3 Well Volumes ____ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer ____ Dedicated Tubing Other: ____

## Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47

## Purging Calculations

Casing Volumes (CV): WC 18.95 x CM 0.16 = 3.032 (CV)(gal) x 10 CV (gal) = 30.32 PV

## Monitoring Measurements

Depth to LNAPL (feet): | Total Well Depth (feet): 29.87

Depth to Water (DTW)(feet): 10.92 | Water Column (WC)(feet): 18.95

LNAPL Thickness (ft): | Purging Start Time:

## Purging Data

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Begin hand bailing |
| 1310 | 10.92 | 19 | 20.79 | 3.487 | 4.21 | 7.93 | 64.7 | Clear H2O |
| 1315 | — | 4.1 | 20.57 | 2.496 | 4.87 | 8.09 | 58.3 | No odor. |
| 1322 | — | 7.2 | 20.25 | 2.450 | 4.91 | 8.07 | 59.2 | light brownish H2O |
| 1328 | — | 10.3 | 20.23 | 2.458 | 5.22 | 8.05 | 59.9 | fine silt. |
| 1333 | Dry | 13.3 | 20.29 | 2.471 | 4.97 | 7.91 | 66.2 | Well dry |
| | | | | | | | | |
| 1353 | 25.91 | | | | | | | |

## Sample Data

Sample ID: MW- 6 | Time of Sample:

Container Types, Volumes, & Quantities:

| Filtered (yes/no) | Preservatives | Analytical Parameters |
|---|---|---|
| | | |

No sample collected. Well development.

## Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): | Approximate Flow Rate (GPM): 0.578 / 0.140

Recovery Type: ____ Fast ✓ Slow | % Recovery = 40% in 4 hrs.

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

MW-6 @ 1726 = 22.21 = 40.42 % recharged.

Comments:

# Monitoring Well Purging and Sampling Log

MW-6

FLD-103a

Page 2 of 2

Jul-16

| Time (24 Hours) | DTW (Feet) | Cum. Vol. Purged (Gallons) | Temp (°C) (± 1°) | Specific Cond. (mS/cm) (± 5%) | Dissolved Oxygen (mg/L) (± 10%) | pH (± 0.1) | ORP (mV) (± 10 mV) | Other |
|---|---|---|---|---|---|---|---|---|
| 1735 | 22.01 | 14.0 | 21.99 | 1.792 | 5.42 | 7.32 | 90.4 | Pump on @ bottom light brownish $H_2O$ |
| 1742 | 27.10 | 17.0 | 21.90 | 1.307 | 5.16 | 7.20 | 83.6 | Clear $H_2O$ |
| 1748 | Dry | 18.5 | 21.82 | 1.429 | 4.83 | 7.14 | 91.1 | No odor |

Comments: Final depth = 29.87

18.5 gallons purged.

# Monitoring Well Inspection Log

FLD-104
Revision 0.0
Jul-16

| | | |
|---|---|---|
| ATC Branch: 54; Modesto, CA | Date: 07/4/16 | Page 1 of 1 |
| ATC Representative(s): Alex Flores | Project: Coulterville General Store | |
| | Location: 2820 and 2855 Broadway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: Z054000094 | Task No: 01 |

Well ID: **MW-1** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emco box 2-15/16 bolts
Installed new padlock

Well ID: **MW-2** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emco box 2-15/16 bolts
Installed new padlock

Well ID: **MW-3** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | None |

Comments: 12" Emcobox 2-15/16 bolts
Installed new padlock

Well ID: **MW-4** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box 2-15/16 bolts.
Installed new padlock

Well ID: **MW-5** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box 2-15/16 bolts.
Installed new padlock

Well ID: **MW-6** Type: [flush well box, vault, or monument]

| Construction Detail | Condition [secure, good, poor, bad, yes, no, etc.] |
|---|---|
| Security Vault | Secure |
| Surface Seal | Good |
| Locking Cap | Good |
| ATC Lock | NO |

Comments: 12" Emco box
2-15/16 bolts
installed new padlock

# Field Report

FLD-100
Revision 0.0
Jul-16

| | | |
|---|---|---|
| Cardno Branch: Modesto, CA; 54 | Date: 071416 | Page 1 of 1 |
| Cardno Representative(s): Alex Flores | Project: Broadway Valdez Premier Hyundai of Oakland. | |
| Role: Technician | Location: 2820 and 2855 Boradway, Oakland, CA | |
| Contact Information: Gabe Stivala | Project No: 118EM01075 | Task No: 01 |
| Scope of Work: | Weather: Sunny | Temperature: 68°F |
| _X_ Monitoring ___ Assessment ___ Remediation ___ Closure | Contractor: | |

| Time: | Comments: |
|---|---|
| 0812 | Arrived to site. Check in with Service Manager. |
| | request vehicles move from MW-1-3 to get well |
| | access. HASP. JSA- Tailgate Safety meeting. |
| | Set up equipment decon - Alconox & rinsate water. |
| | Begin opening MW-1-6. |
| 0910 | Begin gauging: MW-5, 4, 6, 3, 1 & 2 |
| 1000 | Completed well gauging - |
| | pH meter calibration YSI 556. |
| 1015 | Begin well development. MW-5, 4, 6 (Dewatered x2) |
| | ↑Very slow recharge - MW-3, MW-1 & 2. |
| | Dewatered MW-6 x2. |
| | Install padlocks in all wells. Contained well development |
| | water in four drums. Labeled 55g drums. |
| | Clean up - Load up. |
| 1812 | left site |

| Calibration of: | Dissolved Oxygen | pH | pH | Cond. | ORP | Unit Inspection: (Pass) / Fail | |
|---|---|---|---|---|---|---|---|
| meter type: YSI 556 | (%) | (7.00) | (4.00) | (1.413) (mS/cm) | (220) (mV) | Battery levels: | 80 |
| | | | | | | Screen / Casing: | Good |
| Pre / Post | 99.1 / 100.0 | 6.94 / 7.00 | 4.02 / 4.00 | 1.410 / 1.413 | 219.1 / 220 | Commets: | |

| | |
|---|---|
| Calibration Solution Expiration Date: 01/2017 | Cable Unit Serial No.: 11377 |
| | Handheld Unit Serial No.: |
| Copies To: Gabe Stivala. | Project Manager: Gabe Stivala |
| | Reviewed By: |

# ATTACHMENT E

## LABORATORY ANALYTICAL DATA REPORTS AND CHAIN OF CUSTODY DOCUMENTS

*e-Hardcopy 2.0*
*Automated Report*

# Technical Report for

## ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46423

Sampling Dates: 07/05/16 - 07/06/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: **88**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5 6 7

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46423

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46423-1 | 07/05/16 | 10:40 | | 07/06/16 | SO | Soil | B24-5' |
| C46423-2 | 07/05/16 | 10:45 | | 07/06/16 | SO | Soil | B24-10' |
| C46423-3 | 07/05/16 | 10:50 | | 07/06/16 | SO | Soil | B24-15' |
| C46423-4 | 07/05/16 | 11:00 | | 07/06/16 | SO | Soil | B24-20' |
| C46423-5 | 07/05/16 | 11:05 | | 07/06/16 | SO | Soil | B24-25' |
| C46423-6 | 07/06/16 | 08:15 | | 07/06/16 | SO | Soil | B25-5' |
| C46423-7 | 07/06/16 | 08:20 | | 07/06/16 | SO | Soil | B25-10' |
| C46423-8 | 07/06/16 | 08:25 | | 07/06/16 | SO | Soil | B25-15' |
| C46423-9 | 07/06/16 | 08:31 | | 07/06/16 | SO | Soil | B25-20' |
| C46423-10 | 07/06/16 | 08:40 | | 07/06/16 | SO | Soil | B25-25' |
| C46423-11 | 07/06/16 | 09:00 | | 07/06/16 | SO | Soil | B25-30' |
| C46423-12 | 07/06/16 | 10:50 | | 07/06/16 | SO | Soil | B26-5' |
| C46423-13 | 07/06/16 | 10:58 | | 07/06/16 | SO | Soil | B26-10' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Sample Summary
(continued)

ATC Group Services

**Job No:** C46423

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46423-14 | 07/06/16 | 11:05 | | 07/06/16 | SO | Soil | B26-15' |
| C46423-15 | 07/06/16 | 11:10 | | 07/06/16 | SO | Soil | B26-20' |
| C46423-16 | 07/06/16 | 11:15 | | 07/06/16 | SO | Soil | B26-25' |
| C46423-17 | 07/06/16 | 11:20 | | 07/06/16 | SO | Soil | B26-30' |
| C46423-18 | 07/05/16 | 00:00 | | 07/06/16 | SO | Soil | COMPB24(5-25) |
| C46423-19 | 07/05/16 | 00:00 | | 07/06/16 | SO | Soil | COMPB25(5-25) |
| C46423-20 | 07/05/16 | 00:00 | | 07/06/16 | SO | Soil | COMPB26(5-25) |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Summary of Hits

**Job Number:** C46423
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/05/16 thru 07/06/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46423-3** | **B24-15'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46423-4** | **B24-20'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46423-5** | **B24-25'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46423-8** | **B25-15'** | | | | | |
| Carbon tetrachloride | | 23.7 | 4.9 | 0.49 | ug/kg | SW846 8260B |
| **C46423-9** | **B25-20'** | | | | | |
| Chloroform | | 2.0 J | 5.0 | 0.50 | ug/kg | SW846 8260B |
| Carbon tetrachloride | | 21.9 | 5.0 | 0.50 | ug/kg | SW846 8260B |
| **C46423-10** | **B25-25'** | | | | | |
| Carbon tetrachloride | | 3.3 J | 4.8 | 0.48 | ug/kg | SW846 8260B |
| Methyl chloride | | 2.0 J | 4.8 | 0.95 | ug/kg | SW846 8260B |
| **C46423-14** | **B26-15'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46423-15** | **B26-20'** | | | | | |
| Carbon tetrachloride | | 0.90 J | 4.8 | 0.48 | ug/kg | SW846 8260B |
| **C46423-16** | **B26-25'** | | | | | |
| Chloroform | | 0.87 J | 4.8 | 0.48 | ug/kg | SW846 8260B |
| Carbon tetrachloride | | 8.9 | 4.8 | 0.48 | ug/kg | SW846 8260B |
| **C46423-18** | **COMPB24(5-25)** | | | | | |
| TPH (C10-C28) | | 16.0 | 3.3 | 1.5 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 2.78 J | 3.3 | 1.3 | mg/kg | SW846 8015B M |
| Arsenic | | 4.1 | 1.8 | | mg/kg | SW846 6010B |
| Barium | | 125 | 18 | | mg/kg | SW846 6010B |

# Summary of Hits

**Job Number:** C46423
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/05/16 thru 07/06/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| Chromium | | 46.0 | 0.91 | | mg/kg | SW846 6010B |
| Cobalt | | 8.3 | 0.91 | | mg/kg | SW846 6010B |
| Copper | | 20.5 | 2.3 | | mg/kg | SW846 6010B |
| Lead | | 5.6 | 1.8 | | mg/kg | SW846 6010B |
| Mercury | | 0.056 | 0.015 | | mg/kg | SW846 7471A |
| Nickel | | 59.4 | 0.91 | | mg/kg | SW846 6010B |
| Vanadium | | 33.6 | 0.91 | | mg/kg | SW846 6010B |
| Zinc | | 42.7 | 1.8 | | mg/kg | SW846 6010B |
| **C46423-19** | **COMPB25(5-25)** | | | | | |
| TPH (C10-C28) | | 13.7 | 3.3 | 1.5 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 2.09 J | 3.3 | 1.3 | mg/kg | SW846 8015B M |
| Arsenic | | 4.4 | 1.8 | | mg/kg | SW846 6010B |
| Barium | | 168 | 18 | | mg/kg | SW846 6010B |
| Chromium | | 54.8 | 0.92 | | mg/kg | SW846 6010B |
| Cobalt | | 10.4 | 0.92 | | mg/kg | SW846 6010B |
| Copper | | 23.8 | 2.3 | | mg/kg | SW846 6010B |
| Lead | | 10.3 | 1.8 | | mg/kg | SW846 6010B |
| Mercury | | 0.068 | 0.015 | | mg/kg | SW846 7471A |
| Nickel | | 71.2 | 0.92 | | mg/kg | SW846 6010B |
| Vanadium | | 35.1 | 0.92 | | mg/kg | SW846 6010B |
| Zinc | | 47.8 | 1.8 | | mg/kg | SW846 6010B |
| **C46423-20** | **COMPB26(5-25)** | | | | | |
| TPH (C10-C28) | | 7.29 | 3.3 | 1.5 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 1.53 J | 3.3 | 1.3 | mg/kg | SW846 8015B M |
| Arsenic | | 4.4 | 1.9 | | mg/kg | SW846 6010B |
| Barium | | 124 | 19 | | mg/kg | SW846 6010B |
| Chromium | | 41.2 | 0.94 | | mg/kg | SW846 6010B |
| Cobalt | | 10.6 | 0.94 | | mg/kg | SW846 6010B |
| Copper | | 19.7 | 2.4 | | mg/kg | SW846 6010B |
| Lead | | 6.6 | 1.9 | | mg/kg | SW846 6010B |
| Mercury | | 0.025 | 0.015 | | mg/kg | SW846 7471A |
| Nickel | | 50.3 | 0.94 | | mg/kg | SW846 6010B |
| Vanadium | | 33.2 | 0.94 | | mg/kg | SW846 6010B |
| Zinc | | 41.3 | 1.9 | | mg/kg | SW846 6010B |

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-15' | | |
| **Lab Sample ID:** | C46423-3 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49952.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.07 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | 9.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | 0.49 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | 0.99 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | 0.49 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | 0.49 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | 0.49 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | 0.49 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.9 | 0.99 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-15' | | |
| **Lab Sample ID:** | C46423-3 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | 0.99 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | 0.49 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | 0.99 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | 0.99 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | 0.49 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 4.9 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | 0.99 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | 0.99 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | 0.49 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | 9.9 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | 0.99 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | 0.99 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | 0.99 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | 0.59 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | 0.49 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | 0.99 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | 0.99 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | 0.99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-15' | | |
| **Lab Sample ID:** | C46423-3 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-20' | | |
| **Lab Sample ID:** | C46423-4 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49953.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.23 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.96 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.8 | 0.96 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-20' | | |
| **Lab Sample ID:** | C46423-4 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.96 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.96 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.96 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.96 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.6 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.96 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.57 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.96 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.6 | 0.96 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 94% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-20' | | |
| **Lab Sample ID:** | C46423-4 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-25' | | |
| **Lab Sample ID:** | C46423-5 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49954.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.16 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | 9.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.97 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.8 | 0.97 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-25' | | |
| **Lab Sample ID:** | C46423-5 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.97 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.97 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.97 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.97 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.97 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | 9.7 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.97 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.97 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.97 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.58 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.97 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.97 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.7 | 0.97 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B24-25' | | |
| **Lab Sample ID:** | C46423-5 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-15' | | |
| **Lab Sample ID:** | C46423-8 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49955.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.11 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | 9.8 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | 0.49 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | 0.98 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | 0.49 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | 23.7 | 4.9 | 0.49 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | 0.49 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | 0.49 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.9 | 0.98 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-15' | | |
| **Lab Sample ID:** | C46423-8 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | 0.98 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | 0.49 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | 0.98 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | 0.98 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | 0.49 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 4.9 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | 0.98 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | 0.98 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | 0.49 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | 9.8 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | 0.98 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | 0.98 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | 0.98 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | 0.59 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | 0.49 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | 0.98 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | 0.98 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.8 | 0.98 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-15' | | |
| **Lab Sample ID:** | C46423-8 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-20' | | |
| **Lab Sample ID:** | C46423-9 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49956.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.01 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 67-66-3 | Chloroform | 2.0 | 5.0 | 0.50 | ug/kg | J |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | 21.9 | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-20' | | |
| **Lab Sample ID:** | C46423-9 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 1.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 1.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 10 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-20' | | |
| **Lab Sample ID:** | C46423-9 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-25' | | |
| **Lab Sample ID:** | C46423-10 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49957.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.24 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.95 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | 3.3 | 4.8 | 0.48 | ug/kg | J |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.8 | 0.95 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-25' | | |
| **Lab Sample ID:** | C46423-10 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.95 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.95 | ug/kg | |
| 74-87-3 | Methyl chloride | 2.0 | 4.8 | 0.95 | ug/kg | J |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.95 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.95 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.5 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.95 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.57 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.95 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.95 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.5 | 0.95 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B25-25' | | |
| **Lab Sample ID:** | C46423-10 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-15' | | |
| **Lab Sample ID:** | C46423-14 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49958.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.03 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 9.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 0.99 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 5.0 | 0.99 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-15' | | |
| **Lab Sample ID:** | C46423-14 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 0.99 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 0.99 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 0.99 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 0.99 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.99 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 9.9 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.99 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 0.99 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 0.99 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 0.99 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 0.99 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | 0.99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 98% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-15' | | |
| **Lab Sample ID:** | C46423-14 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-20' | | |
| **Lab Sample ID:** | C46423-15 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49959.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.22 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.96 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | 0.90 | 4.8 | 0.48 | ug/kg | J |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.8 | 0.96 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-20' | | |
| **Lab Sample ID:** | C46423-15 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.96 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.96 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.96 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.96 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.6 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.96 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.57 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.96 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.6 | 0.96 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-20' | | |
| **Lab Sample ID:** | C46423-15 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-25' | | |
| **Lab Sample ID:** | C46423-16 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49960.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.21 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.96 | ug/kg | |
| 67-66-3 | Chloroform | 0.87 | 4.8 | 0.48 | ug/kg | J |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | 8.9 | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.8 | 0.96 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-25' | | |
| **Lab Sample ID:** | C46423-16 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.96 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.96 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.96 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.96 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.6 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.96 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.96 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.58 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.96 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.96 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.6 | 0.96 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B26-25' | | |
| **Lab Sample ID:** | C46423-16 | **Date Sampled:** | 07/06/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB24(5-25) | | |
| **Lab Sample ID:** | C46423-18 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61755.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 6.01 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1700 | 420 | ug/kg | |
| 71-43-2 | Benzene | ND | 210 | 21 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 210 | 21 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 210 | 21 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 210 | 21 | ug/kg | |
| 75-25-2 | Bromoform | ND | 210 | 21 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 210 | 21 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 210 | 21 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 210 | 21 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 210 | 21 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 210 | 42 | ug/kg | |
| 67-66-3 | Chloroform | ND | 210 | 21 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 210 | 21 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 210 | 21 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 210 | 21 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 210 | 21 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 210 | 21 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 210 | 58 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 210 | 21 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 210 | 21 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 210 | 21 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 210 | 21 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 210 | 42 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 210 | 46 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 210 | 21 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 210 | 21 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 210 | 21 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB24(5-25) | | |
| **Lab Sample ID:** | C46423-18 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 210 | 21 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 210 | 21 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 210 | 21 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 830 | 83 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 210 | 42 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 210 | 21 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 210 | 21 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 830 | 83 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 210 | 42 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 210 | 42 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 210 | 21 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 830 | 210 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 830 | 83 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 210 | 42 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 210 | 42 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 210 | 21 | ug/kg | |
| 100-42-5 | Styrene | ND | 210 | 21 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 210 | 21 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1700 | 420 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 210 | 21 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 210 | 21 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 210 | 21 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 210 | 21 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 210 | 21 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 210 | 42 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 210 | 21 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 210 | 42 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 210 | 42 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 210 | 25 | ug/kg | |
| 108-88-3 | Toluene | ND | 210 | 21 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 210 | 21 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 210 | 42 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 210 | 42 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 420 | 42 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 4200 | 2100 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | | 72-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB24(5-25) | | |
| **Lab Sample ID:** | C46423-18 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 106% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB24(5-25) | | |
| **Lab Sample ID:** | C46423-18 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5172.D | 1 | 07/09/16 | MT | 07/07/16 | OP14603 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 16.0 | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 2.78 | 3.3 | 1.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 70% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** COMPB24(5-25)
**Lab Sample ID:** C46423-18
**Matrix:** SO - Soil
**Project:** Premier Hyundai 2820 Broadway Oakland

**Date Sampled:** 07/05/16
**Date Received:** 07/06/16
**Percent Solids:** n/a [a]

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 4.1 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Barium | 125 | 18 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.91 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.91 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 46.0 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cobalt | 8.3 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 20.5 | 2.3 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 5.6 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.056 | 0.015 | mg/kg | 1 | 07/13/16 | 07/13/16 | EB | SW846 7471A [2] | SW846 7471A [5] |
| Molybdenum | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Nickel | 59.4 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 0.91 | 0.91 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [3] | SW846 3050B [4] |
| Thallium | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Vanadium | 33.6 | 0.91 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 42.7 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA6001
(2) Instrument QC Batch: MA6003
(3) Instrument QC Batch: MA6017
(4) Prep QC Batch: MP11595
(5) Prep QC Batch: MP11603

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB25(5-25) | | |
| **Lab Sample ID:** | C46423-19 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61756.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.73 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1700 | 440 | ug/kg | |
| 71-43-2 | Benzene | ND | 220 | 22 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 220 | 22 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 220 | 22 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 220 | 22 | ug/kg | |
| 75-25-2 | Bromoform | ND | 220 | 22 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 220 | 22 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 220 | 44 | ug/kg | |
| 67-66-3 | Chloroform | ND | 220 | 22 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 220 | 22 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 220 | 22 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 220 | 22 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 220 | 22 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 220 | 22 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 220 | 61 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 220 | 22 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 220 | 22 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 220 | 22 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 220 | 22 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 220 | 44 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 220 | 48 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 220 | 22 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 220 | 22 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 220 | 22 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** COMPB25(5-25)
**Lab Sample ID:** C46423-19
**Matrix:** SO - Soil
**Method:** SW846 8260B
**Project:** Premier Hyundai 2820 Broadway Oakland

**Date Sampled:** 07/05/16
**Date Received:** 07/06/16
**Percent Solids:** n/a [a]

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 220 | 22 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 220 | 22 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 220 | 22 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 870 | 87 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 220 | 44 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 220 | 22 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 220 | 22 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 870 | 87 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 220 | 44 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 220 | 44 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 220 | 22 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 870 | 220 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 870 | 87 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 220 | 44 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 220 | 44 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 220 | 22 | ug/kg | |
| 100-42-5 | Styrene | ND | 220 | 22 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 220 | 22 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1700 | 440 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 220 | 22 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 220 | 22 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 220 | 22 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 220 | 22 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 220 | 22 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 220 | 44 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 220 | 22 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 220 | 44 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 220 | 44 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 220 | 26 | ug/kg | |
| 108-88-3 | Toluene | ND | 220 | 22 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 220 | 22 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 220 | 44 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 220 | 44 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 440 | 44 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 4400 | 2200 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB25(5-25) | | |
| **Lab Sample ID:** | C46423-19 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB25(5-25) | | |
| **Lab Sample ID:** | C46423-19 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5173.D | 1 | 07/09/16 | MT | 07/07/16 | OP14603 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 13.7 | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 2.09 | 3.3 | 1.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 74% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB25(5-25) | | |
| **Lab Sample ID:** | C46423-19 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 4.4 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Barium | 168 | 18 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.92 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.92 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 54.8 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cobalt | 10.4 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 23.8 | 2.3 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 10.3 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.068 | 0.015 | mg/kg | 1 | 07/13/16 | 07/13/16 | EB | SW846 7471A [2] | SW846 7471A [5] |
| Molybdenum | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Nickel | 71.2 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 0.92 | 0.92 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [3] | SW846 3050B [4] |
| Thallium | < 1.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Vanadium | 35.1 | 0.92 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 47.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA6001
(2) Instrument QC Batch: MA6003
(3) Instrument QC Batch: MA6017
(4) Prep QC Batch: MP11595
(5) Prep QC Batch: MP11603

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB26(5-25) | | |
| **Lab Sample ID:** | C46423-20 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61757.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.24 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1900 | 480 | ug/kg | |
| 71-43-2 | Benzene | ND | 240 | 24 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 240 | 24 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 240 | 24 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 240 | 24 | ug/kg | |
| 75-25-2 | Bromoform | ND | 240 | 24 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 240 | 24 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 240 | 24 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 240 | 24 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 240 | 24 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 240 | 48 | ug/kg | |
| 67-66-3 | Chloroform | ND | 240 | 24 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 240 | 24 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 240 | 24 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 240 | 24 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 240 | 24 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 240 | 24 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 240 | 24 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 240 | 67 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 240 | 24 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 240 | 24 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 240 | 24 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 240 | 24 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 240 | 24 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 240 | 24 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 240 | 24 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 240 | 48 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 240 | 52 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 240 | 24 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 240 | 24 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 240 | 24 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 240 | 24 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB26(5-25) | | |
| **Lab Sample ID:** | C46423-20 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 240 | 24 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 240 | 24 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 240 | 24 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 240 | 24 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 950 | 95 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 240 | 48 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 240 | 24 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 240 | 24 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 950 | 95 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 240 | 48 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 240 | 48 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 240 | 24 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 950 | 240 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 950 | 95 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 240 | 48 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 240 | 48 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 240 | 24 | ug/kg | |
| 100-42-5 | Styrene | ND | 240 | 24 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 240 | 24 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1900 | 480 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 240 | 24 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 240 | 24 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 240 | 24 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 240 | 24 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 240 | 24 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 240 | 48 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 240 | 24 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 240 | 48 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 240 | 48 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 240 | 29 | ug/kg | |
| 108-88-3 | Toluene | ND | 240 | 24 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 240 | 24 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 240 | 48 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 240 | 48 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 480 | 48 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 4800 | 2400 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB26(5-25) | | |
| **Lab Sample ID:** | C46423-20 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB26(5-25) | | |
| **Lab Sample ID:** | C46423-20 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5174.D | 1 | 07/09/16 | MT | 07/07/16 | OP14603 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 7.29 | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 1.53 | 3.3 | 1.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 72% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | COMPB26(5-25) | | |
| **Lab Sample ID:** | C46423-20 | **Date Sampled:** | 07/05/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/06/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 1.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 4.4 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Barium | 124 | 19 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.94 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.94 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 41.2 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Cobalt | 10.6 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 19.7 | 2.4 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 6.6 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.025 | 0.015 | mg/kg | 1 | 07/13/16 | 07/13/16 | EB | SW846 7471A [2] | SW846 7471A [5] |
| Molybdenum | < 1.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Nickel | 50.3 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 1.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 0.94 | 0.94 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [3] | SW846 3050B [4] |
| Thallium | < 1.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Vanadium | 33.2 | 0.94 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 41.3 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA6001
(2) Instrument QC Batch: MA6003
(3) Instrument QC Batch: MA6017
(4) Prep QC Batch: MP11595
(5) Prep QC Batch: MP11603

(a) All results reported on a wet weight basis.

RL = Reporting Limit

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: C46423
Date 7-6-16 Page 1 of 2

**Report To**
Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr. Suite 250, Roseville
Email: gabe.stivala@atcassociates.com
Bill To:
Attn:
Sampled By: JC
Phone: 916-724-5247

**Analysis Request**

| Sample ID | Date | Time | Mat. | # | Preserv. | Volatile Organics GCMS (VOCs) EPA 8260B | HVOCs by EPA 8260B | EPA 8260B BTEX Gas / 5 Oxygenates DCA, EDB Ethanol | TEPH EPA 8015B Silica Gel / Diesel Motor Oil Other | SemiVolatile Organics GCMS EPA 8270C | PNA/PAH's by 8270C / 8270C SIM | Oil and Grease (EPA 1664/9071) Petroleum / Total | Pesticides EPA 8081 / PCBs EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: 6010B 200.7 / LUFT CRCRA / Other: | Metals: 6020 200.8 (ICP-MS): | W.E.T (STLC) / W.E.T (DI) TCLP | Hex. Chrom by EPA 7199 / or EPA 7199 | pH 9040 / SM4500 | Spec. Cond. Alkalinity / TSS SS TDS | Anions: Cl SO4 NO3 F / Br PO4 NO2 | Perchlorate by EPA 314.0 | COD EPA 410.4 SM5220D / Turbidity | Sample # | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B24-5' | 7-5-16 | 1050 | S | | NA | X | | X | | | | | | | | | | | | | | | | 1 | | |
| B24-10' | | 1055 | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| B24-15' | | 1050 | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| B24-20' | | 1100 | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| B24-25' | | 1105 | | | | | | | | | | | | | | | | | | | | | | 5 | | |
| ~~B24-30'~~ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B25-5' | 7-6-16 | 0815 | | | | | | | | | | | | | | | | | | | | | | 6 | | |
| B25-10' | | 0820 | | | | | | | | | | | | | | | | | | | | | | 7 | | |
| B25-15' | | 0825 | | | | | | | | | | | | | | | | | | | | | | 8 | | |
| B25-20' | | 0831 | | | | | | | | | | | | | | | | | | | | | | 9 | | |

**Project Info:**
Project Name/ #:
PO#:

**Sample Receipt:**
# of Containers: 9
Head Space:
Temp:

Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other: Call

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

1) Relinquished by: Signature 7-6-16 Time
Printed Name Jim Kundert 1235 Date
Company ATC

2) Relinquished by: Signature 1420 Time
Printed Name 7/6/16 Date
Company SGS Accutest

3) Relinquished by: Signature Time
Printed Name Date
Company

1) Received by: Signature 1235 Time
Printed Name 7/6/16 Date
Company

2) Received by: Signature 1420 Time
Printed Name 7-6-16 Date
Company SGS Accutest

3) Received by: Signature Time
Printed Name Date
Company

Rev. 10/2012

Reno 4.7.5.7

**C46423: Chain of Custody**
**Page 1 of 3**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: C46423
Date 7-6-16 Page 2 of 2

**Report To**
Attn: Gabe Stivala
Company: ATC Group Services
Address: 965 Hightech Pointe Dr. Suite 350, Roseville CA
Email:
Bill To:
Attn:
Sampled By: JK
Phone:

**Analysis Request**

| Sample ID | Date | Time | Mat. | Preserv. | Volatile Organics GCMS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B/ ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other | SemiVolatile Organics GCMS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP | Hex Chrom by ☐ EPA 7195 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ SO4 ☐ NO3 ☐ F ☐ Br ☐ NO2 ☐ PO4 | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Sample # | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B25-25' | 7-6-16 | 0930 | S | NA | X | | X | | | | | | | | | | | | | | | | 10 | | |
| B25-30' | | 0950 | | | | | | | | | | | | | | | | | | | | | 11 | | |
| B26-5' | | 1050 | | | | | | | | | | | | | | | | | | | | | 12 | | |
| B26-10' | | 1055 | | | | | | | | | | | | | | | | | | | | | 13 | | |
| B26-15' | | 1105 | | | | | | | | | | | | | | | | | | | | | 14 | | |
| B26-20' | | 1110 | | | | | | | | | | | | | | | | | | | | | 15 | | |
| B26-25' | | 1115 | | | | | | | | | | | | | | | | | | | | | 16 | | |
| B26-30' | | 1120 | | | | | | | | | | | | | | | | | | | | | 17 | | |
| Comp B24 (5-25) | | | | | | | | | | | | | | | | | | | | | | | 18 | | |
| Comp B25 (5-25) | | | | | | | | | | | | | | | | | | | | | | | 19 | | |
| Comp B26 (5-25) | | | | | | | | | | | | | | | | | | | | | | | 20 | | |

**Project Info**
Project Name/ #:
PO#:
Credit Card Y/N:

**Sample Receipt**
# of Containers: 8
Head Space:
Temp:
If yes, please call with payment information ASAP

| TAT | 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other: Call |
|---|---|---|---|---|---|---|---|

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

1) Relinquished by: Signature — Time: 1235 — Printed Name: Jim Kinder — Date: 7-6-16 — Company: ATC

1) Received by: Signature — Time: 1235 — Printed Name: Mike Shoreland — Date: 7/6/16 — Company:

2) Relinquished by: Signature — Time: 1420 — Printed Name: Mike Shoreland — Date: 7/6/16 — Company: SGS Accutest

2) Received by: Signature — Time: 1420 — Printed Name: Tom Wisher — Date: 7-6-16 — Company: SGS Accutest

3) Relinquished by: Signature — Time — Printed Name — Date — Company

3) Received by: Signature — Time — Printed Name — Date — Company

Rev.10/2012

**C46423: Chain of Custody**
**Page 2 of 3**

# SGS Accutest Sample Receipt Summary

**Job Number:** C46423 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/6/2016 2:20:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (4.7/5.7);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☐ | ☑ |
| 2. Trip Blank listed on COC: | ☐ | | ☐ | ☑ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☐ | | ☐ | ☑ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments Sample #11: Sample ID on COC B25-30' but sample label states B25-29'. Sample is lined up according to time at 09:00

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-MB | M61752.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |

# Method Blank Summary

**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-MB | M61752.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 1.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 1.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 10 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | 1.0 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 100 | 50 | ug/kg | |

# Method Blank Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-MB | M61752.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 72-140% |
| 2037-26-5 | Toluene-D8 | 96% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 81-115% |

# Method Blank Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |

# Method Blank Summary

**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 1.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 1.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 10 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | 72-140% |

# Method Blank Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | 81-115% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-BS | M61749.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| VM1857-BSD | M61750.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 228 | 143 | 193 | 121 | 17 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 37.7 | 94 | 36.4 | 91 | 4 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 36.1 | 90 | 34.5 | 86 | 5 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 37.5 | 94 | 36.7 | 92 | 2 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 34.7 | 87 | 33.5 | 84 | 4 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 37.3 | 93 | 36.3 | 91 | 3 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 36.9 | 92 | 34.8 | 87 | 6 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 36.6 | 92 | 35.3 | 88 | 4 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 37.7 | 94 | 35.9 | 90 | 5 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 37.3 | 93 | 34.9 | 87 | 7 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 38.5 | 96 | 38.3 | 96 | 1 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 34.4 | 86 | 33.5 | 84 | 3 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 34.4 | 86 | 33.7 | 84 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 36.3 | 91 | 33.1 | 83 | 9 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 36.9 | 92 | 35.6 | 89 | 4 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 35.8 | 90 | 34.7 | 87 | 3 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 36.9 | 92 | 35.5 | 89 | 4 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 36.3 | 91 | 34.9 | 87 | 4 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 37.3 | 93 | 37.8 | 95 | 1 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 36.1 | 90 | 34.6 | 87 | 4 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 33.9 | 85 | 32.8 | 82 | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 37.3 | 93 | 35.7 | 89 | 4 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 36.1 | 90 | 34.5 | 86 | 5 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 35.6 | 89 | 35.0 | 88 | 2 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 35.7 | 89 | 35.9 | 90 | 1 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 35.5 | 89 | 33.9 | 85 | 5 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 35.9 | 90 | 35.4 | 89 | 1 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 38.9 | 97 | 38.0 | 95 | 2 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 39.9 | 100 | 38.2 | 96 | 4 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.0 | 90 | 34.6 | 87 | 4 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 37.1 | 93 | 35.3 | 88 | 5 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.2 | 91 | 34.3 | 86 | 5 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 34.9 | 87 | 33.8 | 85 | 3 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 35.1 | 88 | 33.2 | 83 | 6 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 37.4 | 94 | 35.4 | 89 | 5 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 36.8 | 92 | 36.2 | 91 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-BS | M61749.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| VM1857-BSD | M61750.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 182 | 114 | 174 | 109 | 4 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 33.2 | 83 | 32.5 | 81 | 2 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 38.3 | 96 | 36.1 | 90 | 6 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 37.5 | 94 | 35.9 | 90 | 4 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 154 | 96 | 154 | 96 | 0 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 37.2 | 93 | 37.2 | 93 | 0 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 33.8 | 85 | 33.3 | 83 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 36.8 | 92 | 35.5 | 89 | 4 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 35.6 | 89 | 34.8 | 87 | 2 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 177 | 111 | 173 | 108 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 36.4 | 91 | 35.9 | 90 | 1 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 37.3 | 93 | 37.0 | 93 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 35.7 | 89 | 34.2 | 86 | 4 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 38.6 | 97 | 36.4 | 91 | 6 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 39.3 | 98 | 38.5 | 96 | 2 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 222 | 111 | 234 | 117 | 5 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 37.1 | 93 | 35.0 | 88 | 6 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 36.6 | 92 | 36.0 | 90 | 2 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 36.8 | 92 | 36.0 | 90 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 35.1 | 88 | 33.4 | 84 | 5 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 34.4 | 86 | 33.6 | 84 | 2 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 37.7 | 94 | 37.0 | 93 | 2 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 35.9 | 90 | 34.2 | 86 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 36.3 | 91 | 34.4 | 86 | 5 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 37.4 | 94 | 35.6 | 89 | 5 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.0 | 98 | 37.0 | 93 | 5 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 37.0 | 93 | 34.6 | 87 | 7 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 39.9 | 100 | 38.3 | 96 | 4 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 36.9 | 92 | 37.1 | 93 | 1 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 31.8 | 80 | 31.5 | 79 | 1 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 115 | 96 | 107 | 89 | 7 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | 96% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-BS | M61749.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| VM1857-BSD | M61750.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 96% | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 100% | 81-115% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 135 | 84 | 138 | 86 | 2 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 31.8 | 80 | 32.0 | 80 | 1 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 37.3 | 93 | 37.5 | 94 | 1 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 33.1 | 83 | 32.7 | 82 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 32.4 | 81 | 32.1 | 80 | 1 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 39.7 | 99 | 39.1 | 98 | 2 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 35.8 | 90 | 36.5 | 91 | 2 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 35.8 | 90 | 36.7 | 92 | 2 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 35.3 | 88 | 36.8 | 92 | 4 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 35.3 | 88 | 35.3 | 88 | 0 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 39.4 | 99 | 38.0 | 95 | 4 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 30.7 | 77 | 30.4 | 76 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 33.2 | 83 | 33.9 | 85 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 32.6 | 82 | 33.4 | 84 | 2 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 32.2 | 81 | 32.7 | 82 | 2 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 29.4 | 74 | 29.5 | 74 | 0 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 28.0 | 70 | 27.5 | 69 | 2 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 30.1 | 75 | 29.9 | 75 | 1 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 34.0 | 85 | 33.3 | 83 | 2 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 35.9 | 90 | 34.9 | 87 | 3 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 30.5 | 76 | 30.1 | 75 | 1 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 32.7 | 82 | 32.7 | 82 | 0 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 35.7 | 89 | 35.0 | 88 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 29.4 | 74 | 29.0 | 73 | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 30.5 | 76 | 29.7 | 74 | 3 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 35.9 | 90 | 34.7 | 87 | 3 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 32.4 | 81 | 31.8 | 80 | 2 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 34.2 | 86 | 32.9 | 82 | 4 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 34.5 | 86 | 33.9 | 85 | 2 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.6 | 92 | 37.0 | 93 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 36.7 | 92 | 37.2 | 93 | 1 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.8 | 92 | 36.8 | 92 | 0 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 28.2 | 71 | 28.1 | 70 | 0 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 33.5 | 84 | 32.2 | 81 | 4 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 34.8 | 87 | 34.9 | 87 | 0 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 30.4 | 76 | 29.8 | 75 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 153 | 96 | 142 | 89 | 7 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 37.5 | 94 | 38.5 | 96 | 3 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 35.4 | 89 | 35.8 | 90 | 1 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 36.5 | 91 | 37.4 | 94 | 2 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 161 | 101 | 152 | 95 | 6 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 38.6 | 97 | 38.1 | 95 | 1 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 34.1 | 85 | 33.7 | 84 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 33.8 | 85 | 33.2 | 83 | 2 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 29.8 | 75 | 28.8 | 72 | 3 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 143 | 89 | 137 | 86 | 4 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 29.4 | 74 | 28.5 | 71 | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 36.8 | 92 | 36.5 | 91 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 34.4 | 86 | 35.2 | 88 | 2 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 36.1 | 90 | 35.7 | 89 | 1 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 32.6 | 82 | 31.6 | 79 | 3 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 153 | 77 | 159 | 80 | 4 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 36.2 | 91 | 36.3 | 91 | 0 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 31.3 | 78 | 31.2 | 78 | 0 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 37.4 | 94 | 36.5 | 91 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 35.7 | 89 | 34.7 | 87 | 3 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 36.0 | 90 | 36.5 | 91 | 1 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 38.2 | 96 | 37.4 | 94 | 2 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 37.1 | 93 | 36.4 | 91 | 2 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 34.8 | 87 | 35.4 | 89 | 2 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 35.3 | 88 | 35.8 | 90 | 1 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.8 | 100 | 44.4 | 111 | 11 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 34.0 | 85 | 34.1 | 85 | 0 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 33.8 | 85 | 33.7 | 84 | 0 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 37.2 | 93 | 36.2 | 91 | 3 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 38.1 | 95 | 37.4 | 94 | 2 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 105 | 88 | 106 | 88 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 92% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 92% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1857-LCS | M61751.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 236 | 94 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-LCS | L49948.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | 81-115% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46423-18MS | M61758.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18MSD | M61759.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18 | M61755.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | C46423-18 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 6660 | 5790 | 87 | 6660 | 4960 | 75 | 15 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 1660 | 1590 | 96 | 1660 | 1470 | 88 | 8 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 1660 | 1550 | 93 | 1660 | 1420 | 85 | 9 | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 1660 | 1640 | 99 | 1660 | 1510 | 91 | 8 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 1660 | 1510 | 91 | 1660 | 1390 | 84 | 8 | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 1660 | 1570 | 94 | 1660 | 1490 | 90 | 5 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 1660 | 1500 | 90 | 1660 | 1390 | 84 | 8 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 1660 | 1530 | 92 | 1660 | 1400 | 84 | 9 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 1660 | 1570 | 94 | 1660 | 1440 | 87 | 9 | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 1660 | 1570 | 94 | 1660 | 1460 | 88 | 7 | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 1660 | 1620 | 97 | 1660 | 1470 | 88 | 10 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 1660 | 1480 | 89 | 1660 | 1340 | 81 | 10 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 1660 | 1440 | 87 | 1660 | 1320 | 79 | 9 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 1660 | 1520 | 91 | 1660 | 1410 | 85 | 8 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 1660 | 1500 | 90 | 1660 | 1370 | 82 | 9 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 1660 | 1510 | 91 | 1660 | 1390 | 84 | 8 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 1660 | 1520 | 91 | 1660 | 1390 | 84 | 9 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 1660 | 1500 | 90 | 1660 | 1370 | 82 | 9 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 1660 | 1730 | 104 | 1660 | 1600 | 96 | 8 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 1660 | 1540 | 93 | 1660 | 1450 | 87 | 6 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 1660 | 1470 | 88 | 1660 | 1350 | 81 | 9 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 1660 | 1650 | 99 | 1660 | 1500 | 90 | 10 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 1660 | 1550 | 93 | 1660 | 1470 | 88 | 5 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 1660 | 1550 | 93 | 1660 | 1410 | 85 | 9 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 1660 | 1360 | 82 | 1660 | 1220 | 73 | 11 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 1660 | 1520 | 91 | 1660 | 1410 | 85 | 8 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 1660 | 1500 | 90 | 1660 | 1350 | 81 | 11 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 1660 | 1650 | 99 | 1660 | 1530 | 92 | 8 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 1660 | 1710 | 103 | 1660 | 1590 | 96 | 7 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 1660 | 1560 | 94 | 1660 | 1430 | 86 | 9 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 1660 | 1610 | 97 | 1660 | 1480 | 89 | 8 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 1660 | 1550 | 93 | 1660 | 1430 | 86 | 8 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 1660 | 1460 | 88 | 1660 | 1330 | 80 | 9 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 1660 | 1480 | 89 | 1660 | 1370 | 82 | 8 | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 1660 | 1560 | 94 | 1660 | 1440 | 87 | 8 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 1660 | 1630 | 98 | 1660 | 1490 | 90 | 9 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46423-18MS | M61758.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18MSD | M61759.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18 | M61755.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | C46423-18 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 6660 | 6480 | 97 | 6660 | 6170 | 93 | 5 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1660 | 1400 | 84 | 1660 | 1290 | 78 | 8 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 1660 | 1590 | 96 | 1660 | 1480 | 89 | 7 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 1660 | 1540 | 93 | 1660 | 1420 | 85 | 8 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 6660 | 6700 | 101 | 6660 | 6240 | 94 | 7 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 1660 | 1520 | 91 | 1660 | 1360 | 82 | 11 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 1660 | 1480 | 89 | 1660 | 1280 | 77 | 14 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 1660 | 1590 | 96 | 1660 | 1460 | 88 | 9 | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 1660 | 1520 | 91 | 1660 | 1400 | 84 | 8 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 6660 | 5660 | 85 | 6660 | 5120 | 77 | 10 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 1660 | 1530 | 92 | 1660 | 1410 | 85 | 8 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 1660 | 1790 | 108 | 1660 | 1680 | 101 | 6 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 1660 | 1470 | 88 | 1660 | 1350 | 81 | 9 | 67-116/20 |
| 100-42-5 | Styrene | ND | | 1660 | 1640 | 99 | 1660 | 1530 | 92 | 7 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 1660 | 1730 | 104 | 1660 | 1580 | 95 | 9 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | ND | | 8320 | 4330 | 52 | 8320 | 3750 | 45* [a] | 14 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 1660 | 1570 | 94 | 1660 | 1470 | 88 | 7 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 1660 | 1510 | 91 | 1660 | 1370 | 82 | 10 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1660 | 1580 | 95 | 1660 | 1470 | 88 | 7 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 1660 | 1500 | 90 | 1660 | 1390 | 84 | 8 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 1660 | 1630 | 98 | 1660 | 1520 | 91 | 7 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 1660 | 1640 | 99 | 1660 | 1550 | 93 | 6 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 1660 | 1610 | 97 | 1660 | 1480 | 89 | 8 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1660 | 1520 | 91 | 1660 | 1410 | 85 | 8 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 1660 | 1550 | 93 | 1660 | 1430 | 86 | 8 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 1660 | 1650 | 99 | 1660 | 1520 | 91 | 8 | 66-125/18 |
| 108-88-3 | Toluene | ND | | 1660 | 1530 | 92 | 1660 | 1420 | 85 | 7 | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 1660 | 1660 | 100 | 1660 | 1530 | 92 | 8 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1660 | 1530 | 92 | 1660 | 1390 | 84 | 10 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 1660 | 821 | 49* [a] | 1660 | 719 | 43* [a] | 13 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 4990 | 4790 | 96 | 4990 | 4480 | 90 | 7 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46423-18 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | 92% | 91% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46423-18MS | M61758.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18MSD | M61759.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |
| C46423-18 | M61755.D | 1 | 07/07/16 | JT | n/a | n/a | VM1857 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-18, C46423-19, C46423-20

| CAS No. | Surrogate Recoveries | MS | MSD | C46423-18 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 95% | 96% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 102% | 106% | 81-115% |

(a) Outside laboratory control limits.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | C46413-5 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 30900 | 23900 | 77 | 30900 | 23700 | 77 | 1 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 7740 | 6090 | 79 | 7740 | 5110 | 66* a | 18 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 7740 | 7010 | 91 | 7740 | 4650 | 60* a | 40* b | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 7740 | 6600 | 85 | 7740 | 5660 | 73 | 15 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 7740 | 6940 | 90 | 7740 | 5670 | 73 | 20* a | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 7740 | 7910 | 102 | 7740 | 6450 | 83 | 20* b | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 7740 | 6800 | 88 | 7740 | 2340 | 30* a | 98* b | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 7740 | 6860 | 89 | 7740 | 2870 | 37* a | 82* b | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 7740 | 6630 | 86 | 7740 | 3200 | 41* a | 70* a | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 7740 | 6710 | 87 | 7740 | 4530 | 59* a | 39* b | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 7740 | 7610 | 98 | 7740 | 7510 | 97 | 1 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 7740 | 6660 | 86 | 7740 | 5510 | 71 | 19* b | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 7740 | 6590 | 85 | 7740 | 3430 | 44* a | 63* b | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 7740 | 6800 | 88 | 7740 | 3240 | 42* a | 71* b | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 7740 | 7170 | 93 | 7740 | 5620 | 73 | 24* b | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 7740 | 6140 | 79 | 7740 | 5300 | 69 | 15 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 7740 | 5210 | 67* a | 7740 | 4710 | 61* a | 10 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 7740 | 6180 | 80 | 7740 | 4760 | 62* a | 26* b | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 7740 | 7070 | 91 | 7740 | 6310 | 82 | 11 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 7740 | 6930 | 90 | 7740 | 5890 | 76 | 16 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 7740 | 7220 | 93 | 7740 | 6080 | 79 | 17 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 7740 | 6460 | 83 | 7740 | 5580 | 72 | 15 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 7740 | 6940 | 90 | 7740 | 5920 | 77 | 16 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 7740 | 5990 | 77 | 7740 | 5350 | 69 | 11 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 7740 | 6400 | 83 | 7740 | 5510 | 71 | 15 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 7740 | 7340 | 95 | 7740 | 5960 | 77 | 21* b | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 7740 | 7850 | 101 | 7740 | 7310 | 94 | 7 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 7740 | 6620 | 86 | 7740 | 5610 | 73 | 17 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 7740 | 6850 | 89 | 7740 | 5490 | 71 | 22* b | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 7740 | 6950 | 90 | 7740 | 3800 | 49* a | 59* b | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 7740 | 7050 | 91 | 7740 | 4210 | 54* a | 50* b | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 7740 | 6940 | 90 | 7740 | 3720 | 48* a | 60* b | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 7740 | 5480 | 71 | 7740 | 4590 | 59* a | 18 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 7740 | 6620 | 86 | 7740 | 5340 | 69* a | 21* b | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 7740 | 6760 | 87 | 7740 | 3970 | 51* a | 52* b | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 7740 | 6390 | 83 | 7740 | 5710 | 74 | 11 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Compound | C46413-5 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 30900 | 28000 | 90 | 30900 | 26800 | 87 | 4 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 7740 | 7340 | 95 | 7740 | 2200 | 28* a | 108* b | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 7740 | 7020 | 91 | 7740 | 3600 | 47* a | 64* b | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 7740 | 6910 | 89 | 7740 | 2770 | 36* a | 86* b | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 30900 | 28900 | 93 | 30900 | 27900 | 90 | 4 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 7740 | 7780 | 101 | 7740 | 7690 | 99 | 1 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 7740 | 7550 | 98 | 7740 | 7200 | 93 | 5 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 7740 | 7120 | 92 | 7740 | 5950 | 77 | 18* b | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 7740 | 5720 | 74 | 7740 | 5130 | 66* a | 11 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 30900 | 26000 | 84 | 30900 | 24800 | 80 | 5 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 12700 | | 7740 | 18900 | 80 | 7740 | 17600 | 63* a | 7 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 7740 | 7210 | 93 | 7740 | 5290 | 68 | 31* b | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 7740 | 6460 | 83 | 7740 | 2990 | 39* a | 73* b | 67-116/20 |
| 100-42-5 | Styrene | ND | | 7740 | 6900 | 89 | 7740 | 4200 | 54* a | 49* b | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 7740 | 6720 | 87 | 7740 | 5990 | 77 | 11 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 20800 | | 38700 | 59000 | 99 | 38700 | 55700 | 90 | 6 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 7740 | 7420 | 96 | 7740 | 5570 | 72 | 28* b | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 7740 | 7010 | 91 | 7740 | 5590 | 72 | 23* b | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 7740 | 7020 | 91 | 7740 | 6350 | 82 | 10 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 7740 | 6820 | 88 | 7740 | 5940 | 77 | 14 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 7740 | 7330 | 95 | 7740 | 4020 | 52* a | 58* b | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 7740 | 8020 | 104 | 7740 | 6840 | 88 | 16 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 7740 | 6940 | 90 | 7740 | 3750 | 48* a | 60* b | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 7740 | 6730 | 87 | 7740 | 3280 | 42* a | 69* b | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 7740 | 6720 | 87 | 7740 | 3300 | 43* a | 68* b | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 7740 | 7070 | 91 | 7740 | 4500 | 58* a | 44* b | 66-125/18 |
| 108-88-3 | Toluene | ND | | 7740 | 6460 | 83 | 7740 | 4620 | 60* a | 33* b | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 7740 | 6590 | 85 | 7740 | 5000 | 65* a | 27* b | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 7740 | 8490 | 110 | 7740 | 7740 | 100 | 9 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 7740 | 8600 | 111 | 7740 | 8010 | 104 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 23200 | 20300 | 87 | 23200 | 11800 | 51* a | 53* b | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-5 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 97% | 98% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46423-3, C46423-4, C46423-5, C46423-8, C46423-9, C46423-10, C46423-14, C46423-15, C46423-16

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-5 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 98% | 96% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 97% | 93% | 81-115% |

(a) Outside control limits due to matrix interference.
(b) Outside laboratory control limits.

* = Outside of Control Limits.

## GC Semi-volatiles

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### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14603-MB | BB5051.D | 1 | 07/07/16 | MT | 07/06/16 | OP14603 | GBB169 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | 1.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 630-01-3 | Hexacosane | 71% | 38-146% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14603-BS | BB5052.D | 1 | 07/07/16 | MT | 07/06/16 | OP14603 | GBB169 |
| OP14603-BSD | BB5053.D | 1 | 07/07/16 | MT | 07/06/16 | OP14603 | GBB169 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | Spike mg/kg | BSP mg/kg | BSP % | BSD mg/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 33.3 | 27.5 | 83 | 27.7 | 83 | 1 | 53-107/12 |
| | TPH (> C28-C40) | 33.3 | 29.1 | 87 | 30.9 | 93 | 6 | 59-120/14 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 73% | 73% | 38-146% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46423
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14603-MS | BB5181.D | 1 | 07/09/16 | MT | 07/06/16 | OP14603 | GBB170 |
| OP14603-MSD | BB5182.D | 1 | 07/09/16 | MT | 07/06/16 | OP14603 | GBB170 |
| C46405-5 | BB5180.D | 1 | 07/09/16 | MT | 07/06/16 | OP14603 | GBB170 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46423-18, C46423-19, C46423-20

| CAS No. | Compound | C46405-5 mg/kg | Q | Spike mg/kg | MS mg/kg | MS % | Spike mg/kg | MSD mg/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 1.77 | J | 34.1 | 28.6 | 79 | 34.1 | 30.4 | 84 | 6 | 53-107/12 |
| | TPH (> C28-C40) | 1.52 | J | 34.1 | 28.8 | 80 | 34.1 | 30.6 | 85 | 6 | 59-120/14 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46405-5 | Limits |
|---|---|---|---|---|---|
| 630-01-3 | Hexacosane | 69% | 70% | 67% | 38-146% |

* = Outside of Control Limits.

## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Aluminum | 20 | .54 | 1.5 | | |
| Antimony | 2.0 | .16 | .18 | 0.21 | <2.0 |
| Arsenic | 2.0 | .17 | .17 | 0.080 | <2.0 |
| Barium | 20 | .025 | .09 | 0.13 | <20 |
| Beryllium | 1.0 | .019 | .01 | 0.0 | <1.0 |
| Boron | 10 | .27 | .15 | | |
| Cadmium | 1.0 | .032 | .031 | -0.010 | <1.0 |
| Calcium | 500 | 1.9 | 4.5 | | |
| Chromium | 1.0 | .12 | .054 | 0.020 | <1.0 |
| Cobalt | 1.0 | .049 | .025 | 0.030 | <1.0 |
| Copper | 2.5 | .1 | .15 | 0.020 | <2.5 |
| Iron | 20 | .51 | .76 | | |
| Lead | 2.0 | .11 | .14 | 0.050 | <2.0 |
| Magnesium | 500 | 3.7 | 2.1 | | |
| Manganese | 1.5 | .021 | .026 | | |
| Molybdenum | 2.0 | .11 | .04 | 0.0 | <2.0 |
| Nickel | 1.0 | .045 | .047 | 0.050 | <1.0 |
| Potassium | 1000 | 2.9 | 4.6 | | |
| Selenium | 2.0 | .49 | .33 | -0.070 | <2.0 |
| Silicon | 20 | .22 | .43 | | |
| Silver | 1.0 | .089 | .067 | 0.010 | <1.0 |
| Sodium | 1000 | 2.6 | 1.2 | | |
| Strontium | 1.0 | .014 | .018 | | |
| Thallium | 2.0 | .39 | .12 | -0.090 | <2.0 |
| Tin | 50 | .3 | .28 | | |
| Titanium | 1.0 | .076 | .13 | | |
| Vanadium | 1.0 | .043 | .074 | 0.020 | <1.0 |
| Zinc | 2.0 | .11 | .22 | 0.29 | <2.0 |

Associated samples MP11595: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | C46435-18 Original | MS | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Aluminum | | | | | |
| Antimony | 0.46 | 15.7 | 45.9 | 33.2N(a) | 75-125 |
| Arsenic | 6.9 | 48.3 | 45.9 | 90.3 | 75-125 |
| Barium | 79.7 | 109 | 45.9 | 63.9N(a) | 75-125 |
| Beryllium | 0.30 | 41.1 | 45.9 | 88.9 | 75-125 |
| Boron | | | | | |
| Cadmium | 0.26 | 42.4 | 45.9 | 91.9 | 75-125 |
| Calcium | | | | | |
| Chromium | 40.0 | 77.7 | 45.9 | 82.2 | 75-125 |
| Cobalt | 4.6 | 47.0 | 45.9 | 92.4 | 75-125 |
| Copper | 11.7 | 57.8 | 45.9 | 100.5 | 75-125 |
| Iron | | | | | |
| Lead | 3.1 | 44.3 | 45.9 | 89.8 | 75-125 |
| Magnesium | | | | | |
| Manganese | | | | | |
| Molybdenum | 0.53 | 38.6 | 45.9 | 83.0 | 75-125 |
| Nickel | 28.3 | 71.7 | 45.9 | 94.6 | 75-125 |
| Potassium | | | | | |
| Selenium | 0.59 | 40.3 | 45.9 | 86.6 | 75-125 |
| Silicon | | | | | |
| Silver | 0.0 | 36.3 | 45.9 | 79.1 | 75-125 |
| Sodium | | | | | |
| Strontium | | | | | |
| Thallium | 0.0 | 41.9 | 45.9 | 91.3 | 75-125 |
| Tin | | | | | |
| Titanium | | | | | |
| Vanadium | 35.7 | 87.1 | 45.9 | 112.1 | 75-125 |
| Zinc | 26.0 | 75.9 | 45.9 | 108.8 | 75-125 |

Associated samples MP11595: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | C46435-18 Original | MSD | Spikelot MPIR5 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Aluminum | | | | | | |
| Antimony | 0.46 | 17.2 | 46.3 | 36.2N(a) | 9.1 | 20 |
| Arsenic | 6.9 | 50.0 | 46.3 | 93.1 | 3.5 | 20 |
| Barium | 79.7 | 119 | 46.3 | 84.9 | 8.8 | 20 |
| Beryllium | 0.30 | 40.2 | 46.3 | 86.2 | 2.2 | 20 |
| Boron | | | | | | |
| Cadmium | 0.26 | 42.2 | 46.3 | 90.6 | 0.5 | 20 |
| Calcium | | | | | | |
| Chromium | 40.0 | 94.3 | 46.3 | 117.3 | 19.3 | 20 |
| Cobalt | 4.6 | 47.1 | 46.3 | 91.8 | 0.2 | 20 |
| Copper | 11.7 | 61.1 | 46.3 | 106.7 | 5.6 | 20 |
| Iron | | | | | | |
| Lead | 3.1 | 45.5 | 46.3 | 91.6 | 2.7 | 20 |
| Magnesium | | | | | | |
| Manganese | | | | | | |
| Molybdenum | 0.53 | 38.4 | 46.3 | 81.8 | 0.5 | 20 |
| Nickel | 28.3 | 81.8 | 46.3 | 115.6 | 13.2 | 20 |
| Potassium | | | | | | |
| Selenium | 0.59 | 40.1 | 46.3 | 85.3 | 0.5 | 20 |
| Silicon | | | | | | |
| Silver | 0.0 | 36.1 | 46.3 | 78.0 | 0.6 | 20 |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Thallium | 0.0 | 42.2 | 46.3 | 91.2 | 0.7 | 20 |
| Tin | | | | | | |
| Titanium | | | | | | |
| Vanadium | 35.7 | 90.7 | 46.3 | 118.8 | 4.0 | 20 |
| Zinc | 26.0 | 80.6 | 46.3 | 117.9 | 6.0 | 20 |

Associated samples MP11595: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | BSP Result | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | 46.5 | 50 | 93.0 | 80-120 |
| Arsenic | 45.8 | 50 | 91.6 | 80-120 |
| Barium | 43.6 | 50 | 87.2 | 80-120 |
| Beryllium | 45.5 | 50 | 91.0 | 80-120 |
| Boron | | | | |
| Cadmium | 46.3 | 50 | 92.6 | 80-120 |
| Calcium | | | | |
| Chromium | 47.9 | 50 | 95.8 | 80-120 |
| Cobalt | 48.2 | 50 | 96.4 | 80-120 |
| Copper | 47.7 | 50 | 95.4 | 80-120 |
| Iron | | | | |
| Lead | 44.2 | 50 | 88.4 | 80-120 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | 46.0 | 50 | 92.0 | 80-120 |
| Nickel | 44.2 | 50 | 88.4 | 80-120 |
| Potassium | | | | |
| Selenium | 45.2 | 50 | 90.4 | 80-120 |
| Silicon | | | | |
| Silver | 49.9 | 50 | 99.8 | 80-120 |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | 46.6 | 50 | 93.2 | 80-120 |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | 47.1 | 50 | 94.2 | 80-120 |
| Zinc | 47.4 | 50 | 94.8 | 80-120 |

Associated samples MP11595: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/11/16

| Metal | C46435-18 Original | SDL 1:5 | %DIF | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | 4.70 | 8.10 | 72.3 (a) | 0-10 |
| Arsenic | 70.6 | 100 | 42.1 (a) | 0-10 |
| Barium | 813 | 1150 | 41.3*(b) | 0-10 |
| Beryllium | 3.10 | 4.20 | 35.5 (a) | 0-10 |
| Boron | | | | |
| Cadmium | 2.70 | 3.30 | 22.2 (a) | 0-10 |
| Calcium | | | | |
| Chromium | 408 | 581 | 42.4*(b) | 0-10 |
| Cobalt | 47.4 | 64.4 | 35.9*(b) | 0-10 |
| Copper | 120 | 164 | 36.9*(b) | 0-10 |
| Iron | | | | |
| Lead | 31.9 | 37.9 | 18.8 (a) | 0-10 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | 5.40 | 0.00 | 100.0(a) | 0-10 |
| Nickel | 288 | 364 | 26.2*(b) | 0-10 |
| Potassium | | | | |
| Selenium | 6.00 | 0.00 | 100.0(a) | 0-10 |
| Silicon | | | | |
| Silver | 0.00 | 0.00 | NC | 0-10 |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | 0.00 | 0.00 | NC | 0-10 |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | 364 | 514 | 41.4*(b) | 0-10 |
| Zinc | 265 | 355 | 33.8*(b) | 0-10 |

Associated samples MP11595: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11603 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 07/13/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Mercury | 0.017 | .00035 | .0037 | 0.00083 | <0.017 |

Associated samples MP11603: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11603
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 07/13/16

| Metal | C46423-20 Original | MS | Spikelot HGPWS1 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Mercury | 0.025 | 0.20 | 0.159 | 110.3 | 75-125 |

Associated samples MP11603: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11603 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 07/13/16

| Metal | C46423-20 Original | MSD | Spikelot HGPWS1 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Mercury | 0.025 | 0.19 | 0.152 | 108.9 | 5.1 | 20 |

Associated samples MP11603: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46423
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11603
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 07/13/16

| Metal | BSP Result | Spikelot HGPWS1 | % Rec | QC Limits |
|---|---|---|---|---|
| Mercury | 0.17 | 0.167 | 102.0 | 80-120 |

Associated samples MP11603: C46423-18, C46423-19, C46423-20

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

*e-Hardcopy 2.0*
*Automated Report*

# Technical Report for

## ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46435

Sampling Date: 07/07/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: **625**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

SGS ACCUTEST

August 2, 2016

Gabe Stivala
ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA

**Re: SGS Accutest Job # C46435 Reissue**

Dear Mr. Stivala,

This is a reissued report for SGS Accutest Job # **C46435**, original report dated 7/25/2016.

Additional results for *TPH-GRO* have been retrieved as per your request. Revised result pages and associated QC summary pages have been incorporated into this revised report.

Please contact us at 408-588-0200 if we can be of further assistance in this matter, or if you have any questions regarding this data report.

Sincerely,

SGS Accutest Inc.

# Table of Contents

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46435

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46435-1 | 07/07/16 | 11:20 | JK | 07/07/16 | SO | Soil | B27-2' |
| C46435-1R | 07/07/16 | 11:20 | JK | 07/07/16 | SO | Soil | B27-2' |
| C46435-2 | 07/07/16 | 11:23 | JK | 07/07/16 | SO | Soil | B27-4' |
| C46435-2R | 07/07/16 | 11:23 | JK | 07/07/16 | SO | Soil | B27-4' |
| C46435-3 | 07/07/16 | 11:30 | JK | 07/07/16 | SO | Soil | B27-10' |
| C46435-3R | 07/07/16 | 11:30 | JK | 07/07/16 | SO | Soil | B27-10' |
| C46435-4 | 07/07/16 | 11:35 | JK | 07/07/16 | SO | Soil | B27-15' |
| C46435-4R | 07/07/16 | 11:35 | JK | 07/07/16 | SO | Soil | B27-15' |
| C46435-7 | 07/07/16 | 09:10 | JK | 07/07/16 | SO | Soil | B28-2' |
| C46435-7R | 07/07/16 | 09:10 | JK | 07/07/16 | SO | Soil | B28-2' |
| C46435-8 | 07/07/16 | 09:15 | JK | 07/07/16 | SO | Soil | B28-4' |
| C46435-8R | 07/07/16 | 09:15 | JK | 07/07/16 | SO | Soil | B28-4' |
| C46435-9 | 07/07/16 | 09:25 | JK | 07/07/16 | SO | Soil | B28-10' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Sample Summary
(continued)

ATC Group Services

**Job No:** C46435

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46435-9R | 07/07/16 | 09:25 | JK | 07/07/16 | SO | Soil | B28-10' |
| C46435-10 | 07/07/16 | 09:30 | JK | 07/07/16 | SO | Soil | B28-15' |
| C46435-10R | 07/07/16 | 09:30 | JK | 07/07/16 | SO | Soil | B28-15' |
| C46435-11 | 07/07/16 | 09:35 | JK | 07/07/16 | SO | Soil | B28-20' |
| C46435-11R | 07/07/16 | 09:35 | JK | 07/07/16 | SO | Soil | B28-20' |
| C46435-12 | 07/07/16 | 09:40 | JK | 07/07/16 | SO | Soil | B28-25' |
| C46435-12R | 07/07/16 | 09:40 | JK | 07/07/16 | SO | Soil | B28-25' |
| C46435-13 | 07/07/16 | 10:40 | JK | 07/07/16 | SO | Soil | B29-2' |
| C46435-13R | 07/07/16 | 10:40 | JK | 07/07/16 | SO | Soil | B29-2' |
| C46435-14 | 07/07/16 | 10:45 | JK | 07/07/16 | SO | Soil | B29-4' |
| C46435-14R | 07/07/16 | 10:45 | JK | 07/07/16 | SO | Soil | B29-4' |
| C46435-15 | 07/07/16 | 10:50 | JK | 07/07/16 | SO | Soil | B29-10' |
| C46435-15R | 07/07/16 | 10:50 | JK | 07/07/16 | SO | Soil | B29-10' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Sample Summary
(continued)

ATC Group Services

**Job No:** C46435

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46435-16 | 07/07/16 | 10:55 | JK | 07/07/16 | SO | Soil | B29-15' |
| C46435-16R | 07/07/16 | 10:55 | JK | 07/07/16 | SO | Soil | B29-15' |
| C46435-17 | 07/07/16 | 11:00 | JK | 07/07/16 | SO | Soil | B29-20' |
| C46435-17R | 07/07/16 | 11:00 | JK | 07/07/16 | SO | Soil | B29-20' |
| C46435-18 | 07/07/16 | 11:05 | JK | 07/07/16 | SO | Soil | B29-25' |
| C46435-18R | 07/07/16 | 11:05 | JK | 07/07/16 | SO | Soil | B29-25' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Summary of Hits

**Job Number:** C46435
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46435-1** | **B27-2'** | | | | | |
| Acetone | | 213 | 35 | | ug/kg | SW846 8260B |
| Methyl ethyl ketone | | 38.3 | 18 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 74.0 | 6.6 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 113 | 6.6 | | mg/kg | SW846 8015B M |
| Lead | | 45.9 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-1R** | **B27-2'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 4610 E | 88 | | ug/kg | SW846 8260B |
| **C46435-2** | **B27-4'** | | | | | |
| Acetone | | 83.3 | 39 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 7.55 | 3.3 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 13.3 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 3.9 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-2R** | **B27-4'** | | | | | |
| TPH-GRO (C6-C10) | | 909 | 97 | | ug/kg | SW846 8260B |
| **C46435-3** | **B27-10'** | | | | | |
| TPH (C10-C28) | | 11.5 | 3.3 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 9.11 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 9.7 | 2.0 | | mg/kg | SW846 6010B |
| **C46435-3R** | **B27-10'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 97300 E | 4900 | | ug/kg | SW846 8260B |
| **C46435-4** | **B27-15'** | | | | | |
| Benzene | | 31.6 | 4.9 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 6.7 | 4.9 | | ug/kg | SW846 8260B |
| Lead | | 4.8 | 1.8 | | mg/kg | SW846 6010B |
| **C46435-4R** | **B27-15'** | | | | | |
| TPH-GRO (C6-C10) | | 1230 | 97 | | ug/kg | SW846 8260B |

# Summary of Hits

**Job Number:** C46435
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46435-7** | **B28-2'** | | | | | |
| TPH (C10-C28) | | 33.2 | 6.6 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 81.2 | 6.6 | | mg/kg | SW846 8015B M |
| Lead | | 119 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-7R** | **B28-2'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46435-8** | **B28-4'** | | | | | |
| TPH (> C28-C40) | | 25.2 | 6.6 | | mg/kg | SW846 8015B M |
| Lead | | 5.3 | 1.8 | | mg/kg | SW846 6010B |
| **C46435-8R** | **B28-4'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46435-9** | **B28-10'** | | | | | |
| Lead | | 5.7 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-9R** | **B28-10'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46435-10** | **B28-15'** | | | | | |
| Ethylbenzene | | 6600 | 1200 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 1940 | 1200 | | ug/kg | SW846 8260B |
| Naphthalene | | 1210 | 1200 | | ug/kg | SW846 8260B |
| n-Propylbenzene | | 2440 | 1200 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 11200 | 1200 | | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 3830 | 1200 | | ug/kg | SW846 8260B |
| Toluene | | 8900 | 1200 | | ug/kg | SW846 8260B |
| Xylene (total) | | 40100 | 2300 | | ug/kg | SW846 8260B |
| Lead | | 3.9 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-10R** | **B28-15'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 1570000 E | 23000 | | ug/kg | SW846 8260B |

# Summary of Hits

**Job Number:** C46435
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46435-11** | **B28-20'** | | | | | |
| Acetone | | 45.4 | 36 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 6.6 | 4.5 | | ug/kg | SW846 8260B |
| Naphthalene | | 5.2 | 4.5 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 13.6 | 4.5 | | ug/kg | SW846 8260B |
| Toluene | | 9.2 | 4.5 | | ug/kg | SW846 8260B |
| Xylene (total) | | 42.3 | 9.1 | | ug/kg | SW846 8260B |
| Lead | | 6.2 | 1.8 | | mg/kg | SW846 6010B |
| **C46435-11R** | **B28-20'** | | | | | |
| TPH-GRO (C6-C10) | | 1170 | 91 | | ug/kg | SW846 8260B |
| **C46435-12** | **B28-25'** | | | | | |
| Lead | | 6.3 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-12R** | **B28-25'** | | | | | |
| TPH-GRO (C6-C10) | | 104 | 93 | | ug/kg | SW846 8260B |
| **C46435-13** | **B29-2'** | | | | | |
| n-Butylbenzene | | 353 | 230 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 288 | 230 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 434 | 230 | | ug/kg | SW846 8260B |
| Naphthalene | | 1680 | 230 | | ug/kg | SW846 8260B |
| n-Propylbenzene | | 691 | 230 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 1500 | 230 | | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 707 | 230 | | ug/kg | SW846 8260B |
| Xylene (total) | | 648 | 460 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 35.4 | 3.3 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 36.6 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 26.5 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-13R** | **B29-2'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 81200 E | 4600 | | ug/kg | SW846 8260B |
| **C46435-14** | **B29-4'** | | | | | |
| n-Butylbenzene | | 304 | 240 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 436 | 240 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 487 | 240 | | ug/kg | SW846 8260B |

# Summary of Hits

**Job Number:** C46435
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| Naphthalene | | 486 | 240 | | ug/kg | SW846 8260B |
| n-Propylbenzene | | 653 | 240 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 1340 | 240 | | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 765 | 240 | | ug/kg | SW846 8260B |
| Xylene (total) | | 704 | 470 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 40.8 | 6.6 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 54.0 | 6.6 | | mg/kg | SW846 8015B M |
| Lead | | 10.5 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-14R** | **B29-4'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 188000 E | 4700 | | ug/kg | SW846 8260B |
| **C46435-15** | **B29-10'** | | | | | |
| Benzene | | 884 | 560 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 6860 | 560 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 1370 | 560 | | ug/kg | SW846 8260B |
| Naphthalene | | 1000 | 560 | | ug/kg | SW846 8260B |
| n-Propylbenzene | | 1690 | 560 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 8130 | 560 | | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 2380 | 560 | | ug/kg | SW846 8260B |
| Xylene (total) | | 18900 | 1100 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 17.2 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 4.9 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-15R** | **B29-10'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 864000 E | 11000 | | ug/kg | SW846 8260B |
| **C46435-16** | **B29-15'** | | | | | |
| Benzene | | 937 | 220 | | ug/kg | SW846 8260B |
| Ethylbenzene | | 1930 | 220 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 383 | 220 | | ug/kg | SW846 8260B |
| Naphthalene | | 226 | 220 | | ug/kg | SW846 8260B |
| n-Propylbenzene | | 406 | 220 | | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 1690 | 220 | | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 625 | 220 | | ug/kg | SW846 8260B |
| Toluene | | 1620 | 220 | | ug/kg | SW846 8260B |
| Xylene (total) | | 8690 | 440 | | ug/kg | SW846 8260B |
| Lead | | 4.6 | 1.9 | | mg/kg | SW846 6010B |

# Summary of Hits

**Job Number:** C46435
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46435-16R** | **B29-15'** | | | | | |
| TPH-GRO (C6-C10) [a] | | 378000 E | 4400 | | ug/kg | SW846 8260B |
| **C46435-17** | **B29-20'** | | | | | |
| Benzene | | 296 | 240 | | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 6.43 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 3.9 | 1.9 | | mg/kg | SW846 6010B |
| **C46435-17R** | **B29-20'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46435-18** | **B29-25'** | | | | | |
| Lead | | 3.1 | 2.0 | | mg/kg | SW846 6010B |
| **C46435-18R** | **B29-25'** | | | | | |
| No hits reported in this sample. | | | | | | |

(a) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

## Sample Results

Report of Analysis

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49975.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.66 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 213 | 35 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.4 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.4 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.4 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.4 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.4 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.4 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.4 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.4 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.4 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.4 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.4 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.4 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.4 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.4 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.4 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.4 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.4 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.4 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.4 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.4 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.4 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.4 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.4 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.4 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.4 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.4 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.4 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.4 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.4 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.4 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.4 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.4 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.4 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.4 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.4 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.4 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 18 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.4 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.4 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.4 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 18 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | 38.3 | 18 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.4 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.4 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.4 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.4 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.4 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 35 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.4 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.4 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.4 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.4 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.4 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.4 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.4 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.4 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.4 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.4 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.4 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.4 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.4 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.4 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 8.8 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 98% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5209.D | 2 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 74.0 | 6.6 | mg/kg | |
| | TPH (> C28-C40) | 113 | 6.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 79% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 45.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-2' | | |
| **Lab Sample ID:** | C46435-1R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49975.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.66 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 4610 | 88 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 98% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49976.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.13 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 83.3 | 39 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.9 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.9 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.9 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5190.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 7.55 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 13.3 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 79% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 3.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-4' | | |
| **Lab Sample ID:** | C46435-2R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49976.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.13 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 909 | 97 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61842.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.07 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 2000 | ug/kg | |
| 71-43-2 | Benzene | ND | 250 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 250 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 250 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 250 | ug/kg | |
| 75-25-2 | Bromoform | ND | 250 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 250 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 250 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 250 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 250 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 250 | ug/kg | |
| 67-66-3 | Chloroform | ND | 250 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 250 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 250 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 250 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 250 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 250 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 250 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 250 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 250 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 250 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 250 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 250 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 250 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 250 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 250 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 250 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 250 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 250 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 250 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 250 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 250 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 250 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 250 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 250 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 250 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 990 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 250 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 250 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 250 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 990 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 250 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 250 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 250 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 990 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 990 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 250 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 250 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 250 | ug/kg | |
| 100-42-5 | Styrene | ND | 250 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 250 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 2000 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 250 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 250 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 250 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 250 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 250 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 250 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 250 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 250 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 250 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 250 | ug/kg | |
| 108-88-3 | Toluene | ND | 250 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 250 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 250 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 250 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 490 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 113% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5191.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 11.5 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 9.11 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 71% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 9.7 | 2.0 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-10' | | |
| **Lab Sample ID:** | C46435-3R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61842.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.07 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 97300 | 4900 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 113% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49980.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.13 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | ug/kg | |
| 71-43-2 | Benzene | 31.6 | 4.9 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.9 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 100-41-4 | Ethylbenzene | 6.7 | 4.9 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 94% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5192.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 76% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.8 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27-15' | | |
| **Lab Sample ID:** | C46435-4R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49980.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.13 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 1230 | 97 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 94% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49988.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.77 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 35 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.3 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.3 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.3 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.3 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.3 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.3 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.3 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.3 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.3 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.3 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.3 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.3 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.3 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.3 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.3 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.3 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.3 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.3 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.3 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.3 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.3 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.3 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.3 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.3 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.3 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.3 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.3 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.3 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.3 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.3 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.3 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.3 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.3 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.3 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.3 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.3 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 17 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.3 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.3 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.3 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 17 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 17 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.3 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.3 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.3 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.3 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.3 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 35 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.3 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.3 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.3 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.3 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.3 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.3 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.3 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.3 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.3 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.3 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.3 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.3 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.3 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.3 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 8.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5210.D | 2 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 33.2 | 6.6 | mg/kg | |
| | TPH (> C28-C40) | 81.2 | 6.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 85% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 119 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-2' | | |
| **Lab Sample ID:** | C46435-7R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49988.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.77 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 87 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49961.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.77 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 35 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.3 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.3 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.3 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.3 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.3 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.3 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.3 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.3 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.3 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.3 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.3 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.3 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.3 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.3 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.3 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.3 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.3 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.3 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.3 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.3 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.3 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.3 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.3 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.3 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.3 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.3 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.3 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.3 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.3 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.3 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.3 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.3 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.3 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.3 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.3 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.3 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 17 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.3 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.3 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.3 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 17 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 17 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.3 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.3 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.3 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.3 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.3 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 35 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.3 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.3 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.3 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.3 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.3 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.3 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.3 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.3 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.3 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.3 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.3 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.3 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.3 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.3 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 8.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5211.D | 2 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 6.6 | mg/kg | |
| | TPH (> C28-C40) | 25.2 | 6.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 80% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.3 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-4' | | |
| **Lab Sample ID:** | C46435-8R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49961.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.77 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 87 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49962.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.31 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.7 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.7 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.7 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.7 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.7 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.7 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.7 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.7 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.7 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.7 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.7 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.7 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.7 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.7 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.7 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.7 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.7 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.7 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.7 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.7 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.7 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.7 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.7 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.7 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.7 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.7 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.7 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.7 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.7 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.7 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.7 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.7 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.7 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.7 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.7 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.7 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.7 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.7 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.7 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.7 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.7 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.7 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.7 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.7 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.7 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.7 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.4 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5195.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 72% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.7 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

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# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-10' | | |
| **Lab Sample ID:** | C46435-9R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49962.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.31 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 94 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61920.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.38 g | 5.0 ml | 20.0 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 9300 | ug/kg | |
| 71-43-2 | Benzene | ND | 1200 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 1200 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 1200 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 1200 | ug/kg | |
| 75-25-2 | Bromoform | ND | 1200 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 1200 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 1200 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 1200 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 1200 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 1200 | ug/kg | |
| 67-66-3 | Chloroform | ND | 1200 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 1200 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 1200 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 1200 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1200 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1200 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1200 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 1200 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1200 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1200 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1200 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1200 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 1200 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1200 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 1200 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1200 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1200 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1200 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 1200 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 1200 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 1200 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1200 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1200 | ug/kg | |
| 100-41-4 | Ethylbenzene | 6600 | 1200 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 1200 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 4600 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 1200 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 1940 | 1200 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 1200 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 4600 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 1200 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 1200 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 1200 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4600 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 4600 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1200 | ug/kg | |
| 91-20-3 | Naphthalene | 1210 | 1200 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 2440 | 1200 | ug/kg | |
| 100-42-5 | Styrene | ND | 1200 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 1200 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 9300 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1200 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1200 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1200 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1200 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 1200 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 1200 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 1200 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 11200 | 1200 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 3830 | 1200 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 1200 | ug/kg | |
| 108-88-3 | Toluene | 8900 | 1200 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 1200 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 1200 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 1200 | ug/kg | |
| 1330-20-7 | Xylene (total) | 40100 | 2300 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 109% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5196.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 73% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 3.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-15' | | |
| **Lab Sample ID:** | C46435-10R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61920.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.38 g | 5.0 ml | 20.0 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 1570000 | 23000 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 109% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49982.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.51 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 45.4 | 36 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.5 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.5 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.5 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.5 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.5 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.5 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.5 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.5 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.5 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.5 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.5 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.5 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.5 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.5 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.5 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.5 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.5 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.5 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.5 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.5 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.5 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.5 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.5 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.5 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.5 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.5 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.5 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.5 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.5 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.5 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.5 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.5 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.5 | ug/kg | |
| 100-41-4 | Ethylbenzene | 6.6 | 4.5 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.5 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.5 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.5 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.5 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 18 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.5 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.5 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.5 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 18 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 18 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.5 | ug/kg | |
| 91-20-3 | Naphthalene | 5.2 | 4.5 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.5 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.5 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.5 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 36 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.5 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.5 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.5 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.5 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.5 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.5 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.5 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 13.6 | 4.5 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.5 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.5 | ug/kg | |
| 108-88-3 | Toluene | 9.2 | 4.5 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.5 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.5 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.5 | ug/kg | |
| 1330-20-7 | Xylene (total) | 42.3 | 9.1 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5198.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 75% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 6.2 | 1.8 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

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# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-20' | | |
| **Lab Sample ID:** | C46435-11R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49982.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.51 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 1170 | 91 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49983.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.35 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 37 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.7 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.7 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.7 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.7 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.7 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.7 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.7 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.7 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.7 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.7 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.7 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.7 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.7 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.7 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.7 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.7 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.7 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.7 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.7 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.7 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.7 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.7 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.7 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.7 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.7 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.7 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.7 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.7 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.7 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.7 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.7 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.7 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.7 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.7 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.7 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.7 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.7 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.7 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 37 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.7 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.7 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.7 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.7 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.7 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.7 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.7 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.7 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5199.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 75% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 6.3 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28-25' | | |
| **Lab Sample ID:** | C46435-12R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49983.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.35 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 104 | 93 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61843.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.43 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1800 | ug/kg | |
| 71-43-2 | Benzene | ND | 230 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 230 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 230 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 230 | ug/kg | |
| 75-25-2 | Bromoform | ND | 230 | ug/kg | |
| 104-51-8 | n-Butylbenzene | 353 | 230 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 230 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 230 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 230 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 230 | ug/kg | |
| 67-66-3 | Chloroform | ND | 230 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 230 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 230 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 230 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 230 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 230 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 230 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 230 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 230 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 230 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 230 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 230 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 230 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 230 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 230 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 230 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 230 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 230 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 230 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 230 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 230 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 230 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 230 | ug/kg | |
| 100-41-4 | Ethylbenzene | 288 | 230 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 230 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 920 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 230 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 434 | 230 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 230 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 920 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 230 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 230 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 230 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 920 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 920 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 230 | ug/kg | |
| 91-20-3 | Naphthalene | 1680 | 230 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 691 | 230 | ug/kg | |
| 100-42-5 | Styrene | ND | 230 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 230 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1800 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 230 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 230 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 230 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 230 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 230 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 230 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 230 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1500 | 230 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 707 | 230 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 230 | ug/kg | |
| 108-88-3 | Toluene | ND | 230 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 230 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 230 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 230 | ug/kg | |
| 1330-20-7 | Xylene (total) | 648 | 460 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 108% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5200.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 35.4 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 36.6 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 79% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 26.5 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-2' | | |
| **Lab Sample ID:** | C46435-13R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61843.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.43 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 81200 | 4600 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 96% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 108% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61844.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.31 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1900 | ug/kg | |
| 71-43-2 | Benzene | ND | 240 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 240 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 240 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 240 | ug/kg | |
| 75-25-2 | Bromoform | ND | 240 | ug/kg | |
| 104-51-8 | n-Butylbenzene | 304 | 240 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 240 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 240 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 240 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 240 | ug/kg | |
| 67-66-3 | Chloroform | ND | 240 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 240 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 240 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 240 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 240 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 240 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 240 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 240 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 240 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 240 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 240 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 240 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 240 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 240 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 240 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 240 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 240 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 240 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 240 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 240 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 240 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 240 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 240 | ug/kg | |
| 100-41-4 | Ethylbenzene | 436 | 240 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 240 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 940 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 240 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 487 | 240 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 240 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 940 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 240 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 240 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 240 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 940 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 940 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 240 | ug/kg | |
| 91-20-3 | Naphthalene | 486 | 240 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 653 | 240 | ug/kg | |
| 100-42-5 | Styrene | ND | 240 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 240 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1900 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 240 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 240 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 240 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 240 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 240 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 240 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 240 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1340 | 240 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 765 | 240 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 240 | ug/kg | |
| 108-88-3 | Toluene | ND | 240 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 240 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 240 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 240 | ug/kg | |
| 1330-20-7 | Xylene (total) | 704 | 470 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 115% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5212.D | 2 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 40.8 | 6.6 | mg/kg | |
| | TPH (> C28-C40) | 54.0 | 6.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 81% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.5 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-4' | | |
| **Lab Sample ID:** | C46435-14R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61844.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.31 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 188000 | 4700 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 115% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61919.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.63 g | 5.0 ml | 40.0 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 4400 | ug/kg | |
| 71-43-2 | Benzene | 884 | 560 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 560 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 560 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 560 | ug/kg | |
| 75-25-2 | Bromoform | ND | 560 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 560 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 560 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 560 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 560 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 560 | ug/kg | |
| 67-66-3 | Chloroform | ND | 560 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 560 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 560 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 560 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 560 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 560 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 560 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 560 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 560 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 560 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 560 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 560 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 560 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 560 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 560 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 560 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 560 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 560 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 560 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 560 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 560 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 560 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 560 | ug/kg | |
| 100-41-4 | Ethylbenzene | 6860 | 560 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 560 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 2200 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 560 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 1370 | 560 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 560 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 2200 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 560 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 560 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 560 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 2200 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 2200 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 560 | ug/kg | |
| 91-20-3 | Naphthalene | 1000 | 560 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 1690 | 560 | ug/kg | |
| 100-42-5 | Styrene | ND | 560 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 560 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 4400 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 560 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 560 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 560 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 560 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 560 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 560 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 560 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 8130 | 560 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 2380 | 560 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 560 | ug/kg | |
| 108-88-3 | Toluene | ND | 560 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 560 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 560 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 560 | ug/kg | |
| 1330-20-7 | Xylene (total) | 18900 | 1100 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 112% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5201.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 17.2 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 75% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-10' | | |
| **Lab Sample ID:** | C46435-15R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61919.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.63 g | 5.0 ml | 40.0 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 864000 | 11000 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 112% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61846.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.67 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1800 | ug/kg | |
| 71-43-2 | Benzene | 937 | 220 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 220 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 220 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 220 | ug/kg | |
| 75-25-2 | Bromoform | ND | 220 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 220 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 220 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 220 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 220 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 220 | ug/kg | |
| 67-66-3 | Chloroform | ND | 220 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 220 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 220 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 220 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 220 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 220 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 220 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 220 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 220 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 220 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 220 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 220 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 220 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 220 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 220 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 220 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 220 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 220 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 220 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 220 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 220 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 220 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 220 | ug/kg | |
| 100-41-4 | Ethylbenzene | 1930 | 220 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 220 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 880 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 220 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 383 | 220 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 220 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 880 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 220 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 220 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 220 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 880 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 880 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 220 | ug/kg | |
| 91-20-3 | Naphthalene | 226 | 220 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 406 | 220 | ug/kg | |
| 100-42-5 | Styrene | ND | 220 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 220 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1800 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 220 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 220 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 220 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 220 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 220 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 220 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 220 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1690 | 220 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 625 | 220 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 220 | ug/kg | |
| 108-88-3 | Toluene | 1620 | 220 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 220 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 220 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 220 | ug/kg | |
| 1330-20-7 | Xylene (total) | 8690 | 440 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 86% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 107% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5202.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 76% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.6 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-15' | | |
| **Lab Sample ID:** | C46435-16R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61846.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.67 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) [b] | 378000 | 4400 | ug/kg | E |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 86% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 107% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) Result reported as an estimated value (exceeded calibration range). Compound was retrieved per client request.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61845.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.20 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1900 | ug/kg | |
| 71-43-2 | Benzene | 296 | 240 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 240 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 240 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 240 | ug/kg | |
| 75-25-2 | Bromoform | ND | 240 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 240 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 240 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 240 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 240 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 240 | ug/kg | |
| 67-66-3 | Chloroform | ND | 240 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 240 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 240 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 240 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 240 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 240 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 240 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 240 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 240 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 240 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 240 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 240 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 240 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 240 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 240 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 240 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 240 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 240 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 240 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 240 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 240 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 240 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 240 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 240 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 240 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 960 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 240 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 240 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 240 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 960 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 240 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 240 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 240 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 960 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 960 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 240 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 240 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 240 | ug/kg | |
| 100-42-5 | Styrene | ND | 240 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 240 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1900 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 240 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 240 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 240 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 240 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 240 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 240 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 240 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 240 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 240 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 240 | ug/kg | |
| 108-88-3 | Toluene | ND | 240 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 240 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 240 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 240 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 480 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 94% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5203.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 6.43 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 77% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 3.9 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-20' | | |
| **Lab Sample ID:** | C46435-17R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61845.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.20 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 4800 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 94% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49986.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.37 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 37 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.7 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.7 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.7 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.7 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.7 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.7 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.7 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.7 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.7 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.7 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.7 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.7 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.7 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.7 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.7 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.7 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.7 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.7 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.7 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.7 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.7 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.7 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.7 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.7 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane [b] | ND | 4.7 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.7 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.7 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.7 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.7 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.7 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.7 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.7 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.7 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.7 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.7 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.7 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.7 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.7 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.7 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.7 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.7 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.7 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 37 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.7 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.7 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.7 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.7 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.7 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.7 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.7 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.7 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.7 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.7 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.7 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 81-115% |

(a) All results reported on a wet weight basis.
(b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5204.D | 1 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | ND | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 74% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 3.1 | 2.0 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11595

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29-25' | | |
| **Lab Sample ID:** | C46435-18R | **Date Sampled:** | 07/07/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | L49986.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.37 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 93 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 99% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: C46435
Date 7-7-16 Page 1 of 3

## Report To

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Ste 250, Roseville
Email: gabe.stivala@atcgroupservices.com
Bill To:
Sampled By: JK/MJ
Attn:
Phone: 916-724-5277

## Analysis Request

| Sample ID | Date | Time | Matrix | Preserv | Volatile Organics GC/MS (VOCs) EPA 8260B | HVOCs by EPA 8260B | EPA 8260B: Gas BTEX 5 Oxygenates DCA, EDB Ethanol | TEPH EPA 8015B Silica Gel Diesel Motor Oil Other | Semi-Volatile Organics GC/MS EPA 8270C | PNA/PAH's by 8270C 8270C SIM | Oil and Grease Petroleum Total (EPA 1664/9071) | Pesticides EPA 8081 PCBs EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: 6010B 200.7 Lead LUFT RCRA Other: | Metals: 6020 200.8 (ICP-MS): | W.E.T (STLC) W.E.T (DI) TCLP | Hex. Chrom by EPA 7196 or EPA 7199 | pH 9040 SM4500 | Spec. Cond. Alkalinity TDS TSS SS | Anions: Cl $SO_4$ $NO_3$ F Br $NO_2$ $PO_4$ | Perchlorate by EPA 314.0 | COD EPA 410.4 SM5220D Turbidity | Total Lead | Sample # | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B27-2' | 7-7-16 | 1120 | S | No | X | | | X | | | | | | | | | | | | | | | X | 1 | 1 |
| B27-4' | | 1123 | | | X | | | X | | | | | | | | | | | | | | | X | 2 | 1 |
| B27-10' | | 1130 | | | X | | | X | | | | | | | | | | | | | | | X | 3 | 1 |
| B27-15' | | 1135 | | | X | | | X | | | | | | | | | | | | | | | X | 4 | 1 |
| B27-20' | | 1140 | | | X | | | X | | | | | | | | | | | | | | | X | 5 | 1 |
| B27-25' | | 1155 | | | X | | | X | | | | | | | | | | | | | | | X | 6 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

## Project Info.

Project Name/ #:
PO#:

## Sample Receipt

# of Containers:
Head Space:
Temp: 3.4/4.4

Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

| 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|
| Signature: 1930 | Signature: 15:35 | Signature: Time: |
| Printed Name: Jim Kundert 7-7-16 | Printed Name: Mike Moreland 7/7/16 | Printed Name: Date: |
| Company: ATC | Company: SGS Accutest | Company: |

| 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|
| Signature: 1450 | Signature: 15:35 AZ | Signature: Time: |
| Printed Name: 7/7/16 | Printed Name: 7/7/16 | Printed Name: Date: |
| Company: SGS Accutest | Company: SGS ACCUTEST | Company: |

Rev.10/2012

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: C46435

Date _____ Page 2 of 3

## Report To

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr. Suite 250, Roseville,
Email:
Bill To:
Sampled By: JK/NI
Attn:
Phone: 916.724.5247

## Analysis Request

| Sample ID | Date | Time | Matrix | Preserv | Volatile Organics GC/MS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T (STLC) W.E.T (DI) ☐ TCLP ☐ ☐ | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Total Lead | Sample # | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B28-2' | 7-7-16 | 0910 | S | N | X | | | X | | | | | | | | | | | | | | | X | 7 | 1 |
| B28-4' | ↓ | 0915 | ↓ | ↓ | ↓ | | | ↓ | | | | | | | | | | | | | | | ↓ | 8 | 1 |
| B28-10' | | 0925 | | | | | | | | | | | | | | | | | | | | | | 9 | 1 |
| B28-15' | | 0930 | | | | | | | | | | | | | | | | | | | | | | 10 | 1 |
| B28-20' | | 0935 | | | | | | | | | | | | | | | | | | | | | | 11 | 1 |
| B28-35' | ↓ | 0940 | ↓ | ↓ | ↓ | | | ↓ | | | | | | | | | | | | | | | ↓ | 12 | 1 |

## Project Info / Sample Receipt

Project Name/ #:
# of Containers:
Head Space:
PO#:
Temp:
Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

| 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|
| Signature: [signature] Time: 1730 | Signature: [signature] Time: 1535 | Signature: Time: |
| Printed Name: Jim Kundert Date: 7/7/16 | Printed Name: Mike Monksfield Date: 7/7/16 | Printed Name: Date: |
| Company: ATC | Company: SGS Accutest | Company: |

| 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|
| Signature: [signature] Time: 1450 | Signature: [signature] Time: 15:35 | Signature: Time: |
| Printed Name: Mike Monksfield Date: 7/7/16 | Printed Name: Alireza Zeighami Date: 7/7/16 | Printed Name: Date: |
| Company: SGS Accutest | Company: SGS Accutest | Company: |

Rev.10/2012

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: C46435
Date 7-7-16 Page 3 of 3

**Report To**

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Suite 250, Roseville
Email:
Bill To:
Sampled By: JK/MJ
Attn:
Phone: 916-724-5247

**Analysis Request**

| Sample ID | Date | Time | Mat rix | Preserv | Volatile Organics GC/MS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐200.7 ☐ Lead ☐ LUFT ☐RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T (STLC) W.E.T (DI) ☐ TCLP ☐ ☐ | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Total Lead | Sample # | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B29-2' | 7-7-16 | 1090 | S | No | X | | | X | | | | | | | | | | | | | | | | 13 | 1 |
| B29-5' | | 1095 | | | | | | | | | | | | | | | | | | | | | | 14 | 1 |
| B29-10' | | 1050 | | | | | | | | | | | | | | | | | | | | | | 15 | 1 |
| B29-15' | | 1055 | | | | | | | | | | | | | | | | | | | | | | 16 | 1 |
| B29-20' | | 1100 | | | | | | | | | | | | | | | | | | | | | | 17 | 1 |
| B29-25' | | 1105 | | | | | | | | | | | | | | | | | | | | | | 18 | 1 |

**Project Info.**

Project Name/ #:
PO#:
Credit Card Y/N:

**Sample Receipt**

# of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

| | 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|---|
| Signature | | Mike Moorefield | |
| Time | 1930 | 1535 | |
| Printed Name | Jim Kunkel | Mike Moorefield | |
| Date | 7-7-16 | 7/7/16 | |
| Company | ATC | SGS Accutest | |

| | 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|---|
| Signature | | Ali Zeighami | |
| Time | 1930 | 15:35 | |
| Printed Name | Mike Moorefield | Alireza Zeighami | |
| Date | 7/7/16 | 7/7/16 | |
| Company | SGS Accutest | SGS Accutest | |

Rev.10/2012

# SGS Accutest Sample Receipt Summary

**Job Number:** C46435 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/7/2016 3:35:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.4/4.4);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☐ | ☑ |
| 2. Trip Blank listed on COC: | ☐ | | ☐ | ☑ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☐ | | ☐ | ☑ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

## Job Change Order: C46435

| | | | |
|---|---|---|---|
| **Requested Date:** | 7/8/2016 | **Received Date:** | 7/7/2016 |
| **Account Name:** | ATC Group Services | **Due Date:** | 7/14/2016 |
| **Project Description:** | Premier Hyundai 2820 Broadway Oakland | **Deliverable:** | COMMB |
| **CSR:** | nutank | **TAT (Days):** | 7 |

==========

**Sample #:** C46435-5 & 6

**Dept:**

**Change:**
Client wants to HOLD samples 5 & 6.

==========

**C46435: Chain of Custody**
**Page 5 of 5**

**Above Changes Per:** Gabe Stivala **Date/Time:** 7/8/2016 3:51:25 PM

To Client:This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | 62.1 | 100 | ug/kg | J |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-MB | L49949.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | 81-115% |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-MB | L49974.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-MB | L49974.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | 58.9 | 100 | ug/kg | J |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-MB | L49974.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 91% | 81-115% |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 100 | ug/kg | |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |
| 2037-26-5 | Toluene-D8 | 93% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 100 | ug/kg | |

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 81-115% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 135 | 84 | 138 | 86 | 2 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 31.8 | 80 | 32.0 | 80 | 1 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 37.3 | 93 | 37.5 | 94 | 1 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 33.1 | 83 | 32.7 | 82 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 32.4 | 81 | 32.1 | 80 | 1 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 39.7 | 99 | 39.1 | 98 | 2 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 35.8 | 90 | 36.5 | 91 | 2 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 35.8 | 90 | 36.7 | 92 | 2 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 35.3 | 88 | 36.8 | 92 | 4 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 35.3 | 88 | 35.3 | 88 | 0 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 39.4 | 99 | 38.0 | 95 | 4 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 30.7 | 77 | 30.4 | 76 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 33.2 | 83 | 33.9 | 85 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 32.6 | 82 | 33.4 | 84 | 2 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 32.2 | 81 | 32.7 | 82 | 2 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 29.4 | 74 | 29.5 | 74 | 0 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 28.0 | 70 | 27.5 | 69 | 2 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 30.1 | 75 | 29.9 | 75 | 1 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 34.0 | 85 | 33.3 | 83 | 2 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 35.9 | 90 | 34.9 | 87 | 3 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 30.5 | 76 | 30.1 | 75 | 1 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 32.7 | 82 | 32.7 | 82 | 0 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 35.7 | 89 | 35.0 | 88 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 29.4 | 74 | 29.0 | 73 | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 30.5 | 76 | 29.7 | 74 | 3 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 35.9 | 90 | 34.7 | 87 | 3 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 32.4 | 81 | 31.8 | 80 | 2 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 34.2 | 86 | 32.9 | 82 | 4 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 34.5 | 86 | 33.9 | 85 | 2 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.6 | 92 | 37.0 | 93 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 36.7 | 92 | 37.2 | 93 | 1 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.8 | 92 | 36.8 | 92 | 0 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 28.2 | 71 | 28.1 | 70 | 0 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 33.5 | 84 | 32.2 | 81 | 4 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 34.8 | 87 | 34.9 | 87 | 0 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 30.4 | 76 | 29.8 | 75 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 153 | 96 | 142 | 89 | 7 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 37.5 | 94 | 38.5 | 96 | 3 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 35.4 | 89 | 35.8 | 90 | 1 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 36.5 | 91 | 37.4 | 94 | 2 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 161 | 101 | 152 | 95 | 6 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 38.6 | 97 | 38.1 | 95 | 1 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 34.1 | 85 | 33.7 | 84 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 33.8 | 85 | 33.2 | 83 | 2 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 29.8 | 75 | 28.8 | 72 | 3 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 143 | 89 | 137 | 86 | 4 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 29.4 | 74 | 28.5 | 71 | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 36.8 | 92 | 36.5 | 91 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 34.4 | 86 | 35.2 | 88 | 2 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 36.1 | 90 | 35.7 | 89 | 1 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 32.6 | 82 | 31.6 | 79 | 3 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 153 | 77 | 159 | 80 | 4 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 36.2 | 91 | 36.3 | 91 | 0 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 31.3 | 78 | 31.2 | 78 | 0 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 37.4 | 94 | 36.5 | 91 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 35.7 | 89 | 34.7 | 87 | 3 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 36.0 | 90 | 36.5 | 91 | 1 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 38.2 | 96 | 37.4 | 94 | 2 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 37.1 | 93 | 36.4 | 91 | 2 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 34.8 | 87 | 35.4 | 89 | 2 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 35.3 | 88 | 35.8 | 90 | 1 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.8 | 100 | 44.4 | 111 | 11 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 34.0 | 85 | 34.1 | 85 | 0 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 33.8 | 85 | 33.7 | 84 | 0 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 37.2 | 93 | 36.2 | 91 | 3 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 38.1 | 95 | 37.4 | 94 | 2 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 105 | 88 | 106 | 88 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 92% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-BS | L49946.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| VL1498-BSD | L49947.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 92% | 81-115% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-BS | L49971.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| VL1499-BSD | L49972.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 222 | 139 | 239 | 149 | 7 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 43.0 | 108 | 43.0 | 108 | 0 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 46.2 | 116 | 46.3 | 116 | 0 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 45.4 | 114 | 44.8 | 112 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 41.3 | 103 | 41.6 | 104 | 1 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 45.4 | 114 | 48.2 | 121 | 6 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 46.0 | 115 | 43.7 | 109 | 5 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 45.7 | 114 | 43.5 | 109 | 5 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 45.1 | 113 | 43.9 | 110 | 3 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 45.1 | 113 | 43.9 | 110 | 3 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 41.7 | 104 | 39.2 | 98 | 6 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 41.0 | 103 | 39.6 | 99 | 3 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 44.6 | 112 | 43.6 | 109 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 42.2 | 106 | 41.5 | 104 | 2 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 45.9 | 115 | 43.7 | 109 | 5 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 41.7 | 104 | 40.0 | 100 | 4 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 48.2 | 121* [a] | 46.2 | 116 | 4 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 44.2 | 111 | 41.9 | 105 | 5 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 39.5 | 99 | 44.6 | 112 | 12 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 45.3 | 113 | 47.1 | 118 | 4 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 41.0 | 103 | 42.0 | 105 | 2 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 42.3 | 106 | 42.9 | 107 | 1 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 44.4 | 111 | 45.4 | 114 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 35.3 | 88 | 34.6 | 87 | 2 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 42.5 | 106 | 38.9 | 97 | 9 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 44.0 | 110 | 44.0 | 110 | 0 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 37.2 | 93 | 33.3 | 83 | 11 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 45.7 | 114 | 44.1 | 110 | 4 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 44.5 | 111 | 44.9 | 112 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 45.7 | 114 | 45.1 | 113 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 44.0 | 110 | 43.8 | 110 | 0 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 45.0 | 113 | 44.9 | 112 | 0 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 44.3 | 111 | 42.8 | 107 | 3 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 41.9 | 105 | 42.3 | 106 | 1 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 45.9 | 115 | 43.7 | 109 | 5 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 36.6 | 92 | 36.1 | 90 | 1 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-BS | L49971.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| VL1499-BSD | L49972.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 184 | 115 | 204 | 128 | 10 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 47.6 | 119 | 44.6 | 112 | 7 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 46.2 | 116 | 43.8 | 110 | 5 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 46.9 | 117 | 44.4 | 111 | 5 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 181 | 113 | 206 | 129 | 13 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 41.7 | 104 | 39.2 | 98 | 6 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 37.9 | 95 | 35.0 | 88 | 8 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 44.1 | 110 | 46.3 | 116 | 5 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 41.5 | 104 | 41.4 | 104 | 0 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 190 | 119 | 217 | 136 | 13 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 34.7 | 87 | 36.0 | 90 | 4 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 42.4 | 106 | 45.2 | 113 | 6 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 44.6 | 112 | 42.7 | 107 | 4 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 45.3 | 113 | 44.3 | 111 | 2 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 37.6 | 94 | 38.2 | 96 | 2 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 182 | 91 | 202 | 101 | 10 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 44.7 | 112 | 44.2 | 111 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 44.4 | 111 | 41.2 | 103 | 7 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 41.5 | 104 | 44.5 | 111 | 7 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 42.3 | 106 | 44.4 | 111 | 5 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 44.5 | 111 | 44.5 | 111 | 0 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 44.4 | 111 | 46.1 | 115 | 4 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 45.0 | 113 | 44.1 | 110 | 2 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 44.7 | 112 | 43.5 | 109 | 3 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 46.2 | 116 | 44.5 | 111 | 4 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 54.6 | 137* [a] | 54.6 | 137* [a] | 0 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 45.3 | 113 | 43.5 | 109 | 4 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 46.5 | 116 | 46.0 | 115 | 1 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 40.0 | 100 | 37.0 | 93 | 8 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 41.2 | 103 | 38.4 | 96 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 138 | 115 | 133 | 111 | 4 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | 93% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-BS | L49971.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |
| VL1499-BSD | L49972.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 96% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | 94% | 81-115% |

(a) Outside laboratory control limits (high bias); not detected in associated samples.

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 182 | 114 | 183 | 114 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 38.9 | 97 | 34.9 | 87 | 11 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 37.4 | 94 | 33.7 | 84 | 10 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 39.9 | 100 | 37.1 | 93 | 7 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 37.7 | 94 | 34.3 | 86 | 9 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 40.3 | 101 | 37.3 | 93 | 8 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 34.3 | 86 | 32.9 | 82 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 35.0 | 88 | 33.0 | 83 | 6 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 36.5 | 91 | 34.2 | 86 | 7 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.5 | 96 | 35.0 | 88 | 10 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 40.7 | 102 | 36.4 | 91 | 11 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 36.7 | 92 | 33.6 | 84 | 9 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 34.2 | 86 | 30.6 | 77 | 11 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 35.2 | 88 | 32.7 | 82 | 7 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 39.4 | 99 | 35.9 | 90 | 9 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 36.7 | 92 | 33.5 | 84 | 9 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 36.8 | 92 | 33.5 | 84 | 9 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 37.5 | 94 | 33.4 | 84 | 12 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 39.9 | 100 | 32.9 | 82 | 19 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.0 | 95 | 34.2 | 86 | 11 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 37.9 | 95 | 34.3 | 86 | 10 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 38.8 | 97 | 34.8 | 87 | 11 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 38.4 | 96 | 34.0 | 85 | 12 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 35.9 | 90 | 32.9 | 82 | 9 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 36.1 | 90 | 33.7 | 84 | 7 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.5 | 96 | 34.4 | 86 | 11 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 29.3 | 73 | 25.9 | 65 | 12 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 40.4 | 101 | 36.7 | 92 | 10 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.0 | 105 | 37.9 | 95 | 10 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.6 | 92 | 33.8 | 85 | 8 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 37.5 | 94 | 35.1 | 88 | 7 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.6 | 92 | 33.9 | 85 | 8 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 35.0 | 88 | 32.3 | 81 | 8 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 37.1 | 93 | 32.9 | 82 | 12 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 37.3 | 93 | 34.2 | 86 | 9 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 38.2 | 96 | 34.7 | 87 | 10 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 183 | 114 | 151 | 94 | 19 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 34.6 | 87 | 32.7 | 82 | 6 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 37.4 | 94 | 35.8 | 90 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 36.1 | 90 | 34.0 | 85 | 6 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 161 | 101 | 138 | 86 | 15 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 39.5 | 99 | 35.0 | 88 | 12 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 29.4 | 74 | 25.6 | 64 | 14 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.8 | 100 | 35.9 | 90 | 10 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 38.2 | 96 | 34.8 | 87 | 9 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 163 | 102 | 160 | 100 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 37.8 | 95 | 35.3 | 88 | 7 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 38.4 | 96 | 34.5 | 86 | 11 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 34.4 | 86 | 31.7 | 79 | 8 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 38.8 | 97 | 36.0 | 90 | 7 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 40.3 | 101 | 37.6 | 94 | 7 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 194 | 97 | 213 | 107 | 9 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.0 | 98 | 36.0 | 90 | 8 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 38.3 | 96 | 35.1 | 88 | 9 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 37.6 | 94 | 33.2 | 83 | 12 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 37.3 | 93 | 32.9 | 82 | 13 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 35.0 | 88 | 33.1 | 83 | 6 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.4 | 101 | 37.1 | 93 | 9 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 36.4 | 91 | 34.6 | 87 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 35.2 | 88 | 32.9 | 82 | 7 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 35.9 | 90 | 33.1 | 83 | 8 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.3 | 98 | 35.9 | 90 | 9 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 37.1 | 93 | 33.5 | 84 | 10 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 41.4 | 104 | 37.8 | 95 | 9 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 41.0 | 103 | 36.2 | 91 | 12 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 33.8 | 85 | 29.8 | 75 | 13 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 113 | 94 | 105 | 88 | 7 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 96% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 93% | 92% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 102% | 81-115% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 184 | 115 | 196 | 123 | 6 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 39.6 | 99 | 38.9 | 97 | 2 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 41.5 | 104 | 40.6 | 102 | 2 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 39.2 | 98 | 38.2 | 96 | 3 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 39.4 | 99 | 38.0 | 95 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 39.4 | 99 | 38.2 | 96 | 3 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 40.3 | 101 | 38.9 | 97 | 4 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.4 | 96 | 38.4 | 96 | 0 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 44.0 | 110 | 41.9 | 105 | 5 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 40.3 | 101 | 39.2 | 98 | 3 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 40.5 | 101 | 39.8 | 100 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 37.5 | 94 | 35.9 | 90 | 4 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 40.4 | 101 | 39.0 | 98 | 4 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 40.8 | 102 | 39.4 | 99 | 3 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 39.1 | 98 | 38.0 | 95 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 39.0 | 98 | 37.7 | 94 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 40.6 | 102 | 39.0 | 98 | 4 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.8 | 97 | 39.0 | 98 | 1 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 39.9 | 100 | 38.8 | 97 | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 40.4 | 101 | 39.4 | 99 | 3 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 40.1 | 100 | 40.0 | 100 | 0 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 40.2 | 101 | 39.4 | 99 | 2 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 41.9 | 105 | 38.8 | 97 | 8 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.9 | 97 | 38.6 | 97 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 31.0 | 78 | 28.6 | 72 | 8 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 42.8 | 107 | 42.3 | 106 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.1 | 105 | 41.6 | 104 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 39.2 | 98 | 38.5 | 96 | 2 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 39.4 | 99 | 38.8 | 97 | 2 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 39.6 | 99 | 38.6 | 97 | 3 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 37.9 | 95 | 36.9 | 92 | 3 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 38.2 | 96 | 37.9 | 95 | 1 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 39.6 | 99 | 39.0 | 98 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 41.3 | 103 | 39.9 | 100 | 3 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 193 | 121 | 180 | 113 | 7 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 38.6 | 97 | 36.0 | 90 | 7 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 39.6 | 99 | 38.1 | 95 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 40.2 | 101 | 38.6 | 97 | 4 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 160 | 100 | 156 | 98 | 3 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 42.0 | 105 | 40.3 | 101 | 4 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 36.9 | 92 | 33.8 | 85 | 9 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.6 | 99 | 39.5 | 99 | 0 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 39.0 | 98 | 38.0 | 95 | 3 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 196 | 123 | 191 | 119 | 3 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 39.7 | 99 | 39.1 | 98 | 2 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 41.0 | 103 | 39.7 | 99 | 3 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 38.6 | 97 | 37.3 | 93 | 3 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 40.3 | 101 | 39.6 | 99 | 2 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 41.7 | 104 | 41.1 | 103 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 273 | 137 | 207 | 104 | 28 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.1 | 98 | 39.1 | 98 | 0 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 42.5 | 106 | 40.4 | 101 | 5 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 39.8 | 100 | 39.4 | 99 | 1 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 38.5 | 96 | 38.2 | 96 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 39.1 | 98 | 37.5 | 94 | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.3 | 101 | 39.3 | 98 | 3 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 39.5 | 99 | 37.6 | 94 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 39.1 | 98 | 37.9 | 95 | 3 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 39.6 | 99 | 38.8 | 97 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 38.6 | 97 | 38.1 | 95 | 1 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 38.7 | 97 | 38.8 | 97 | 0 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 40.5 | 101 | 39.3 | 98 | 3 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 45.1 | 113 | 41.9 | 105 | 7 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 44.8 | 112 | 41.8 | 105 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 118 | 98 | 116 | 97 | 2 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 98% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1498-LCS | L49948.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 283 | 113 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VL1499-LCS | L49973.D | 1 | 07/12/16 | JT | n/a | n/a | VL1499 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-1, C46435-2, C46435-4, C46435-7, C46435-11, C46435-12, C46435-18, C46435-1R, C46435-2R, C46435-4R, C46435-7R, C46435-11R, C46435-12R, C46435-18R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 264 | 106 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-LCS | M61833.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 210 | 84 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-LCS | M61912.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 296 | 118 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 81-115% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | C46413-5 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 30900 | 23900 | 77 | 30900 | 23700 | 77 | 1 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 7740 | 6090 | 79 | 7740 | 5110 | 66* a | 18 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 7740 | 7010 | 91 | 7740 | 4650 | 60* a | 40* b | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 7740 | 6600 | 85 | 7740 | 5660 | 73 | 15 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 7740 | 6940 | 90 | 7740 | 5670 | 73 | 20* a | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 7740 | 7910 | 102 | 7740 | 6450 | 83 | 20* b | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 7740 | 6800 | 88 | 7740 | 2340 | 30* a | 98* b | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 7740 | 6860 | 89 | 7740 | 2870 | 37* a | 82* b | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 7740 | 6630 | 86 | 7740 | 3200 | 41* a | 70* a | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 7740 | 6710 | 87 | 7740 | 4530 | 59* a | 39* b | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 7740 | 7610 | 98 | 7740 | 7510 | 97 | 1 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 7740 | 6660 | 86 | 7740 | 5510 | 71 | 19* b | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 7740 | 6590 | 85 | 7740 | 3430 | 44* a | 63* b | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 7740 | 6800 | 88 | 7740 | 3240 | 42* a | 71* b | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 7740 | 7170 | 93 | 7740 | 5620 | 73 | 24* b | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 7740 | 6140 | 79 | 7740 | 5300 | 69 | 15 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 7740 | 5210 | 67* a | 7740 | 4710 | 61* a | 10 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 7740 | 6180 | 80 | 7740 | 4760 | 62* a | 26* b | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 7740 | 7070 | 91 | 7740 | 6310 | 82 | 11 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 7740 | 6930 | 90 | 7740 | 5890 | 76 | 16 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 7740 | 7220 | 93 | 7740 | 6080 | 79 | 17 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 7740 | 6460 | 83 | 7740 | 5580 | 72 | 15 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 7740 | 6940 | 90 | 7740 | 5920 | 77 | 16 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 7740 | 5990 | 77 | 7740 | 5350 | 69 | 11 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 7740 | 6400 | 83 | 7740 | 5510 | 71 | 15 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 7740 | 7340 | 95 | 7740 | 5960 | 77 | 21* b | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 7740 | 7850 | 101 | 7740 | 7310 | 94 | 7 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 7740 | 6620 | 86 | 7740 | 5610 | 73 | 17 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 7740 | 6850 | 89 | 7740 | 5490 | 71 | 22* b | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 7740 | 6950 | 90 | 7740 | 3800 | 49* a | 59* b | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 7740 | 7050 | 91 | 7740 | 4210 | 54* a | 50* b | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 7740 | 6940 | 90 | 7740 | 3720 | 48* a | 60* b | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 7740 | 5480 | 71 | 7740 | 4590 | 59* a | 18 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 7740 | 6620 | 86 | 7740 | 5340 | 69* a | 21* b | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 7740 | 6760 | 87 | 7740 | 3970 | 51* a | 52* b | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 7740 | 6390 | 83 | 7740 | 5710 | 74 | 11 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Compound | C46413-5 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 30900 | 28000 | 90 | 30900 | 26800 | 87 | 4 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 7740 | 7340 | 95 | 7740 | 2200 | 28* a | 108* b | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 7740 | 7020 | 91 | 7740 | 3600 | 47* a | 64* b | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 7740 | 6910 | 89 | 7740 | 2770 | 36* a | 86* b | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 30900 | 28900 | 93 | 30900 | 27900 | 90 | 4 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 7740 | 7780 | 101 | 7740 | 7690 | 99 | 1 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 7740 | 7550 | 98 | 7740 | 7200 | 93 | 5 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 7740 | 7120 | 92 | 7740 | 5950 | 77 | 18* b | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 7740 | 5720 | 74 | 7740 | 5130 | 66* a | 11 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 30900 | 26000 | 84 | 30900 | 24800 | 80 | 5 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 12700 | | 7740 | 18900 | 80 | 7740 | 17600 | 63* a | 7 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 7740 | 7210 | 93 | 7740 | 5290 | 68 | 31* b | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 7740 | 6460 | 83 | 7740 | 2990 | 39* a | 73* b | 67-116/20 |
| 100-42-5 | Styrene | ND | | 7740 | 6900 | 89 | 7740 | 4200 | 54* a | 49* b | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 7740 | 6720 | 87 | 7740 | 5990 | 77 | 11 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 20800 | | 38700 | 59000 | 99 | 38700 | 55700 | 90 | 6 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 7740 | 7420 | 96 | 7740 | 5570 | 72 | 28* b | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 7740 | 7010 | 91 | 7740 | 5590 | 72 | 23* b | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 7740 | 7020 | 91 | 7740 | 6350 | 82 | 10 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 7740 | 6820 | 88 | 7740 | 5940 | 77 | 14 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 7740 | 7330 | 95 | 7740 | 4020 | 52* a | 58* b | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 7740 | 8020 | 104 | 7740 | 6840 | 88 | 16 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 7740 | 6940 | 90 | 7740 | 3750 | 48* a | 60* b | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 7740 | 6730 | 87 | 7740 | 3280 | 42* a | 69* b | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 7740 | 6720 | 87 | 7740 | 3300 | 43* a | 68* b | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 7740 | 7070 | 91 | 7740 | 4500 | 58* a | 44* b | 66-125/18 |
| 108-88-3 | Toluene | ND | | 7740 | 6460 | 83 | 7740 | 4620 | 60* a | 33* b | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 7740 | 6590 | 85 | 7740 | 5000 | 65* a | 27* b | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 7740 | 8490 | 110 | 7740 | 7740 | 100 | 9 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 7740 | 8600 | 111 | 7740 | 8010 | 104 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 23200 | 20300 | 87 | 23200 | 11800 | 51* a | 53* b | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-5 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 97% | 98% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-5MS | L49964.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5MSD | L49965.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |
| C46413-5 | L49963.D | 1 | 07/11/16 | JT | n/a | n/a | VL1498 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-8, C46435-9, C46435-8R, C46435-9R

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-5 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 98% | 96% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 97% | 93% | 81-115% |

(a) Outside control limits due to matrix interference.
(b) Outside laboratory control limits.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 40 U | | 160 | 173 | 108 | 160 | 175 | 110 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 5.0 U | | 39.9 | 31.8 | 80 | 39.9 | 33.2 | 83 | 4 | 72-122/18 |
| 108-86-1 | Bromobenzene | 5.0 U | | 39.9 | 27.0 | 68 | 39.9 | 28.8 | 72 | 6 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 31.7 | 79 | 5 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.9 | 70 | 4 | 68-122/18 |
| 75-25-2 | Bromoform | 5.0 U | | 39.9 | 27.0 | 68* [a] | 39.9 | 28.1 | 70 | 4 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 5.0 U | | 39.9 | 24.9 | 62* [a] | 39.9 | 25.2 | 63* [a] | 1 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 5.0 U | | 39.9 | 28.1 | 70 | 39.9 | 29.2 | 73 | 4 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.0 | 78 | 2 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 5.0 U | | 39.9 | 29.4 | 74 | 39.9 | 30.5 | 76 | 4 | 68-117/17 |
| 75-00-3 | Chloroethane | 5.0 U | | 39.9 | 34.2 | 86 | 39.9 | 34.2 | 86 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | 5.0 U | | 39.9 | 28.5 | 71 | 39.9 | 28.8 | 72 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 5.0 U | | 39.9 | 25.0 | 63* [a] | 39.9 | 27.1 | 68 | 8 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 5.0 U | | 39.9 | 25.9 | 65 | 39.9 | 26.1 | 65 | 1 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 5.0 U | | 39.9 | 32.8 | 82 | 39.9 | 34.4 | 86 | 5 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 5.0 U | | 39.9 | 30.0 | 75 | 39.9 | 30.4 | 76 | 1 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 34.2 | 86 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 5.0 U | | 39.9 | 32.1 | 80 | 39.9 | 33.2 | 83 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 U | | 39.9 | 25.1 | 63* [a] | 39.9 | 26.5 | 66 | 5 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 5.0 U | | 39.9 | 27.5 | 69* [a] | 39.9 | 28.1 | 70 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 5.0 U | | 39.9 | 25.5 | 64* [a] | 39.9 | 26.3 | 66* [a] | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 5.0 U | | 39.9 | 29.8 | 75 | 39.9 | 31.1 | 78 | 4 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 5.0 U | | 39.9 | 27.6 | 69* [a] | 39.9 | 28.4 | 71* [a] | 3 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.2 | 68* [a] | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 5.0 U | | 39.9 | 29.2 | 73 | 39.9 | 28.9 | 72 | 1 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 5.0 U | | 39.9 | 26.6 | 67* [a] | 39.9 | 27.9 | 70 | 5 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 5.0 U | | 39.9 | 24.7 | 62 | 39.9 | 24.4 | 61 | 1 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 5.0 U | | 39.9 | 33.1 | 83 | 39.9 | 33.3 | 83 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 U | | 39.9 | 29.0 | 73 | 39.9 | 30.6 | 77 | 5 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 5.0 U | | 39.9 | 24.3 | 61* [a] | 39.9 | 25.2 | 63* [a] | 4 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 5.0 U | | 39.9 | 24.6 | 62* [a] | 39.9 | 24.8 | 62* [a] | 1 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 5.0 U | | 39.9 | 24.1 | 60* [a] | 39.9 | 24.7 | 62* [a] | 2 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 5.0 U | | 39.9 | 30.7 | 77 | 39.9 | 31.0 | 78 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 U | | 39.9 | 24.4 | 61* [a] | 39.9 | 25.2 | 63* [a] | 3 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.2 | 78 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 5.0 U | | 39.9 | 27.9 | 70 | 39.9 | 28.4 | 71 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 20 U | | 160 | 124 | 78 | 160 | 126 | 79 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 5.0 U | | 39.9 | 18.4 | 46* [a] | 39.9 | 19.3 | 48* [a] | 5 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 5.0 U | | 39.9 | 32.2 | 81 | 39.9 | 31.2 | 78 | 3 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 5.0 U | | 39.9 | 28.3 | 71 | 39.9 | 28.6 | 72 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 20 U | | 160 | 104 | 65 | 160 | 111 | 70 | 7 | 60-145/26 |
| 74-83-9 | Methyl bromide | 5.0 U | | 39.9 | 31.6 | 79 | 39.9 | 31.5 | 79 | 0 | 66-130/18 |
| 74-87-3 | Methyl chloride | 5.0 U | | 39.9 | 22.4 | 56 | 39.9 | 22.4 | 56 | 0 | 50-140/25 |
| 74-95-3 | Methylene bromide | 5.0 U | | 39.9 | 28.3 | 71* [a] | 39.9 | 29.2 | 73 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | 20 U | | 39.9 | 32.2 | 81 | 39.9 | 32.5 | 81 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 20 U | | 160 | 122 | 76 | 160 | 120 | 75 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.0 U | | 39.9 | 27.5 | 69 | 39.9 | 26.8 | 67* [a] | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | 5.0 U | | 39.9 | 19.1 | 48* [a] | 39.9 | 20.3 | 51* [a] | 6 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 5.0 U | | 39.9 | 27.8 | 70 | 39.9 | 29.0 | 73 | 4 | 67-116/20 |
| 100-42-5 | Styrene | 5.0 U | | 39.9 | 28.6 | 72 | 39.9 | 28.7 | 72 | 0 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 5.0 U | | 39.9 | 29.7 | 74 | 39.9 | 29.7 | 74 | 0 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 40 U | | 200 | 142 | 71 | 200 | 141 | 71 | 1 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 5.0 U | | 39.9 | 30.4 | 76 | 39.9 | 30.7 | 77 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 U | | 39.9 | 32.0 | 80 | 39.9 | 32.4 | 81 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 U | | 39.9 | 23.6 | 59* [a] | 39.9 | 25.4 | 64* [a] | 7 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 U | | 39.9 | 27.0 | 68* [a] | 39.9 | 27.9 | 70 | 3 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 U | | 39.9 | 15.0 | 38* [a] | 39.9 | 15.6 | 39* [a] | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 5.0 U | | 39.9 | 28.4 | 71 | 39.9 | 28.7 | 72 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 U | | 39.9 | 16.1 | 40* [a] | 39.9 | 16.7 | 42* [a] | 4 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 5.0 U | | 39.9 | 26.9 | 67 | 39.9 | 27.2 | 68 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 5.0 U | | 39.9 | 28.7 | 72 | 39.9 | 28.9 | 72 | 1 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 5.0 U | | 39.9 | 53.6 | 134* [a] | 39.9 | 55.8 | 140* [a] | 4 | 66-125/18 |
| 108-88-3 | Toluene | 5.0 U | | 39.9 | 31.0 | 78 | 39.9 | 31.9 | 80 | 3 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 5.0 U | | 39.9 | 38.2 | 96 | 39.9 | 39.8 | 100 | 4 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 5.0 U | | 39.9 | 32.9 | 82 | 39.9 | 33.2 | 83 | 1 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 5.0 U | | 39.9 | 26.8 | 67 | 39.9 | 28.6 | 72 | 6 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 9.9 U | | 120 | 93.2 | 78 | 120 | 93.8 | 78 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 89% | 100% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-3, C46435-13, C46435-14, C46435-16, C46435-17, C46435-3R, C46435-13R, C46435-14R, C46435-16R, C46435-17R

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 94% | 94% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 94% | 101% | 81-115% |

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 7160 | 6010 | 84 | 7160 | 4940 | 69 | 20 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 1790 | 1800 | 101 | 1790 | 1780 | 100 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 1790 | 1610 | 90 | 1790 | 1580 | 88 | 2 | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 1790 | 1570 | 88 | 1790 | 1600 | 89 | 2 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 1790 | 1670 | 93 | 1790 | 1690 | 94 | 1 | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 1790 | 1810 | 101 | 1790 | 1810 | 101 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 1790 | 1580 | 88 | 1790 | 1600 | 89 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 1790 | 1700 | 95 | 1790 | 1650 | 92 | 3 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 1790 | 1380 | 77 | 1790 | 1500 | 84 | 8 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 1790 | 1600 | 89 | 1790 | 1580 | 88 | 1 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1640 | 92 | 0 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 1790 | 1650 | 92 | 1790 | 1640 | 92 | 1 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 1790 | 1630 | 91 | 1790 | 1600 | 89 | 2 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 1790 | 1630 | 91 | 1790 | 1620 | 91 | 1 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 1790 | 1730 | 97 | 1790 | 1700 | 95 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 1790 | 1600 | 89 | 1790 | 1600 | 89 | 0 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 1790 | 1770 | 99 | 1790 | 1740 | 97 | 2 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 1790 | 1740 | 97 | 1790 | 1700 | 95 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 1790 | 1650 | 92 | 1790 | 1660 | 93 | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 1790 | 1330 | 74 | 1790 | 1370 | 77 | 3 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 1790 | 1120 | 63 | 1790 | 1100 | 61 | 2 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 1790 | 1800 | 101 | 1790 | 1810 | 101 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 1790 | 1570 | 88 | 1790 | 1580 | 88 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 1790 | 1520 | 85 | 1790 | 1520 | 85 | 0 | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 1790 | 1670 | 93 | 1790 | 1680 | 94 | 1 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 7160 | 6990 | 98 | 7160 | 6860 | 96 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1790 | 1690 | 94 | 1790 | 1710 | 96 | 1 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 7160 | 6900 | 96 | 7160 | 6820 | 95 | 1 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 1790 | 1620 | 91 | 1790 | 1580 | 88 | 3 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 1790 | 1360 | 76 | 1790 | 1380 | 77 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 1790 | 1750 | 98 | 1790 | 1690 | 94 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 7160 | 6170 | 86 | 7160 | 5470 | 76 | 12 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 1790 | 1580 | 88 | 1790 | 1530 | 86 | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 1790 | 1990 | 111 | 1790 | 2010 | 112 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 1790 | 1550 | 87 | 1790 | 1570 | 88 | 1 | 67-116/20 |
| 100-42-5 | Styrene | ND | | 1790 | 1780 | 100 | 1790 | 1790 | 100 | 1 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 1790 | 1740 | 97 | 1790 | 1730 | 97 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | ND | | 8940 | 10100 | 113 | 8940 | 9840 | 110 | 3 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 1790 | 1570 | 88 | 1790 | 1590 | 89 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1670 | 93 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 1790 | 1780 | 100 | 1790 | 1770 | 99 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 1790 | 1950 | 109 | 1790 | 1980 | 111 | 2 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 1790 | 2020 | 113 | 1790 | 2000 | 112 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 1790 | 1830 | 102 | 1790 | 1820 | 102 | 1 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1790 | 1620 | 91 | 1790 | 1630 | 91 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 1790 | 1850 | 103 | 1790 | 1750 | 98 | 6 | 66-125/18 |
| 108-88-3 | Toluene | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 1790 | 1810 | 101 | 1790 | 1770 | 99 | 2 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1790 | 1580 | 88 | 1790 | 1580 | 88 | 0 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 1790 | 945 | 53* [a] | 1790 | 966 | 54* [a] | 2 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 5370 | 5110 | 95 | 5370 | 5160 | 96 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | 91% | 95% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46435-10, C46435-15, C46435-10R, C46435-15R

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 95% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 103% | 111% | 81-115% |

(a) Outside control limits due to matrix interference. AZ:M2

* = Outside of Control Limits.

GC/MS Volatiles



Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49975.D
Acq On : 12 Jul 2016 2:15 pm
Operator : johannat
Sample : C46435-1R
Misc : MS1912,VL1499,5.66,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 02 10:59:40 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

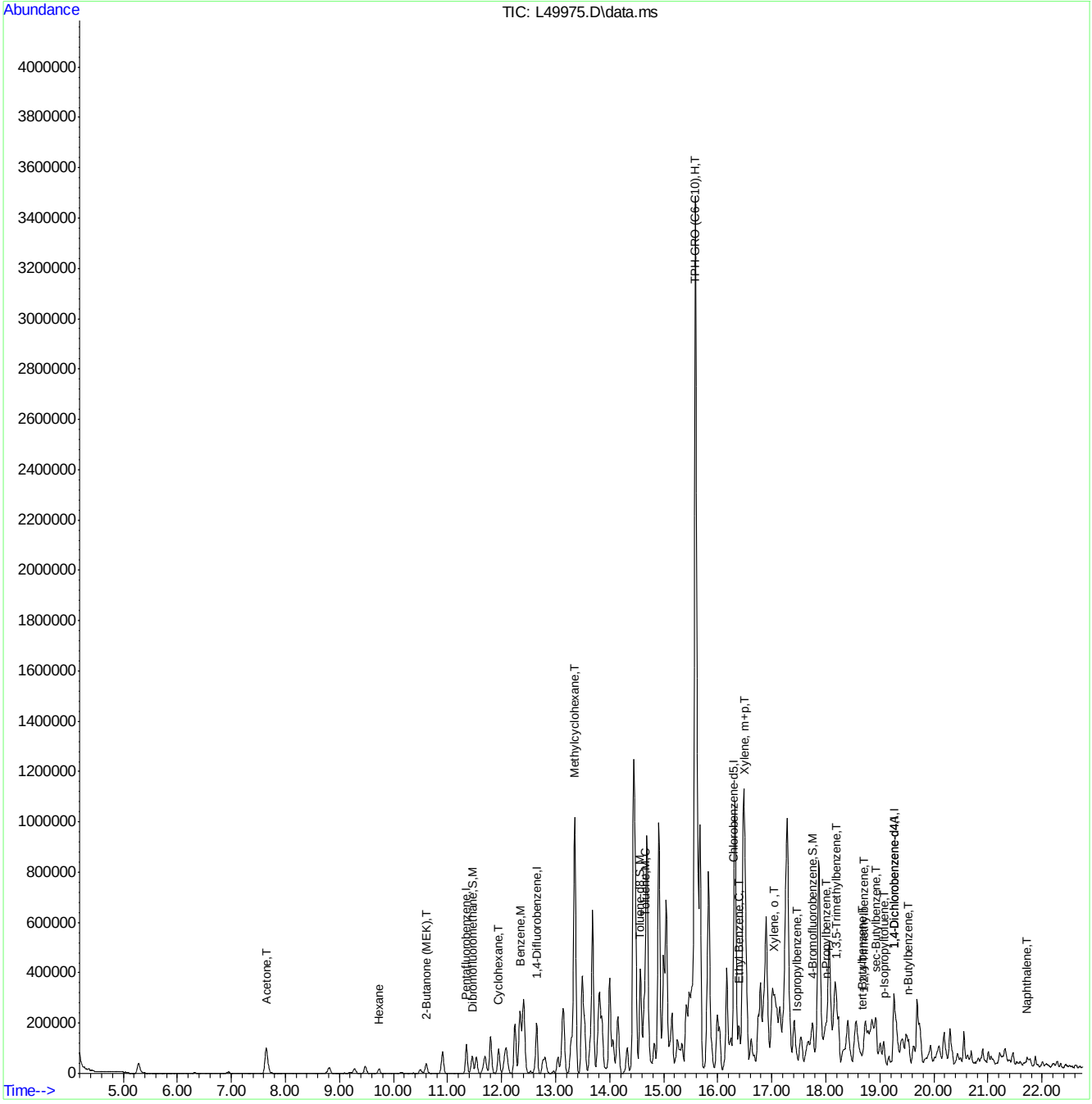
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 991629 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1684444 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1438757 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 650864 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 650864 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 582150 | 19.61 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 98.05% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2016299 | 19.84 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.20% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 751828 | 17.80 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 89.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.646 | 58 | 681661 | 241.39 | ug/Kg# | 67 |
| 24) Hexane | 9.731 | 57 | 130054 | 4.16 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.604 | 72 | 161231 | 43.36 | ug/Kg# | 76 |
| 38) Cyclohexane | 11.946 | 56 | 687533 | 15.39 | ug/Kg | 100 |
| 45) Benzene | 12.339 | 78 | 420151 | 3.35 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.348 | 55 | 5427786 | 137.63 | ug/Kg | 97 |
| 57) Toluene | 14.658 | 92 | 84309 | 1.18 | ug/Kg# | 33 |
| 67) Ethyl Benzene | 16.398 | 91 | 183749 | 1.32 | ug/Kg | 80 |
| 68) Xylene, m+p | 16.496 | 106 | 165720 | 3.36 | ug/Kg# | 53 |
| 69) Xylene, o | 17.031 | 106 | 46871 | 0.93 | ug/Kg# | 1 |
| 73) Isopropylbenzene | 17.462 | 105 | 440831 | 3.52 | ug/Kg | 98 |
| 79) n-Propylbenzene | 18.002 | 91 | 367476 | 2.43 | ug/Kg | 93 |
| 81) 1,3,5-Trimethylbenzene | 18.199 | 105 | 238977 | 2.36 | ug/Kg | 99 |
| 84) tert-Butylbenzene | 18.674 | 119 | 73740 | 0.76 | ug/Kg# | 11 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 275098 | 2.55 | ug/Kg | 82 |
| 87) sec-Butylbenzene | 18.925 | 105 | 290384 | 2.27 | ug/Kg | 95 |
| 88) p-Isopropyltoluene | 19.072 | 119 | 265404 | 2.55 | ug/Kg | 87 |
| 92) n-Butylbenzene | 19.525 | 91 | 113972 | 1.02 | ug/Kg# | 62 |
| 97) Naphthalene | 21.718 | 128 | 171192 | 1.73 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 15.585 | TIC | 891905569m | 5218.20 | ug/Kg | |

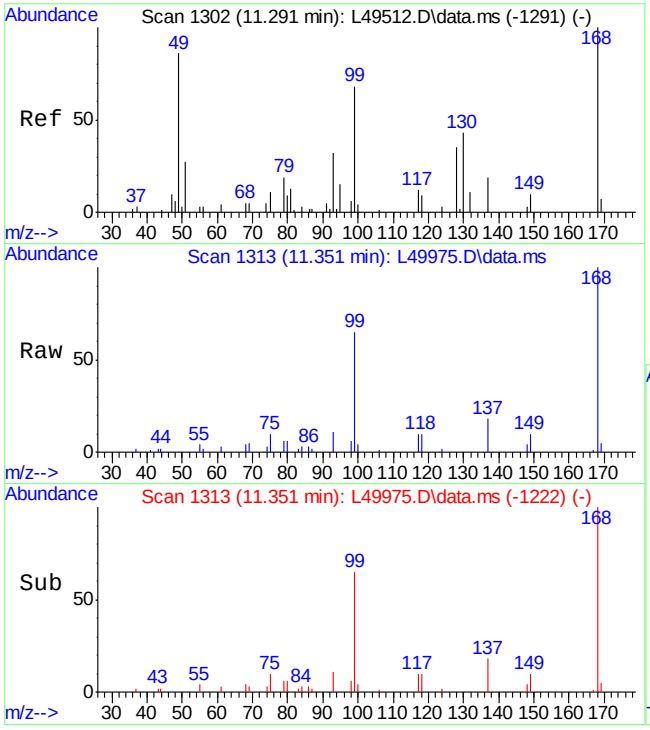
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49975.D
Acq On : 12 Jul 2016 2:15 pm
Operator : johannat
Sample : C46435-1R
Misc : MS1912,VL1499,5.66,,,,1
ALS Vial : 8 Sample Multiplier: 1

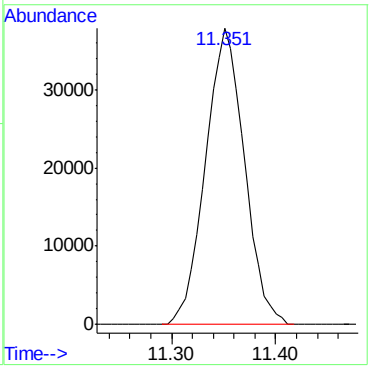
Quant Time: Aug 02 10:59:40 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

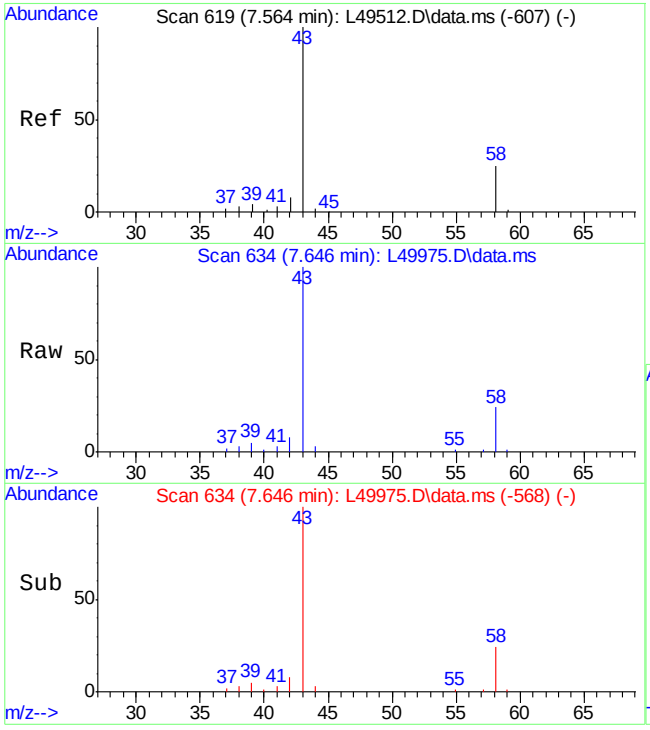





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:168 Resp: 991629

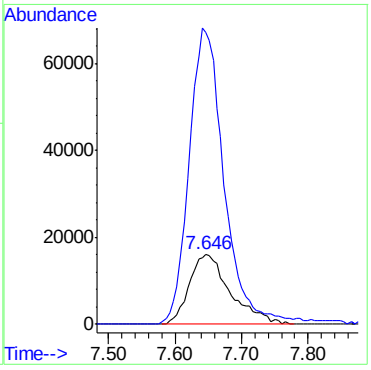


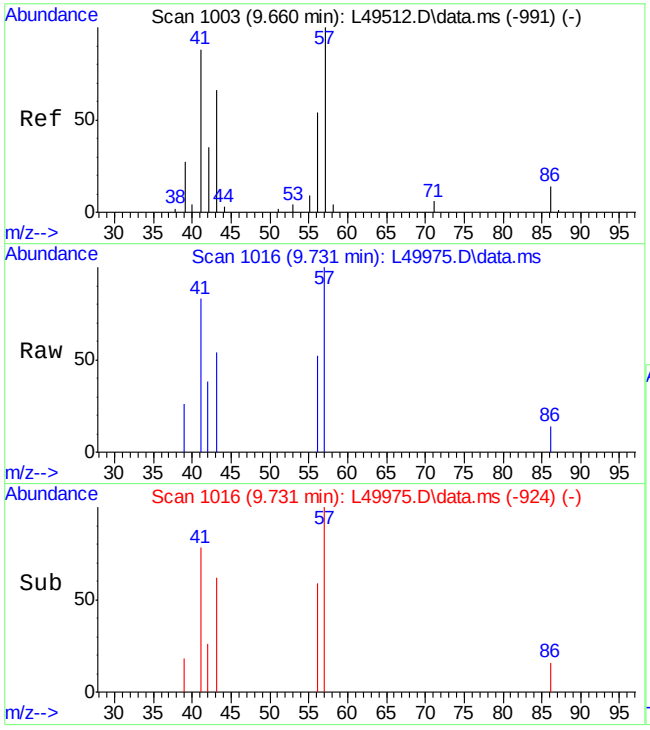




#11
Acetone
Concen: 241.39 ug/Kg
RT: 7.646 min Scan# 634
Delta R.T. 0.011 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 58 Resp: 681661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 363.4 | 428.1 | 468.1# |

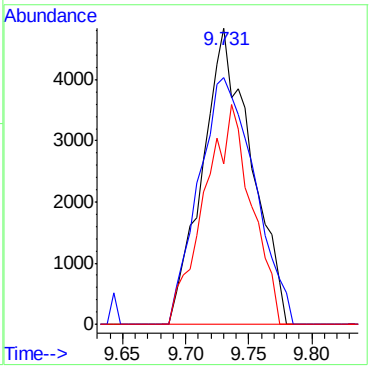


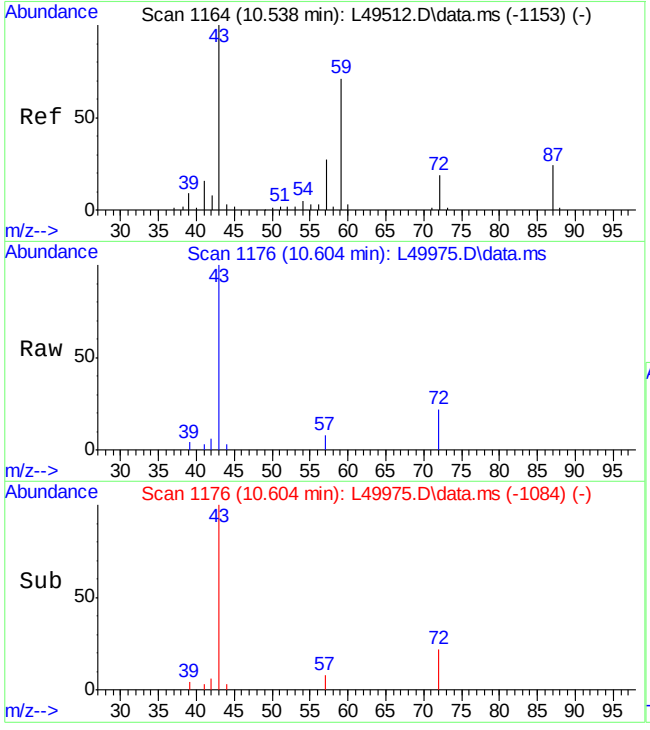



#24
Hexane
Concen: 4.16 ug/Kg
RT: 9.731 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 57 Resp: 130054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 95.7 | 73.8 | 110.8 |
| 43 | 71.9 | 56.6 | 84.8 |

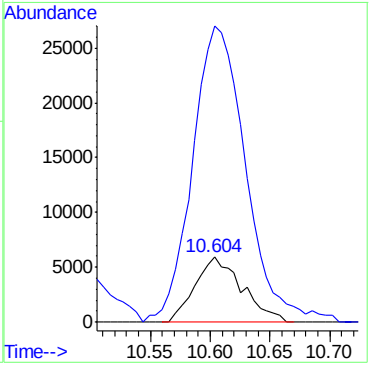


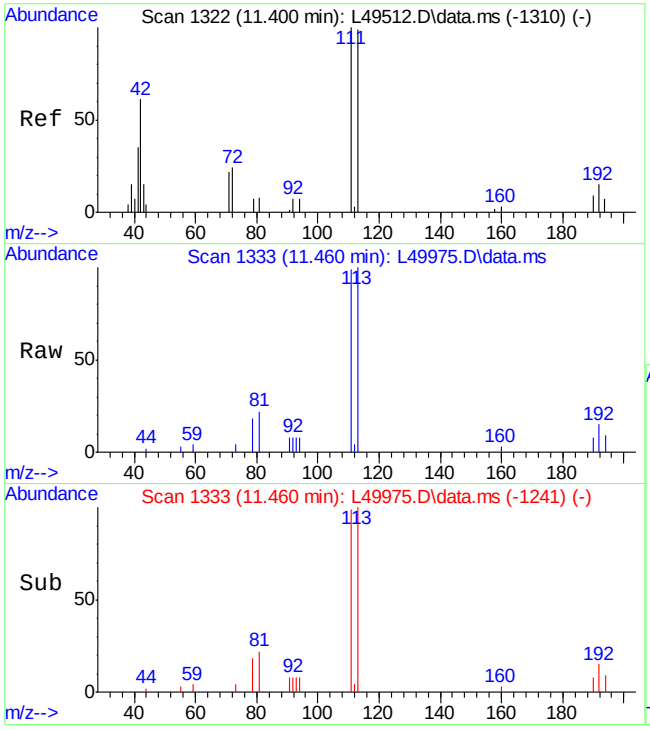




#30
2-Butanone (MEK)
Concen: 43.36 ug/Kg
RT: 10.604 min Scan# 1176
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 72 Resp: 161231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 518.1 | 573.4 | 613.4# |

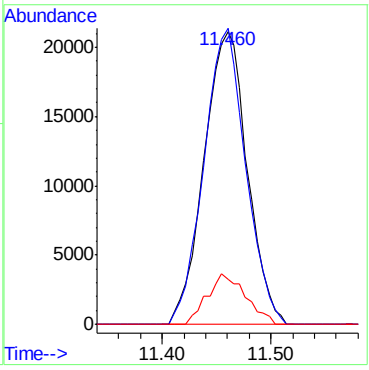


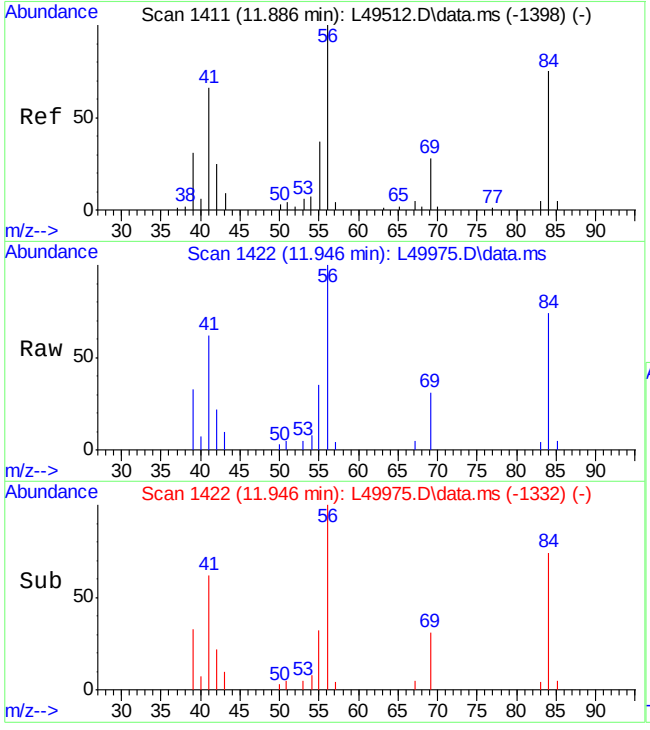



#36
Dibromofluoromethane
Concen: 19.61 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:111 Resp: 582150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.9 | 78.6 | 118.6 |
| 192 | 15.4 | 0.0 | 34.1 |

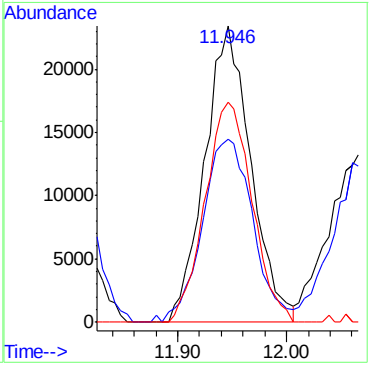


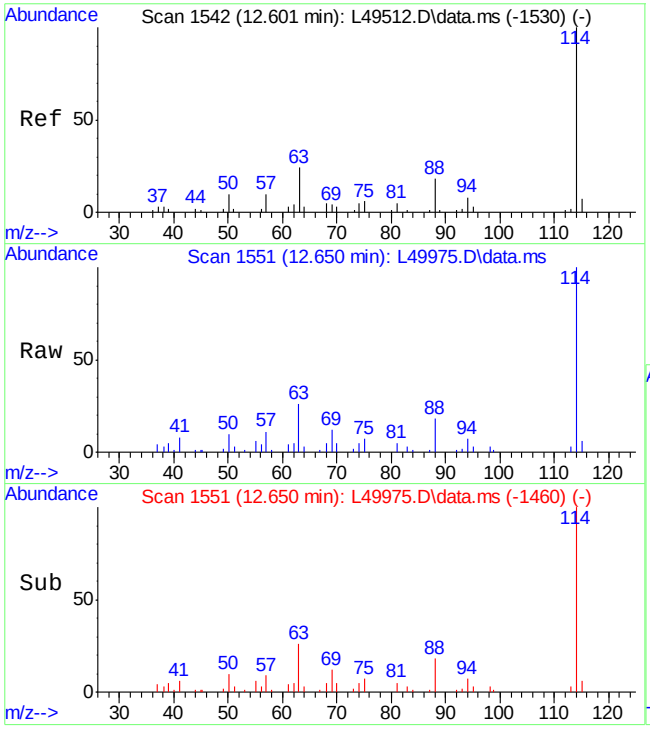




#38
Cyclohexane
Concen: 15.39 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 56 Resp: 687533

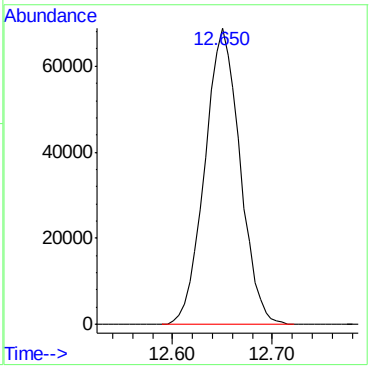
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 67.8 | 53.7 | 80.5 |
| 84 | 75.6 | 60.5 | 90.7 |

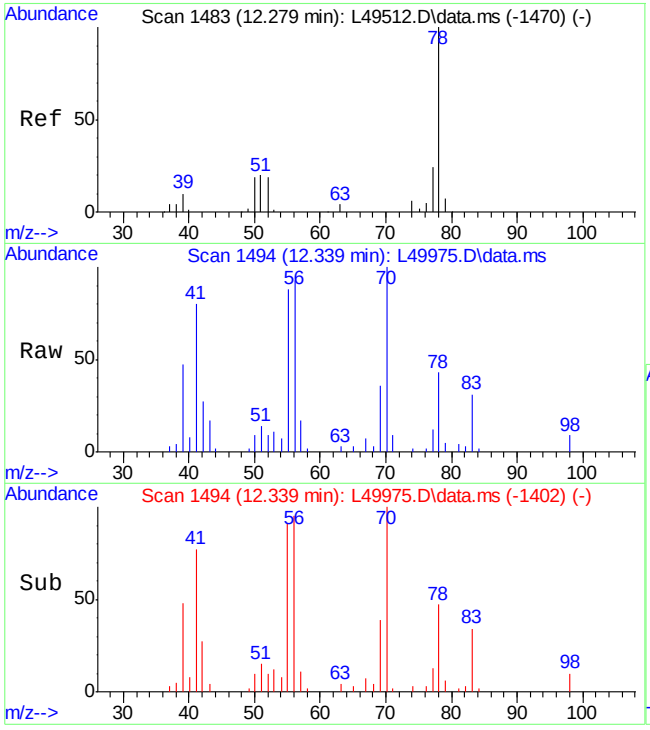





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

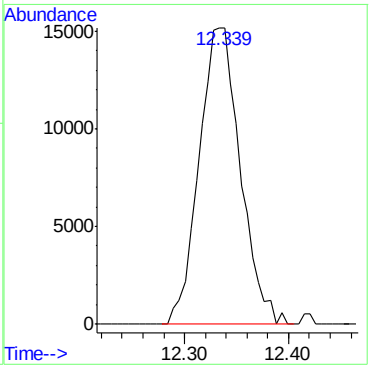
Tgt Ion:114 Resp: 1684444

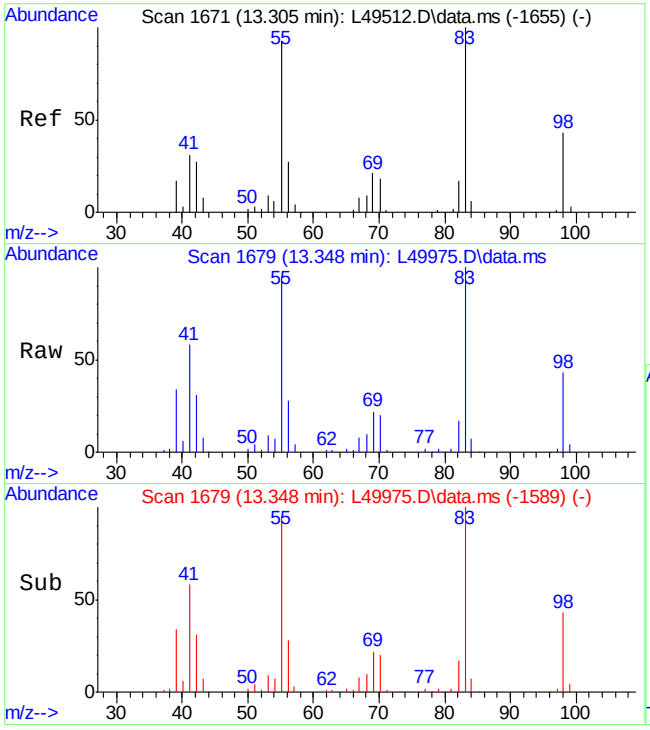



#45
Benzene
Concen: 3.35 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 78 Resp: 420151

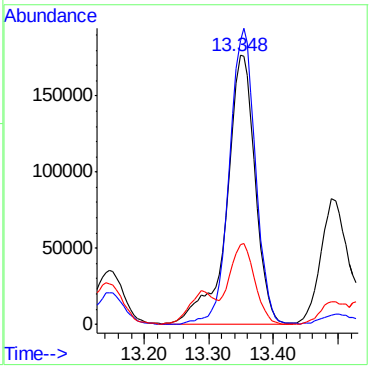


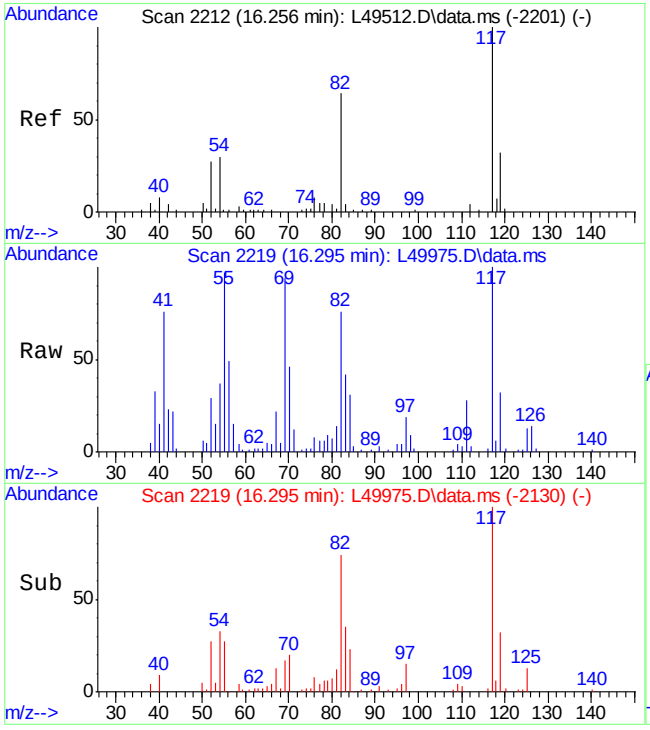



#48
Methylcyclohexane
Concen: 137.63 ug/Kg
RT: 13.348 min Scan# 1679
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 55 Resp: 5427786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 99.9 | 80.6 | 120.6 |
| 56 | 26.6 | 11.5 | 51.5 |

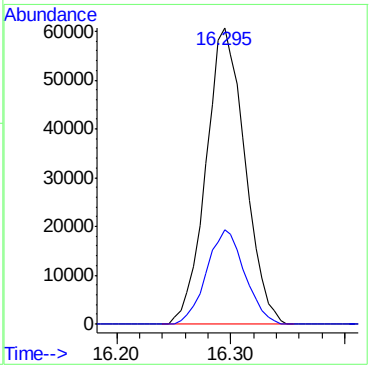


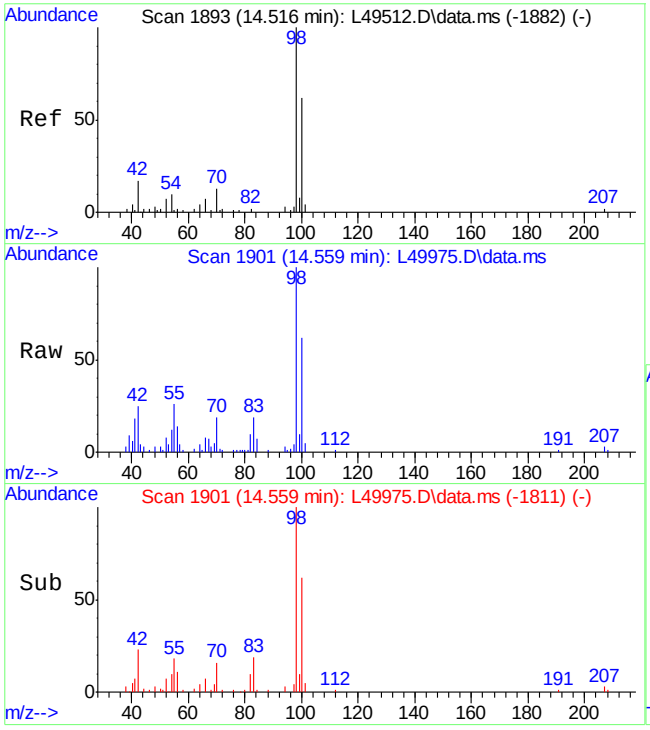




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:117 Resp: 1438757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.2 | 10.2 | 50.2 |

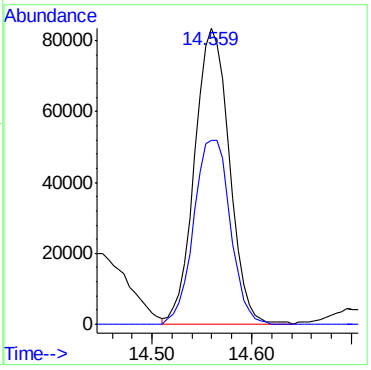


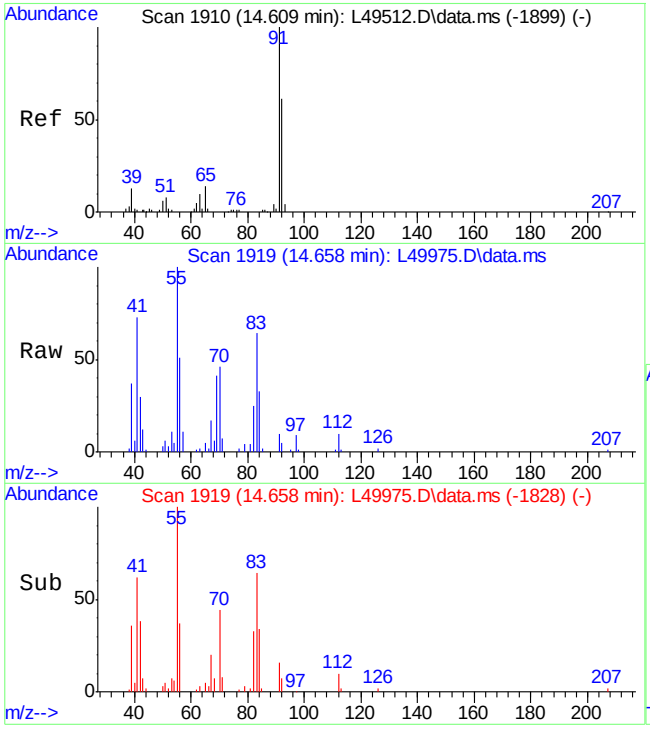



#56
Toluene-d8
Concen: 19.84 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 98 Resp: 2016299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 45.2 | 85.2 |

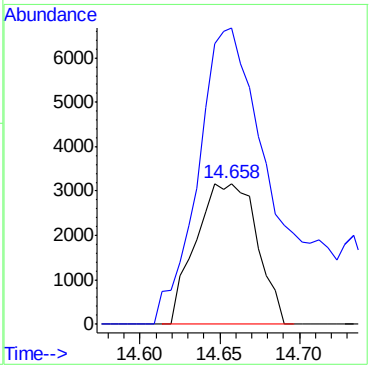


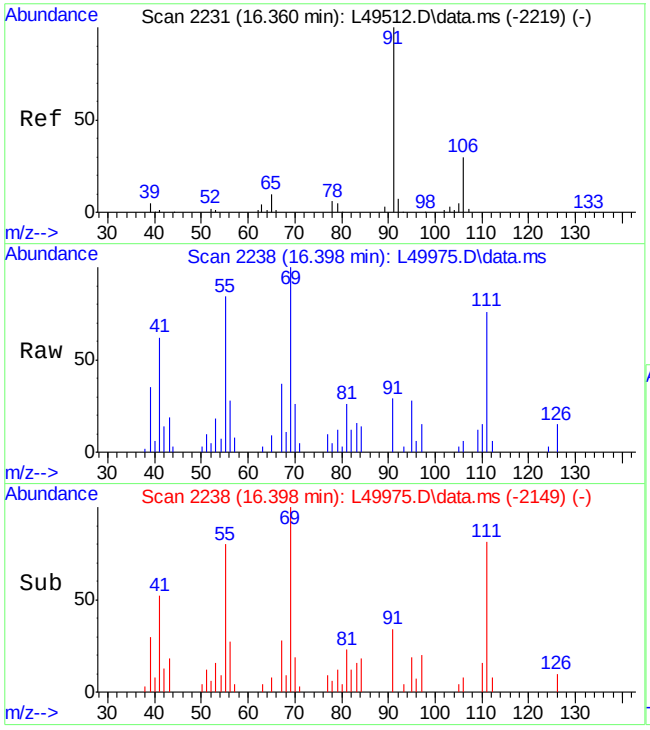




#57
Toluene
Concen: 1.18 ug/Kg
RT: 14.658 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 92 Resp: 84309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 260.9 | 149.2 | 189.2# |

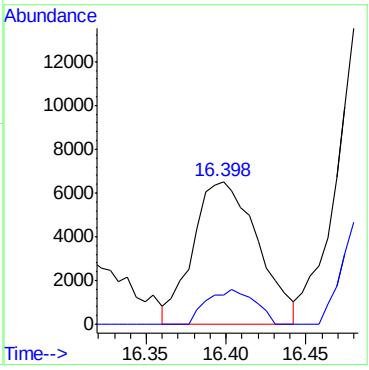


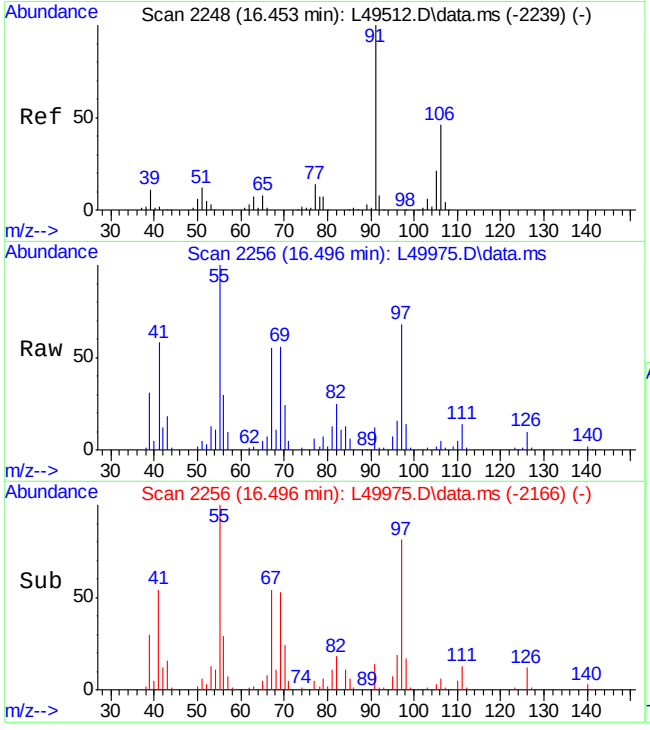



#67
Ethyl Benzene
Concen: 1.32 ug/Kg
RT: 16.398 min Scan# 2238
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 183749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 18.2 | 8.6 | 48.6 |

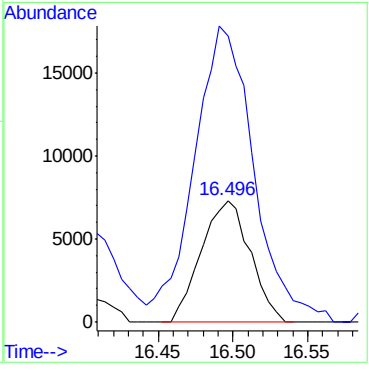


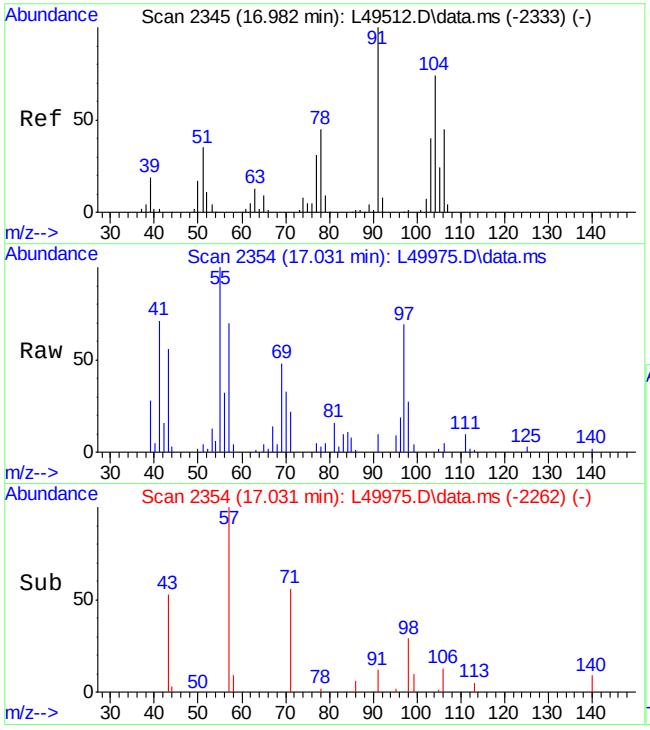




#68
Xylene, m+p
Concen: 3.36 ug/Kg
RT: 16.496 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:106 Resp: 165720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 298.2 | 202.1 | 242.1# |

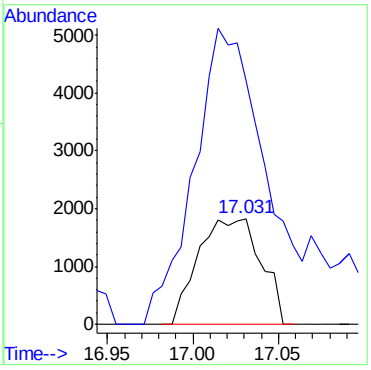


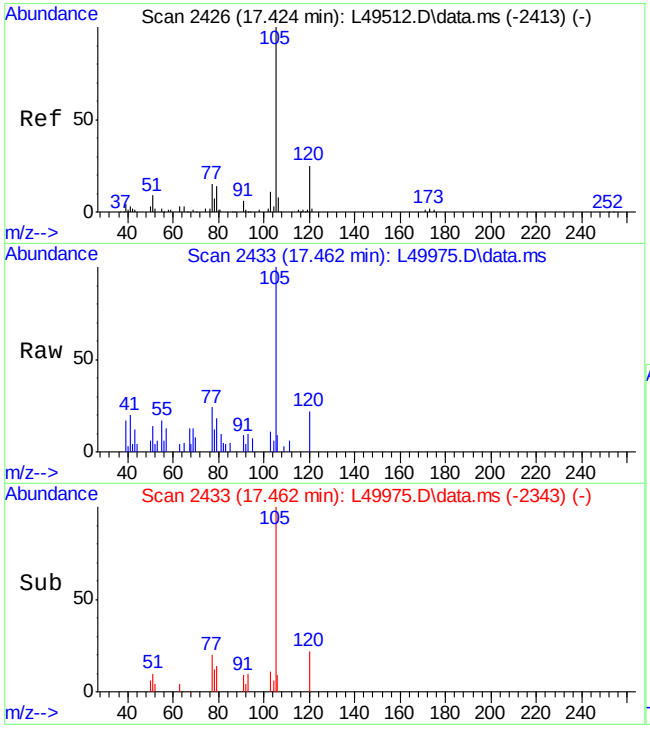



#69
Xylene, o
Concen: 0.93 ug/Kg
RT: 17.031 min Scan# 2354
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:106 Resp: 46871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 440.3 | 212.6 | 252.6# |

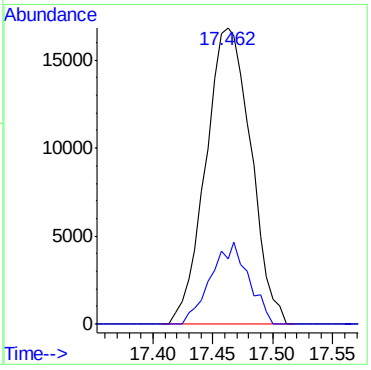


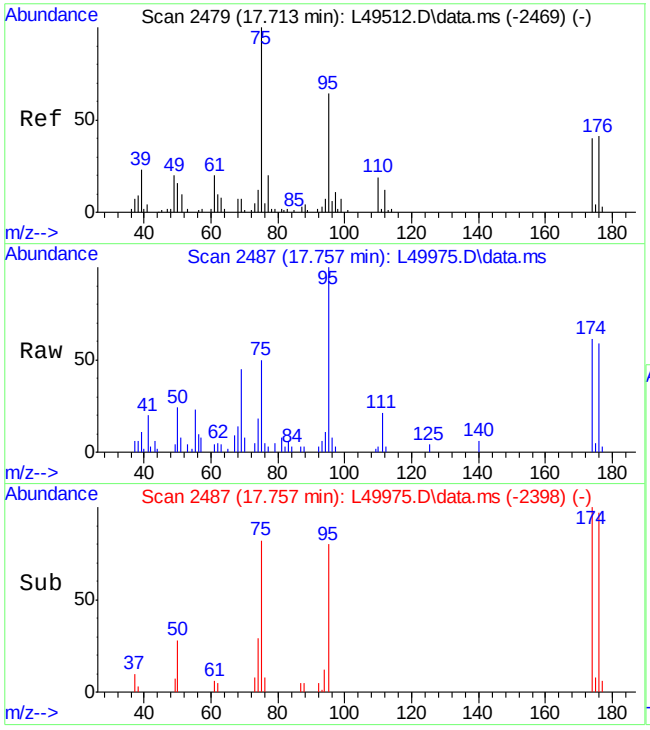




#73
Isopropylbenzene
Concen: 3.52 ug/Kg
RT: 17.462 min Scan# 2433
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 440831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 23.1 | 4.1 | 44.1 |

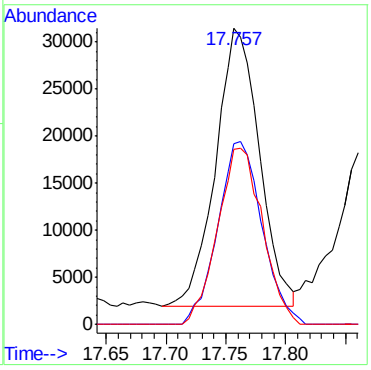


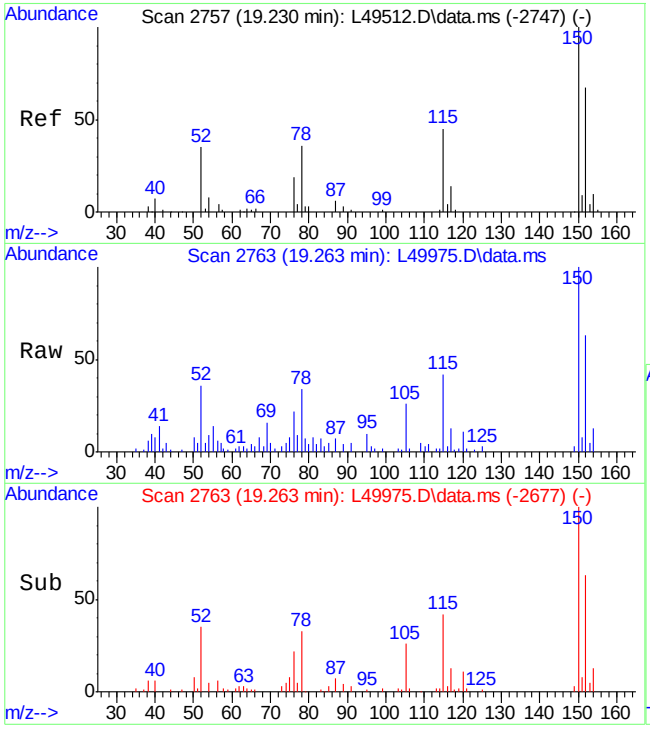



#74
4-Bromofluorobenzene
Concen: 17.80 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 95 Resp: 751828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 66.6 | 41.6 | 81.6 |
| 176 | 64.7 | 39.6 | 79.6 |

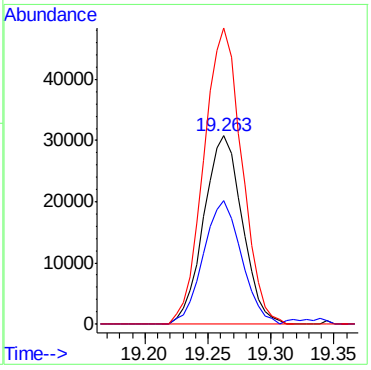


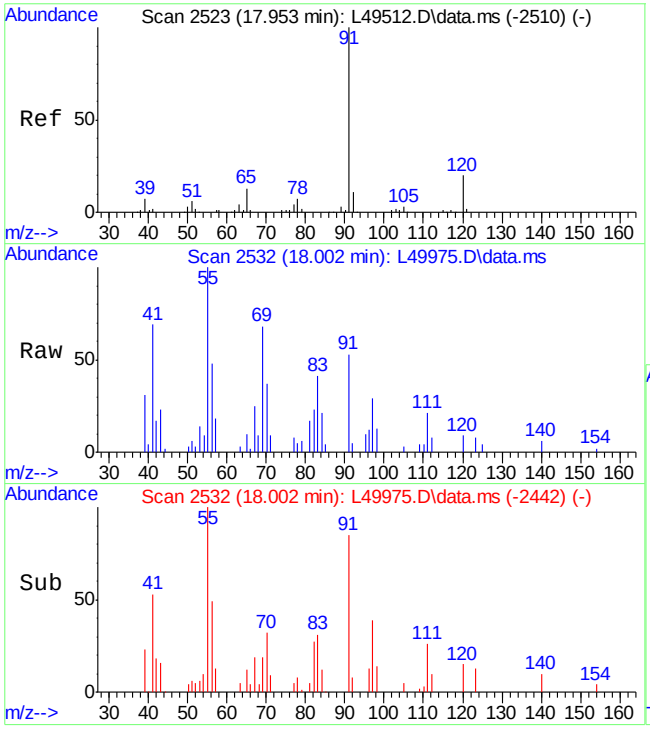




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:152 Resp: 650864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 48.8 | 88.8 |
| 150 | 155.6 | 174.3 | 214.3# |

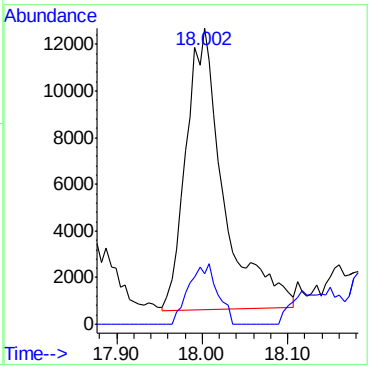


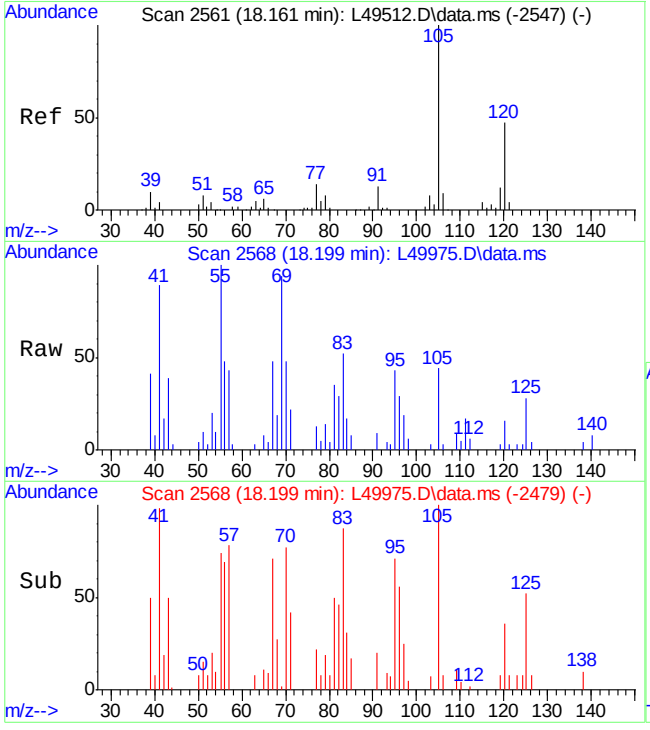



#79
n-Propylbenzene
Concen: 2.43 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 367476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 16.4 | 0.0 | 39.7 |

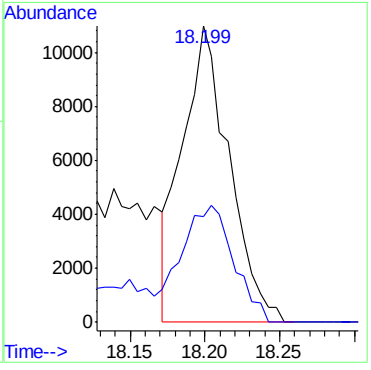


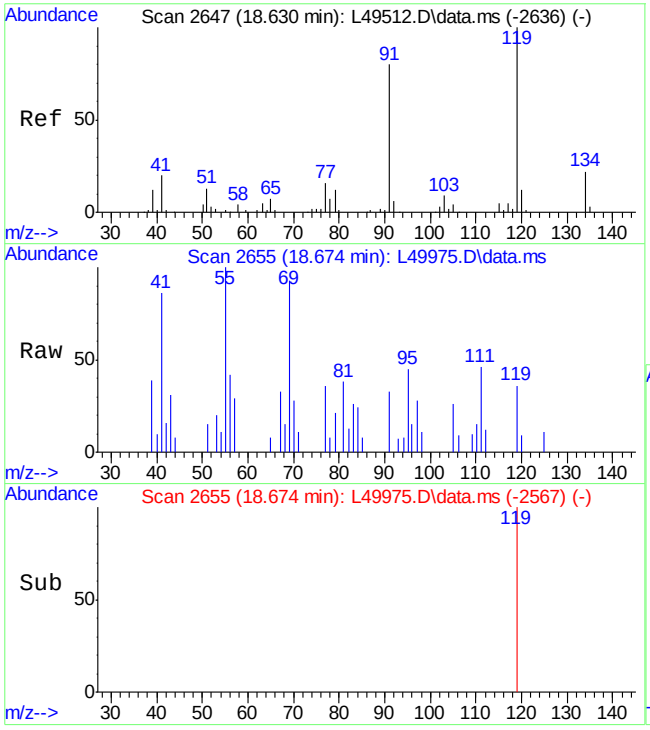




#81
1,3,5-Trimethylbenzene
Concen: 2.36 ug/Kg
RT: 18.199 min Scan# 2568
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 238977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.4 | 24.8 | 64.8 |

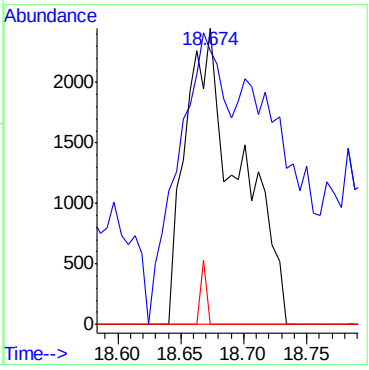


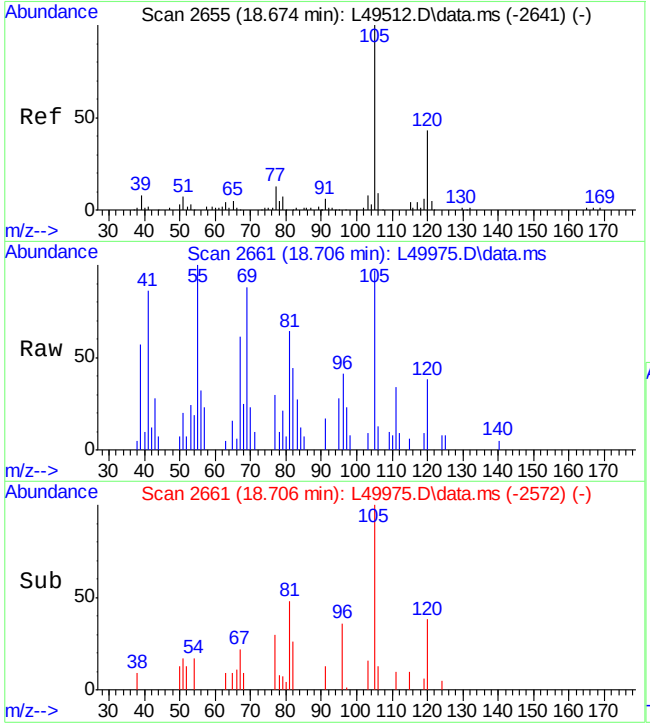



#84
tert-Butylbenzene
Concen: 0.76 ug/Kg
RT: 18.674 min Scan# 2655
Delta R.T. -0.019 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:119 Resp: 73740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 174.7 | 64.0 | 104.0# |
| 134 | 0.0 | 0.0 | 38.8 |

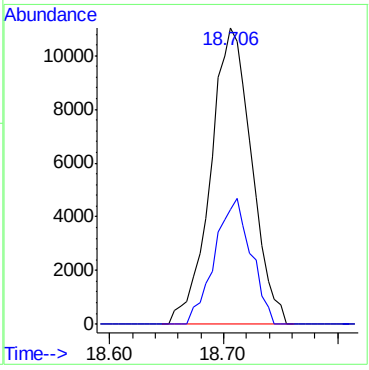


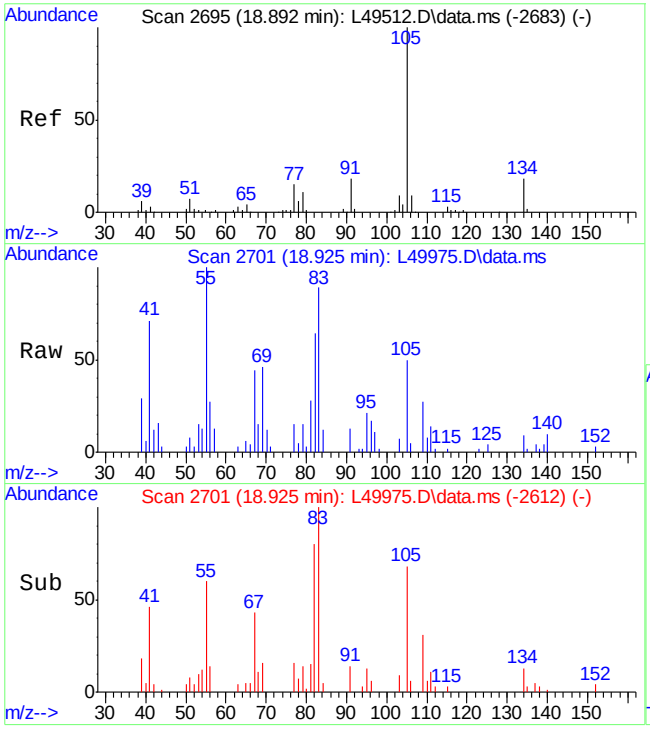




#86
1,2,4-Trimethylbenzene
Concen: 2.55 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 275098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 37.6 | 29.7 | 69.7 |

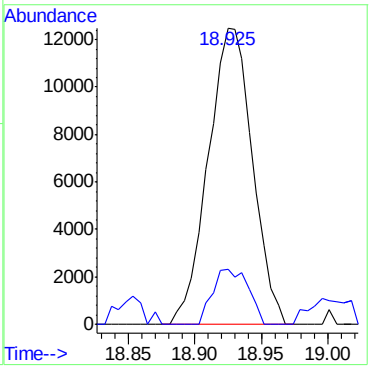


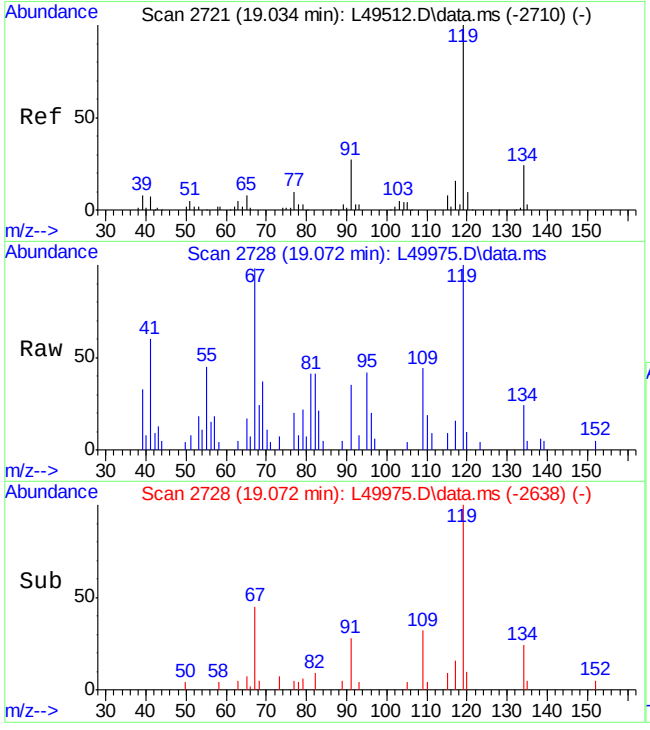



#87
sec-Butylbenzene
Concen: 2.27 ug/Kg
RT: 18.925 min Scan# 2701
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 290384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 14.9 | 0.0 | 37.0 |

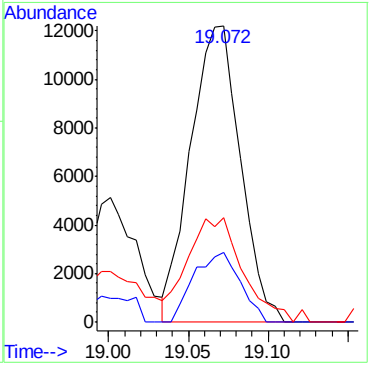


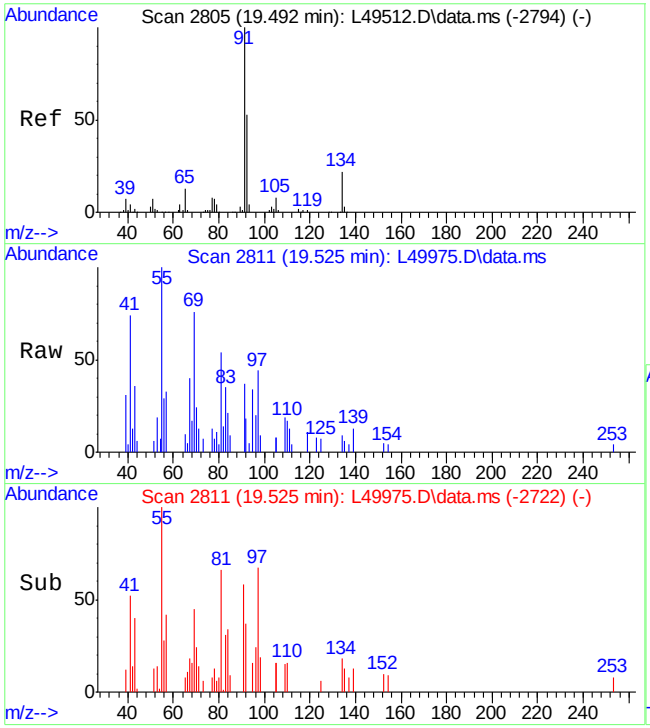




#88
p-Isopropyltoluene
Concen: 2.55 ug/Kg
RT: 19.072 min Scan# 2728
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:119 Resp: 265404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 21.9 | 3.9 | 43.9 |
| 91 | 39.5 | 8.5 | 48.5 |

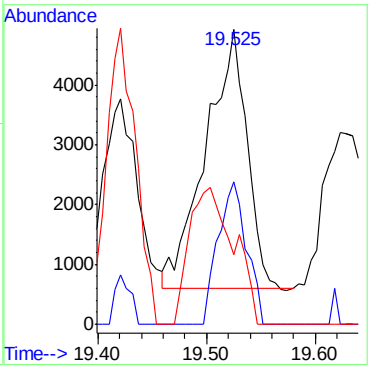


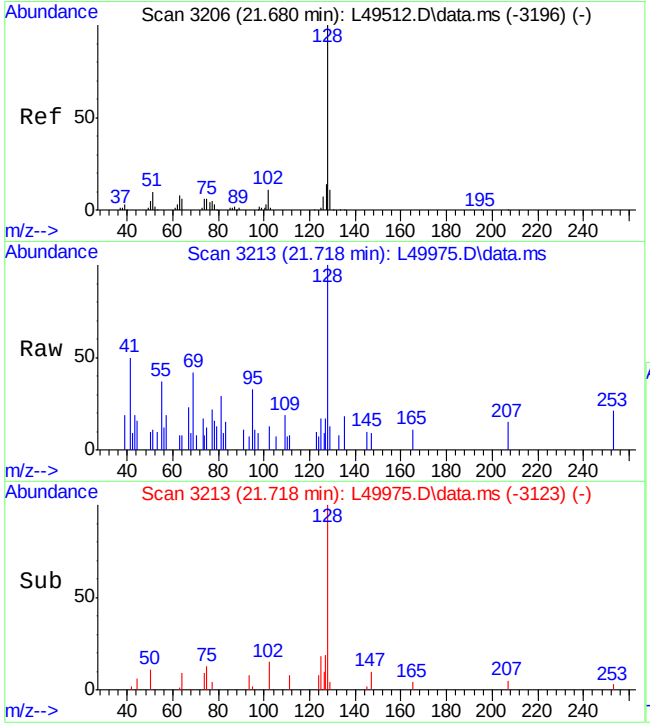



#92
n-Butylbenzene
Concen: 1.02 ug/Kg
RT: 19.525 min Scan# 2811
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 113972

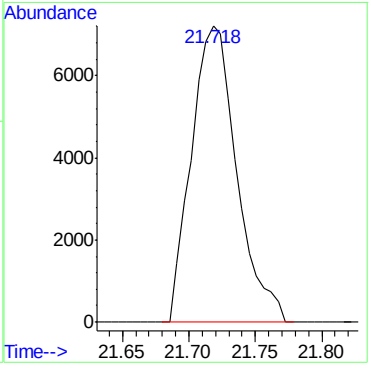
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 38.1 | 35.1 | 75.1 |
| 134 | 56.6 | 1.1 | 41.1# |

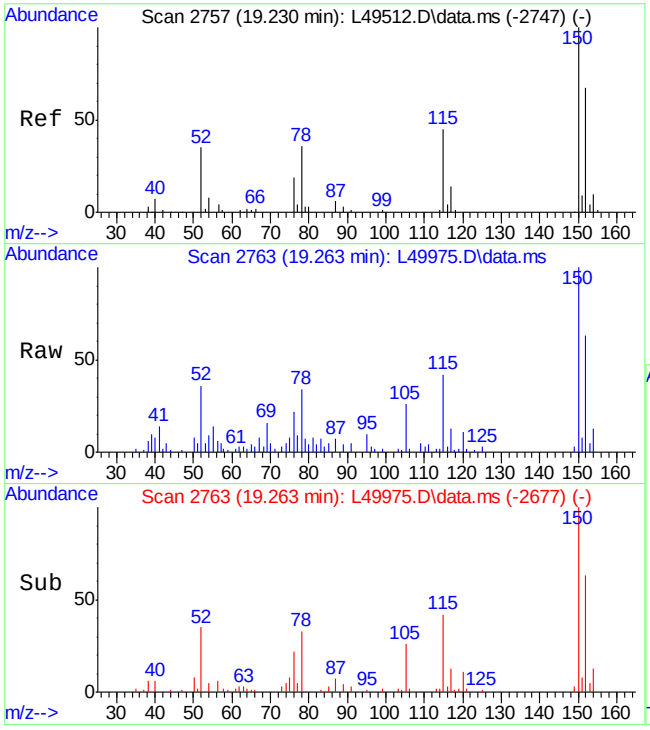



#97
Naphthalene
Concen: 1.73 ug/Kg
RT: 21.718 min Scan# 3213
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:128 Resp: 171192

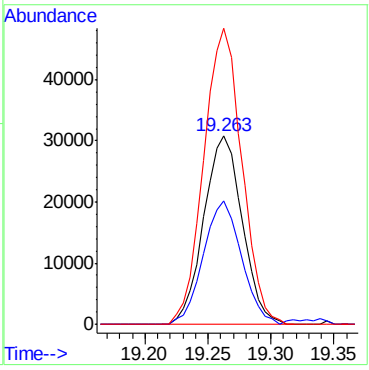


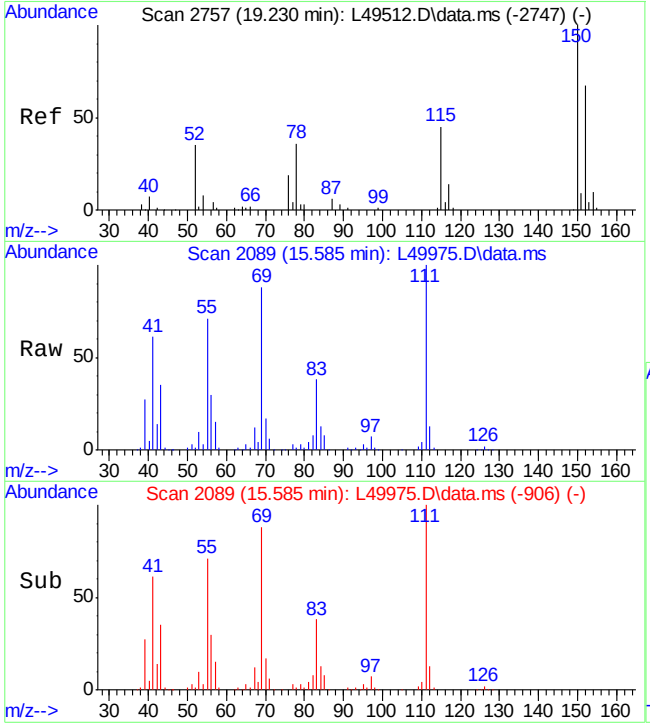



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:152 Resp: 650864

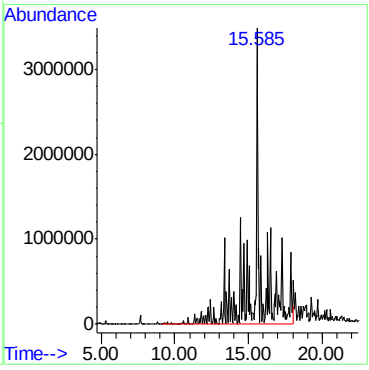
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 41.6 | 81.6 |
| 150 | 155.6 | 176.9 | 216.9# |




#100
TPH-GRO (C6-C10)
Concen: 5218.20 ug/Kg m
RT: 15.585 min Scan# 2089
Delta R.T. 1.060 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:TIC Resp:891905569



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49975.D
Acq On : 12 Jul 2016 2:15 pm
Operator : johannat
Sample : C46435-1R
Misc : MS1912,VL1499,5.66,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 02 10:59:40 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 991629 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1684444 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1438757 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 650864 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 650864 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 582150 | 19.61 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 98.05% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2016299 | 19.84 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.20% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 751828 | 17.80 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 89.00% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.646 | 58 | 681661 | 241.39 | ug/Kg# | 67 |
| 24) Hexane | 9.731 | 57 | 130054 | 4.16 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.604 | 72 | 161231 | 43.36 | ug/Kg# | 76 |
| 38) Cyclohexane | 11.946 | 56 | 687533 | 15.39 | ug/Kg | 100 |
| 45) Benzene | 12.339 | 78 | 420151 | 3.35 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.348 | 55 | 5427786 | 137.63 | ug/Kg | 97 |
| 57) Toluene | 14.658 | 92 | 84309 | 1.18 | ug/Kg# | 33 |
| 67) Ethyl Benzene | 16.398 | 91 | 183749 | 1.32 | ug/Kg | 80 |
| 68) Xylene, m+p | 16.496 | 106 | 165720 | 3.36 | ug/Kg# | 53 |
| 69) Xylene, o | 17.031 | 106 | 46871 | 0.93 | ug/Kg# | 1 |
| 73) Isopropylbenzene | 17.462 | 105 | 440831 | 3.52 | ug/Kg | 98 |
| 79) n-Propylbenzene | 18.002 | 91 | 367476 | 2.43 | ug/Kg | 93 |
| 81) 1,3,5-Trimethylbenzene | 18.199 | 105 | 238977 | 2.36 | ug/Kg | 99 |
| 84) tert-Butylbenzene | 18.674 | 119 | 73740 | 0.76 | ug/Kg# | 11 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 275098 | 2.55 | ug/Kg | 82 |
| 87) sec-Butylbenzene | 18.925 | 105 | 290384 | 2.27 | ug/Kg | 95 |
| 88) p-Isopropyltoluene | 19.072 | 119 | 265404 | 2.55 | ug/Kg | 87 |
| 92) n-Butylbenzene | 19.525 | 91 | 113972 | 1.02 | ug/Kg# | 62 |
| 97) Naphthalene | 21.718 | 128 | 171192 | 1.73 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 15.585 | TIC | 891905569m | 5218.20 | ug/Kg | |

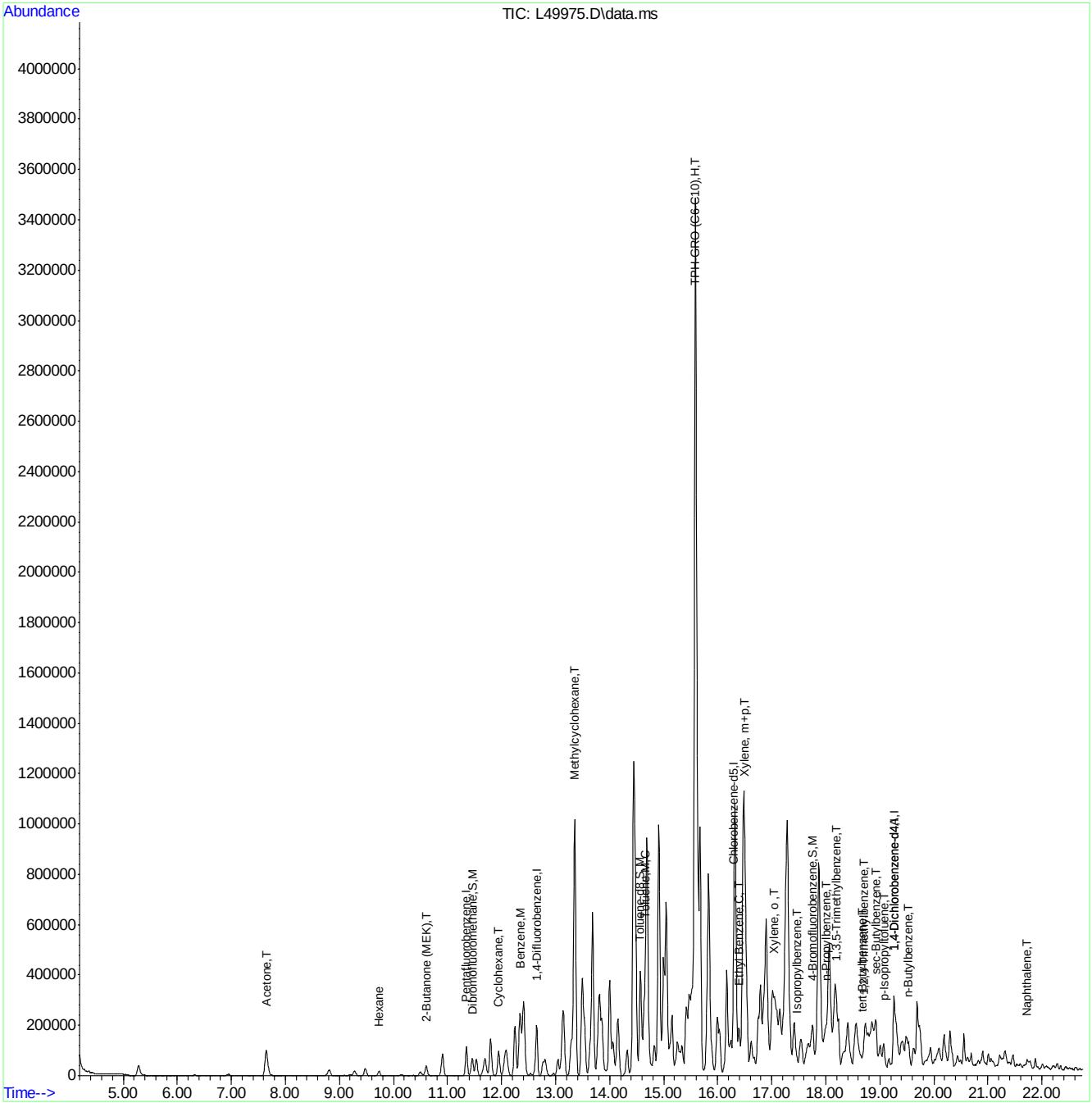
(#) = qualifier out of range (m) = manual integration (+) = signals summed

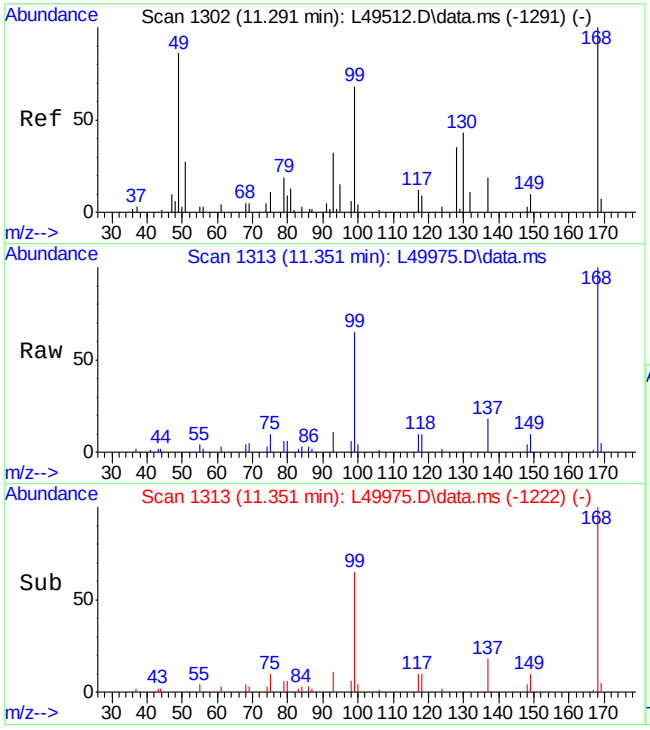
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49975.D
Acq On : 12 Jul 2016 2:15 pm
Operator : johannat
Sample : C46435-1R
Misc : MS1912,VL1499,5.66,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 02 10:59:40 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

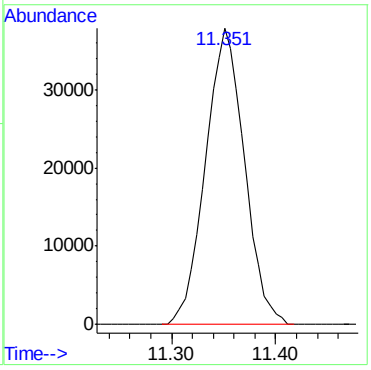


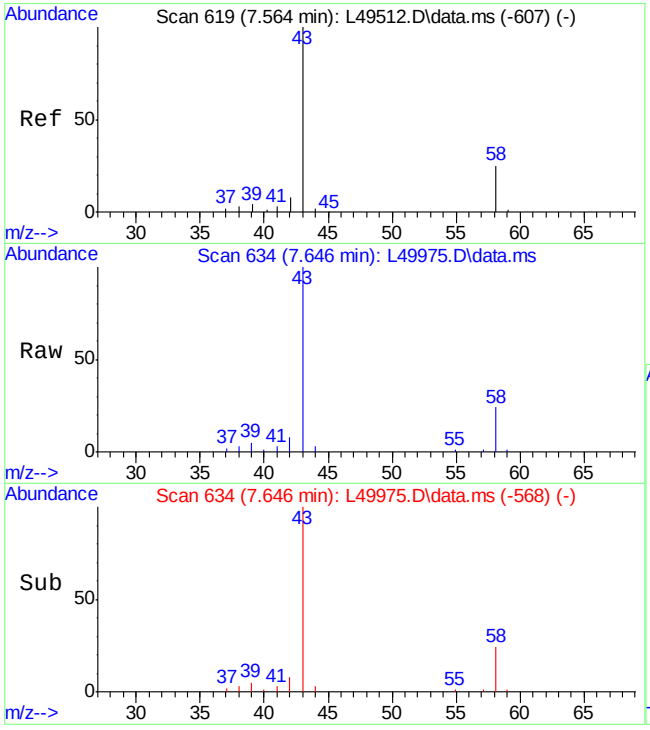





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:168 Resp: 991629

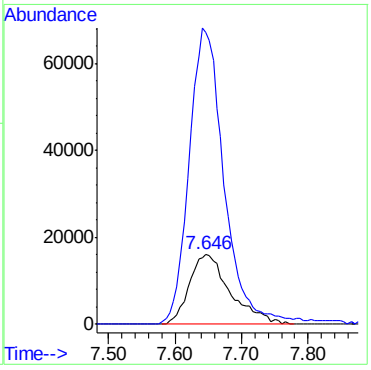


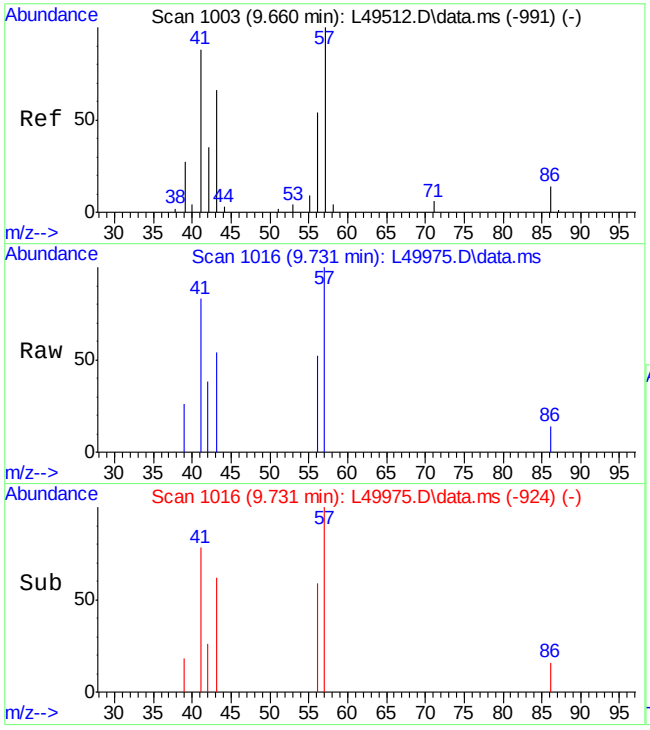




#11
Acetone
Concen: 241.39 ug/Kg
RT: 7.646 min Scan# 634
Delta R.T. 0.011 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 58 Resp: 681661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 363.4 | 428.1 | 468.1# |

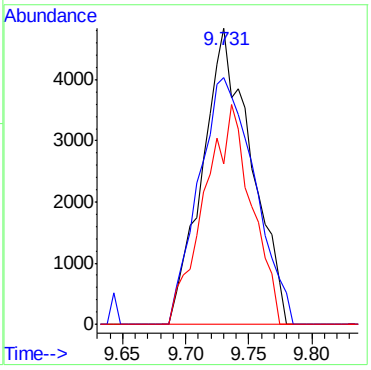


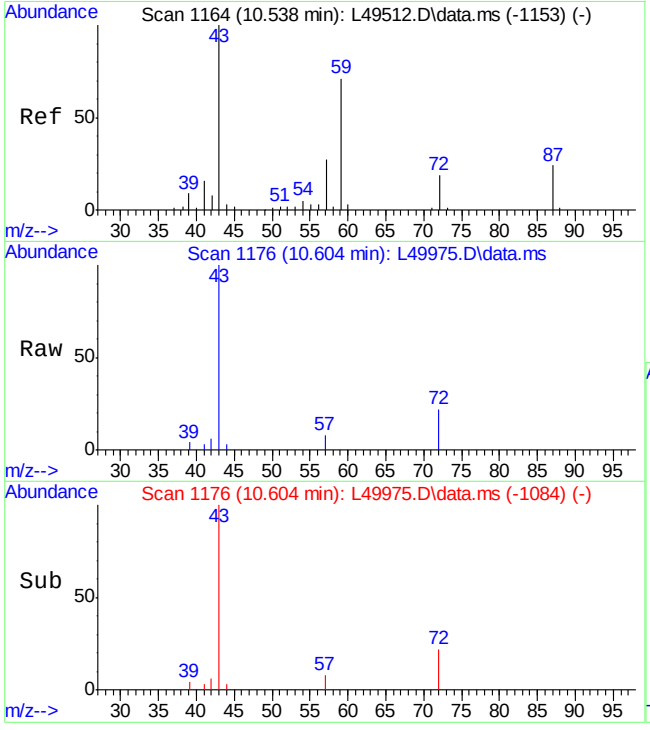



#24
Hexane
Concen: 4.16 ug/Kg
RT: 9.731 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 57 Resp: 130054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 95.7 | 73.8 | 110.8 |
| 43 | 71.9 | 56.6 | 84.8 |

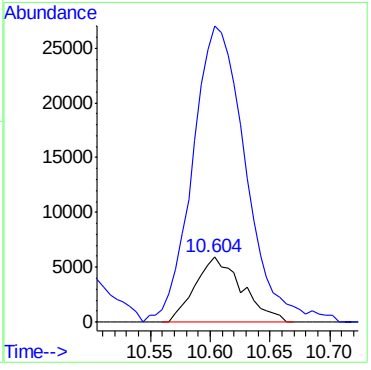


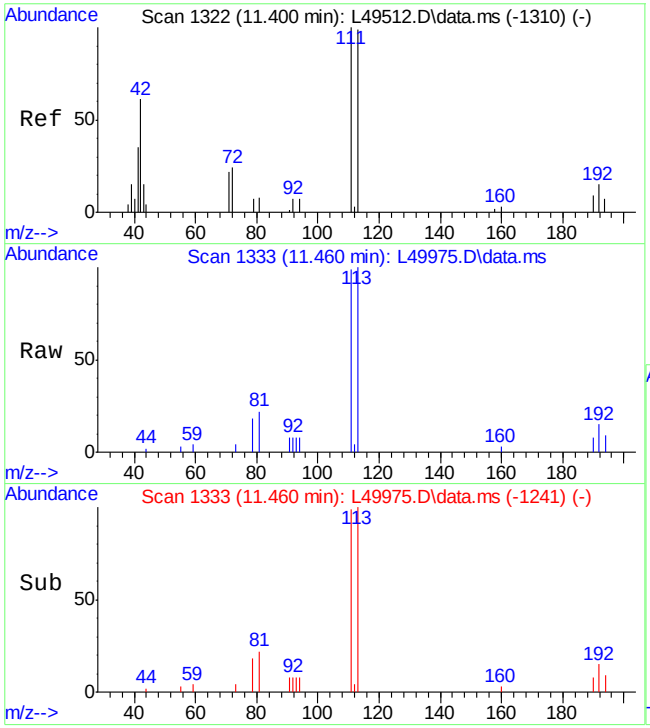




#30
2-Butanone (MEK)
Concen: 43.36 ug/Kg
RT: 10.604 min Scan# 1176
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 72 Resp: 161231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 518.1 | 573.4 | 613.4# |

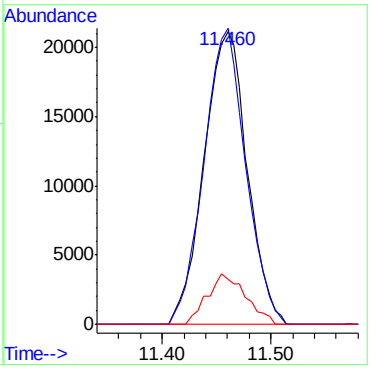


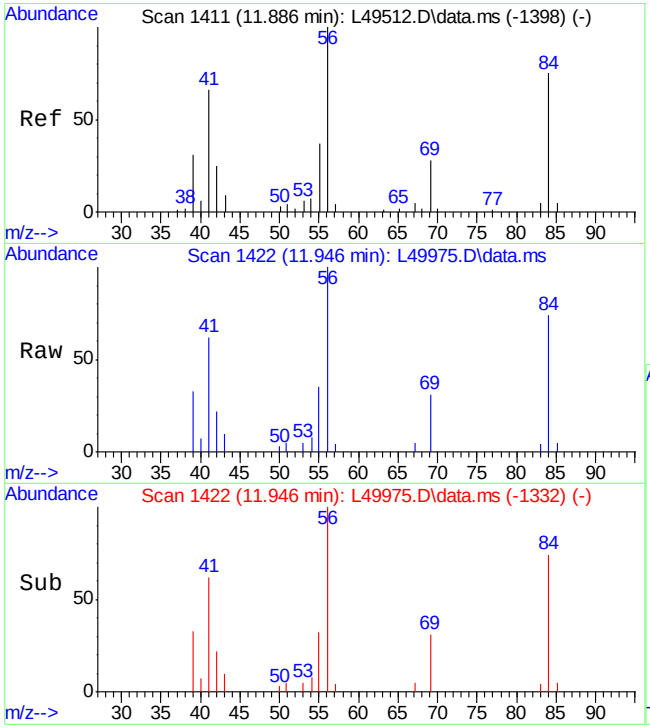



#36
Dibromofluoromethane
Concen: 19.61 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:111 Resp: 582150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.9 | 78.6 | 118.6 |
| 192 | 15.4 | 0.0 | 34.1 |

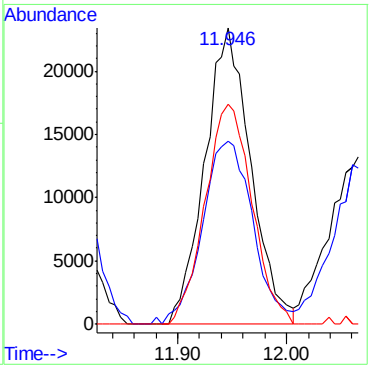


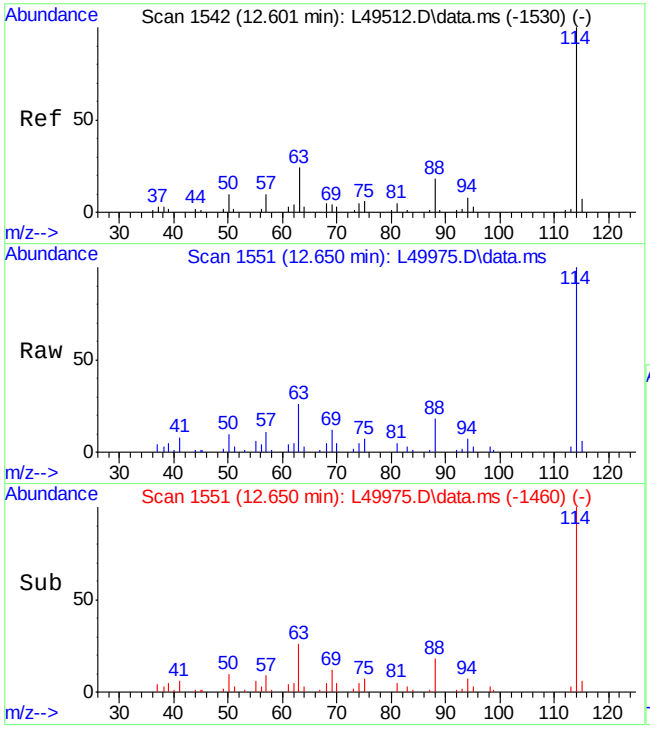




#38
Cyclohexane
Concen: 15.39 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 56 Resp: 687533

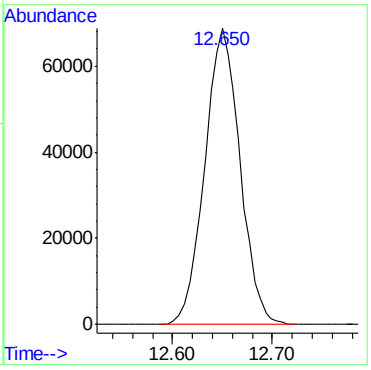
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 67.8 | 53.7 | 80.5 |
| 84 | 75.6 | 60.5 | 90.7 |

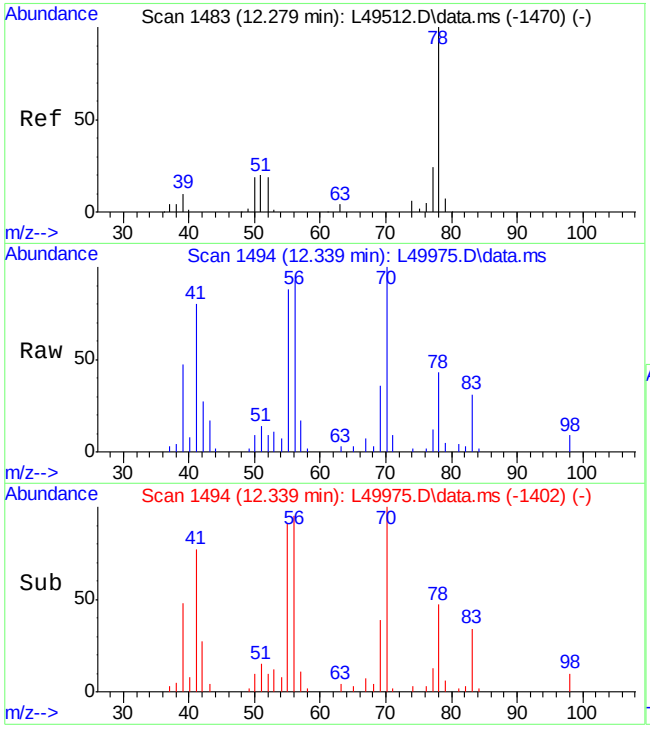





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

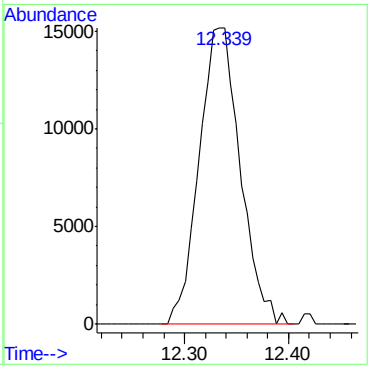
Tgt Ion:114 Resp: 1684444

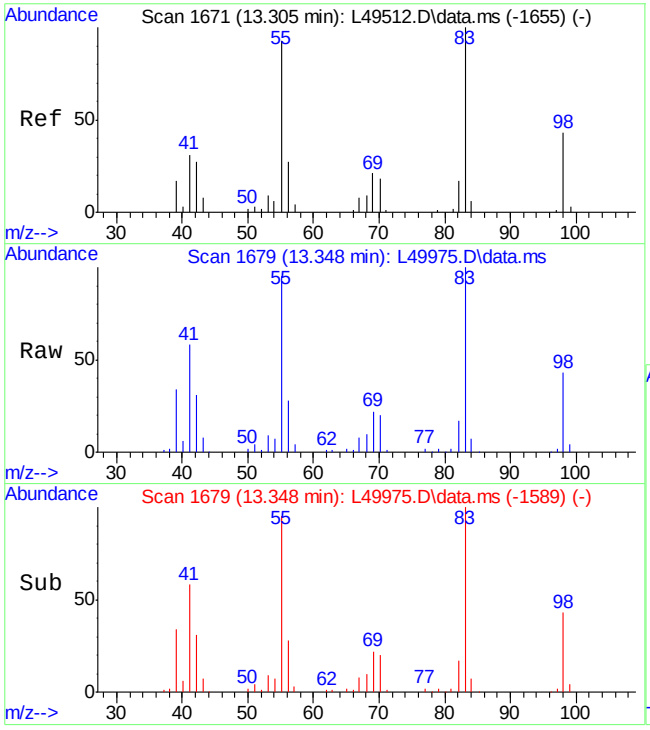



#45
Benzene
Concen: 3.35 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 78 Resp: 420151

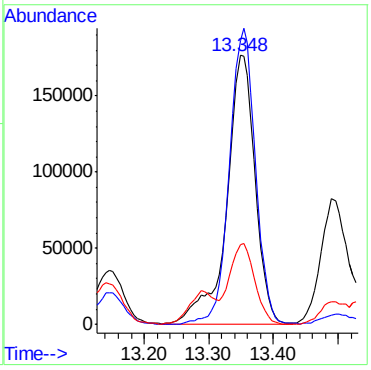


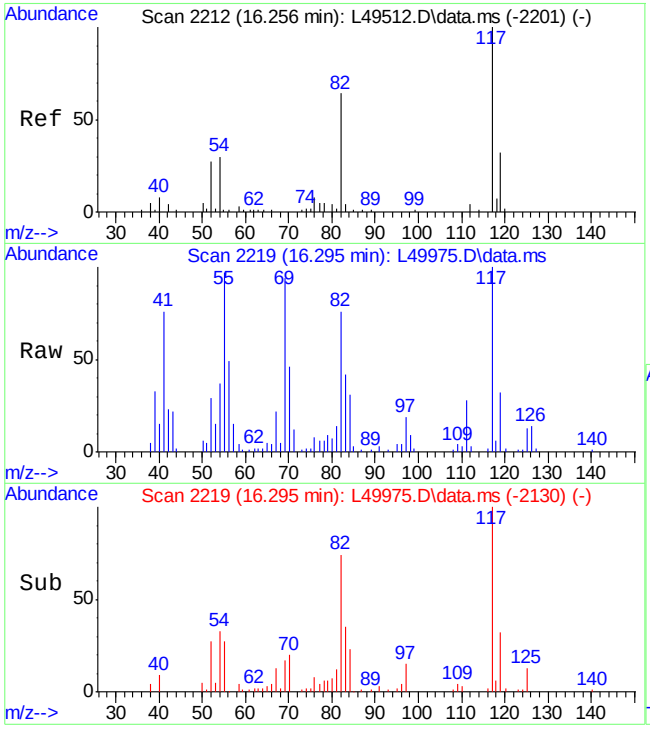



#48
Methylcyclohexane
Concen: 137.63 ug/Kg
RT: 13.348 min Scan# 1679
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 55 Resp: 5427786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 99.9 | 80.6 | 120.6 |
| 56 | 26.6 | 11.5 | 51.5 |

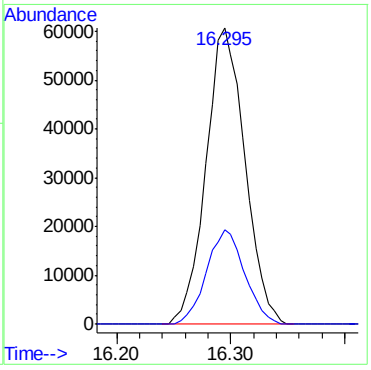


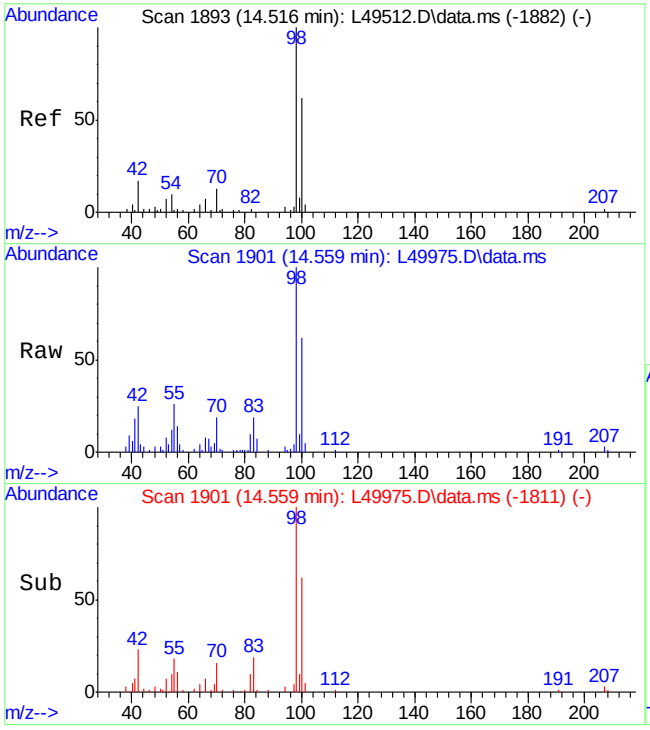




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:117 Resp: 1438757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.2 | 10.2 | 50.2 |

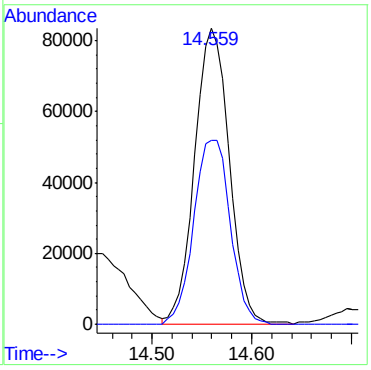


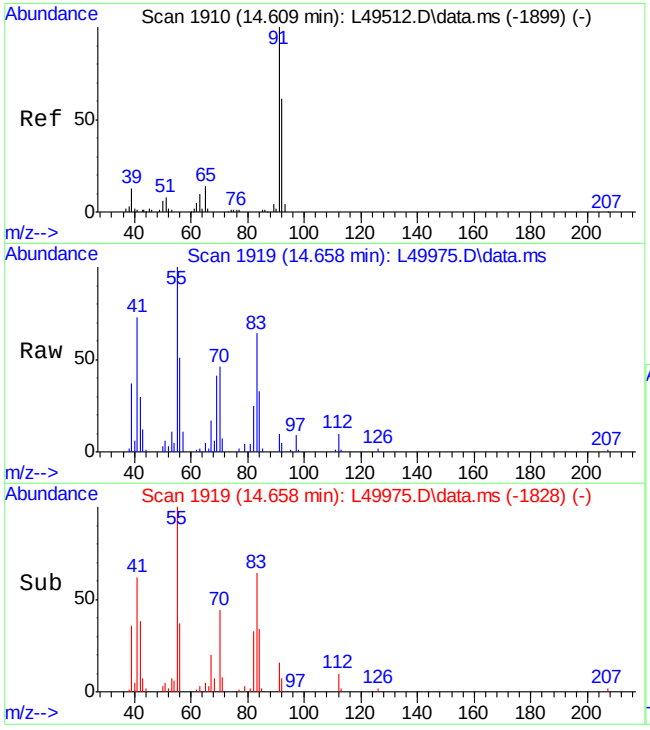



#56
Toluene-d8
Concen: 19.84 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 98 Resp: 2016299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 45.2 | 85.2 |

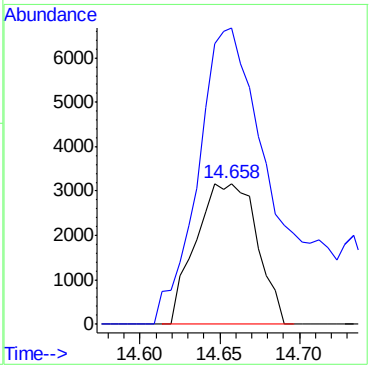


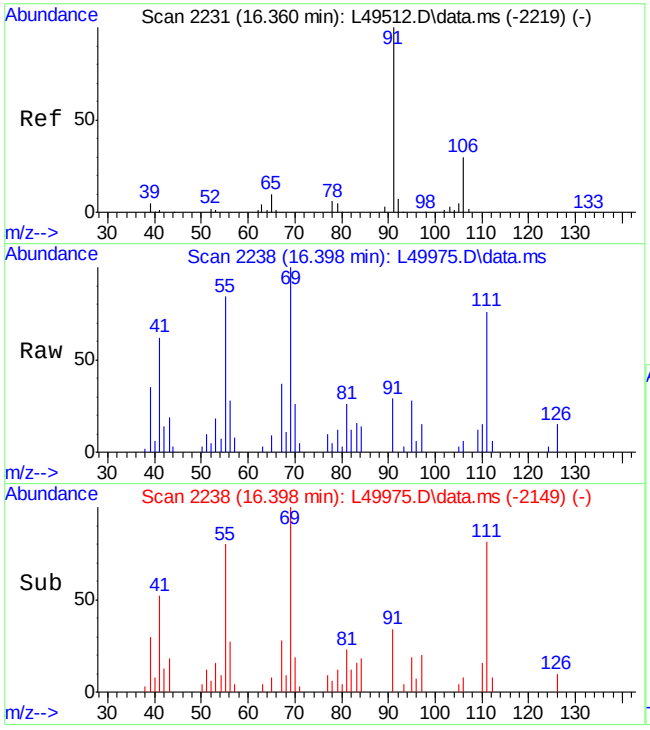




#57
Toluene
Concen: 1.18 ug/Kg
RT: 14.658 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 92 Resp: 84309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 260.9 | 149.2 | 189.2# |

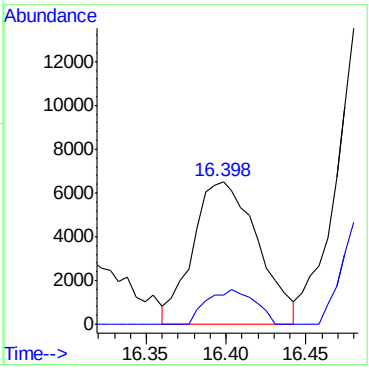


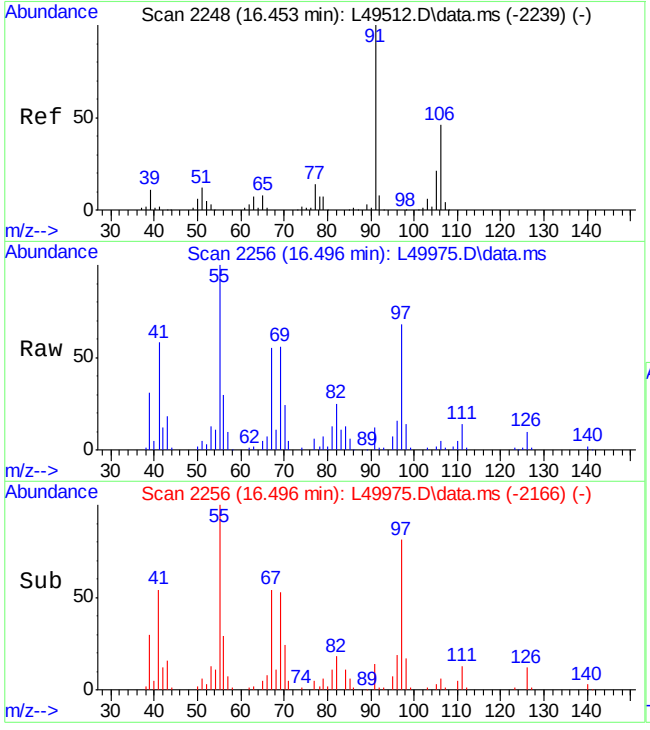



#67
Ethyl Benzene
Concen: 1.32 ug/Kg
RT: 16.398 min Scan# 2238
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 183749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 18.2 | 8.6 | 48.6 |

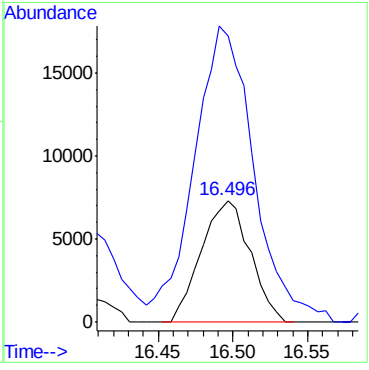


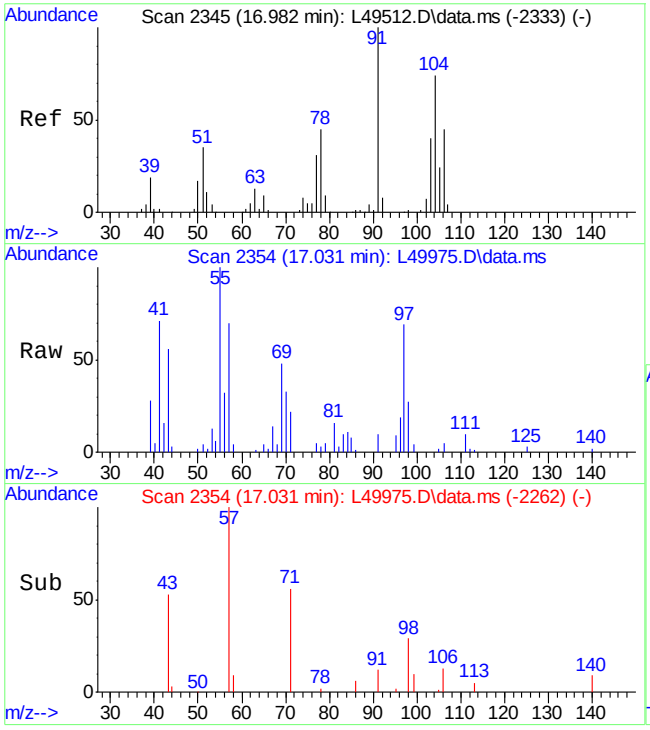




#68
Xylene, m+p
Concen: 3.36 ug/Kg
RT: 16.496 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:106 Resp: 165720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 298.2 | 202.1 | 242.1# |

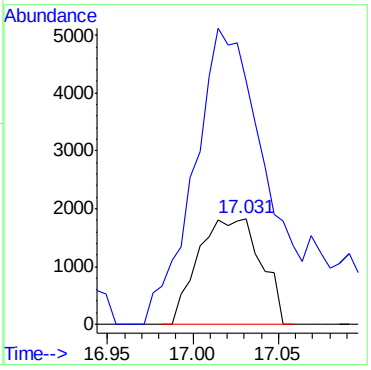


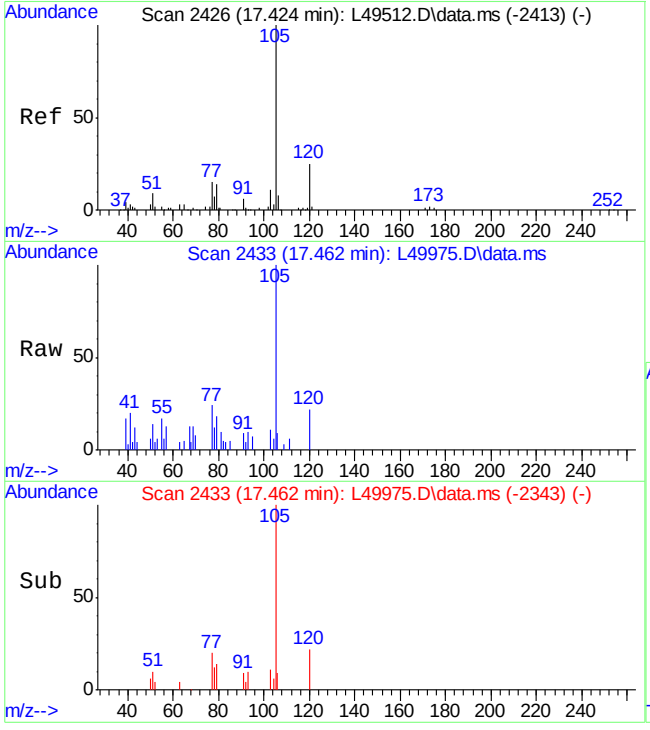



#69
Xylene, o
Concen: 0.93 ug/Kg
RT: 17.031 min Scan# 2354
Delta R.T. 0.000 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:106 Resp: 46871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 440.3 | 212.6 | 252.6# |

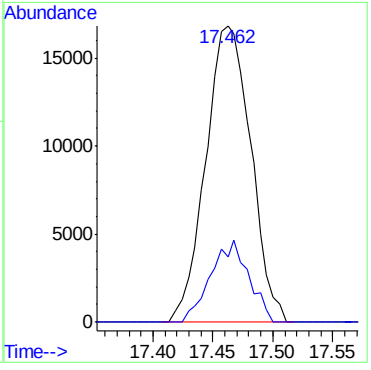


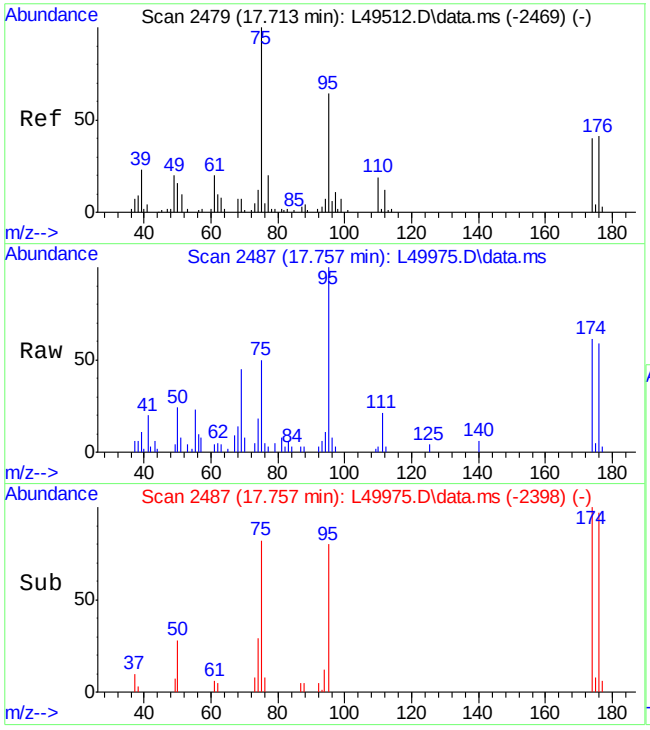




#73
Isopropylbenzene
Concen: 3.52 ug/Kg
RT: 17.462 min Scan# 2433
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 440831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 23.1 | 4.1 | 44.1 |

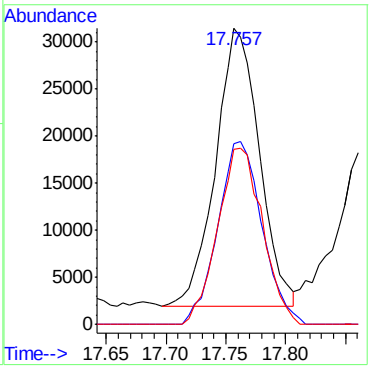


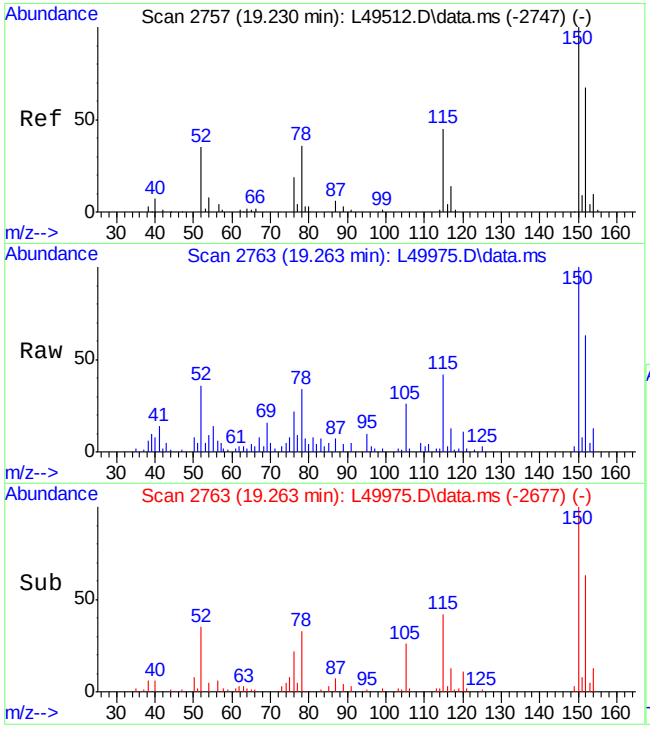



#74
4-Bromofluorobenzene
Concen: 17.80 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 95 Resp: 751828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 66.6 | 41.6 | 81.6 |
| 176 | 64.7 | 39.6 | 79.6 |

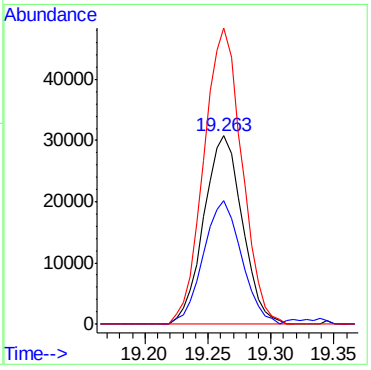


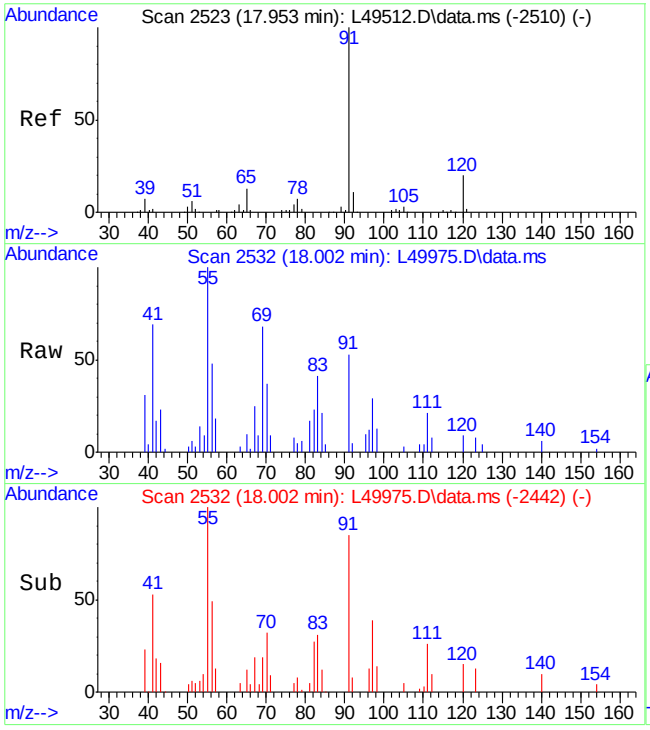




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:152 Resp: 650864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 48.8 | 88.8 |
| 150 | 155.6 | 174.3 | 214.3# |

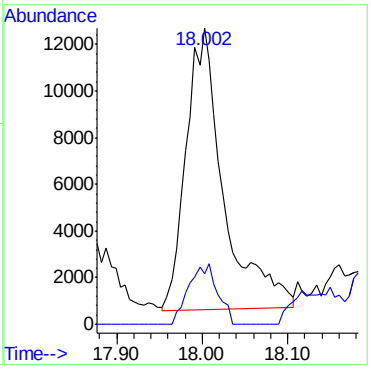


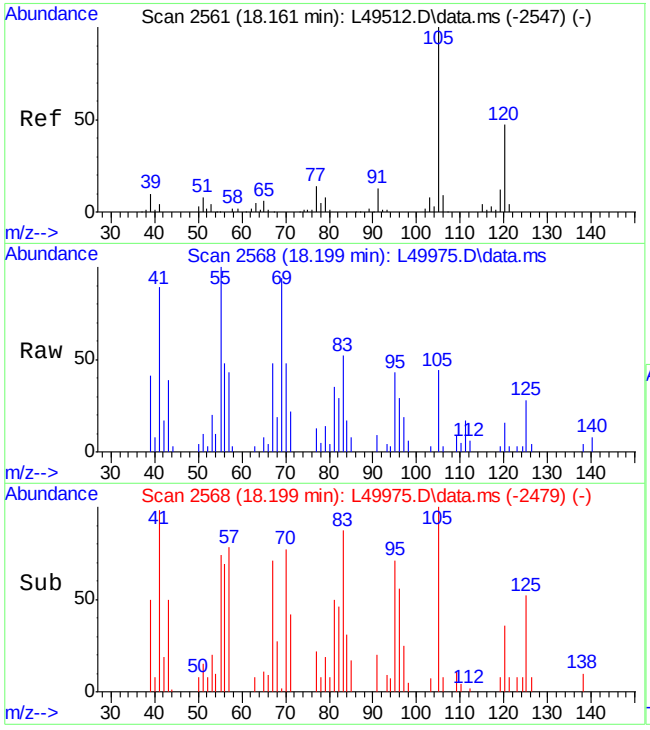



#79
n-Propylbenzene
Concen: 2.43 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 367476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 16.4 | 0.0 | 39.7 |

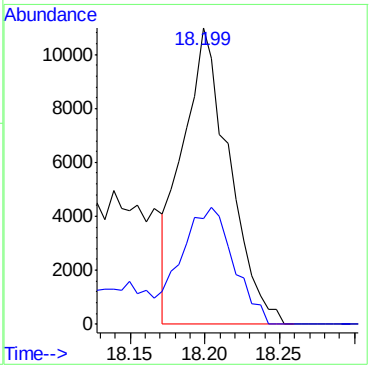


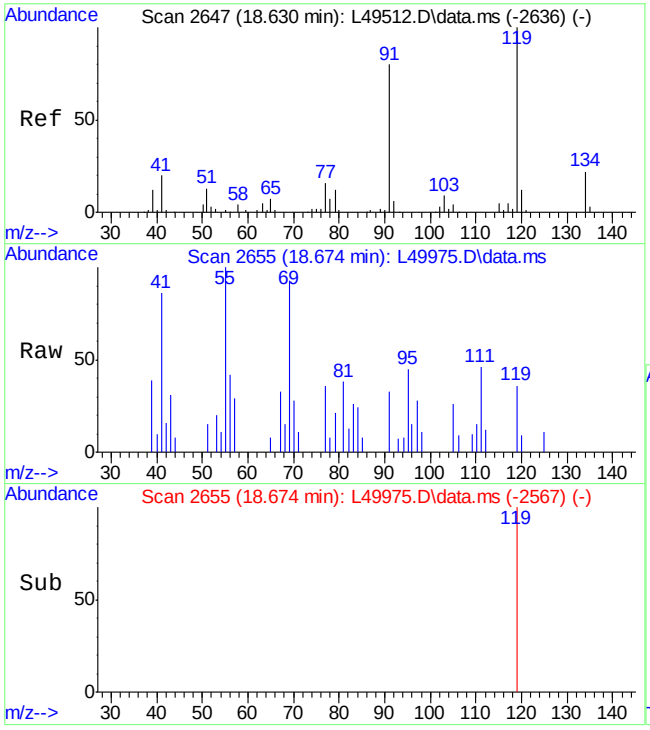




#81
1,3,5-Trimethylbenzene
Concen: 2.36 ug/Kg
RT: 18.199 min Scan# 2568
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 238977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.4 | 24.8 | 64.8 |

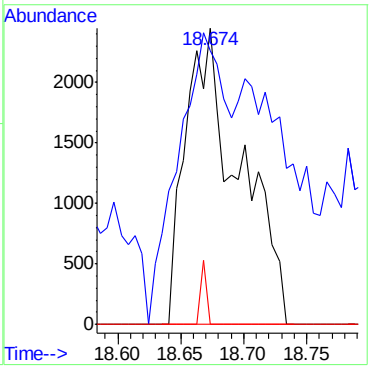


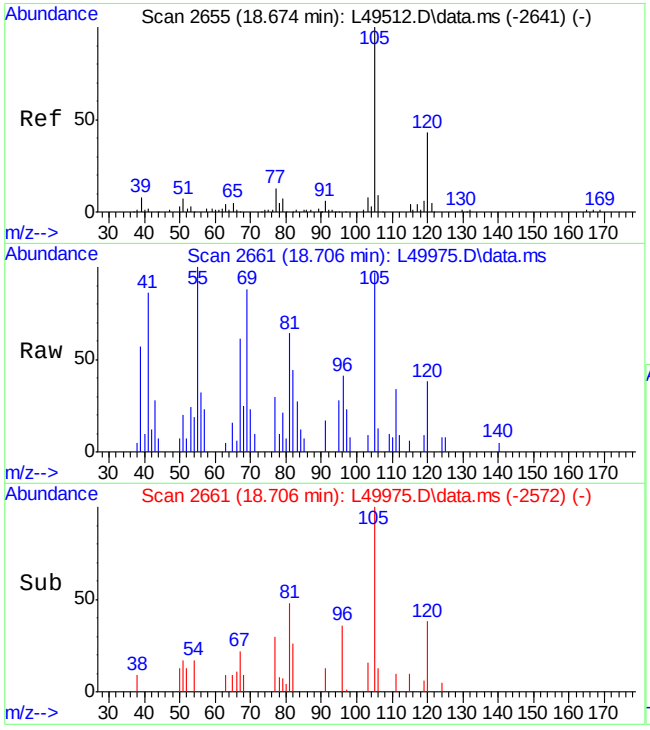



#84
tert-Butylbenzene
Concen: 0.76 ug/Kg
RT: 18.674 min Scan# 2655
Delta R.T. -0.019 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:119 Resp: 73740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 174.7 | 64.0 | 104.0# |
| 134 | 0.0 | 0.0 | 38.8 |

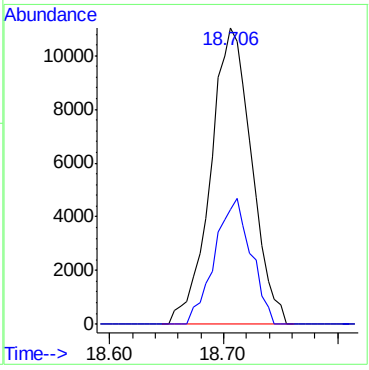


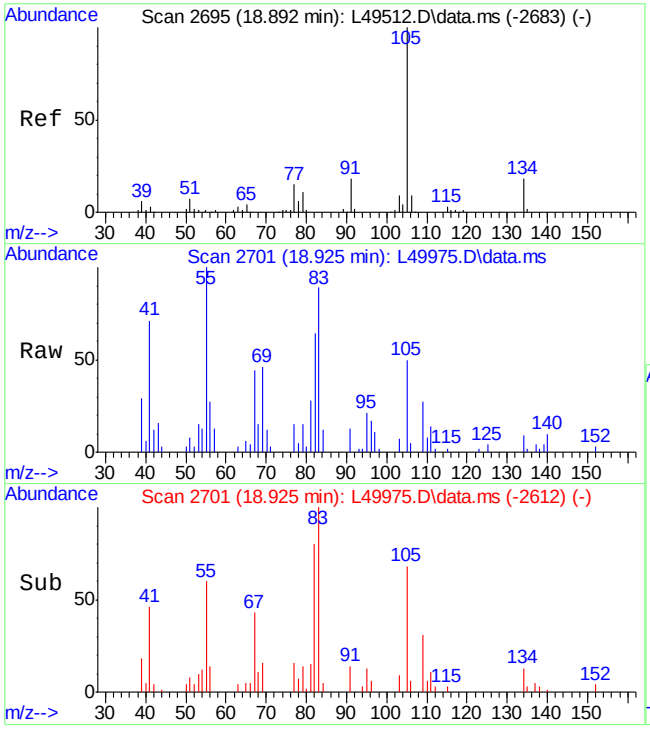




#86
1,2,4-Trimethylbenzene
Concen: 2.55 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 275098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 37.6 | 29.7 | 69.7 |

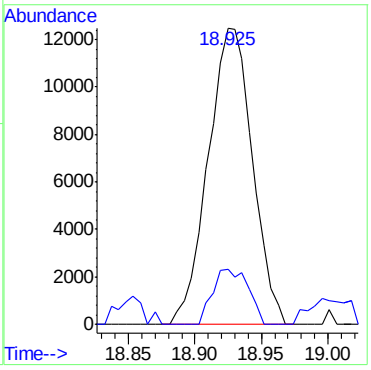


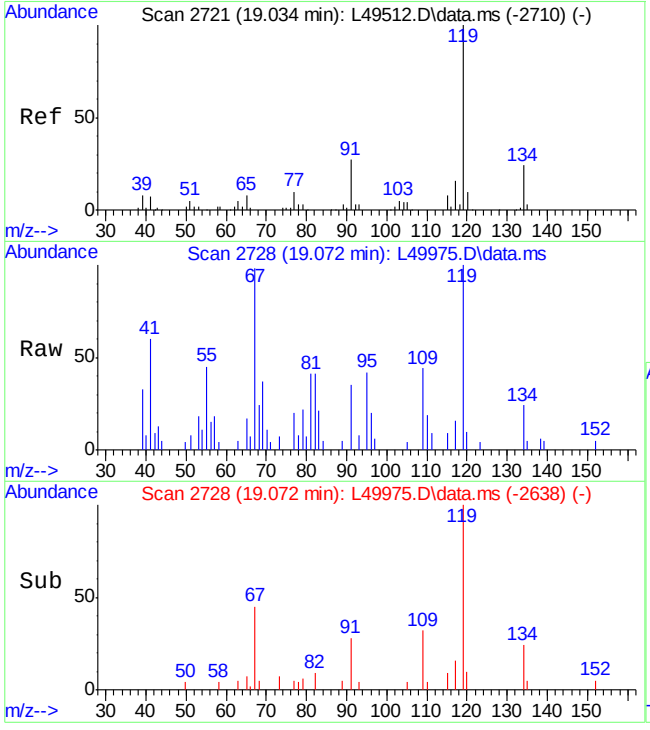



#87
sec-Butylbenzene
Concen: 2.27 ug/Kg
RT: 18.925 min Scan# 2701
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:105 Resp: 290384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 14.9 | 0.0 | 37.0 |

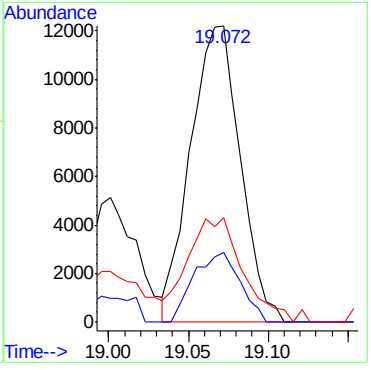


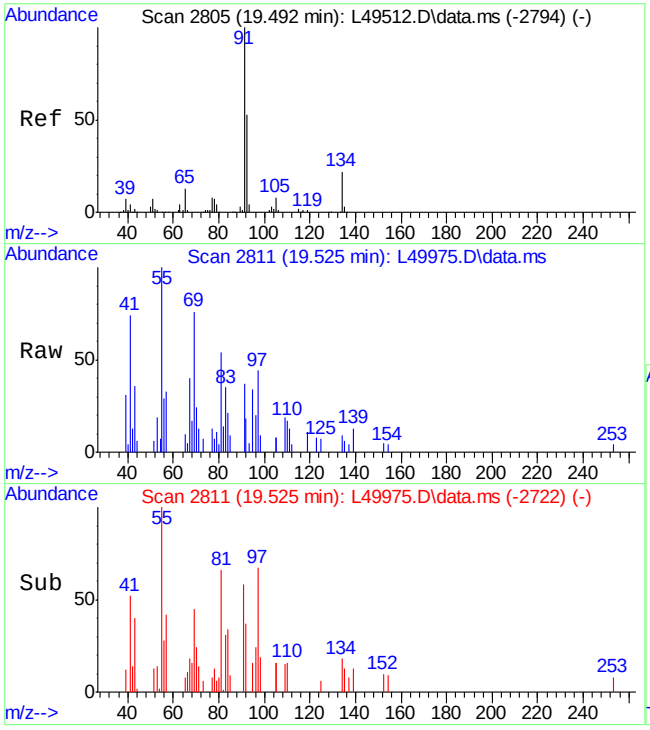




#88
p-Isopropyltoluene
Concen: 2.55 ug/Kg
RT: 19.072 min Scan# 2728
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:119 Resp: 265404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 21.9 | 3.9 | 43.9 |
| 91 | 39.5 | 8.5 | 48.5 |

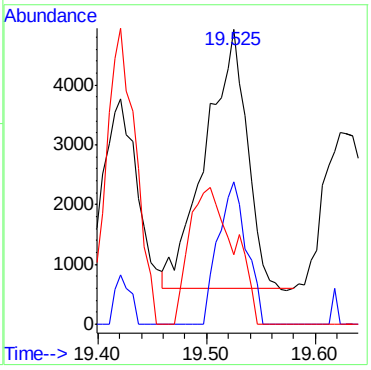


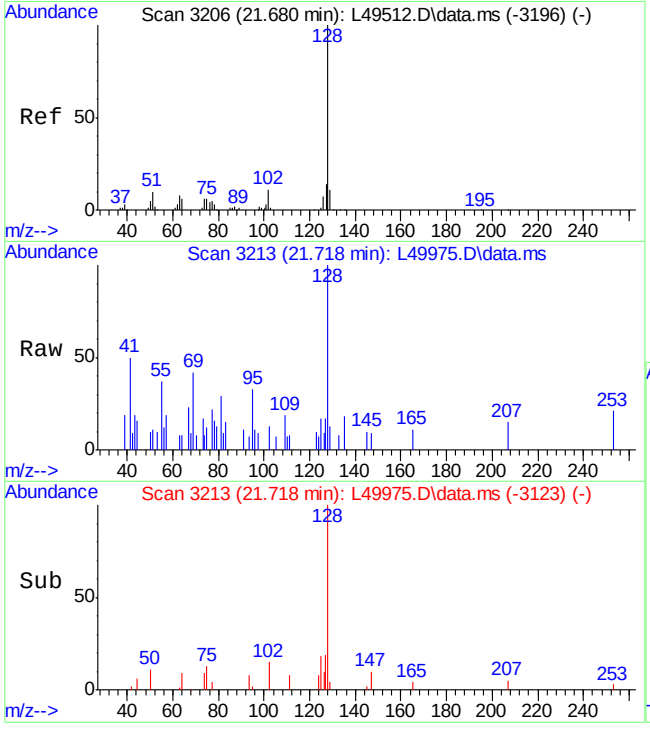



#92
n-Butylbenzene
Concen: 1.02 ug/Kg
RT: 19.525 min Scan# 2811
Delta R.T. -0.016 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion: 91 Resp: 113972

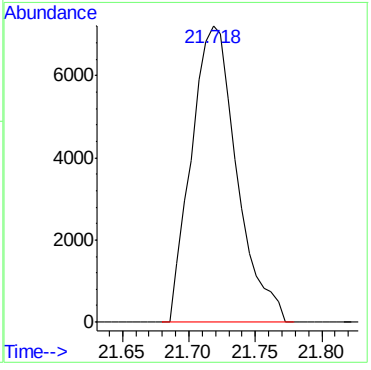
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 38.1 | 35.1 | 75.1 |
| 134 | 56.6 | 1.1 | 41.1# |

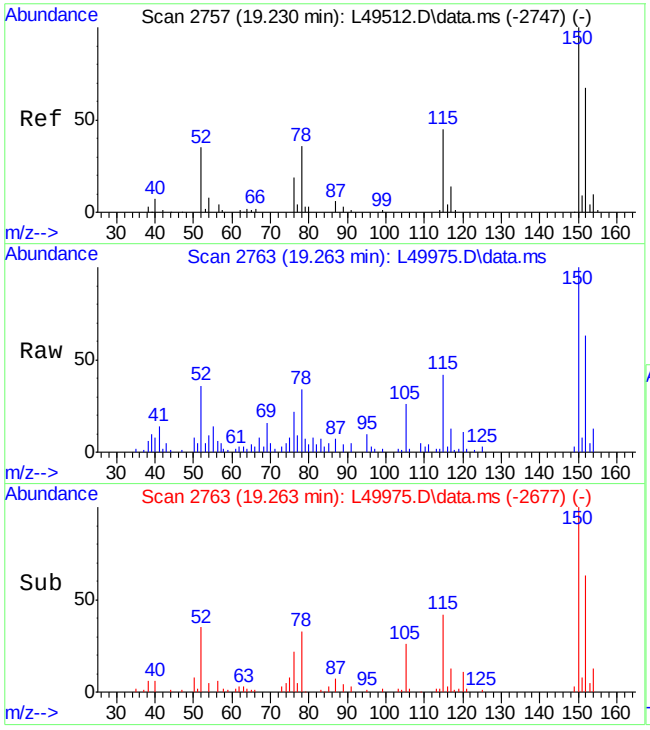



#97
Naphthalene
Concen: 1.73 ug/Kg
RT: 21.718 min Scan# 3213
Delta R.T. -0.010 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:128 Resp: 171192

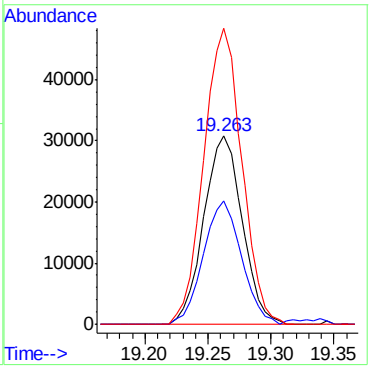


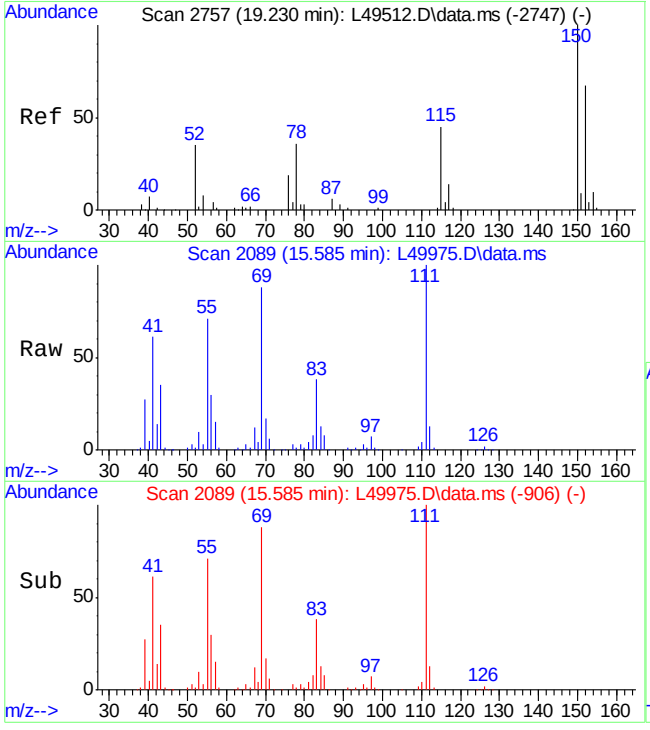



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:152 Resp: 650864

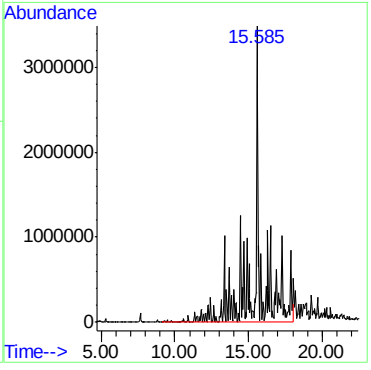
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 41.6 | 81.6 |
| 150 | 155.6 | 176.9 | 216.9# |




#100
TPH-GRO (C6-C10)
Concen: 5218.20 ug/Kg m
RT: 15.585 min Scan# 2089
Delta R.T. 1.060 min
Lab File: L49975.D
Acq: 12 Jul 2016 2:15 pm

Tgt Ion:TIC Resp:891905569



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49976.D
Acq On : 12 Jul 2016 2:45 pm
Operator : johannat
Sample : C46435-2R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 02 10:59:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

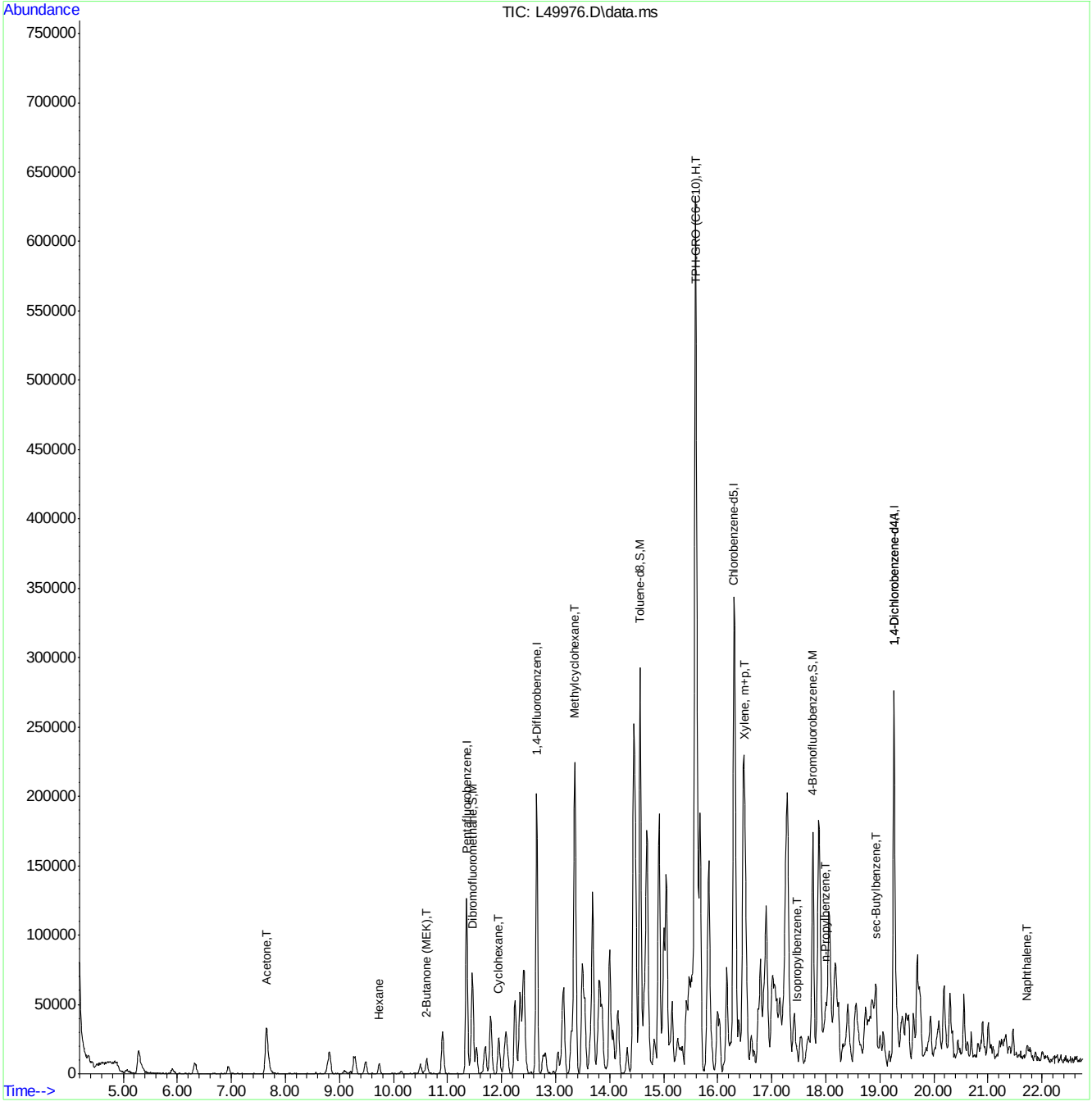
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.357 | 168 | 1146975 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 1971942 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1686168 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 789750 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 789750 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 633364 | 18.44 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 92.20% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2305306 | 19.36 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.80% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 925247 | 18.70 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 93.50% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.657 | 58 | 279310 | 85.51 | ug/Kg# | 47 |
| 24) Hexane | 9.731 | 57 | 54347 | 1.50 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.604 | 72 | 40373 | 9.39 | ug/Kg | 99 |
| 38) Cyclohexane | 11.946 | 56 | 207429 | 4.01 | ug/Kg | 99 |
| 48) Methylcyclohexane | 13.354 | 55 | 1258124 | 27.25 | ug/Kg | 96 |
| 68) Xylene, m+p | 16.496 | 106 | 28465 | 0.49 | ug/Kg# | 36 |
| 73) Isopropylbenzene | 17.468 | 105 | 170552 | 1.16 | ug/Kg | 99 |
| 79) n-Propylbenzene | 17.997 | 91 | 153140 | 0.83 | ug/Kg | 91 |
| 87) sec-Butylbenzene | 18.925 | 105 | 112082 | 0.72 | ug/Kg | 89 |
| 97) Naphthalene | 21.724 | 128 | 91492 | 0.76 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 15.591 | TIC | 205932422m | 932.31 | ug/Kg | |

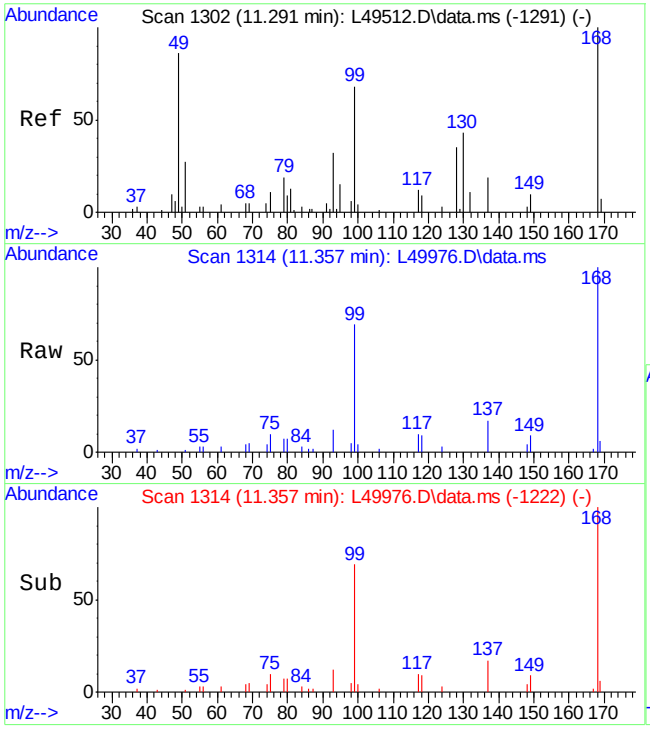
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49976.D
Acq On : 12 Jul 2016 2:45 pm
Operator : johannat
Sample : C46435-2R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 9 Sample Multiplier: 1

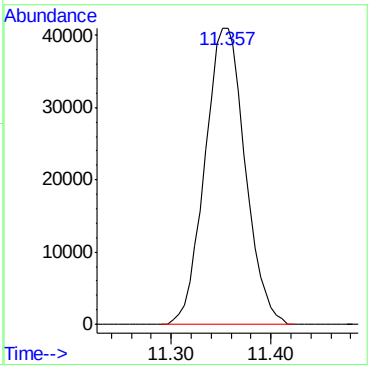
Quant Time: Aug 02 10:59:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

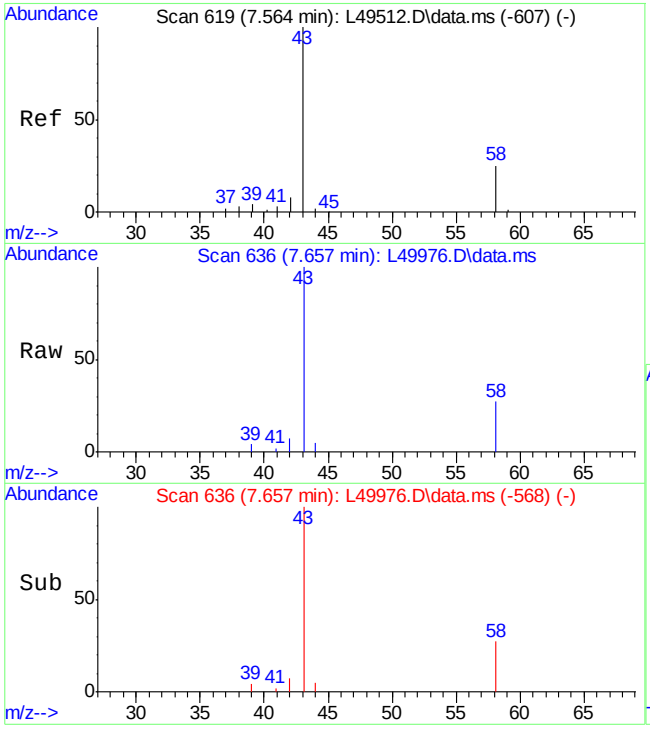





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.357 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:168 Resp: 1146975

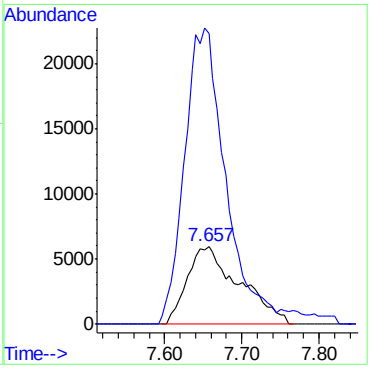


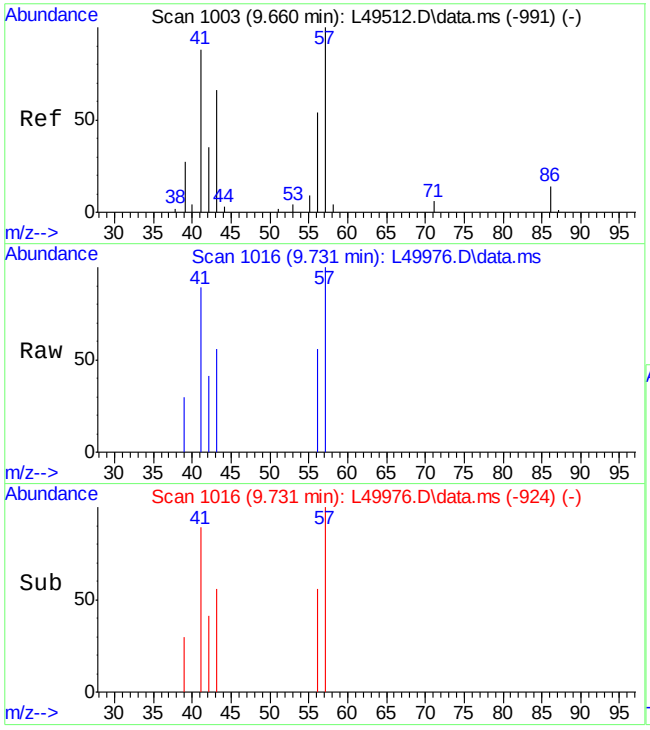




#11
Acetone
Concen: 85.51 ug/Kg
RT: 7.657 min Scan# 636
Delta R.T. 0.022 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 58 Resp: 279310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 312.4 | 428.1 | 468.1# |

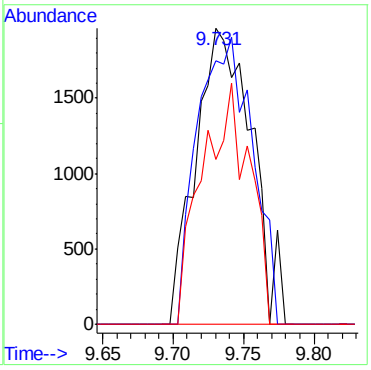


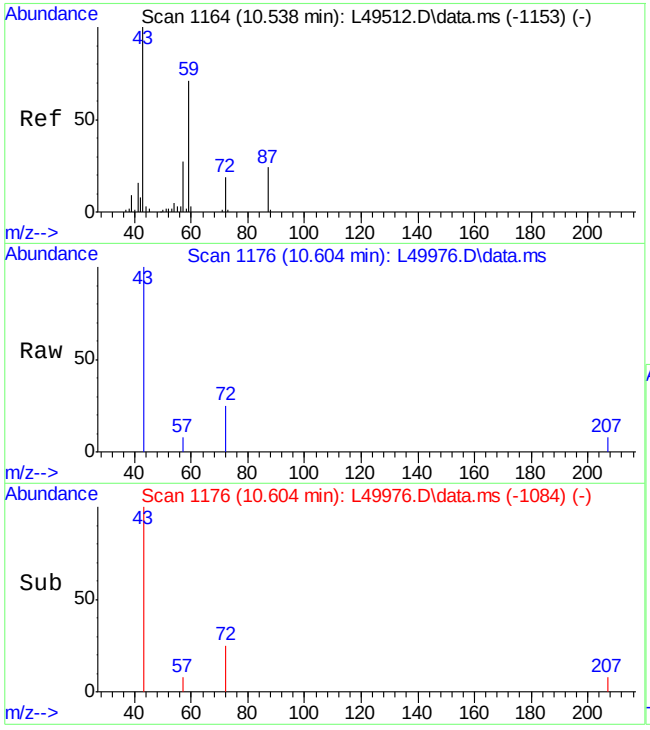



#24
Hexane
Concen: 1.50 ug/Kg
RT: 9.731 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 57 Resp: 54347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 95.6 | 73.8 | 110.8 |
| 43 | 69.2 | 56.6 | 84.8 |

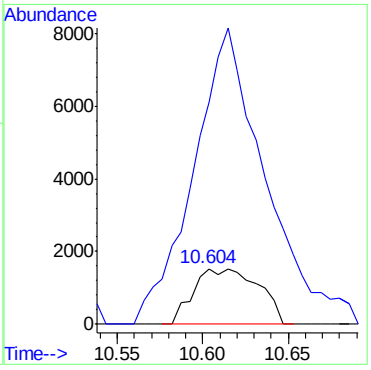


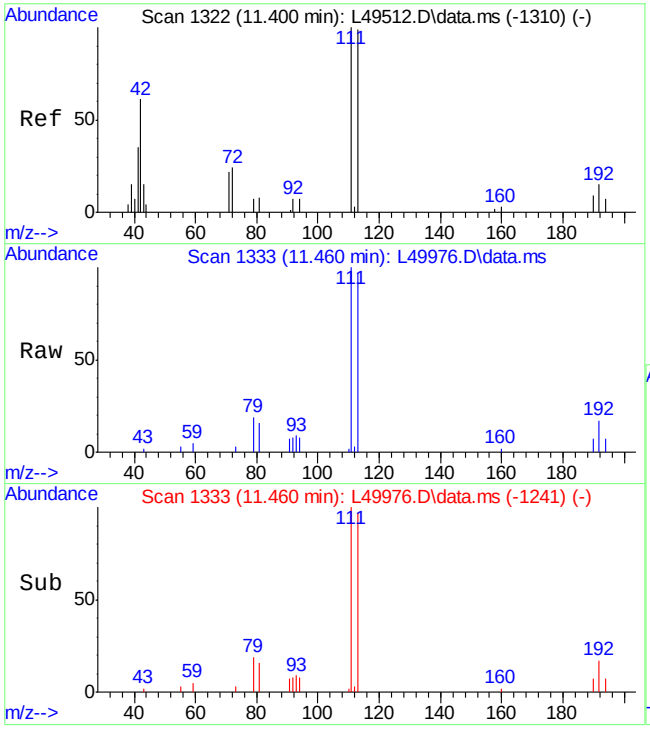




#30
2-Butanone (MEK)
Concen: 9.39 ug/Kg
RT: 10.604 min Scan# 1176
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 72 Resp: 40373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 590.1 | 573.4 | 613.4 |

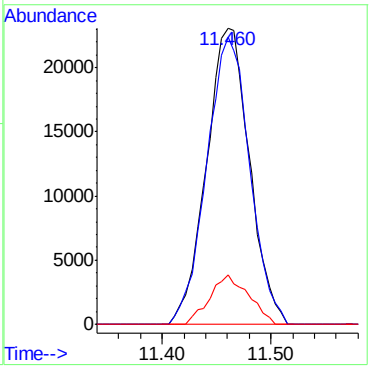


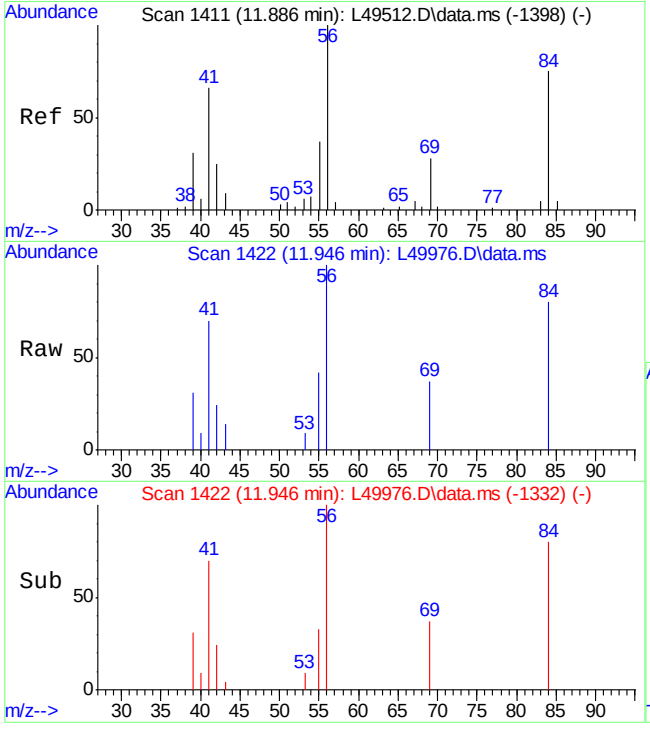



#36
Dibromofluoromethane
Concen: 18.44 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:111 Resp: 633364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.1 | 78.6 | 118.6 |
| 192 | 15.0 | 0.0 | 34.1 |

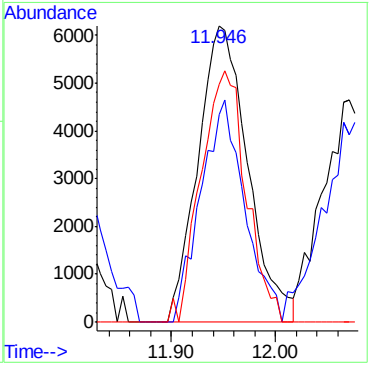


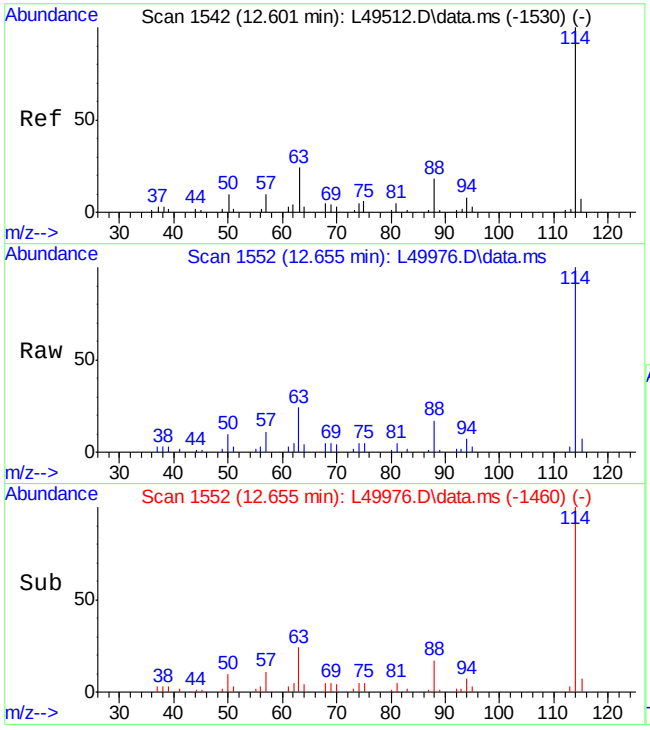




#38
Cyclohexane
Concen: 4.01 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.010 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 56 Resp: 207429

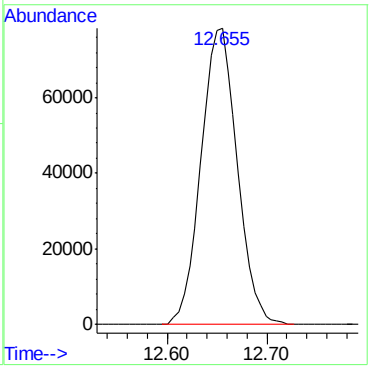
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 66.1 | 53.7 | 80.5 |
| 84 | 76.9 | 60.5 | 90.7 |

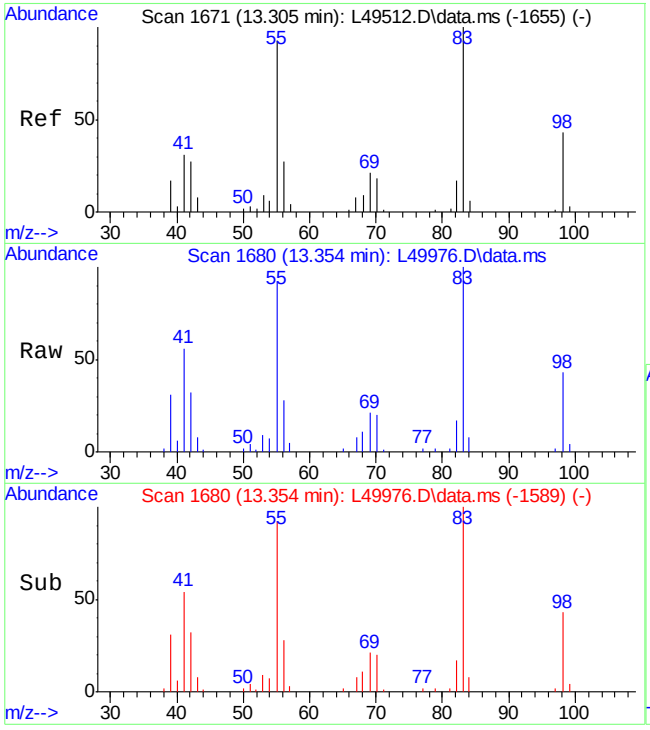





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:114 Resp: 1971942

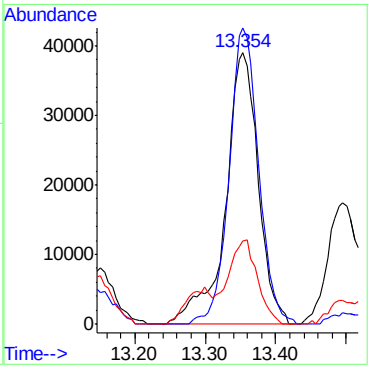


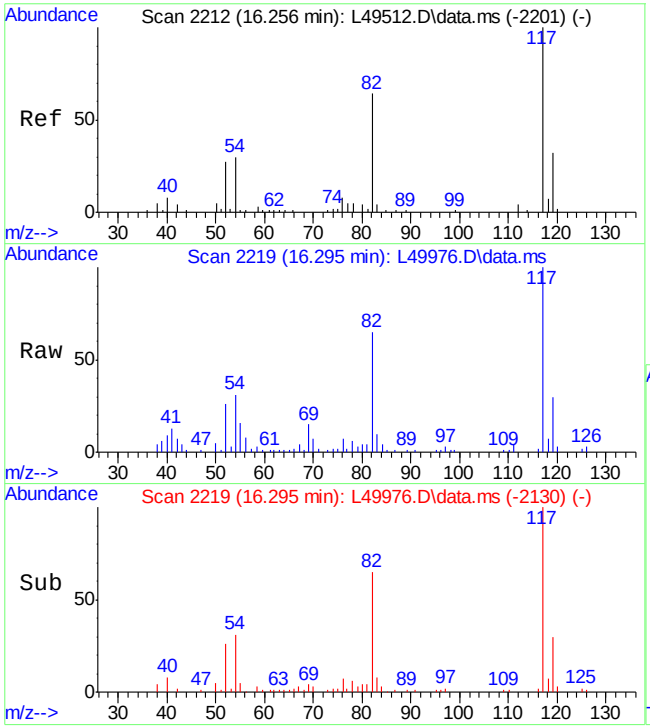




#48
Methylcyclohexane
Concen: 27.25 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 55 Resp: 1258124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 98.2 | 80.6 | 120.6 |
| 56 | 27.3 | 11.5 | 51.5 |

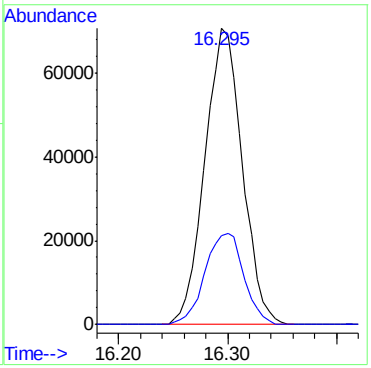


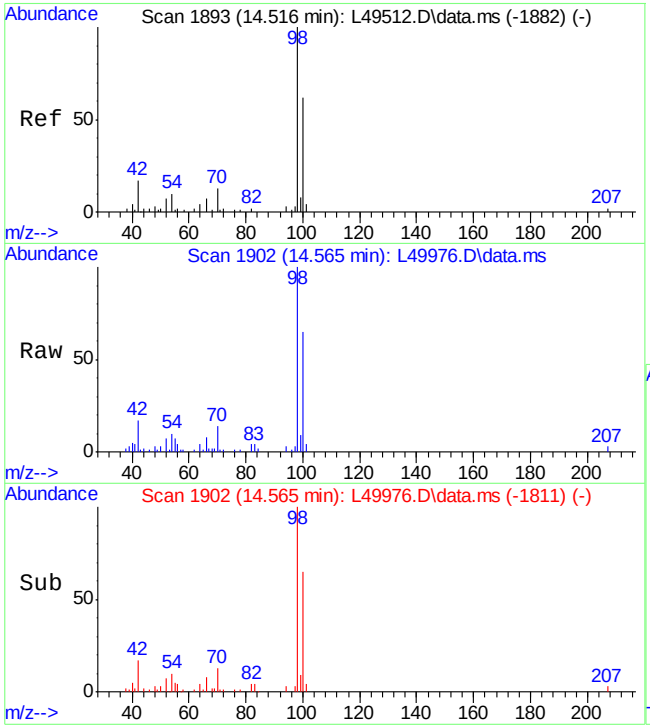



#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:117 Resp: 1686168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.9 | 10.2 | 50.2 |

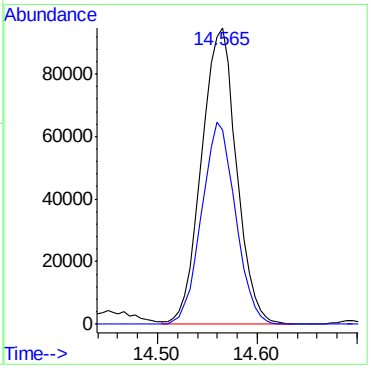


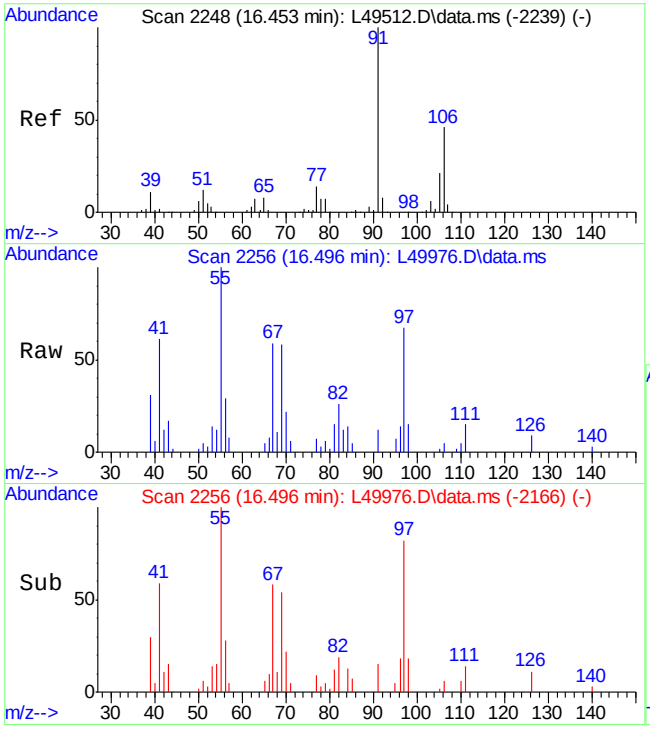




#56
Toluene-d8
Concen: 19.36 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 98 Resp: 2305306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 45.2 | 85.2 |

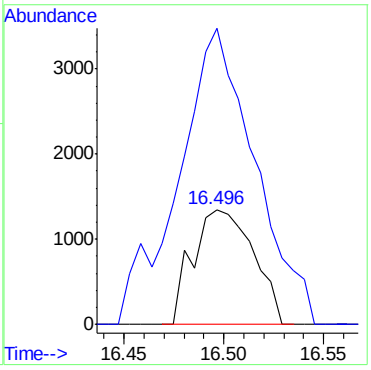


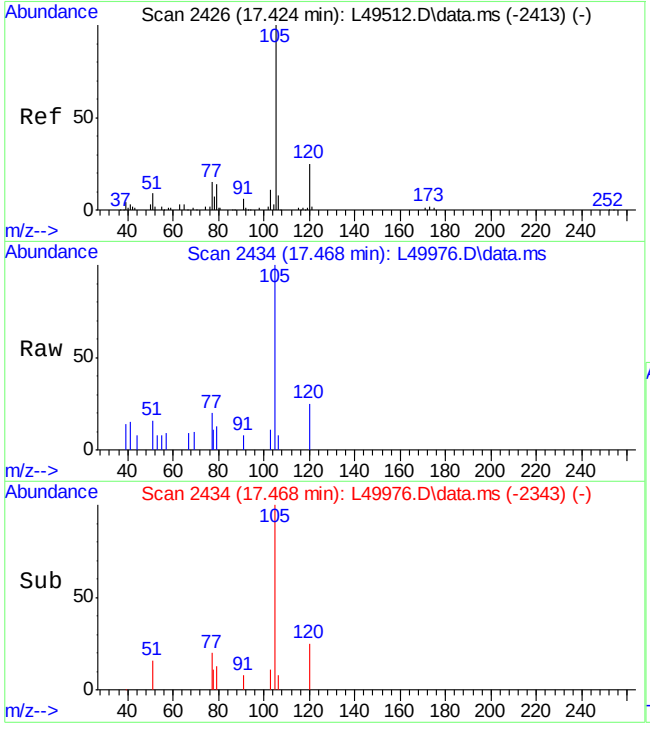



#68
Xylene, m+p
Concen: 0.49 ug/Kg
RT: 16.496 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:106 Resp: 28465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 325.5 | 202.1 | 242.1# |

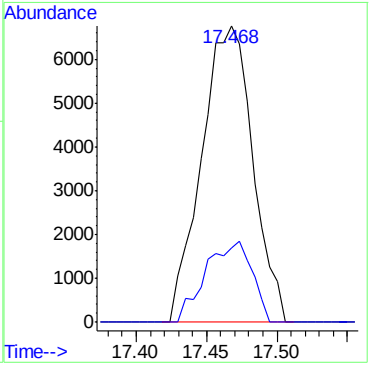


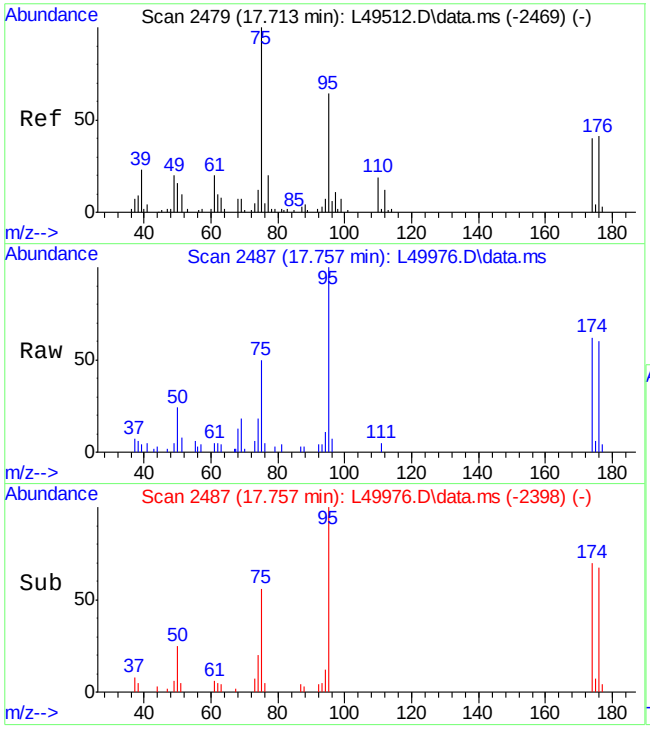




#73
Isopropylbenzene
Concen: 1.16 ug/Kg
RT: 17.468 min Scan# 2434
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:105 Resp: 170552

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.7 | 4.1 | 44.1 |

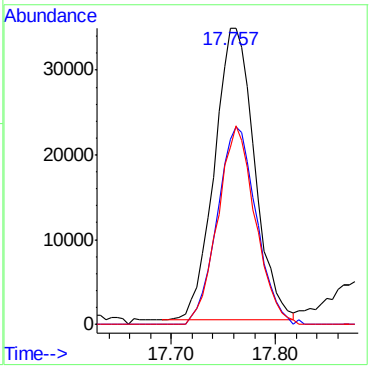


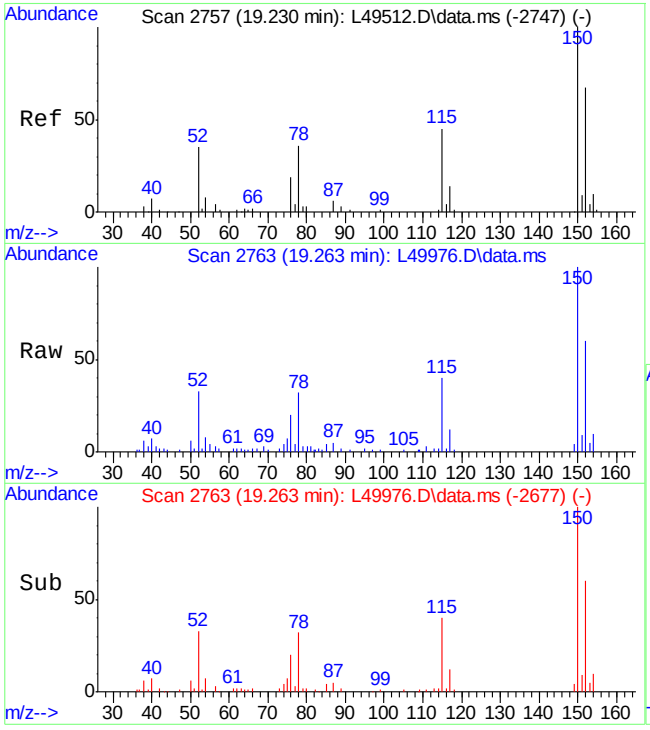



#74
4-Bromofluorobenzene
Concen: 18.70 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 95 Resp: 925247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 66.0 | 41.6 | 81.6 |
| 176 | 63.6 | 39.6 | 79.6 |

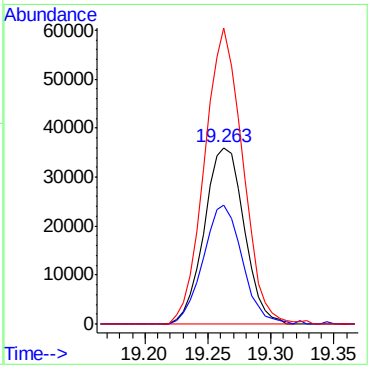


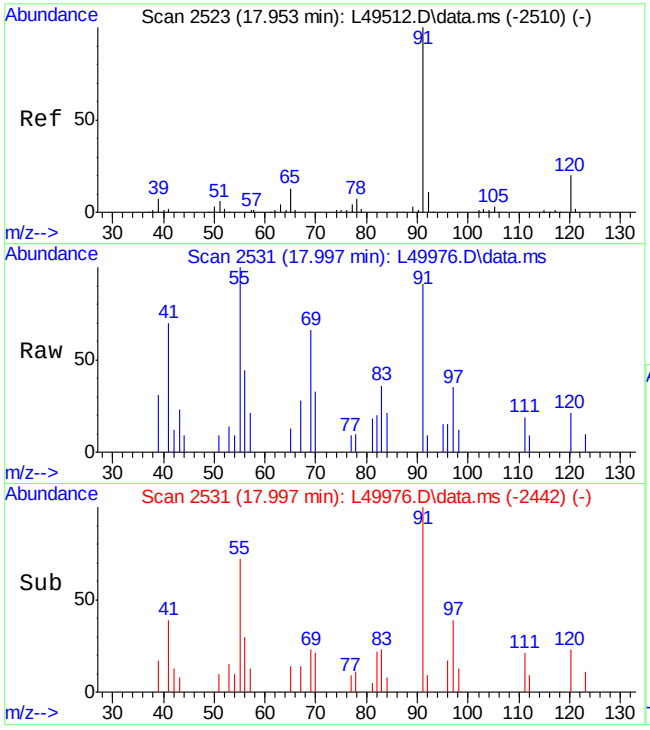




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:152 Resp: 789750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.2 | 48.8 | 88.8 |
| 150 | 160.8 | 174.3 | 214.3# |

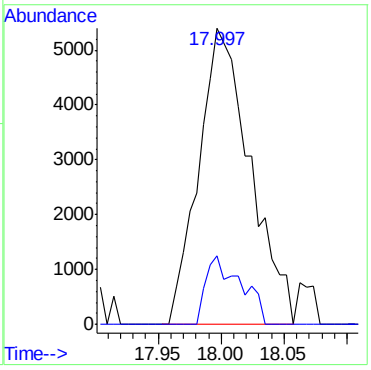


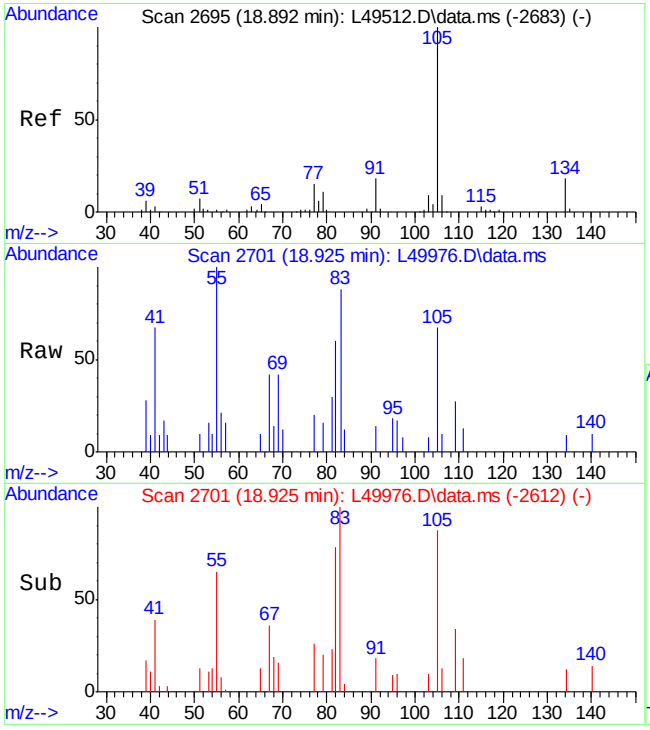



#79
n-Propylbenzene
Concen: 0.83 ug/Kg
RT: 17.997 min Scan# 2531
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 91 Resp: 153140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 15.7 | 0.0 | 39.7 |

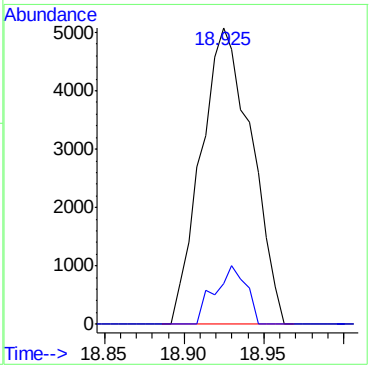


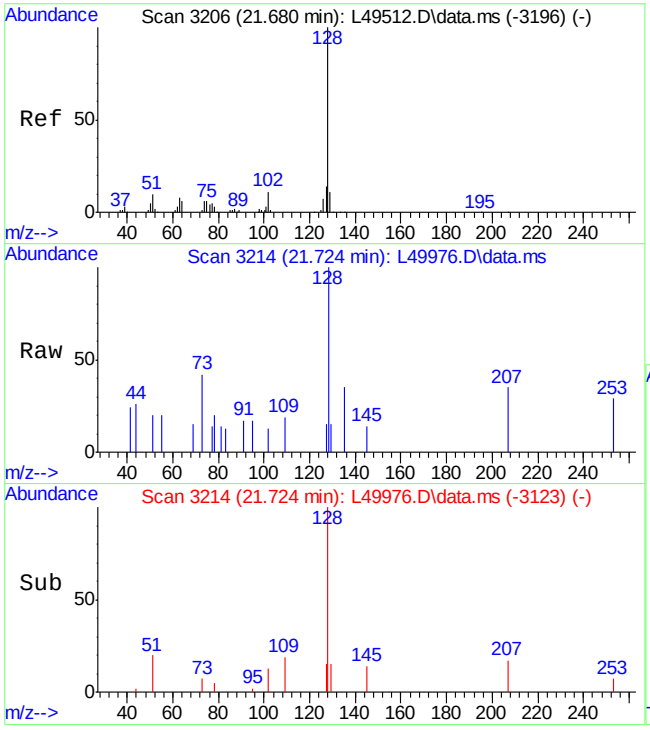




#87
sec-Butylbenzene
Concen: 0.72 ug/Kg
RT: 18.925 min Scan# 2701
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:105 Resp: 112082

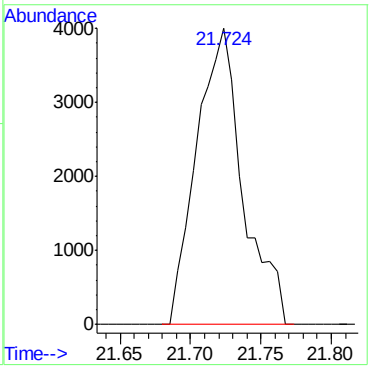
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 12.1 | 0.0 | 37.0 |

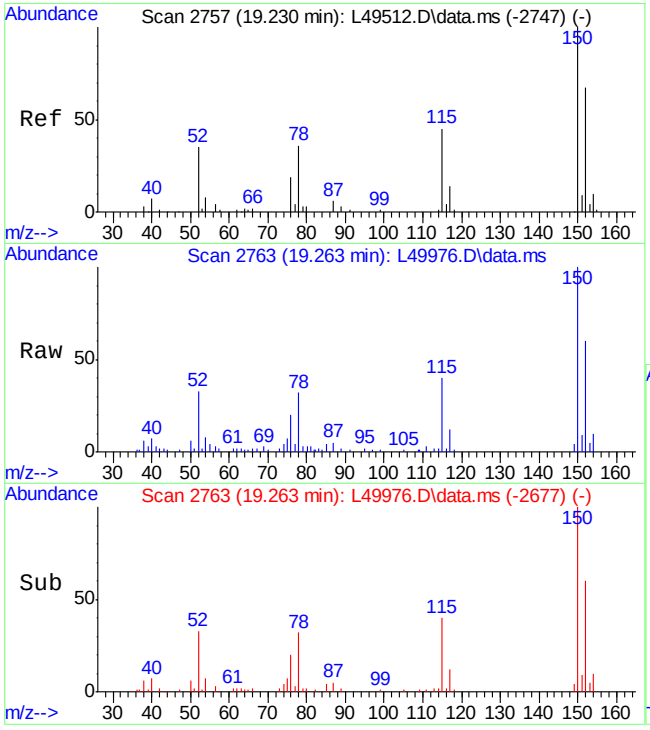





#97
Naphthalene
Concen: 0.76 ug/Kg
RT: 21.724 min Scan# 3214
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:128 Resp: 91492

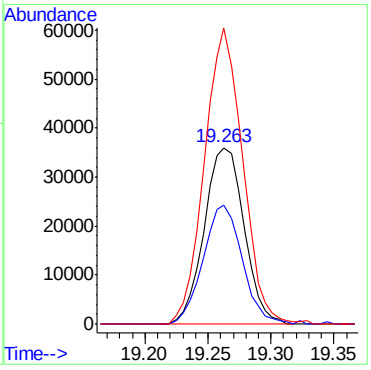


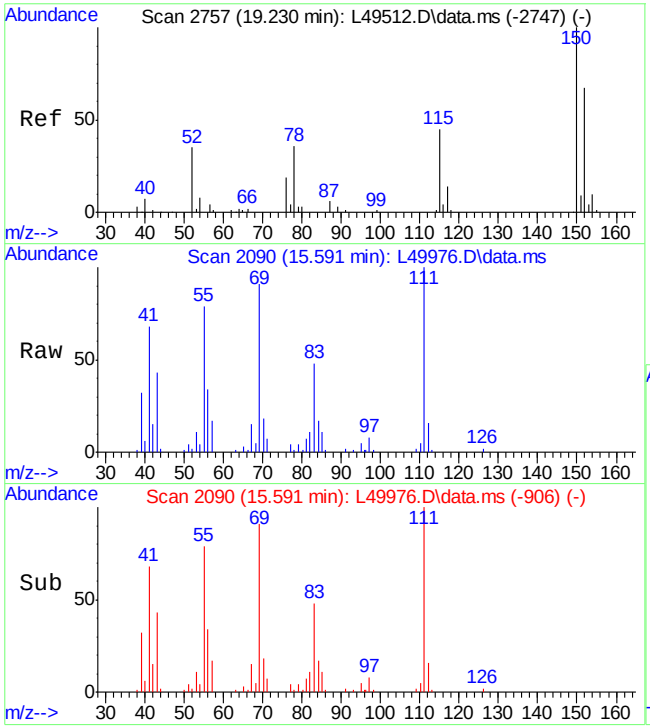




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:152 Resp: 789750

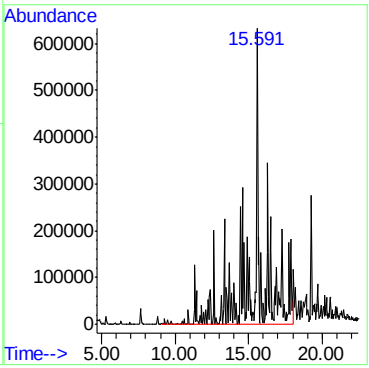
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.2 | 41.6 | 81.6 |
| 150 | 160.8 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 932.31 ug/Kg m
RT: 15.591 min Scan# 2090
Delta R.T. 1.065 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:TIC Resp:205932422



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49976.D
Acq On : 12 Jul 2016 2:45 pm
Operator : johannat
Sample : C46435-2R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 02 10:59:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

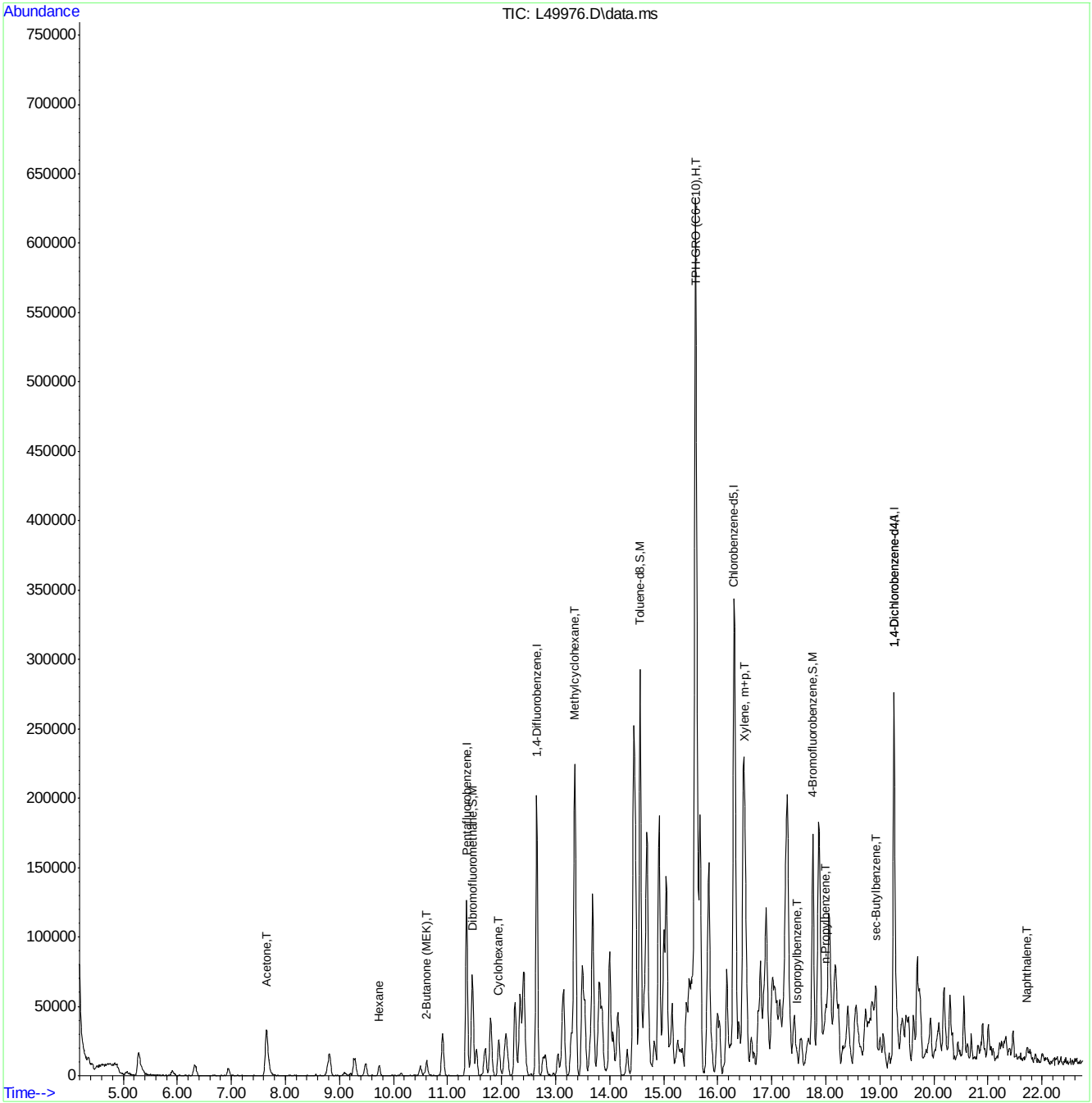
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.357 | 168 | 1146975 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 1971942 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1686168 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 789750 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 789750 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 633364 | 18.44 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 92.20% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2305306 | 19.36 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.80% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 925247 | 18.70 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 93.50% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.657 | 58 | 279310 | 85.51 | ug/Kg# | 47 |
| 24) Hexane | 9.731 | 57 | 54347 | 1.50 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.604 | 72 | 40373 | 9.39 | ug/Kg | 99 |
| 38) Cyclohexane | 11.946 | 56 | 207429 | 4.01 | ug/Kg | 99 |
| 48) Methylcyclohexane | 13.354 | 55 | 1258124 | 27.25 | ug/Kg | 96 |
| 68) Xylene, m+p | 16.496 | 106 | 28465 | 0.49 | ug/Kg# | 36 |
| 73) Isopropylbenzene | 17.468 | 105 | 170552 | 1.16 | ug/Kg | 99 |
| 79) n-Propylbenzene | 17.997 | 91 | 153140 | 0.83 | ug/Kg | 91 |
| 87) sec-Butylbenzene | 18.925 | 105 | 112082 | 0.72 | ug/Kg | 89 |
| 97) Naphthalene | 21.724 | 128 | 91492 | 0.76 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 15.591 | TIC | 205932422m | 932.31 | ug/Kg | |

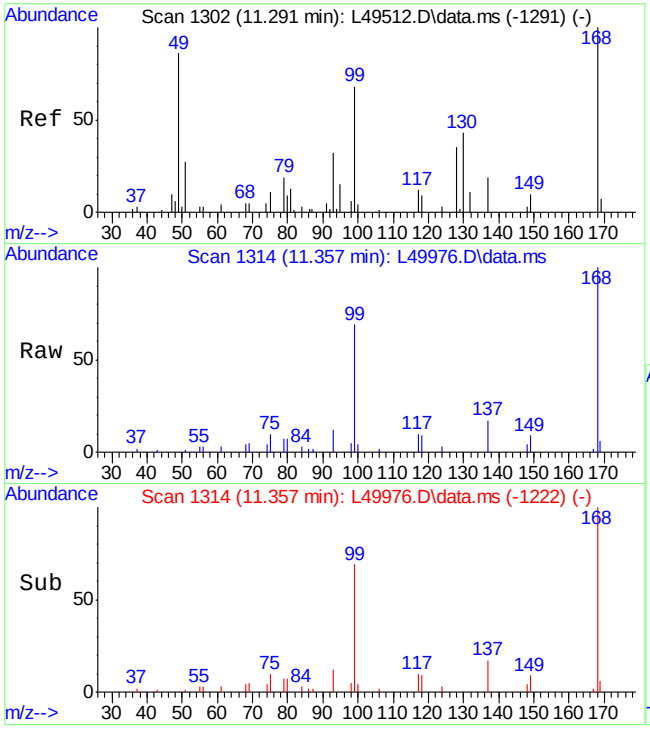
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49976.D
Acq On : 12 Jul 2016 2:45 pm
Operator : johannat
Sample : C46435-2R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 9 Sample Multiplier: 1

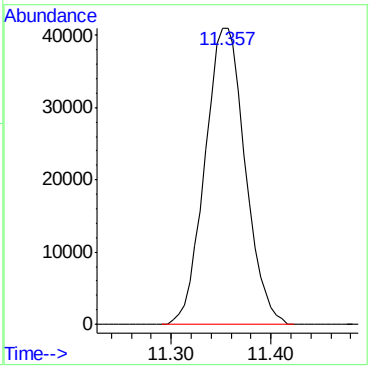
Quant Time: Aug 02 10:59:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

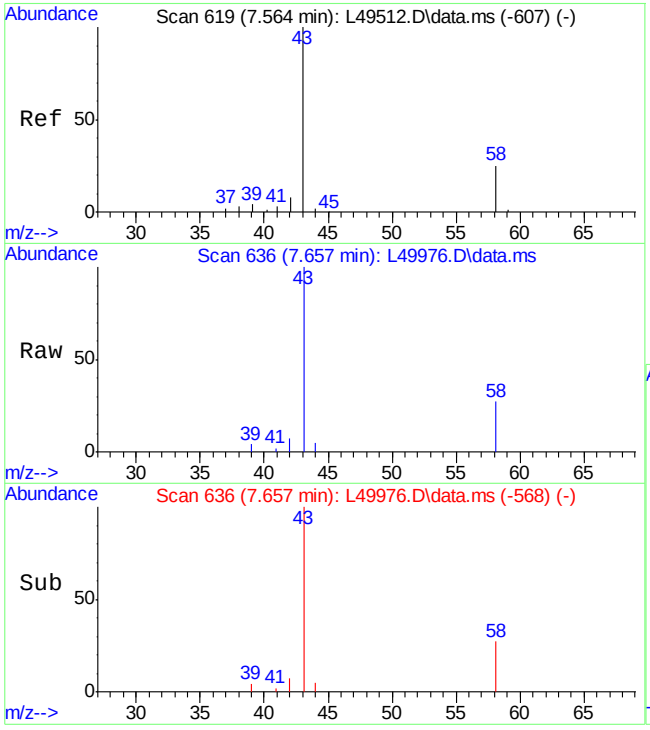





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.357 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:168 Resp: 1146975

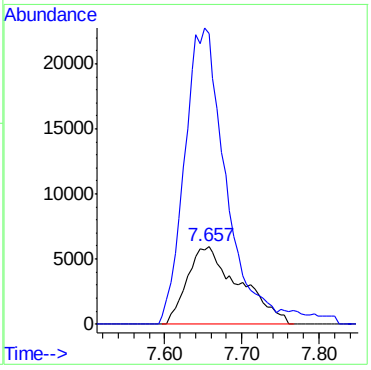


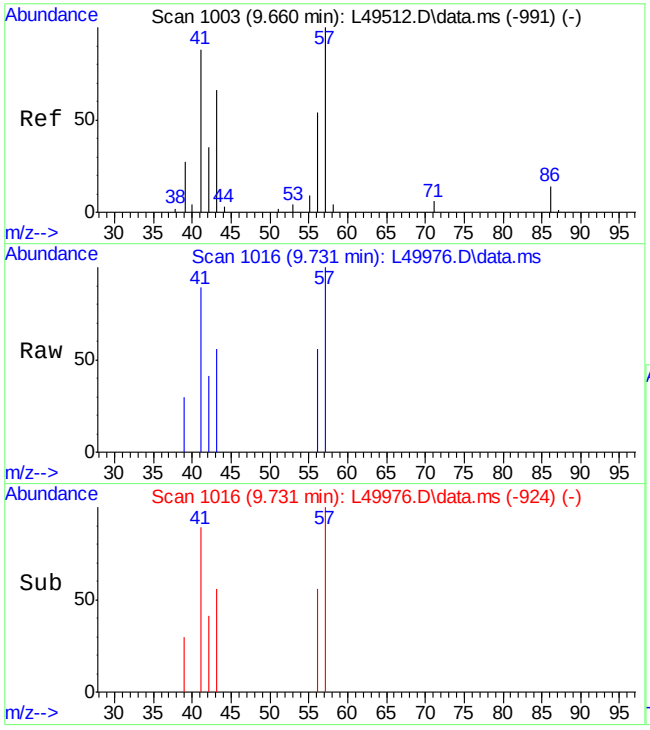




#11
Acetone
Concen: 85.51 ug/Kg
RT: 7.657 min Scan# 636
Delta R.T. 0.022 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 58 Resp: 279310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 312.4 | 428.1 | 468.1# |

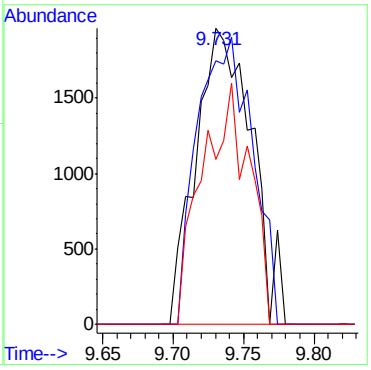


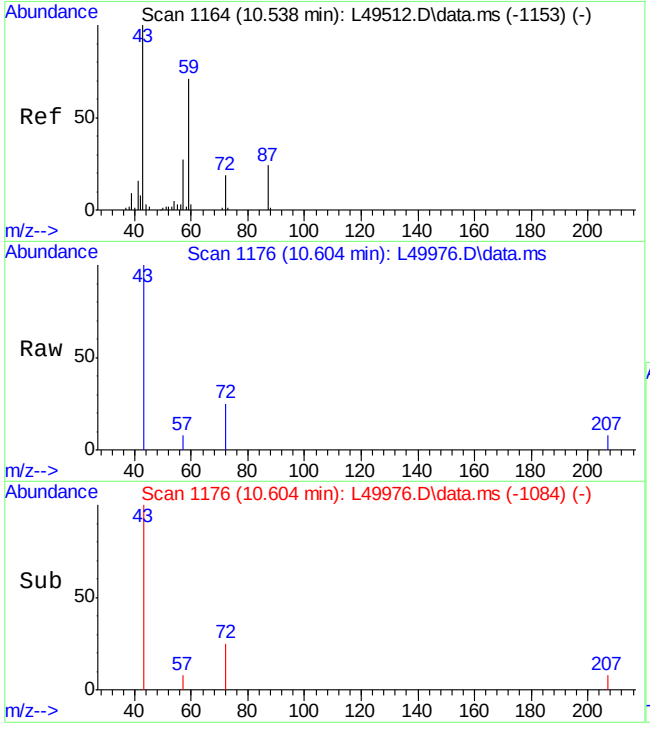



#24
Hexane
Concen: 1.50 ug/Kg
RT: 9.731 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 57 Resp: 54347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 95.6 | 73.8 | 110.8 |
| 43 | 69.2 | 56.6 | 84.8 |

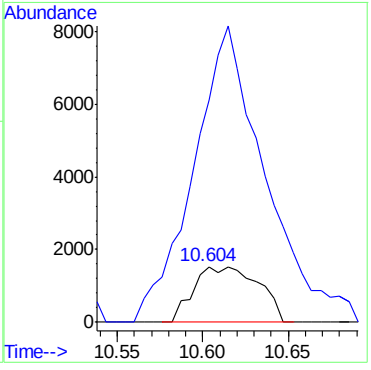


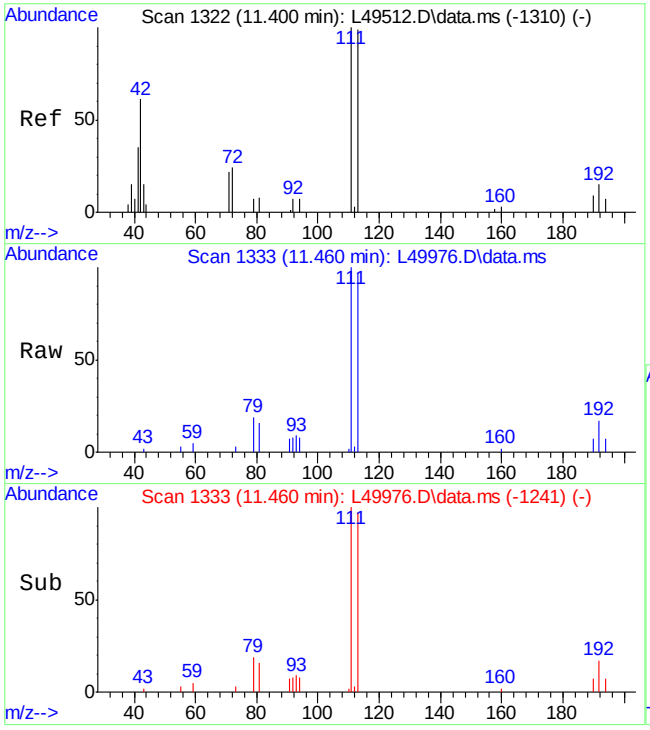




#30
2-Butanone (MEK)
Concen: 9.39 ug/Kg
RT: 10.604 min Scan# 1176
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 72 Resp: 40373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 590.1 | 573.4 | 613.4 |

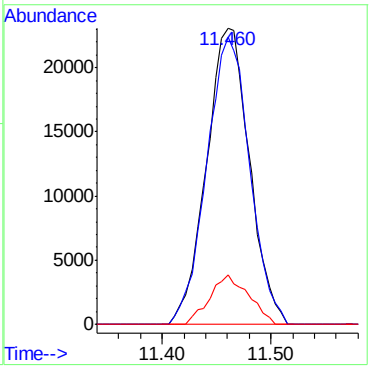


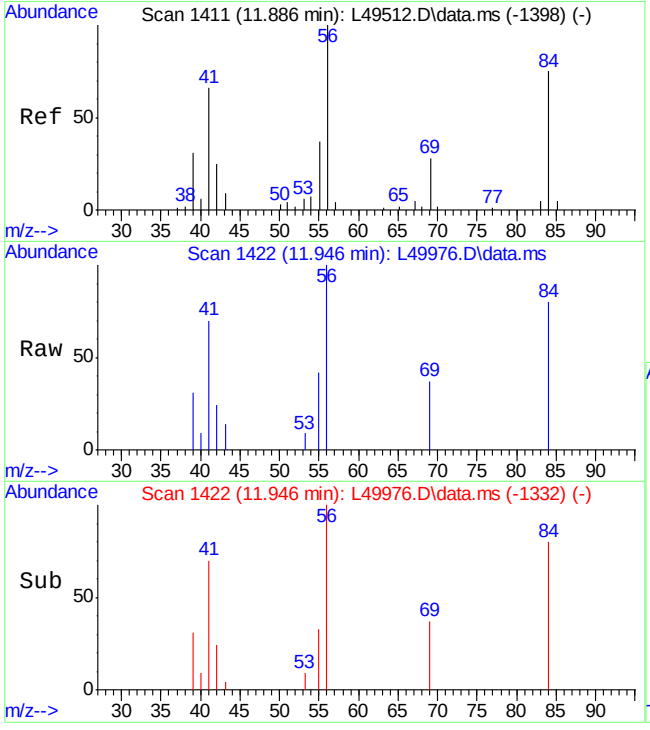



#36
Dibromofluoromethane
Concen: 18.44 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:111 Resp: 633364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.1 | 78.6 | 118.6 |
| 192 | 15.0 | 0.0 | 34.1 |

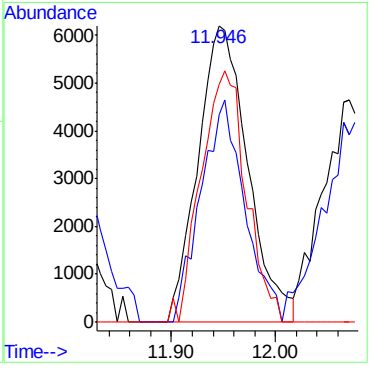


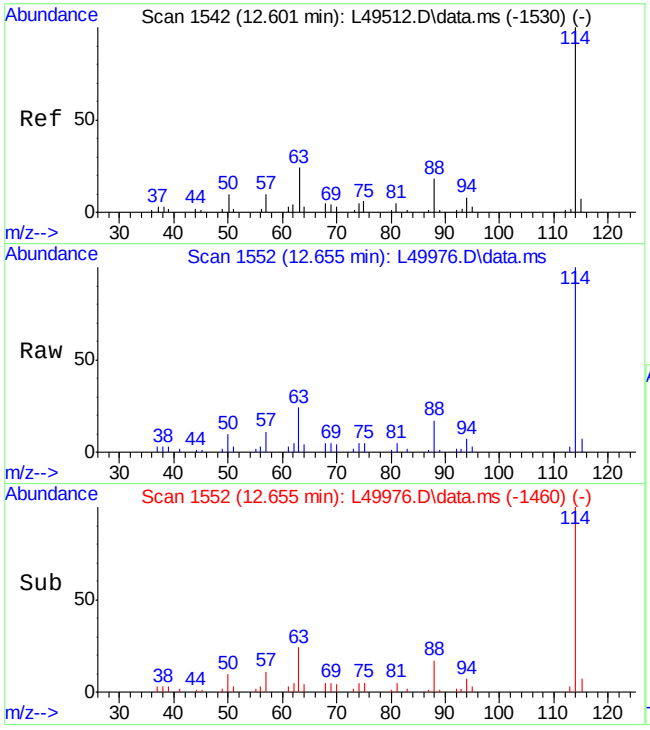




#38
Cyclohexane
Concen: 4.01 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.010 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 56 Resp: 207429

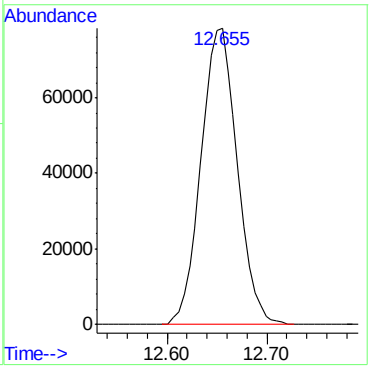
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 66.1 | 53.7 | 80.5 |
| 84 | 76.9 | 60.5 | 90.7 |

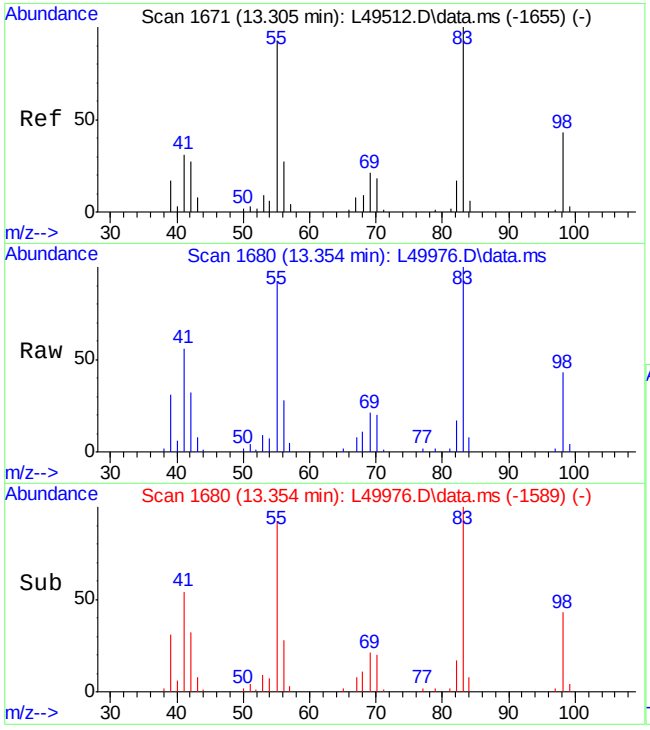





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:114 Resp: 1971942

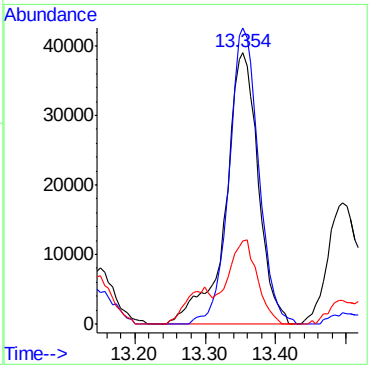


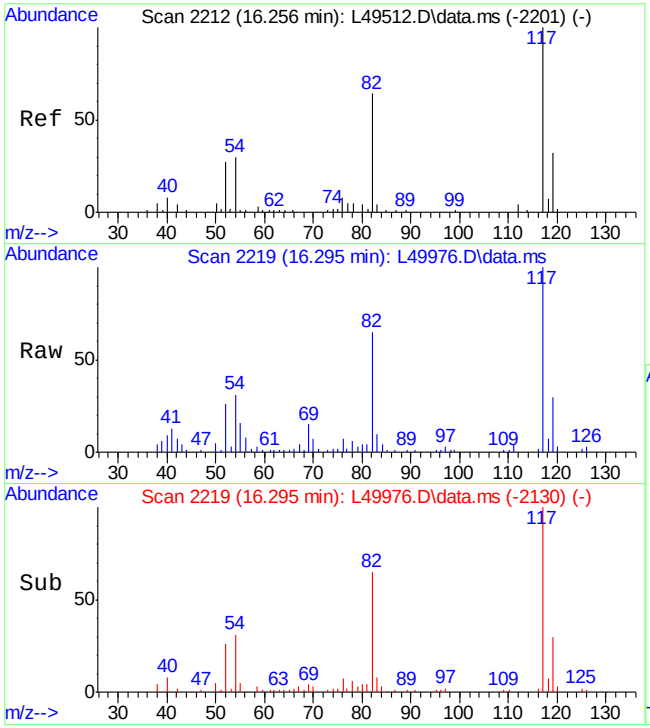




#48
Methylcyclohexane
Concen: 27.25 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 55 Resp: 1258124

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 98.2 | 80.6 | 120.6 |
| 56 | 27.3 | 11.5 | 51.5 |

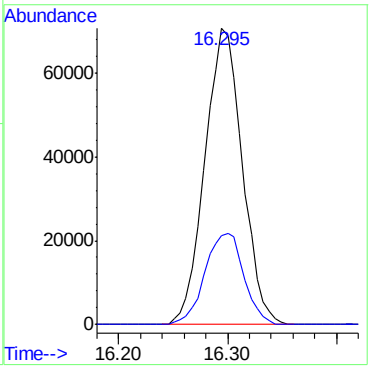


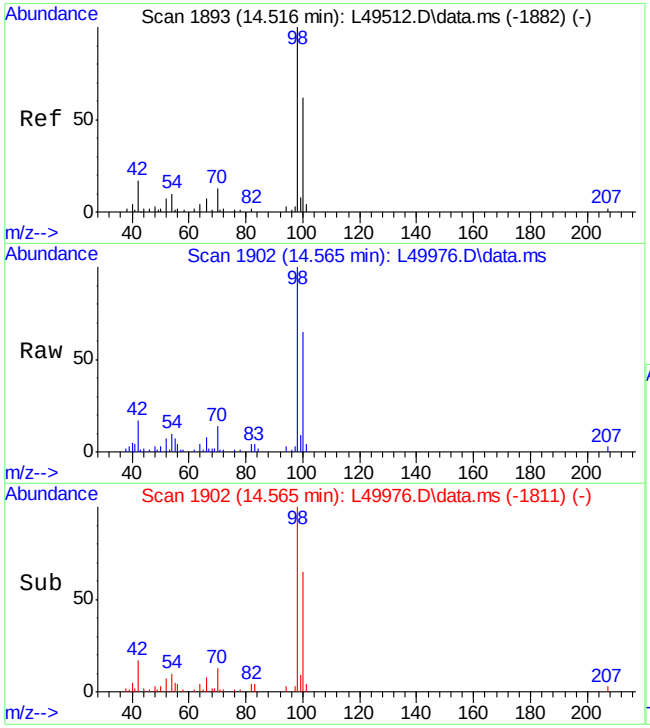



#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:117 Resp: 1686168

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.9 | 10.2 | 50.2 |

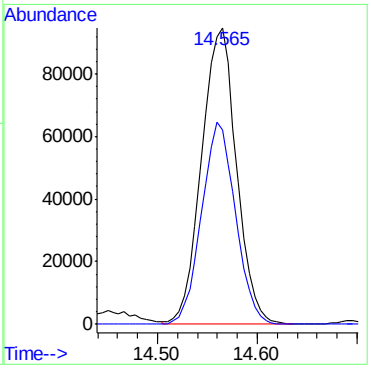


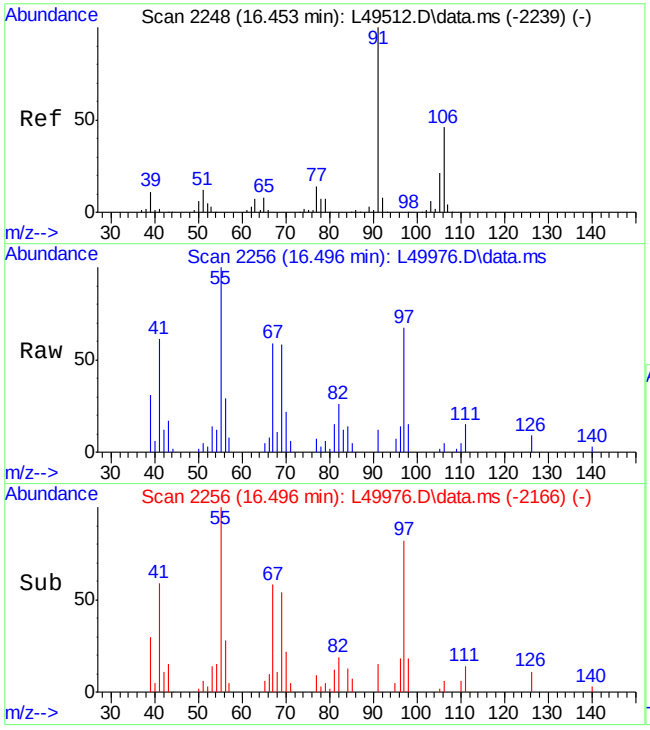




#56
Toluene-d8
Concen: 19.36 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 98 Resp: 2305306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 45.2 | 85.2 |

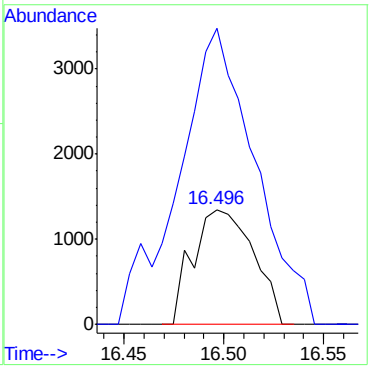


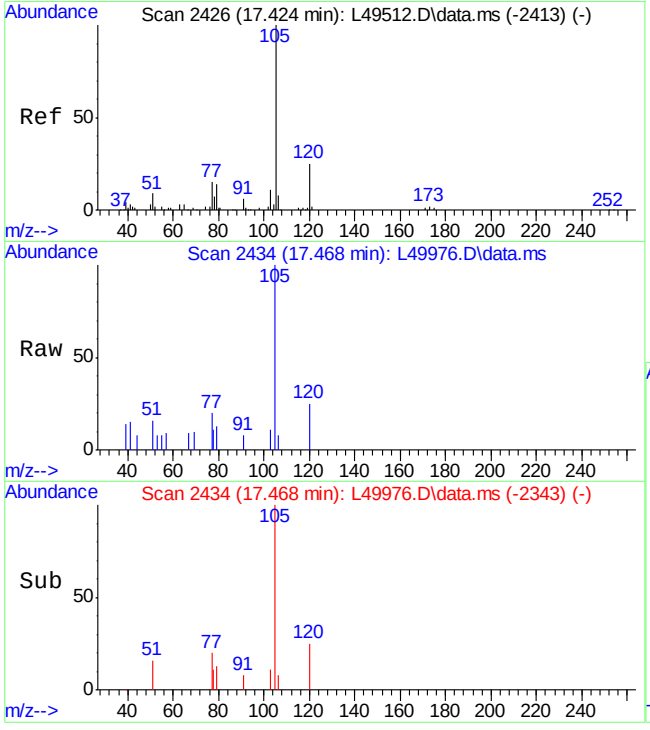



#68
Xylene, m+p
Concen: 0.49 ug/Kg
RT: 16.496 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:106 Resp: 28465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 325.5 | 202.1 | 242.1# |

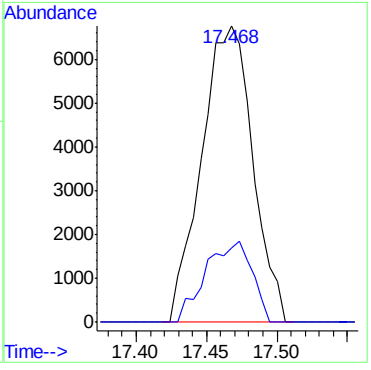


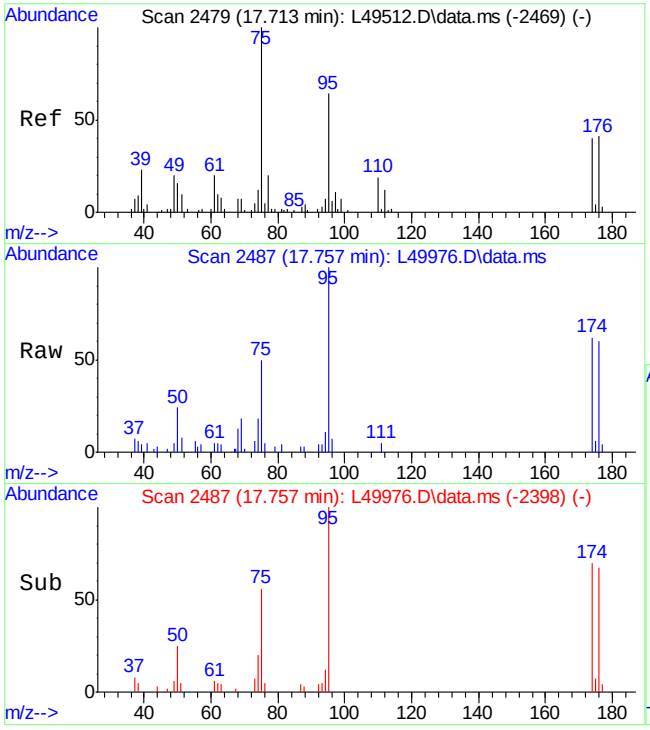




#73
Isopropylbenzene
Concen: 1.16 ug/Kg
RT: 17.468 min Scan# 2434
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:105 Resp: 170552

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.7 | 4.1 | 44.1 |

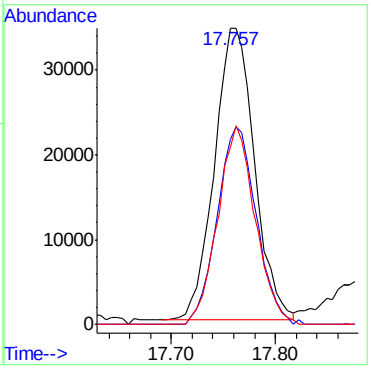


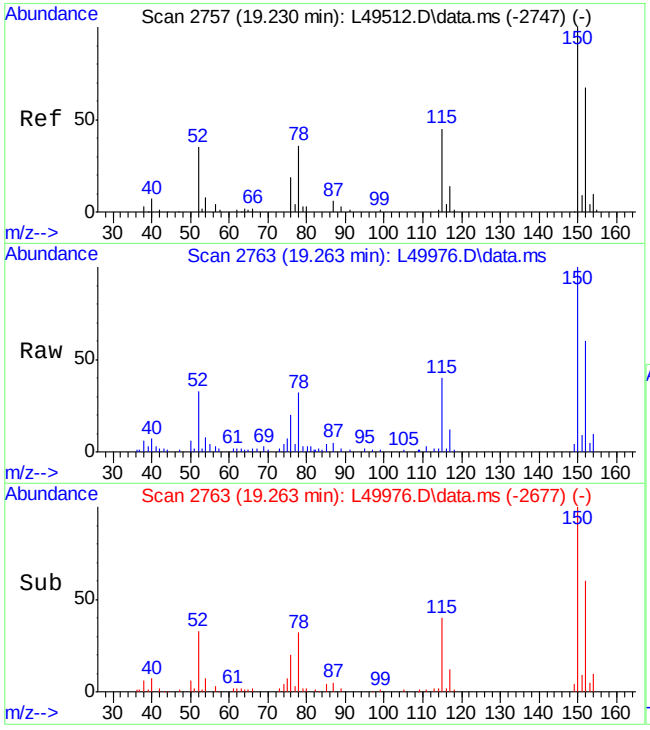



#74
4-Bromofluorobenzene
Concen: 18.70 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 95 Resp: 925247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 66.0 | 41.6 | 81.6 |
| 176 | 63.6 | 39.6 | 79.6 |

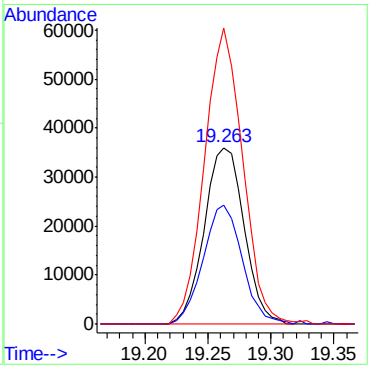


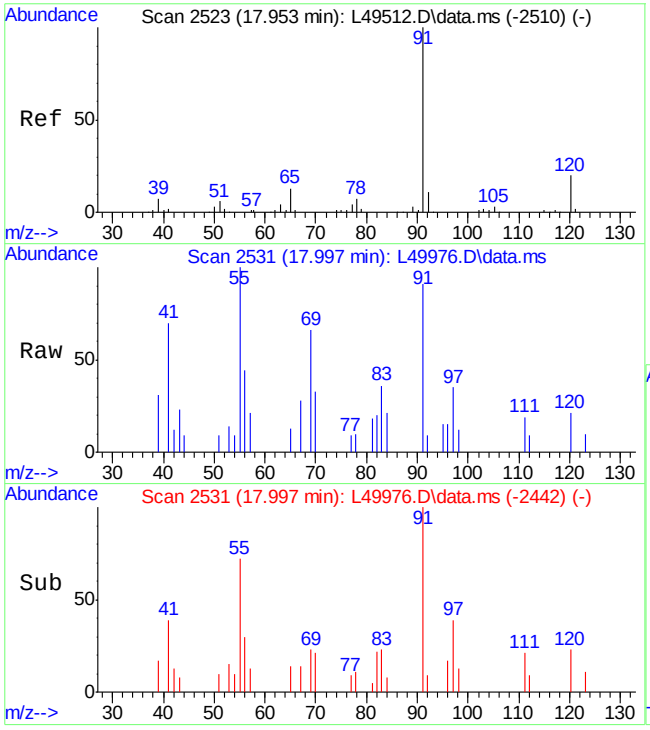




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:152 Resp: 789750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.2 | 48.8 | 88.8 |
| 150 | 160.8 | 174.3 | 214.3# |

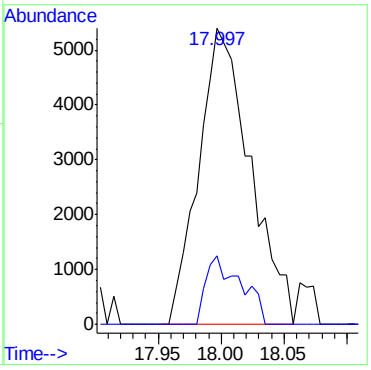


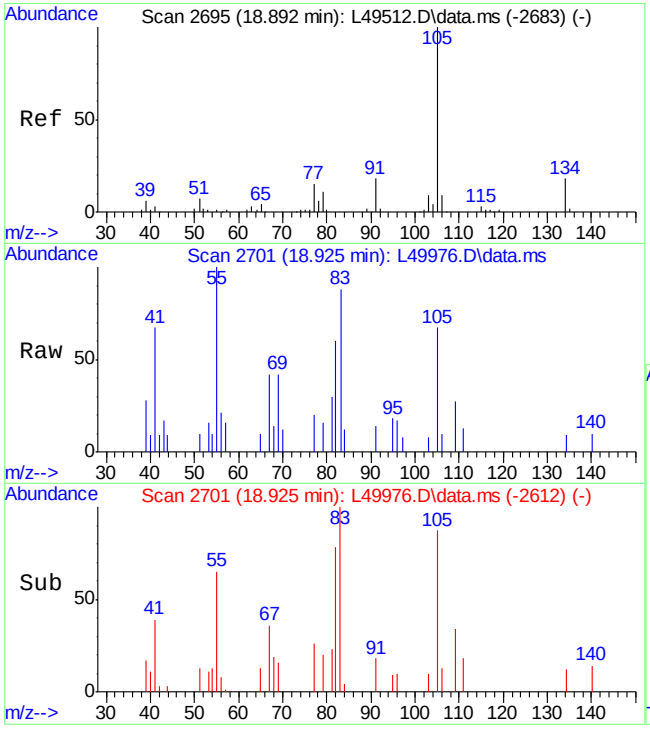



#79
n-Propylbenzene
Concen: 0.83 ug/Kg
RT: 17.997 min Scan# 2531
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion: 91 Resp: 153140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 15.7 | 0.0 | 39.7 |

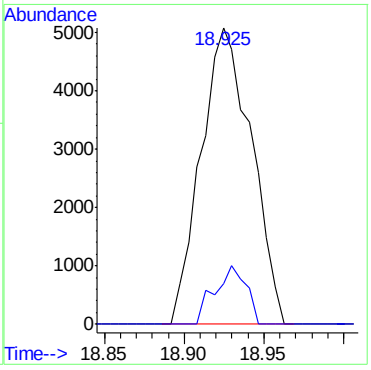


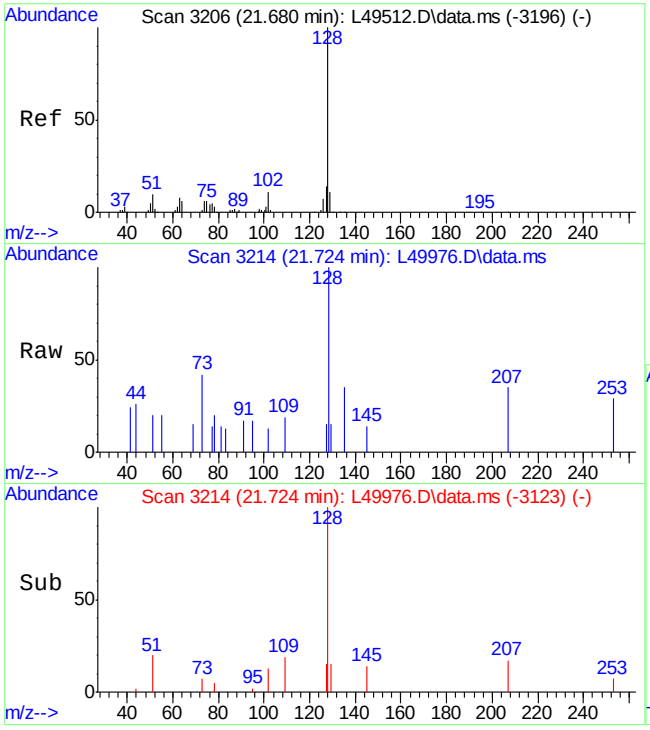




#87
sec-Butylbenzene
Concen: 0.72 ug/Kg
RT: 18.925 min Scan# 2701
Delta R.T. -0.016 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:105 Resp: 112082

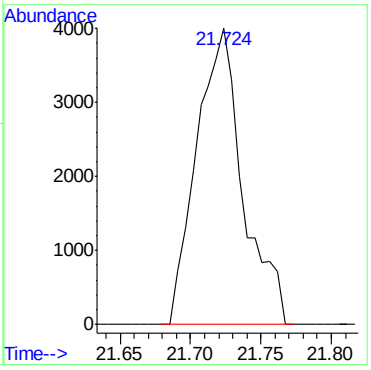
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 12.1 | 0.0 | 37.0 |

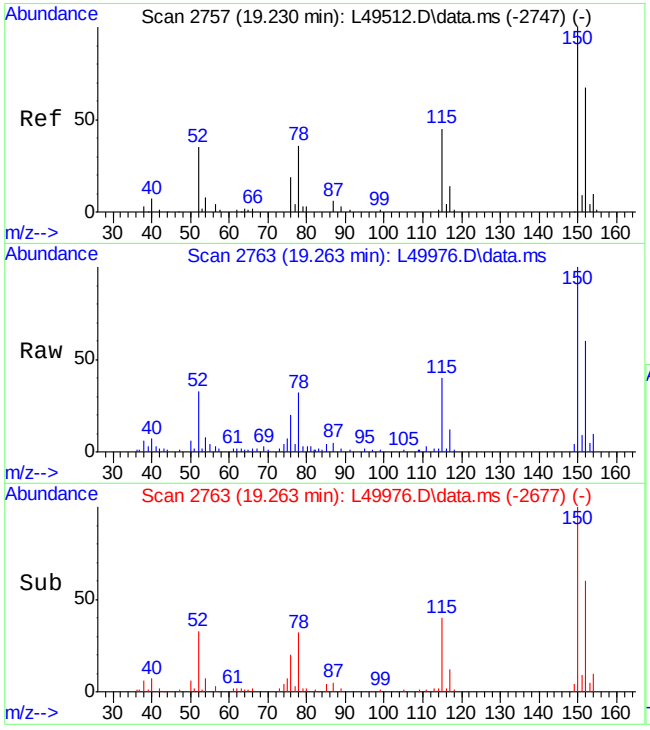





#97
Naphthalene
Concen: 0.76 ug/Kg
RT: 21.724 min Scan# 3214
Delta R.T. -0.005 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:128 Resp: 91492

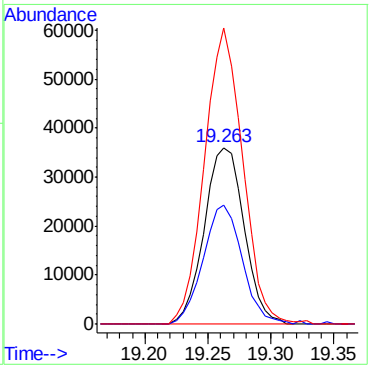


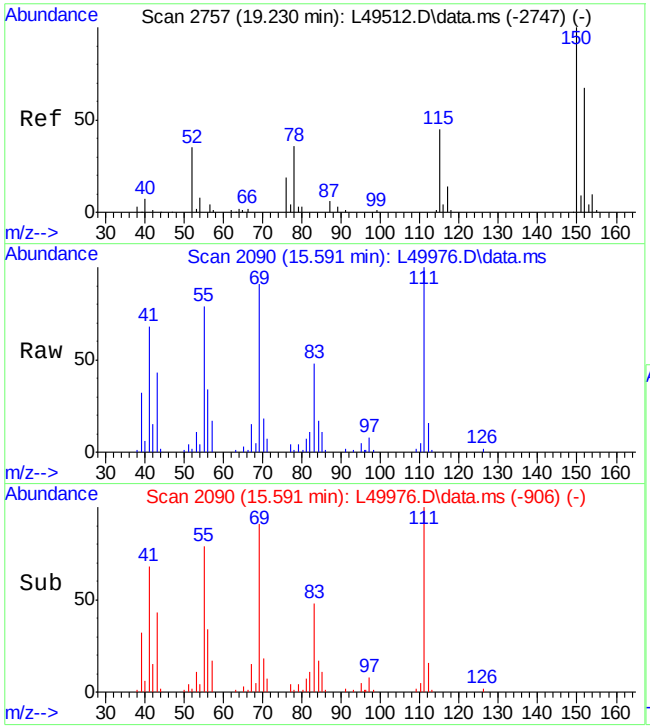




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:152 Resp: 789750

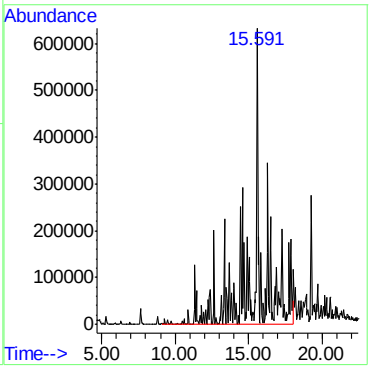
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.2 | 41.6 | 81.6 |
| 150 | 160.8 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 932.31 ug/Kg m
RT: 15.591 min Scan# 2090
Delta R.T. 1.065 min
Lab File: L49976.D
Acq: 12 Jul 2016 2:45 pm

Tgt Ion:TIC Resp:205932422



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61842.D
Acq On : 13 Jul 2016 6:01 pm
Operator : johannat
Sample : C46435-3R
Misc : MS1912,VM1859,5.07,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 02 10:09:31 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

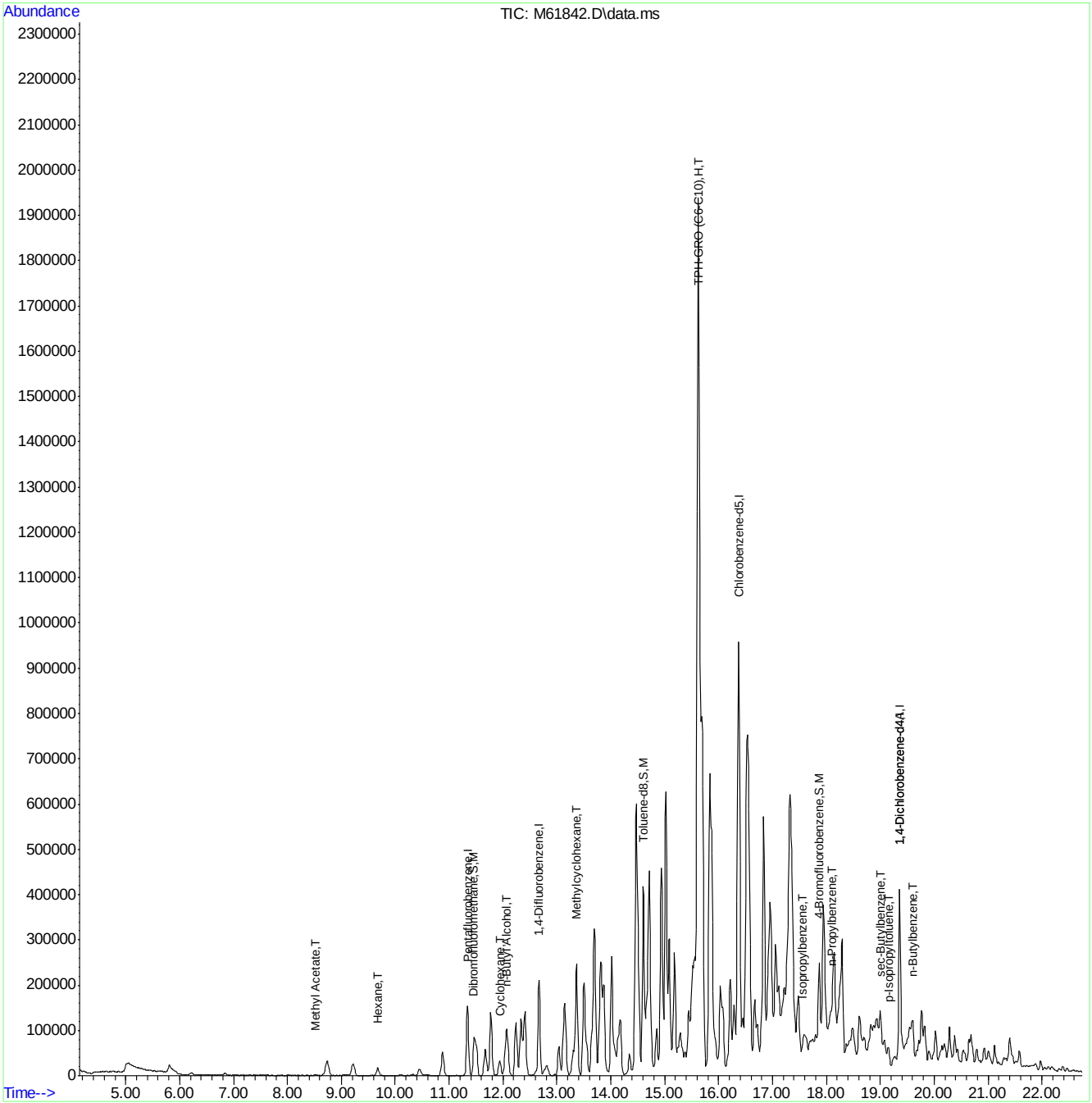
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 142145 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 216223 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 203741 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 118908 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 118908 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.456 | 111 | 69426 | 19.26 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 96.30% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 256686 | 19.30 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.50% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 118447 | 22.66 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 113.30% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 15) Methyl Acetate | 8.512 | 43 | 2344 | 0.54 | ppb | # 66 |
| 24) Hexane | 9.673 | 57 | 12431 | 1.66 | ppb | # 91 |
| 38) Cyclohexane | 11.942 | 56 | 25202 | 2.72 | ppb | 97 |
| 42) n-Butyl Alcohol | 12.058 | 56 | 60533 | 578.05 | ppb | 89 |
| 48) Methylcyclohexane | 13.366 | 55 | 143127 | 18.01 | ppb | 91 |
| 73) Isopropylbenzene | 17.556 | 105 | 14144 | 0.72 | ppb | 96 |
| 79) n-Propylbenzene | 18.094 | 91 | 14170 | 0.50 | ppb | 87 |
| 87) sec-Butylbenzene | 19.012 | 105 | 12492 | 0.51 | ppb | 100 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 11950 | 0.60 | ppb | 96 |
| 92) n-Butylbenzene | 19.603 | 91 | 10574 | 0.52 | ppb | # 55 |
| 100) TPH-GRO (C6-C10) | 15.624 | TIC | 61512113m | 1973.07 | ppb | |

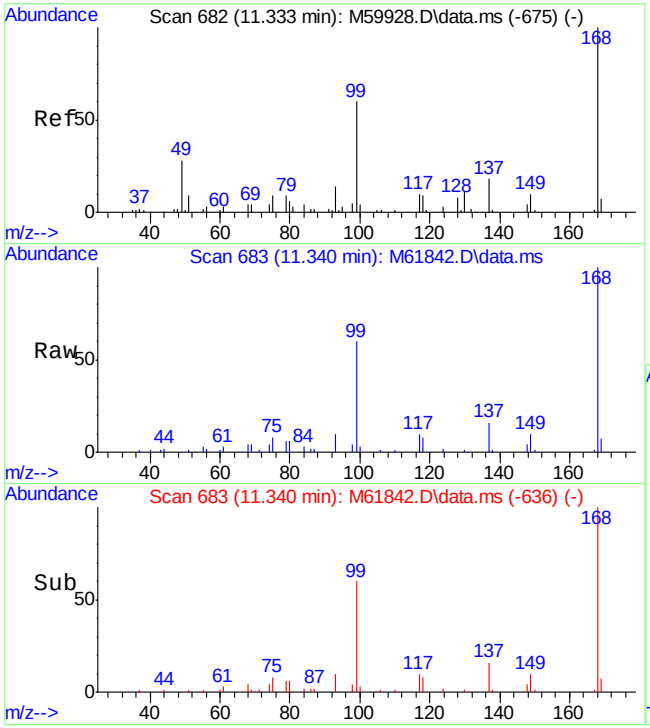
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61842.D
Acq On : 13 Jul 2016 6:01 pm
Operator : johannat
Sample : C46435-3R
Misc : MS1912,VM1859,5.07,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

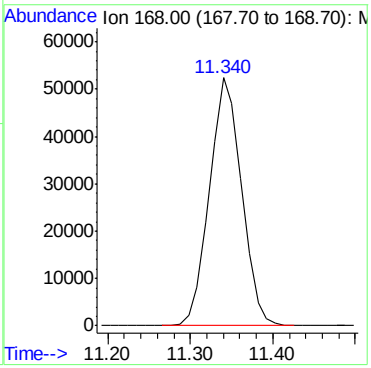
Quant Time: Aug 02 10:09:31 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

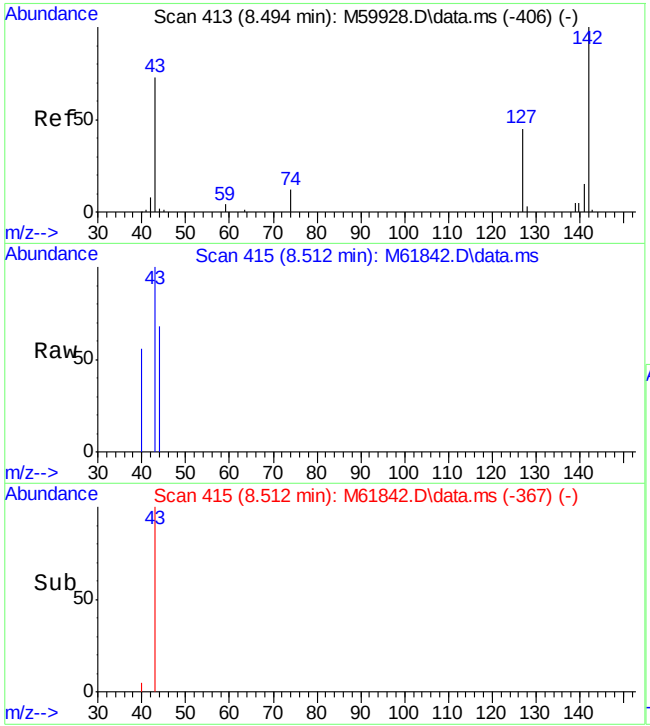





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:168 Resp: 142145

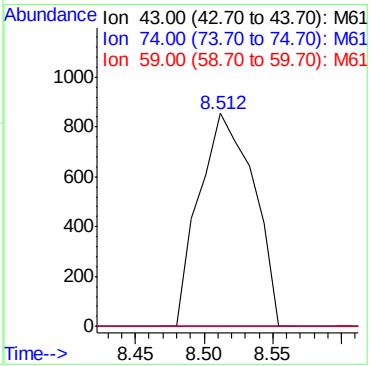


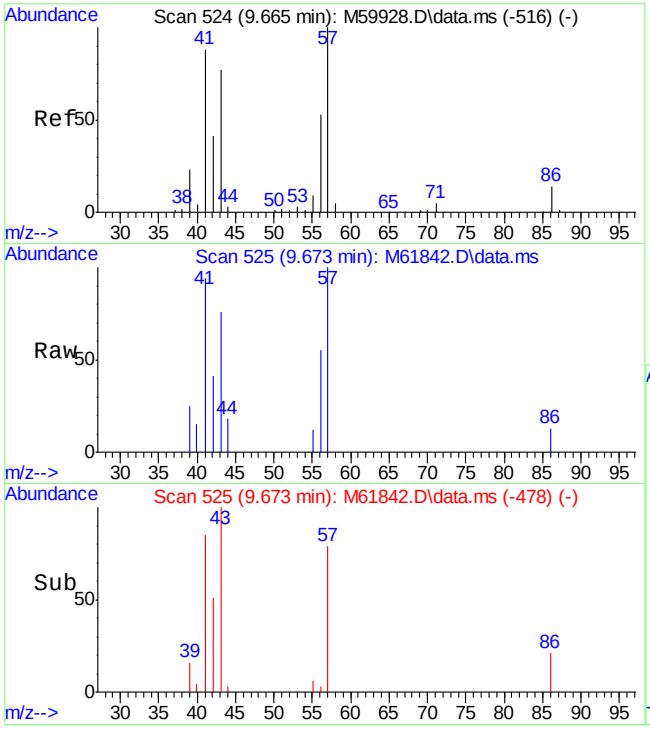




#15
Methyl Acetate
Concen: 0.54 ppb
RT: 8.512 min Scan# 415
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 43 Resp: 2344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 0.0 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

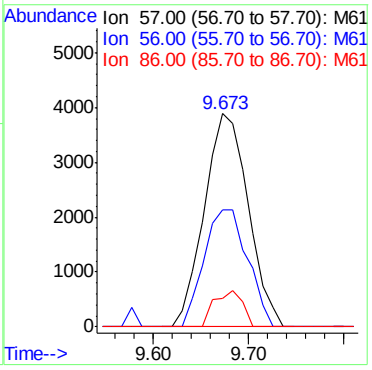


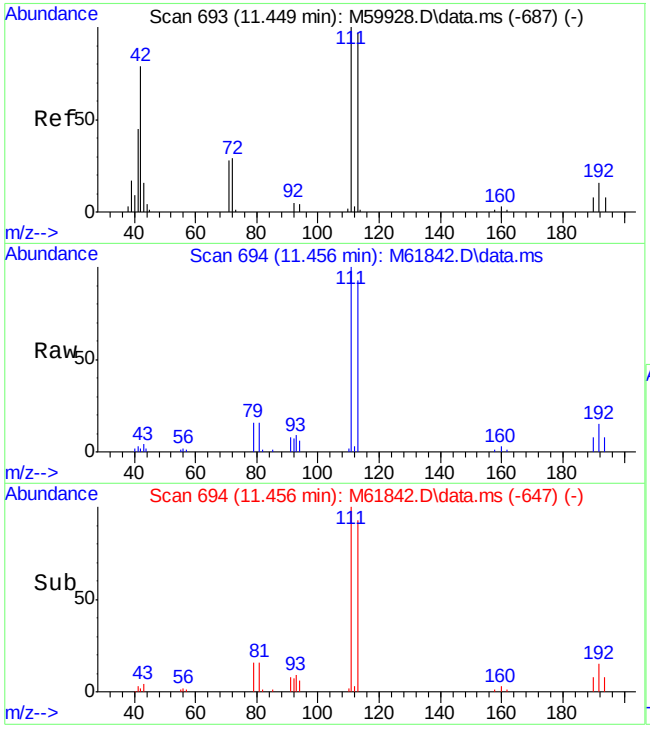



#24
Hexane
Concen: 1.66 ppb
RT: 9.673 min Scan# 525
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 57 Resp: 12431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 54.2 | 32.9 | 72.9 |
| 86 | 0.0 | 0.0 | 34.1 |

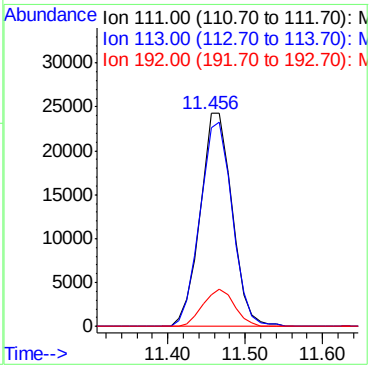


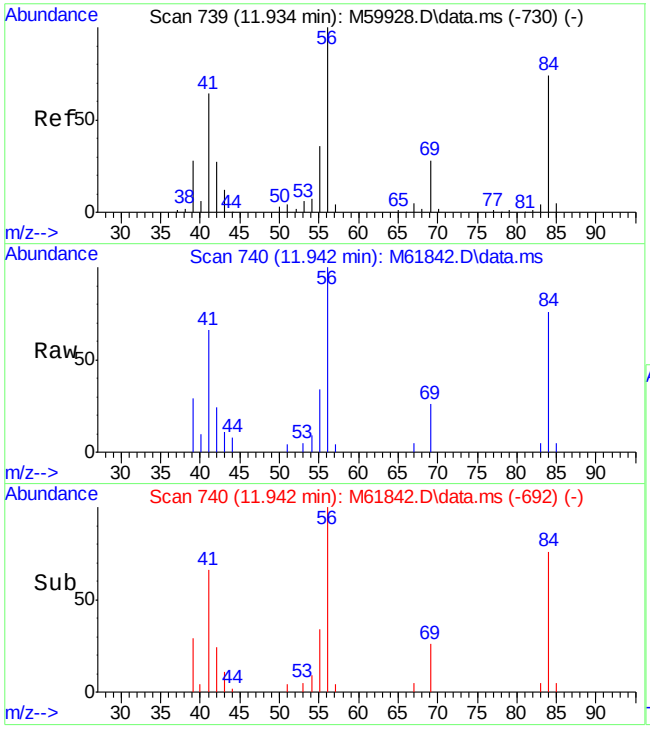




#36
Dibromofluoromethane
Concen: 19.26 ppb
RT: 11.456 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:111 Resp: 69426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.1 | 77.7 | 117.7 |
| 192 | 17.3 | 0.0 | 36.3 |

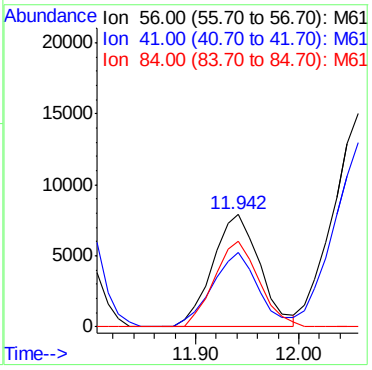


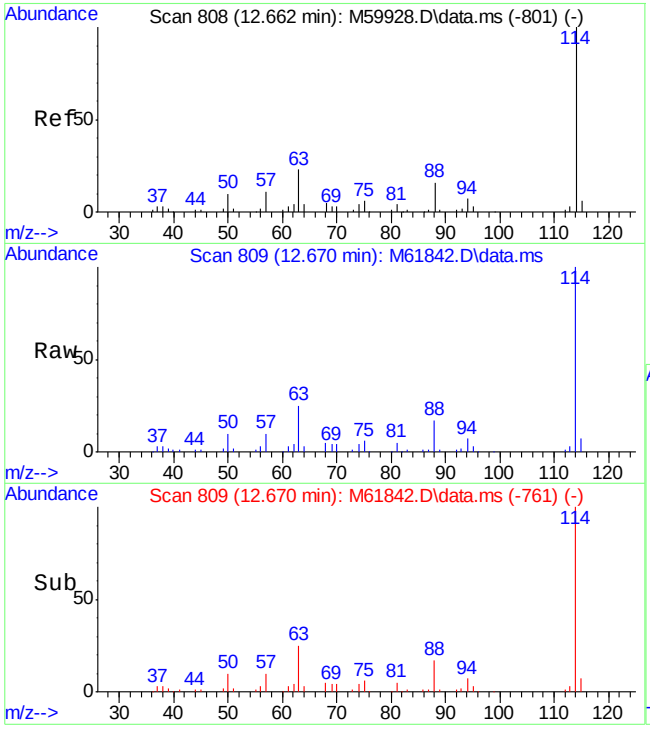



#38
Cyclohexane
Concen: 2.72 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 56 Resp: 25202

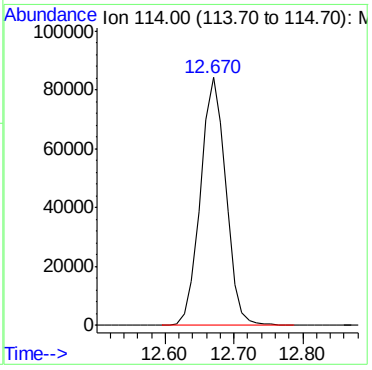
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 65.1 | 46.3 | 86.3 |
| 84 | 71.9 | 56.0 | 96.0 |

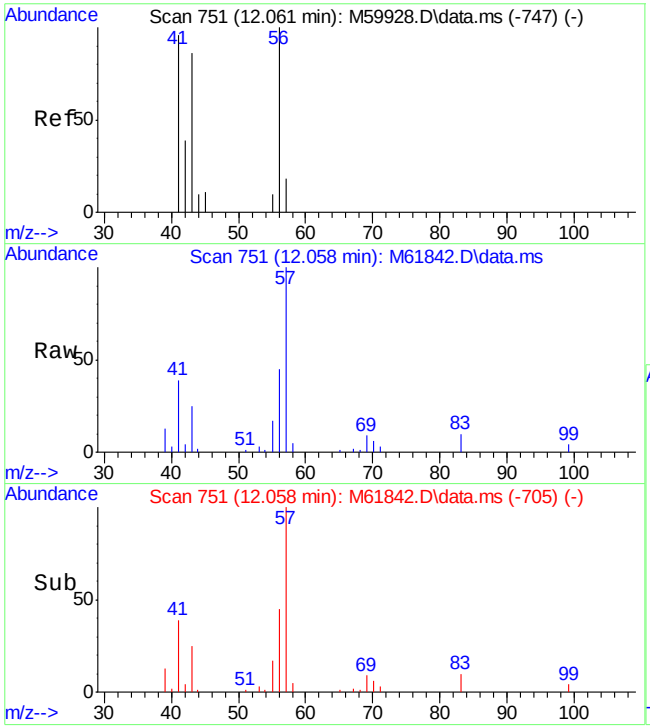



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:114 Resp: 216223

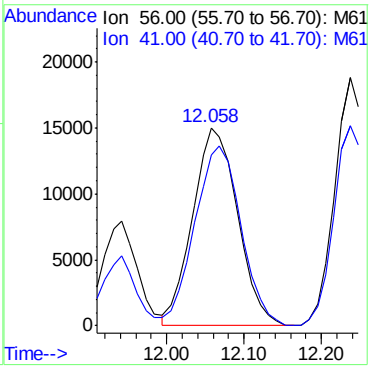


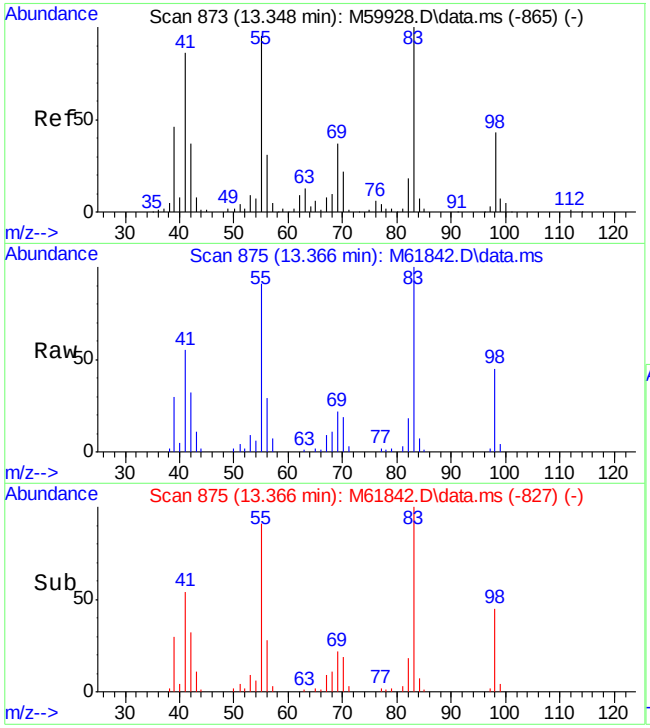



#42
n-Butyl Alcohol
Concen: 578.05 ppb
RT: 12.058 min Scan# 751
Delta R.T. -0.014 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 56 Resp: 60533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 93.4 | 63.5 | 103.5 |

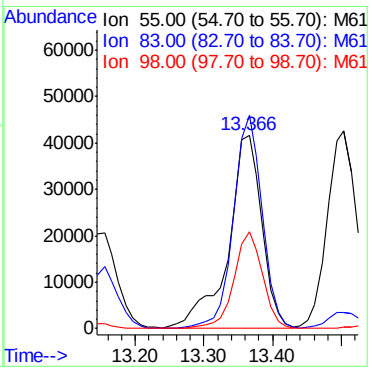


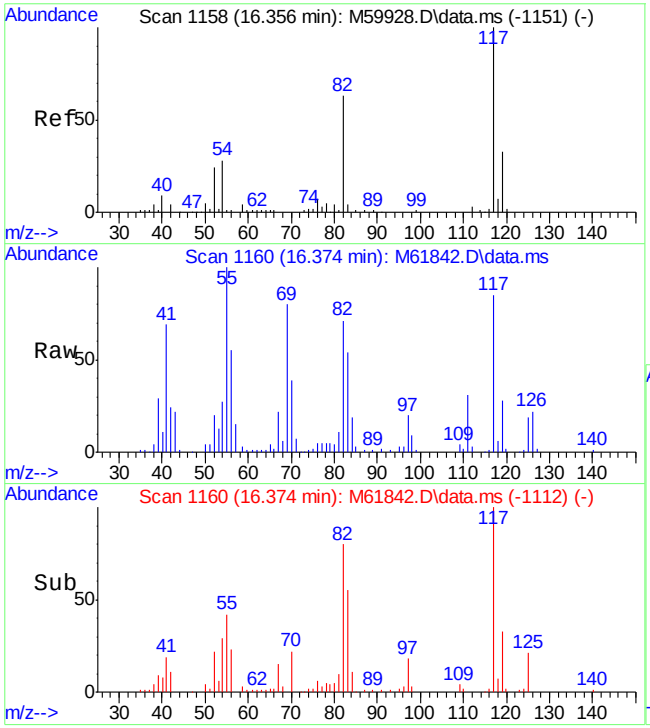




#48
Methylcyclohexane
Concen: 18.01 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 55 Resp: 143127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 94.0 | 84.5 | 124.5 |
| 98 | 42.3 | 27.0 | 67.0 |

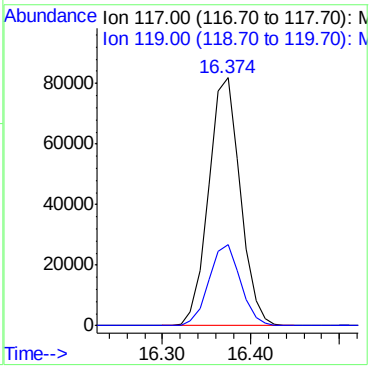


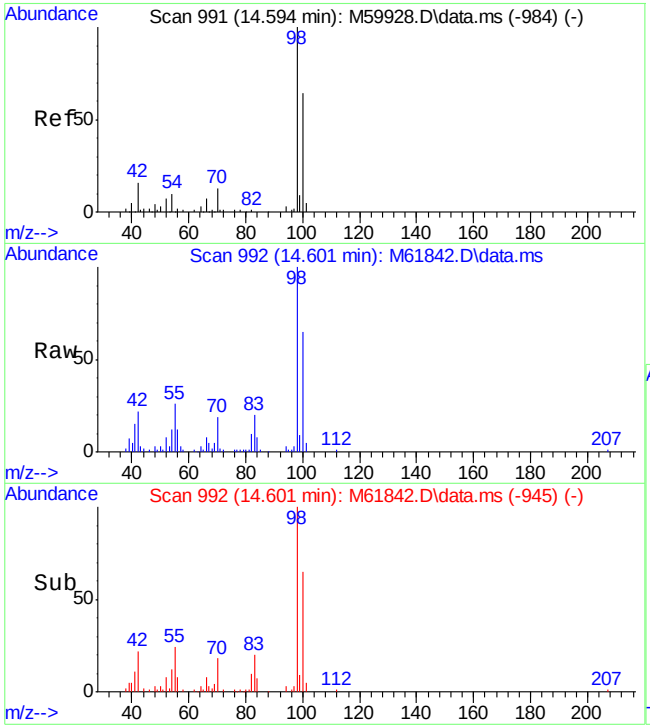



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:117 Resp: 203741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

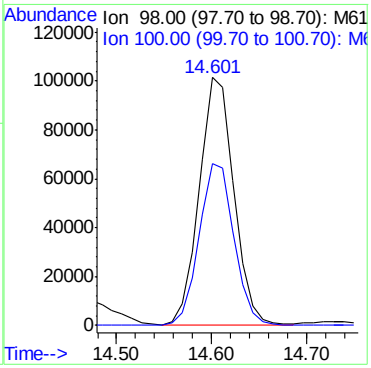


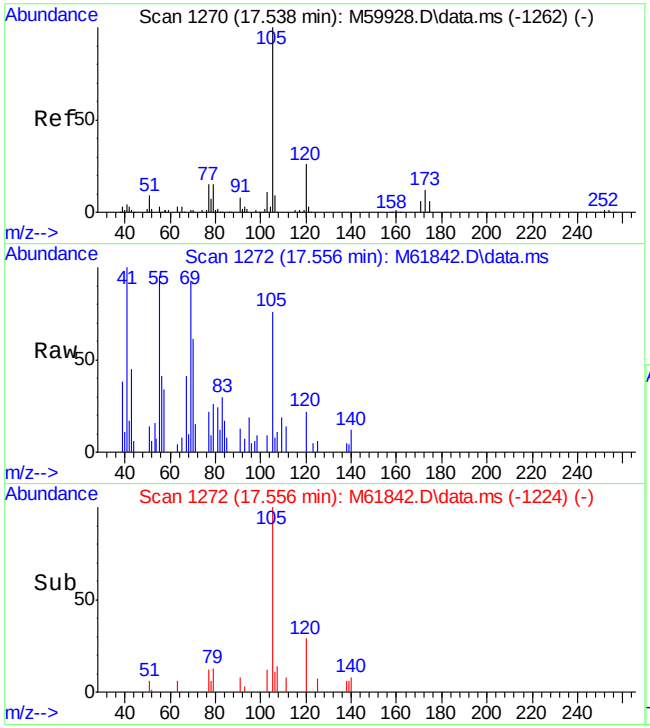




#56
Toluene-d8
Concen: 19.30 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 98 Resp: 256686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

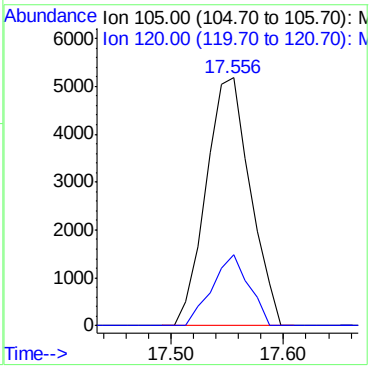


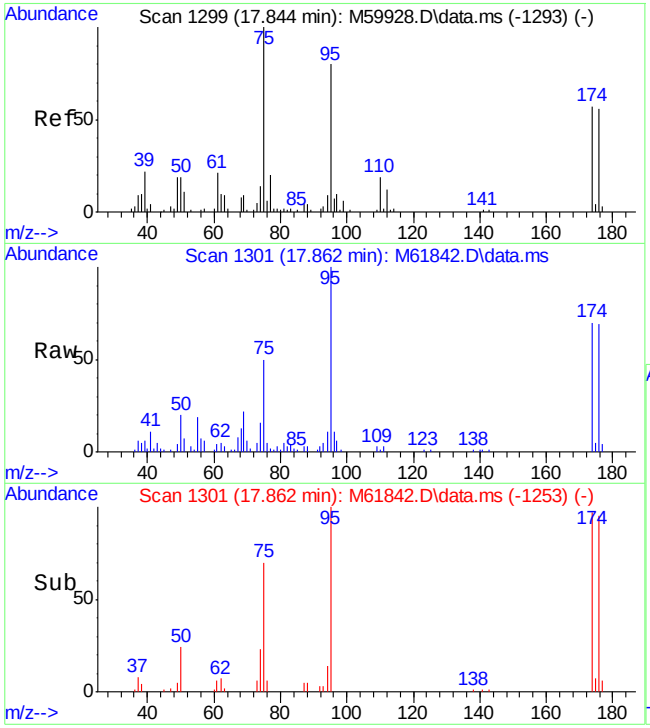



#73
Isopropylbenzene
Concen: 0.72 ppb
RT: 17.556 min Scan# 1272
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:105 Resp: 14144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 23.9 | 5.7 | 45.7 |

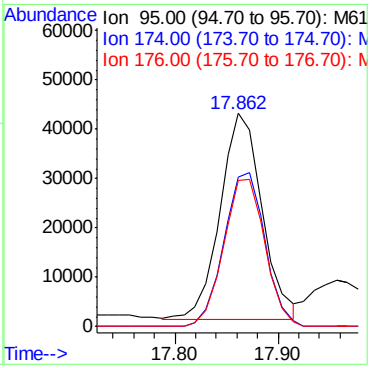


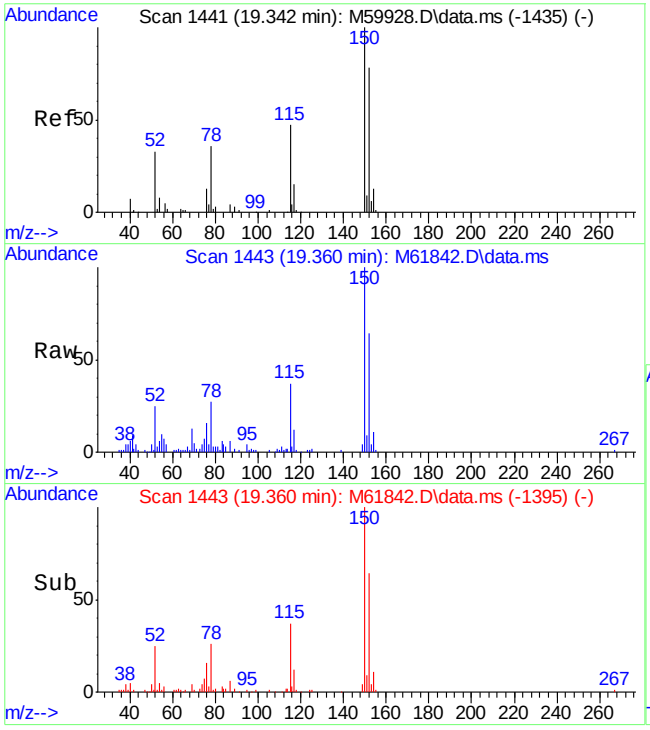




#74
4-Bromofluorobenzene
Concen: 22.66 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 95 Resp: 118447

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.8 | 54.3 | 94.3 |
| 176 | 70.1 | 51.5 | 91.5 |

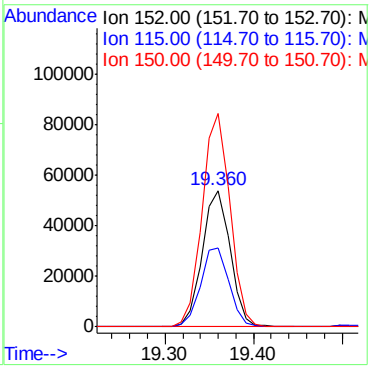


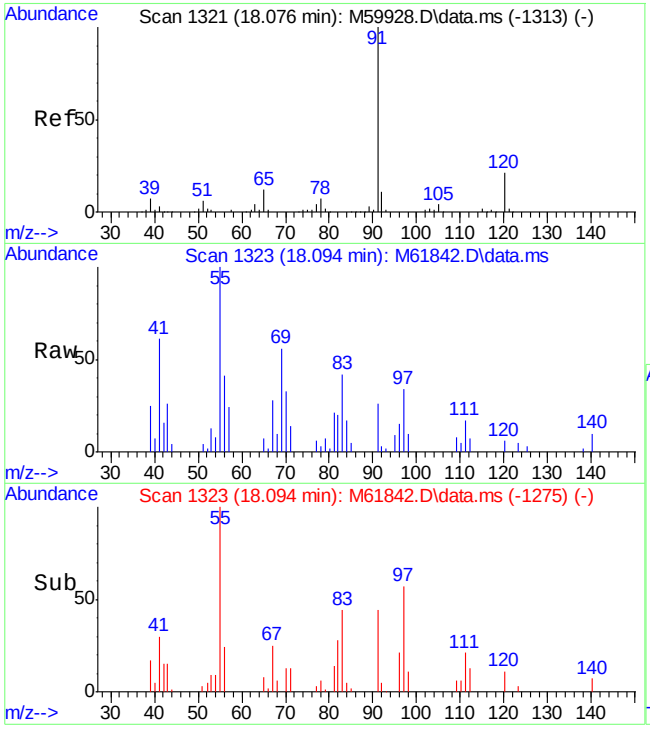



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:152 Resp: 118908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.6 | 40.9 | 80.9 |
| 150 | 154.9 | 178.6 | 218.6# |

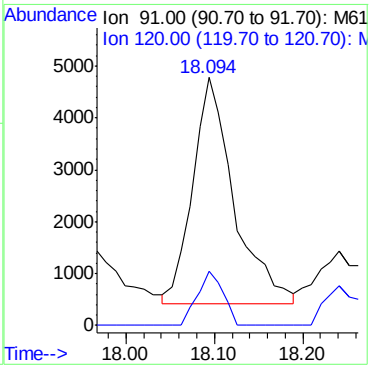


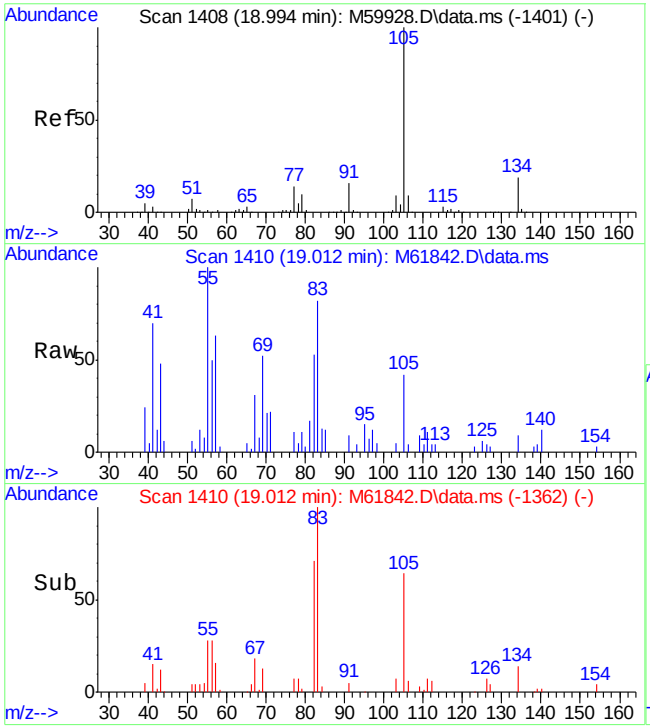




#79
n-Propylbenzene
Concen: 0.50 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 91 Resp: 14170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 14.9 | 1.3 | 41.3 |

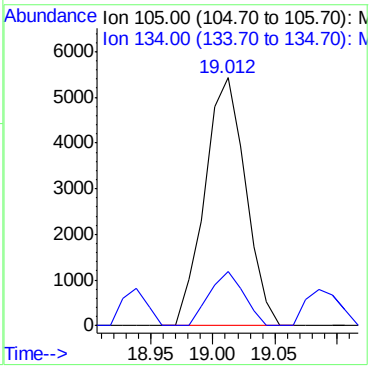


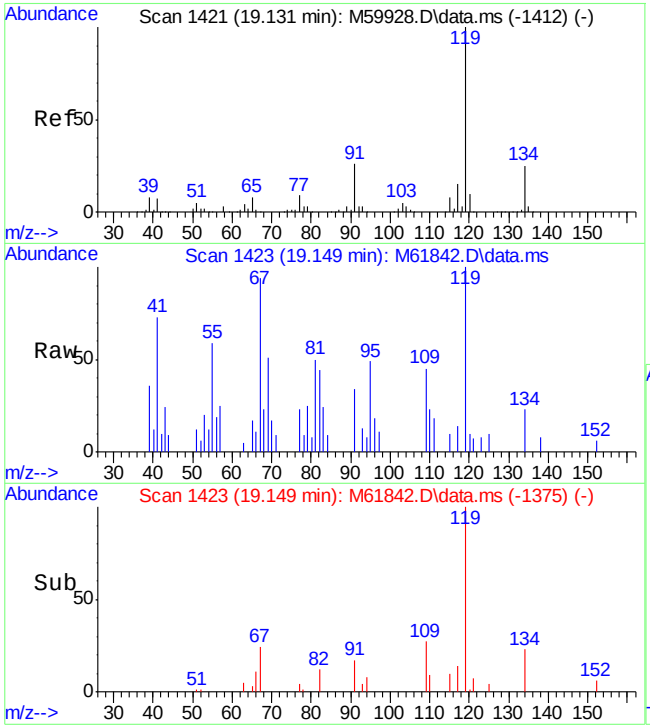



#87
sec-Butylbenzene
Concen: 0.51 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:105 Resp: 12492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.5 | 0.0 | 38.7 |

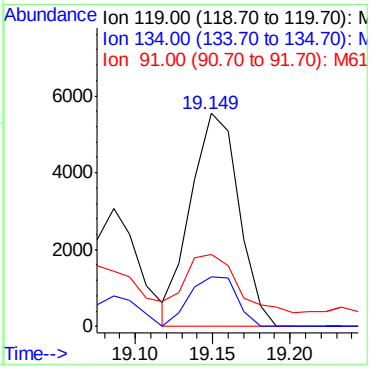


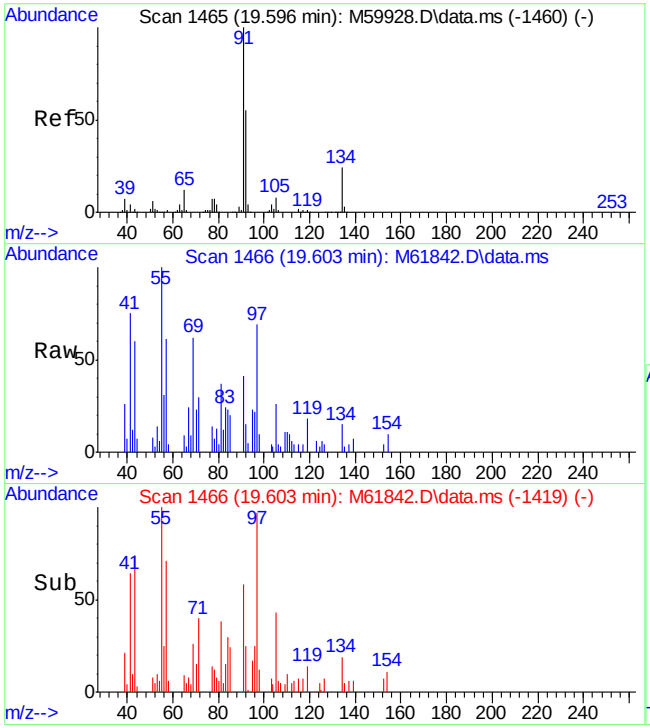




#88
p-Isopropyltoluene
Concen: 0.60 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:119 Resp: 11950

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 23.1 | 6.0 | 46.0 |
| 91 | 27.5 | 6.0 | 46.0 |

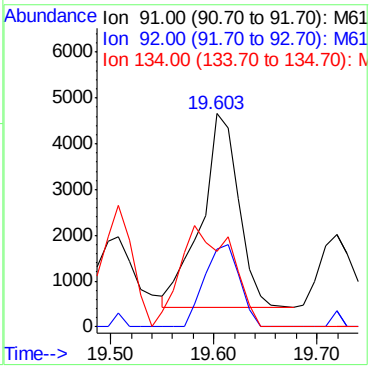


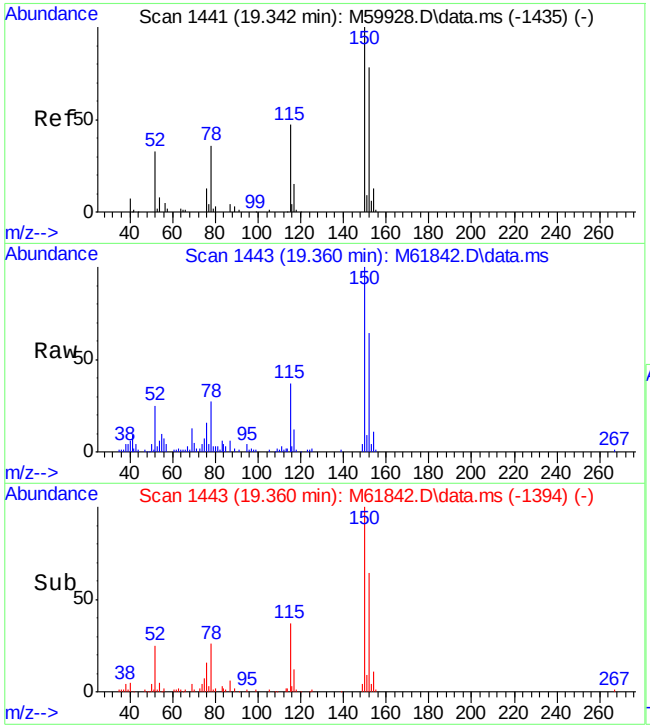



#92
n-Butylbenzene
Concen: 0.52 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 91 Resp: 10574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 40.1 | 35.3 | 75.3 |
| 134 | 72.4 | 3.6 | 43.6# |

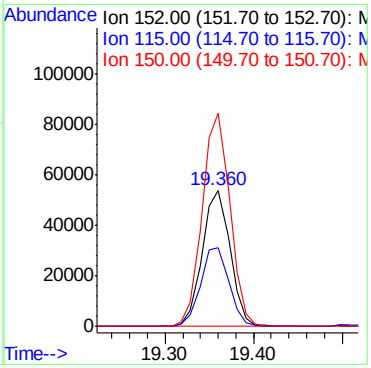


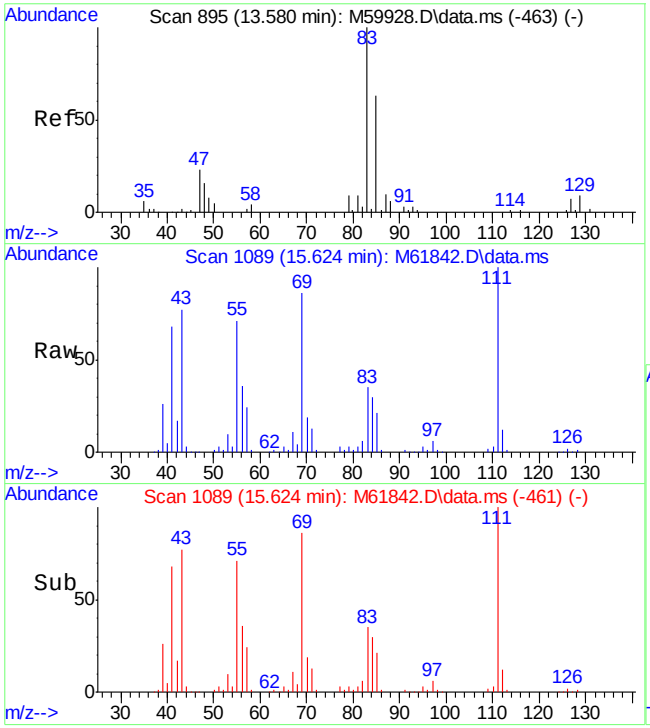




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:152 Resp: 118908

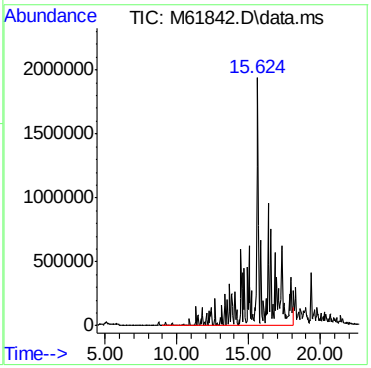
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.6 | 37.3 | 77.3 |
| 150 | 154.9 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 1973.07 ppb m
RT: 15.624 min Scan# 1089
Delta R.T. 2.074 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:TIC Resp:61512113



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61842.D
Acq On : 13 Jul 2016 6:01 pm
Operator : johannat
Sample : C46435-3R
Misc : MS1912,VM1859,5.07,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 02 10:09:31 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

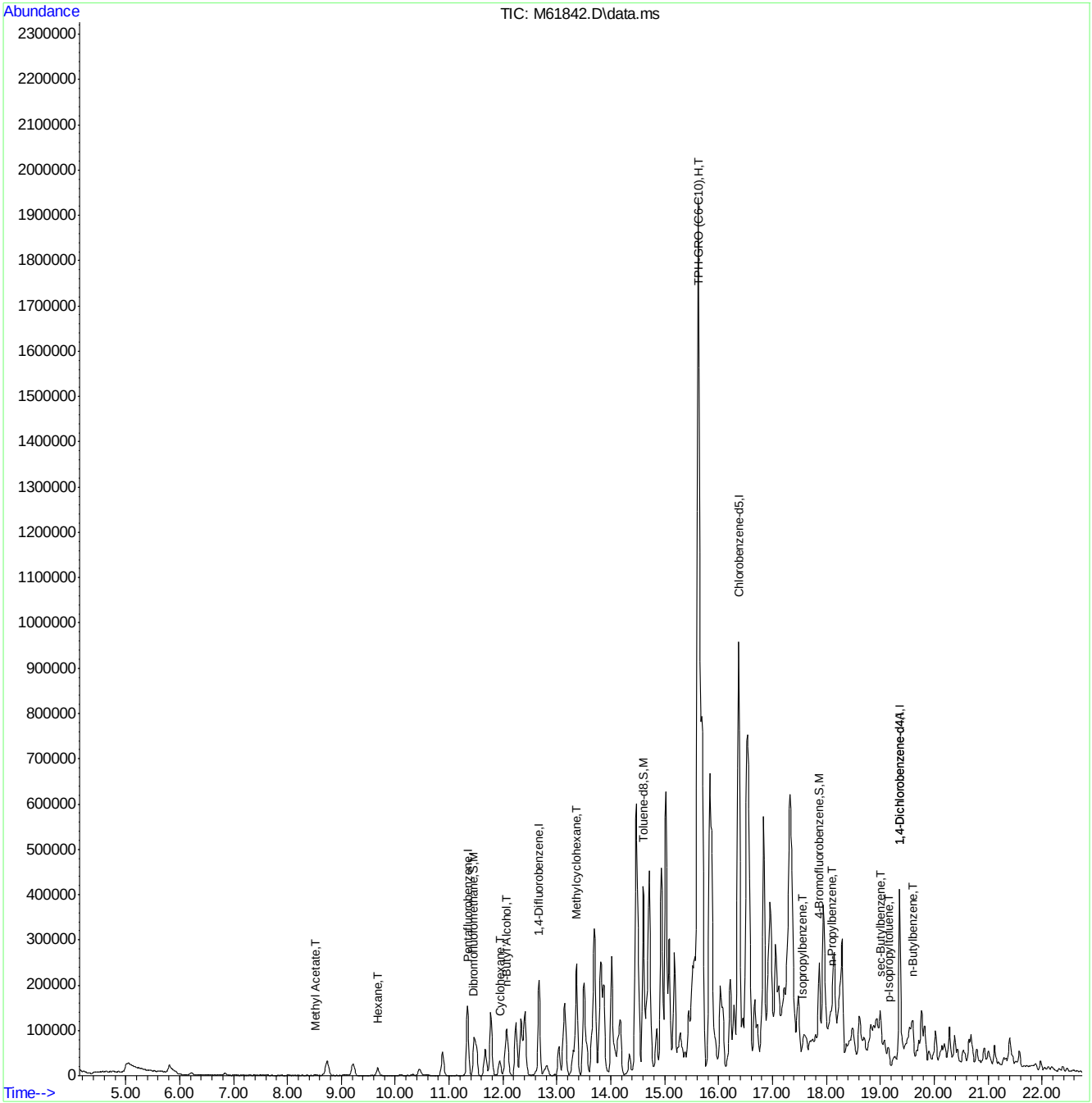
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 142145 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 216223 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 203741 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 118908 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 118908 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.456 | 111 | 69426 | 19.26 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 96.30% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 256686 | 19.30 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.50% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 118447 | 22.66 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 113.30% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 15) Methyl Acetate | 8.512 | 43 | 2344 | 0.54 | ppb | # 66 |
| 24) Hexane | 9.673 | 57 | 12431 | 1.66 | ppb | # 91 |
| 38) Cyclohexane | 11.942 | 56 | 25202 | 2.72 | ppb | 97 |
| 42) n-Butyl Alcohol | 12.058 | 56 | 60533 | 578.05 | ppb | 89 |
| 48) Methylcyclohexane | 13.366 | 55 | 143127 | 18.01 | ppb | 91 |
| 73) Isopropylbenzene | 17.556 | 105 | 14144 | 0.72 | ppb | 96 |
| 79) n-Propylbenzene | 18.094 | 91 | 14170 | 0.50 | ppb | 87 |
| 87) sec-Butylbenzene | 19.012 | 105 | 12492 | 0.51 | ppb | 100 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 11950 | 0.60 | ppb | 96 |
| 92) n-Butylbenzene | 19.603 | 91 | 10574 | 0.52 | ppb | # 55 |
| 100) TPH-GRO (C6-C10) | 15.624 | TIC | 61512113m | 1973.07 | ppb | |

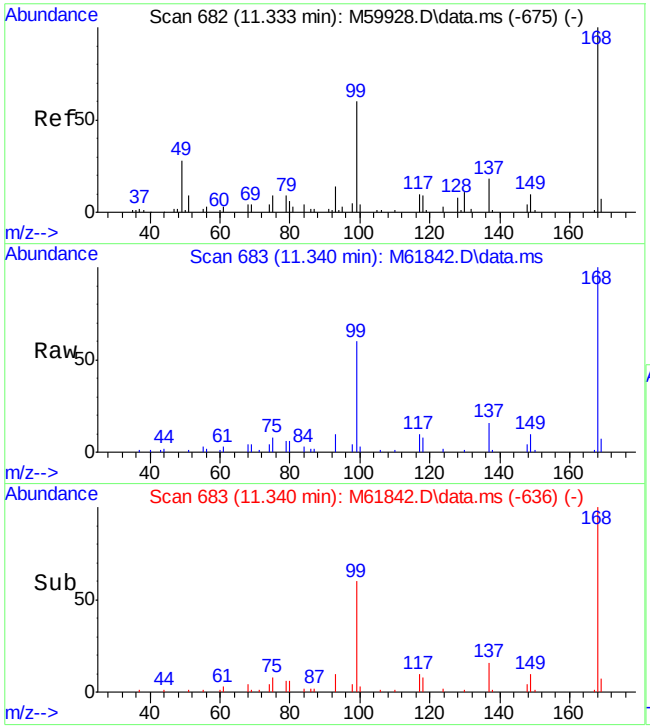
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61842.D
Acq On : 13 Jul 2016 6:01 pm
Operator : johannat
Sample : C46435-3R
Misc : MS1912,VM1859,5.07,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

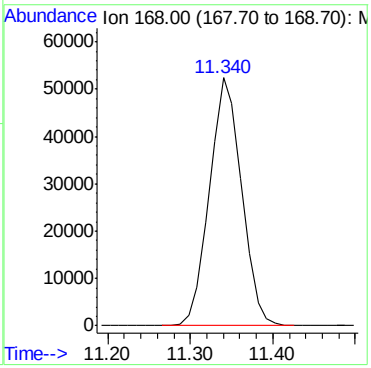
Quant Time: Aug 02 10:09:31 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

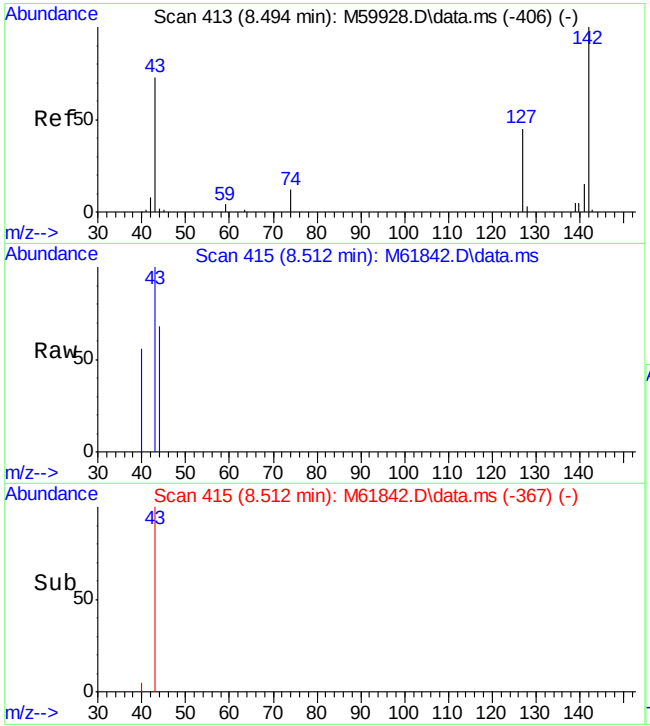





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:168 Resp: 142145

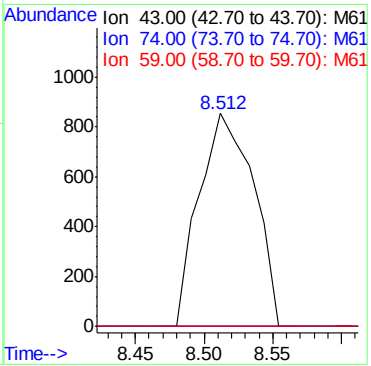


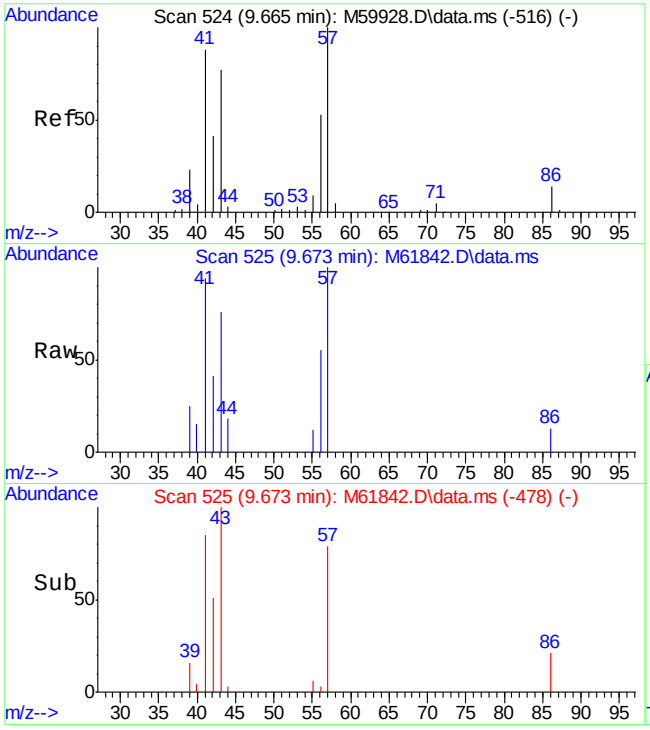




#15
Methyl Acetate
Concen: 0.54 ppb
RT: 8.512 min Scan# 415
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 43 Resp: 2344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 0.0 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

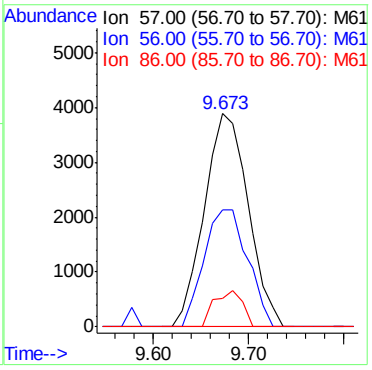


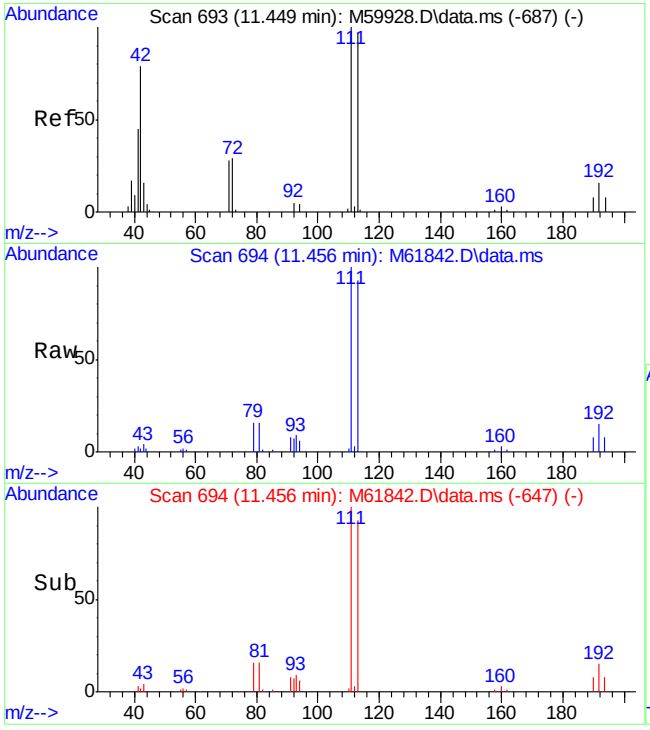



#24
Hexane
Concen: 1.66 ppb
RT: 9.673 min Scan# 525
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 57 Resp: 12431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 54.2 | 32.9 | 72.9 |
| 86 | 0.0 | 0.0 | 34.1 |

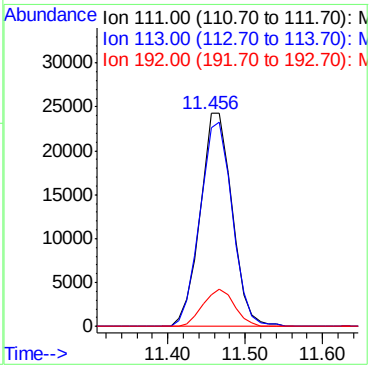


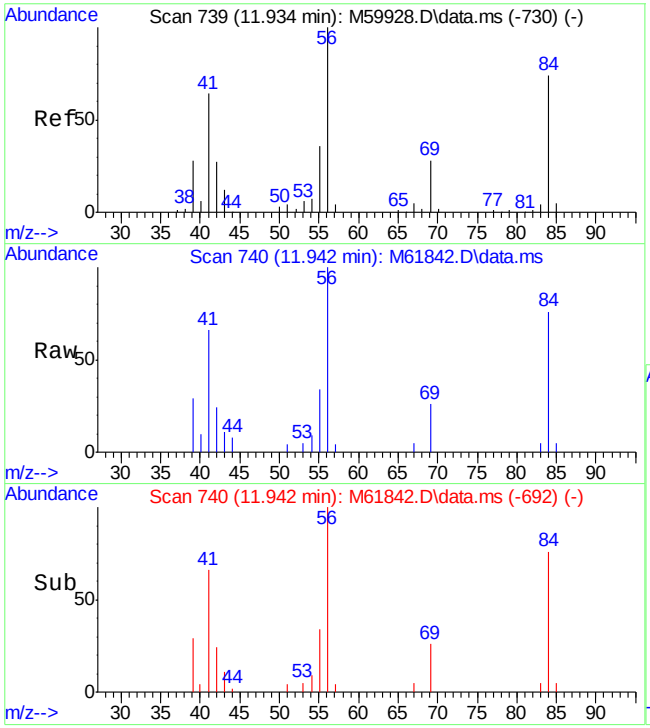




#36
Dibromofluoromethane
Concen: 19.26 ppb
RT: 11.456 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:111 Resp: 69426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.1 | 77.7 | 117.7 |
| 192 | 17.3 | 0.0 | 36.3 |

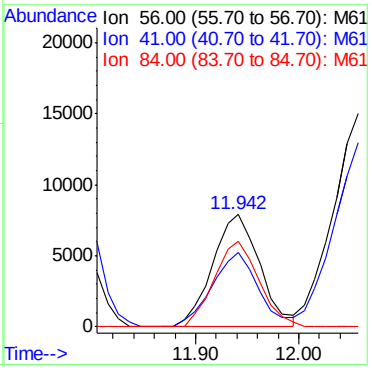


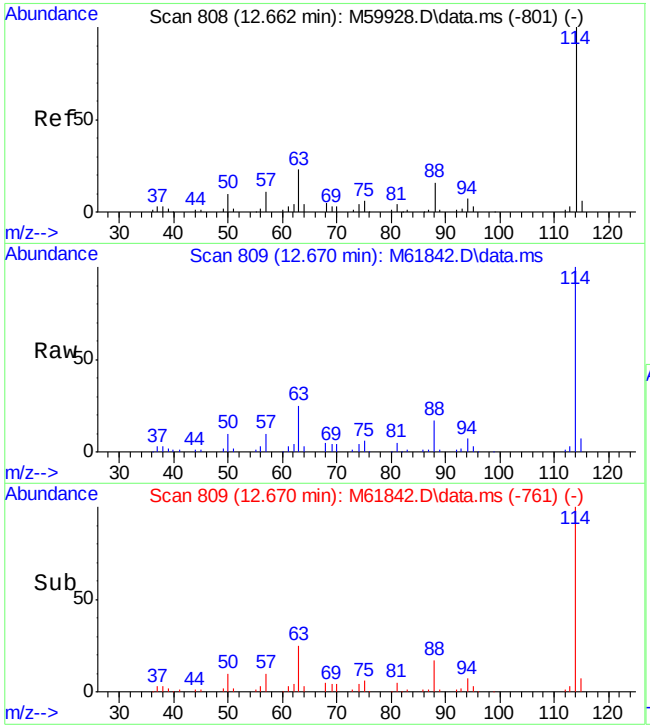



#38
Cyclohexane
Concen: 2.72 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 56 Resp: 25202

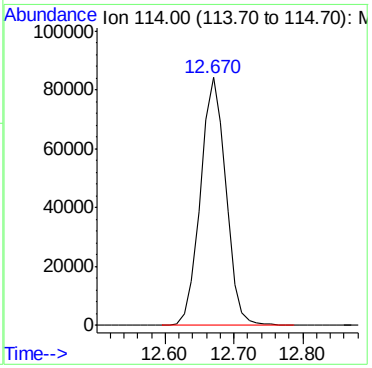
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 65.1 | 46.3 | 86.3 |
| 84 | 71.9 | 56.0 | 96.0 |

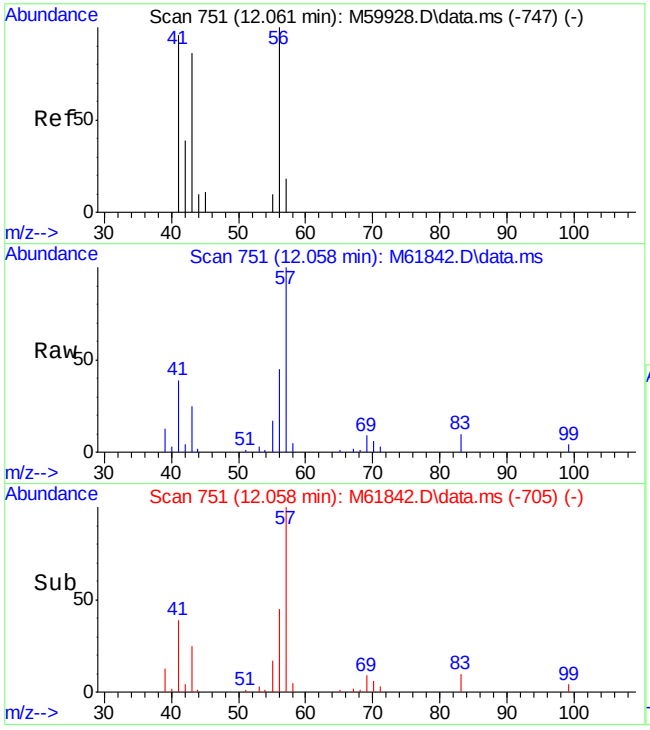



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:114 Resp: 216223

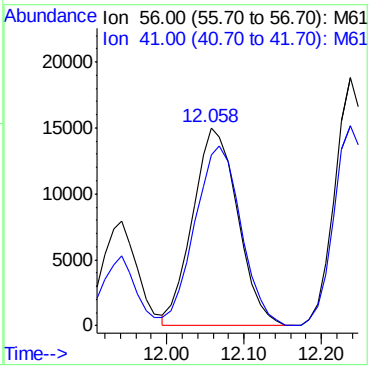


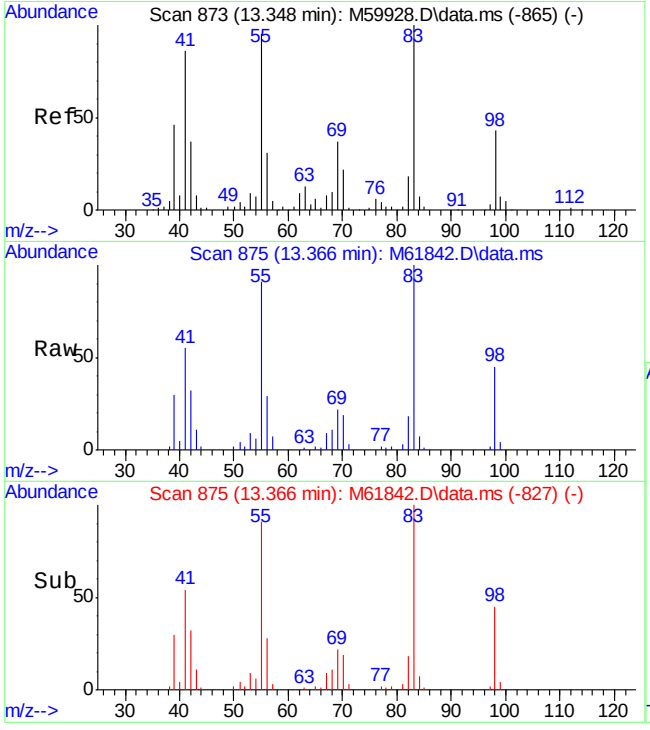



#42
n-Butyl Alcohol
Concen: 578.05 ppb
RT: 12.058 min Scan# 751
Delta R.T. -0.014 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 56 Resp: 60533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 93.4 | 63.5 | 103.5 |

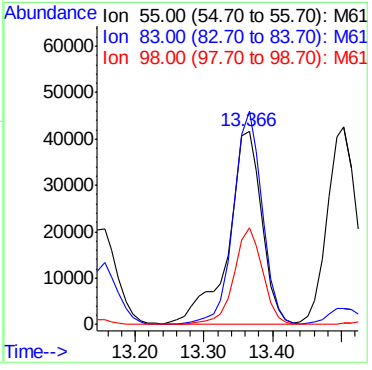


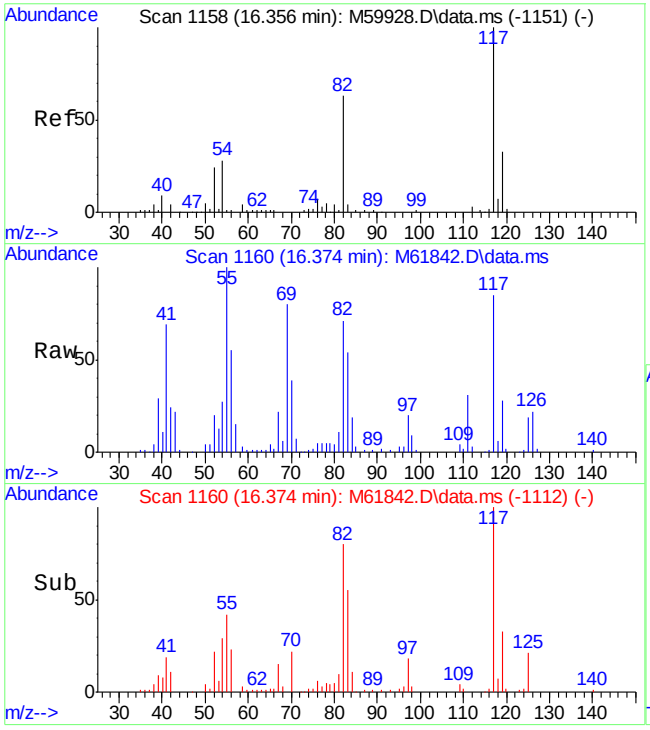




#48
Methylcyclohexane
Concen: 18.01 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 55 Resp: 143127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 94.0 | 84.5 | 124.5 |
| 98 | 42.3 | 27.0 | 67.0 |

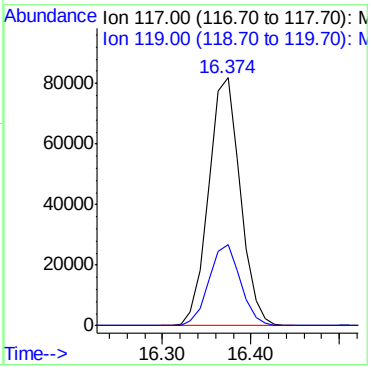


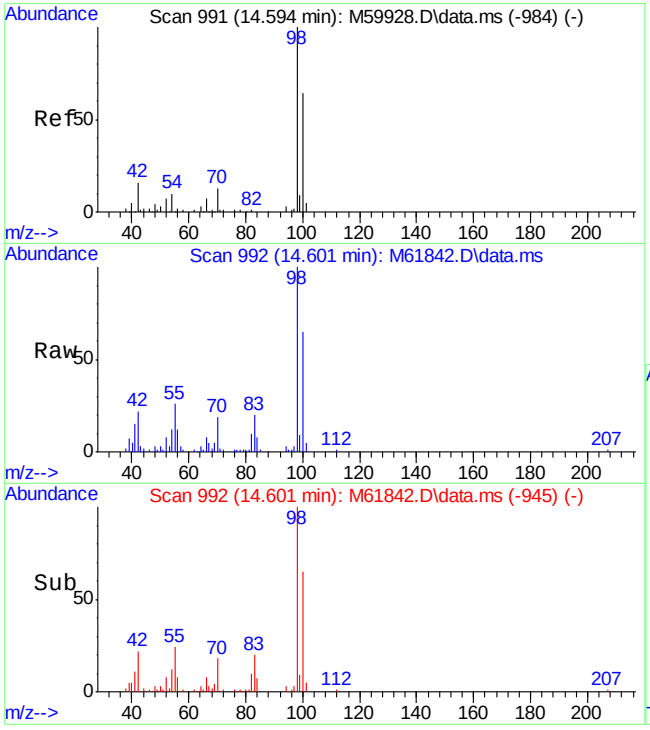



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:117 Resp: 203741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

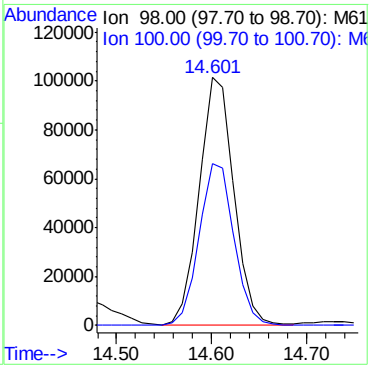


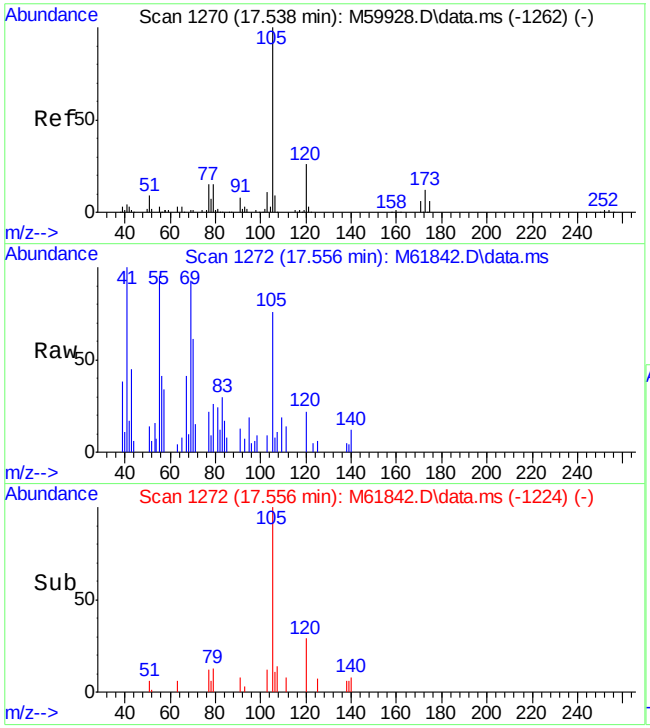




#56
Toluene-d8
Concen: 19.30 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 98 Resp: 256686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

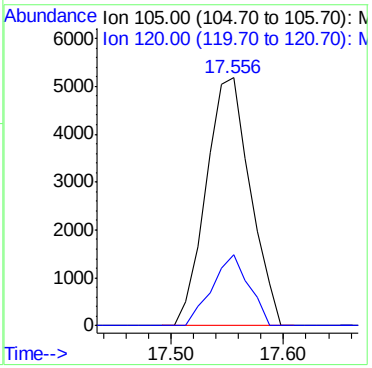


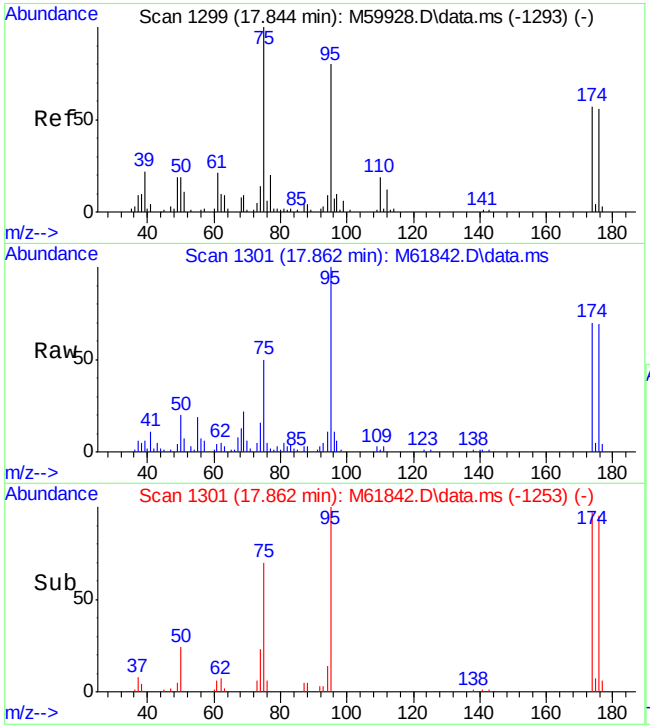



#73
Isopropylbenzene
Concen: 0.72 ppb
RT: 17.556 min Scan# 1272
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:105 Resp: 14144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 23.9 | 5.7 | 45.7 |

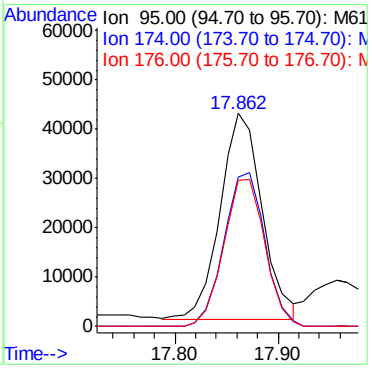


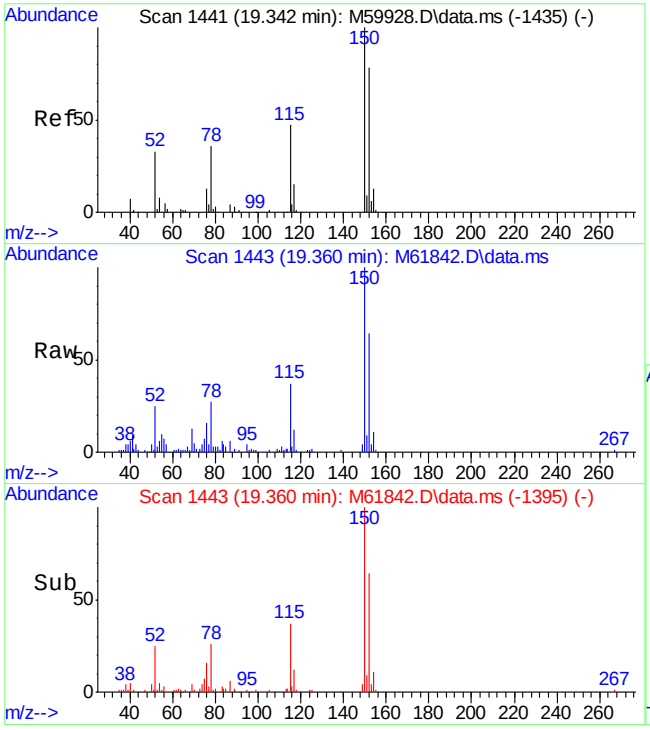




#74
4-Bromofluorobenzene
Concen: 22.66 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 95 Resp: 118447

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.8 | 54.3 | 94.3 |
| 176 | 70.1 | 51.5 | 91.5 |

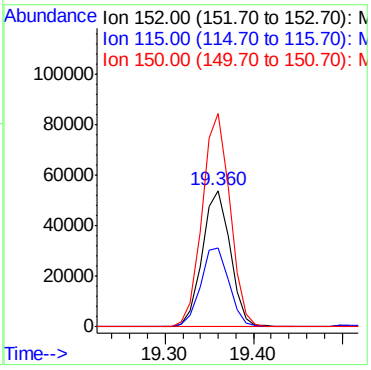


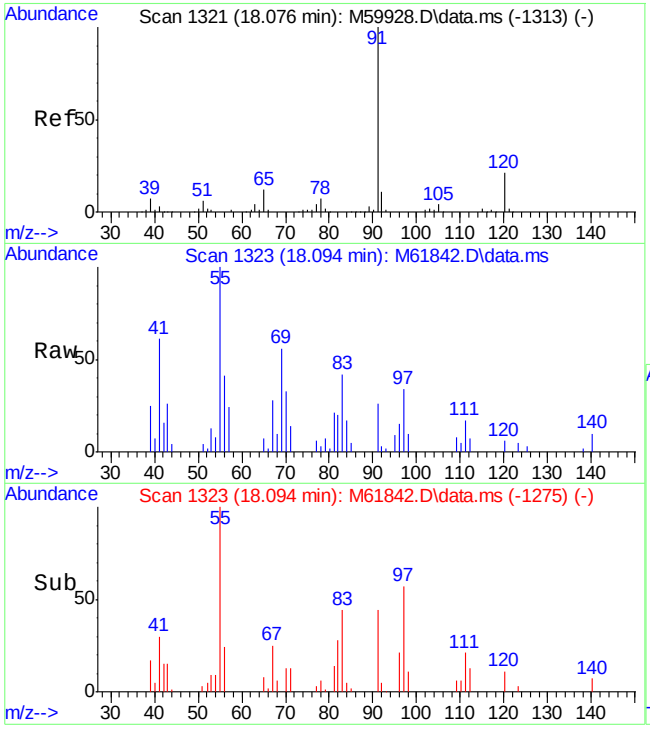



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:152 Resp: 118908

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.6 | 40.9 | 80.9 |
| 150 | 154.9 | 178.6 | 218.6# |

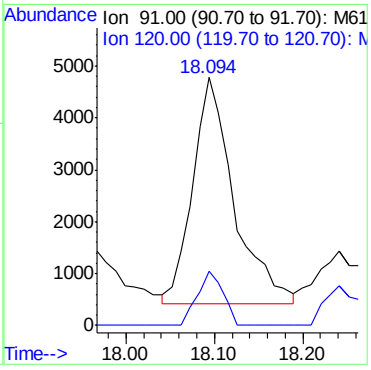


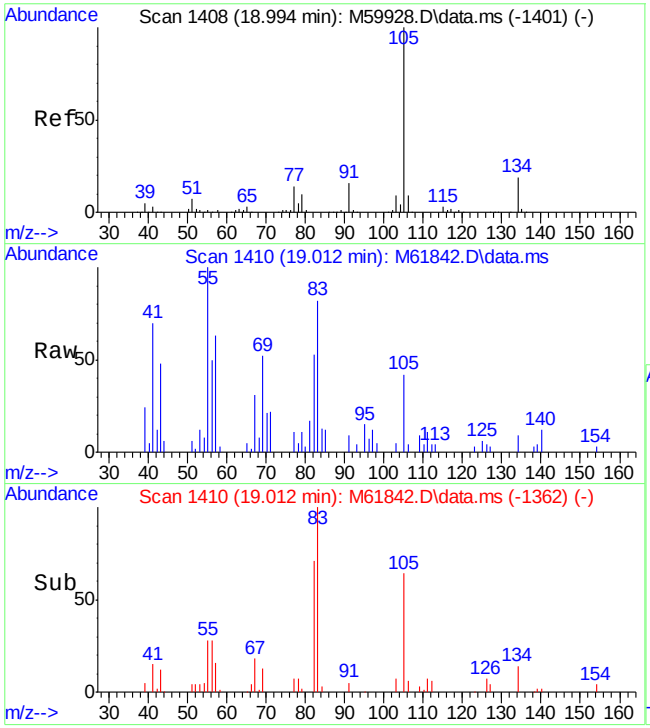




#79
n-Propylbenzene
Concen: 0.50 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 91 Resp: 14170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 14.9 | 1.3 | 41.3 |

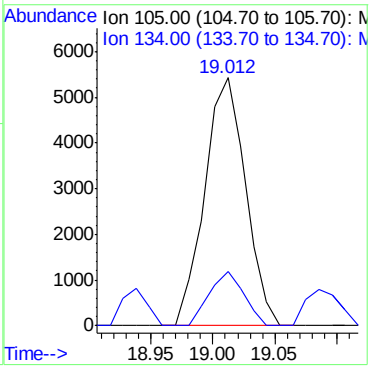


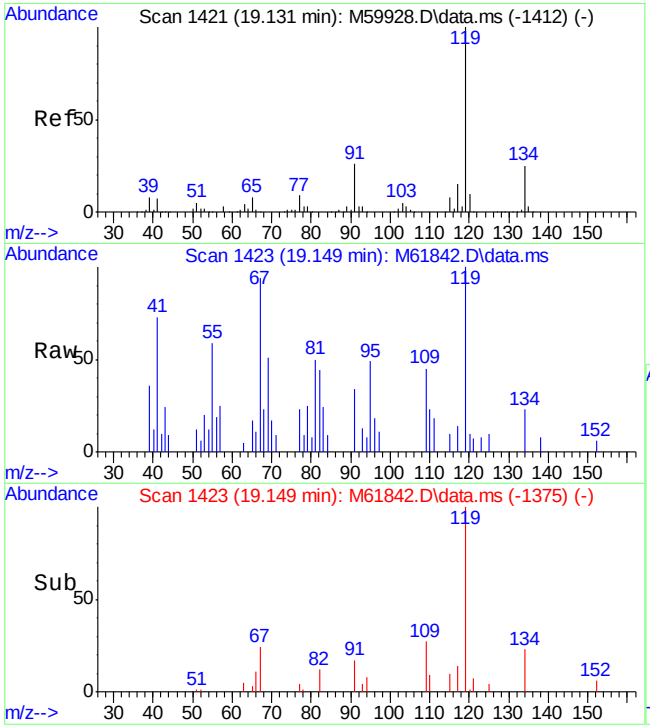



#87
sec-Butylbenzene
Concen: 0.51 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:105 Resp: 12492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.5 | 0.0 | 38.7 |

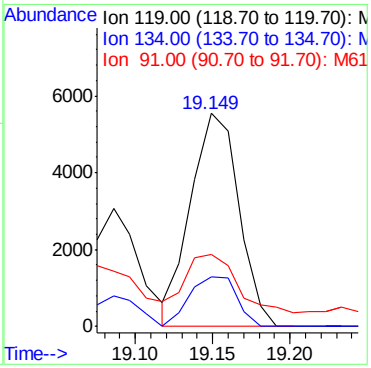


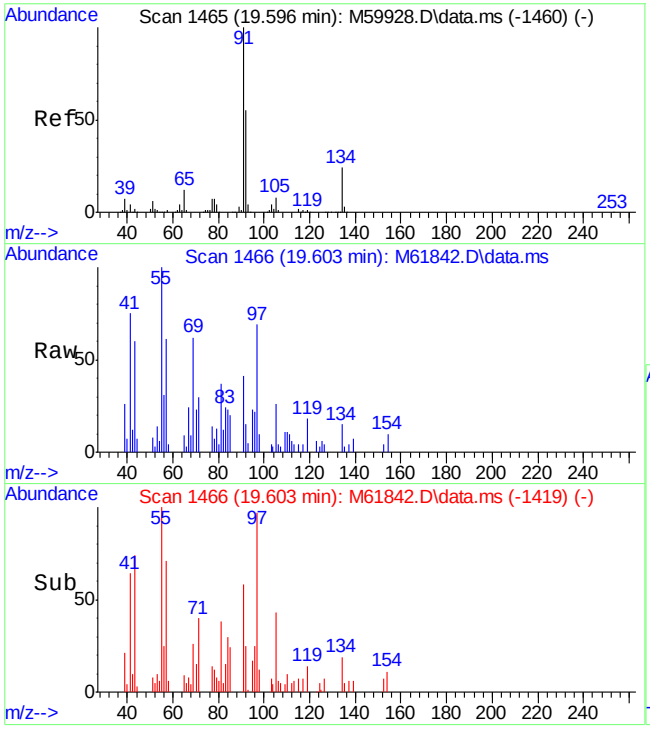




#88
p-Isopropyltoluene
Concen: 0.60 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:119 Resp: 11950

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 23.1 | 6.0 | 46.0 |
| 91 | 27.5 | 6.0 | 46.0 |

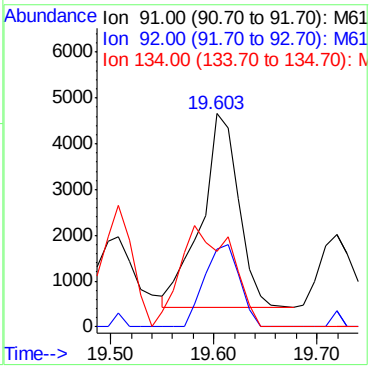


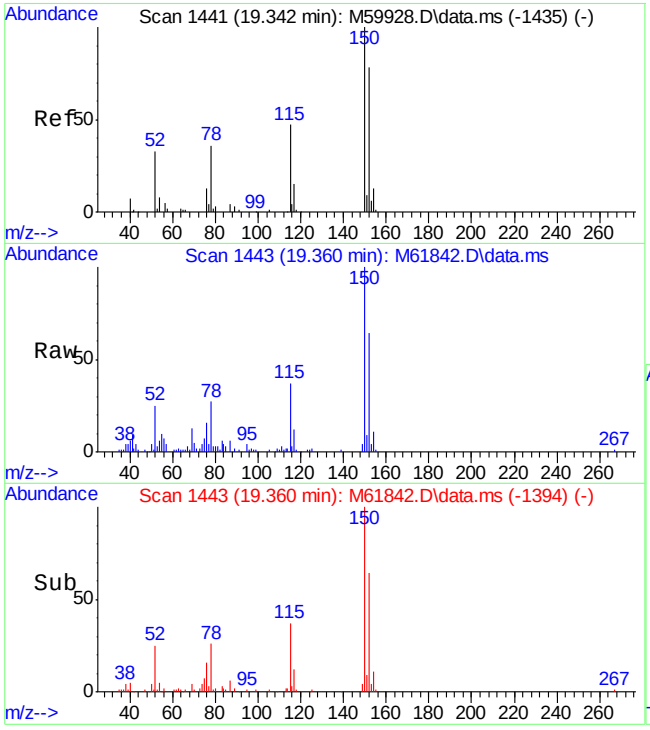



#92
n-Butylbenzene
Concen: 0.52 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion: 91 Resp: 10574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 40.1 | 35.3 | 75.3 |
| 134 | 72.4 | 3.6 | 43.6# |

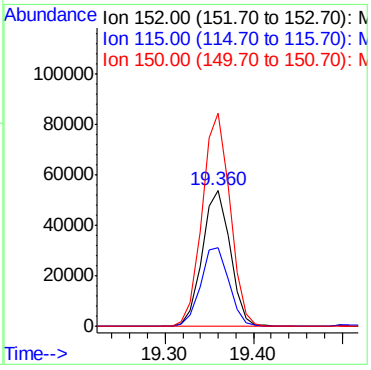


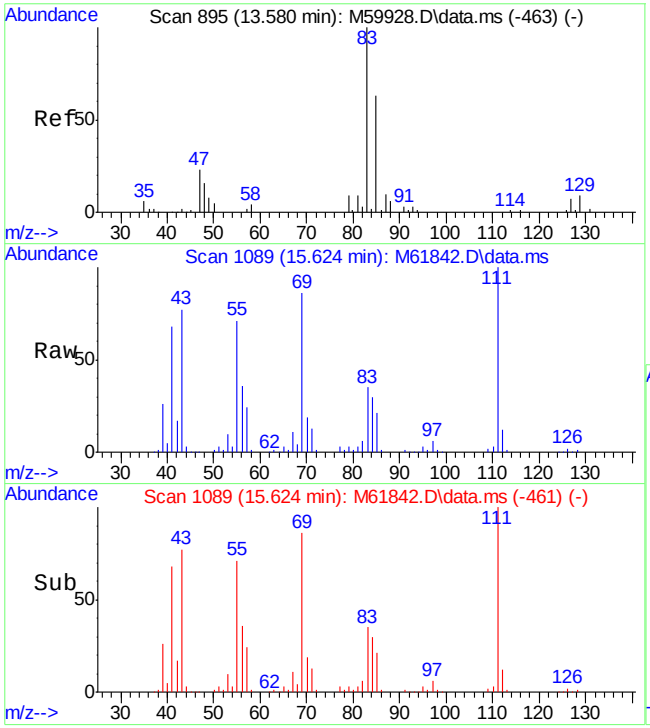




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:152 Resp: 118908

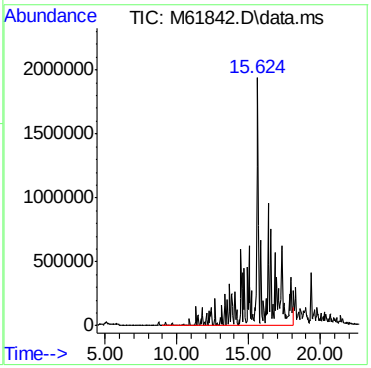
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.6 | 37.3 | 77.3 |
| 150 | 154.9 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 1973.07 ppb m
RT: 15.624 min Scan# 1089
Delta R.T. 2.074 min
Lab File: M61842.D
Acq: 13 Jul 2016 6:01 pm

Tgt Ion:TIC Resp:61512113



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49980.D
Acq On : 12 Jul 2016 4:43 pm
Operator : johannat
Sample : C46435-4R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 02 11:00:28 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

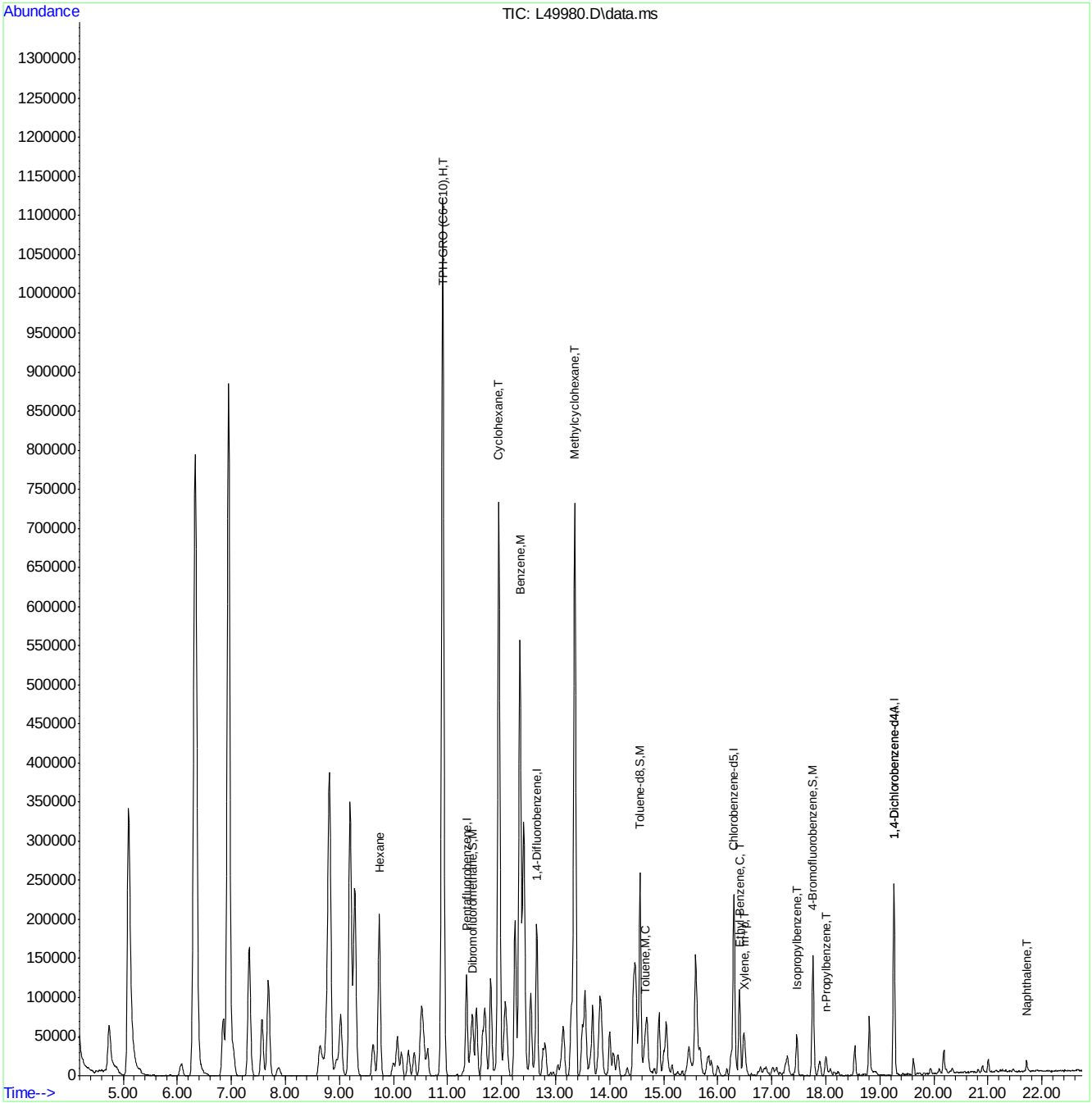
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.356 | 168 | 1046153 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 1813343 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.300 | 117 | 1548348 | 20.00 | ug/Kg | -0.01 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 743565 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 743565 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 588118 | 18.78 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 93.90% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2122115 | 19.41 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 97.05% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 867456 | 19.09 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 95.45% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.741 | 57 | 1510837 | 45.76 | ug/Kg | 97 |
| 38) Cyclohexane | 11.946 | 56 | 5129600 | 108.83 | ug/Kg | 96 |
| 45) Benzene | 12.339 | 78 | 4383116 | 32.44 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.353 | 55 | 3816503 | 89.89 | ug/Kg | 98 |
| 57) Toluene | 14.652 | 92 | 102197 | 1.33 | ug/Kg | 99 |
| 67) Ethyl Benzene | 16.404 | 91 | 1028827 | 6.88 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.491 | 106 | 45895 | 0.86 | ug/Kg# | 84 |
| 73) Isopropylbenzene | 17.462 | 105 | 544209 | 4.04 | ug/Kg | 97 |
| 79) n-Propylbenzene | 18.002 | 91 | 350294 | 2.03 | ug/Kg | 98 |
| 97) Naphthalene | 21.713 | 128 | 159964 | 1.42 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 10.909 | TIC | 257855550m | 1264.60 | ug/Kg | |

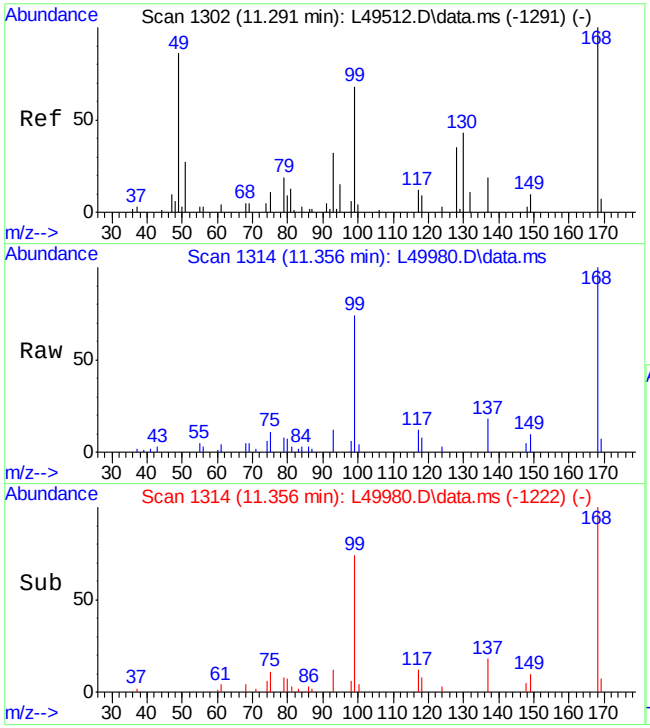
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49980.D
Acq On : 12 Jul 2016 4:43 pm
Operator : johannat
Sample : C46435-4R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 13 Sample Multiplier: 1

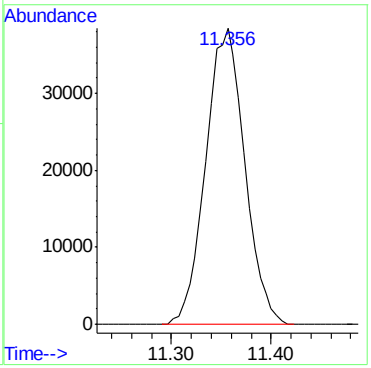
Quant Time: Aug 02 11:00:28 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

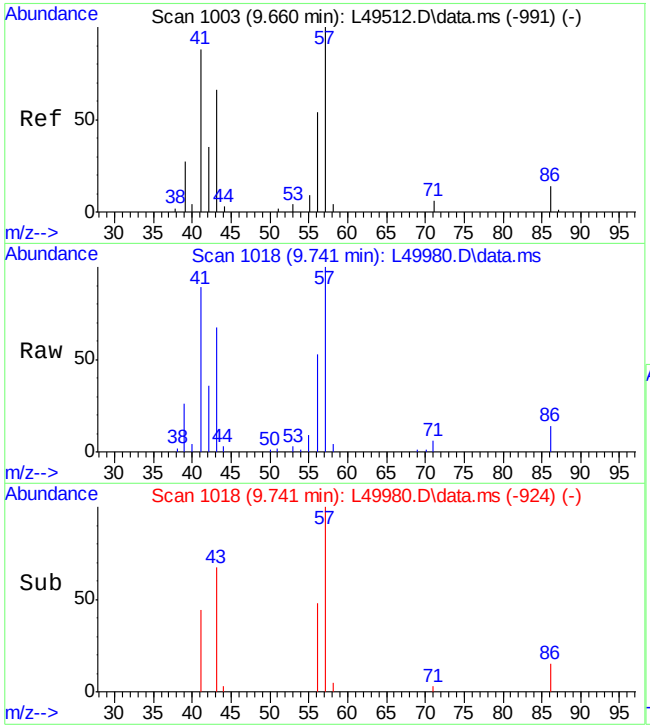





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.356 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:168 Resp: 1046153

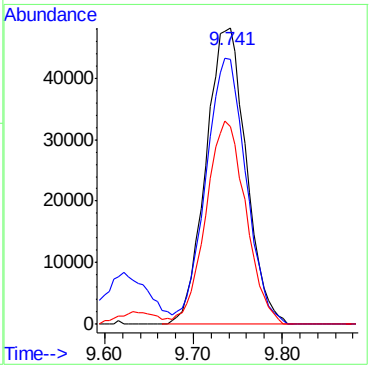


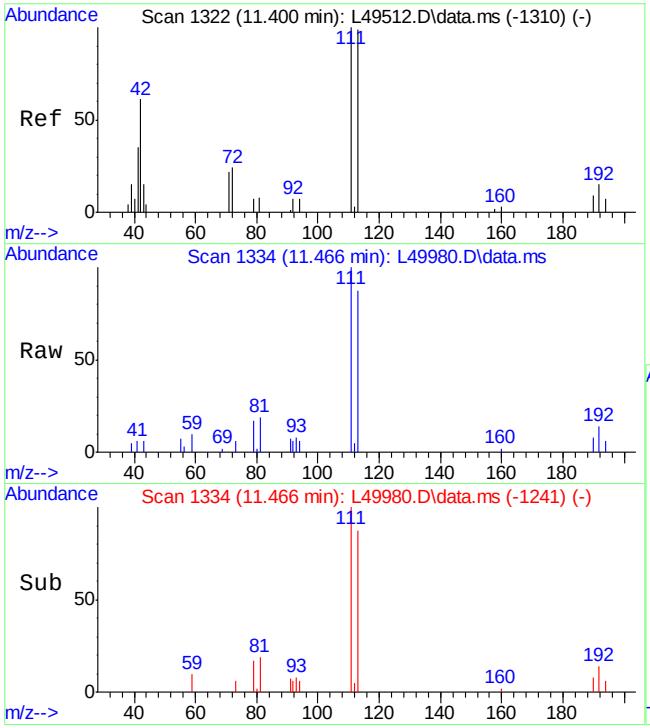




#24
Hexane
Concen: 45.76 ug/Kg
RT: 9.741 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 57 Resp: 1510837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 90.0 | 73.8 | 110.8 |
| 43 | 68.1 | 56.6 | 84.8 |

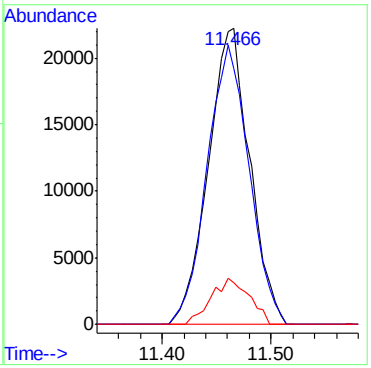


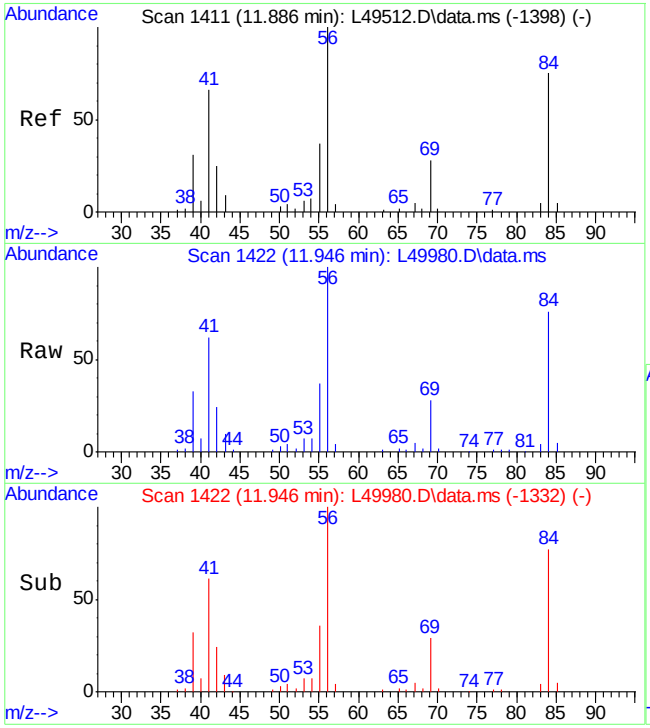



#36
Dibromofluoromethane
Concen: 18.78 ug/Kg
RT: 11.466 min Scan# 1334
Delta R.T. 0.006 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:111 Resp: 588118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.5 | 78.6 | 118.6 |
| 192 | 14.3 | 0.0 | 34.1 |

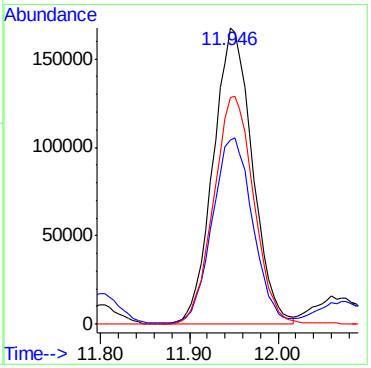


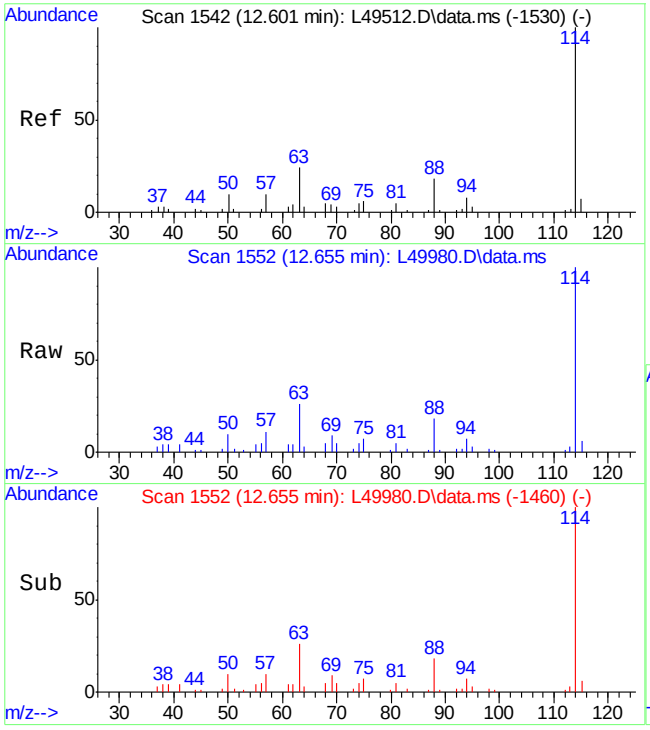




#38
Cyclohexane
Concen: 108.83 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 56 Resp: 5129600

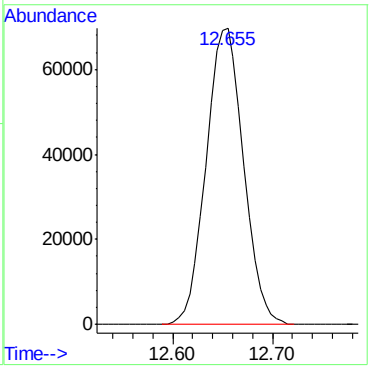
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 64.3 | 53.7 | 80.5 |
| 84 | 78.7 | 60.5 | 90.7 |

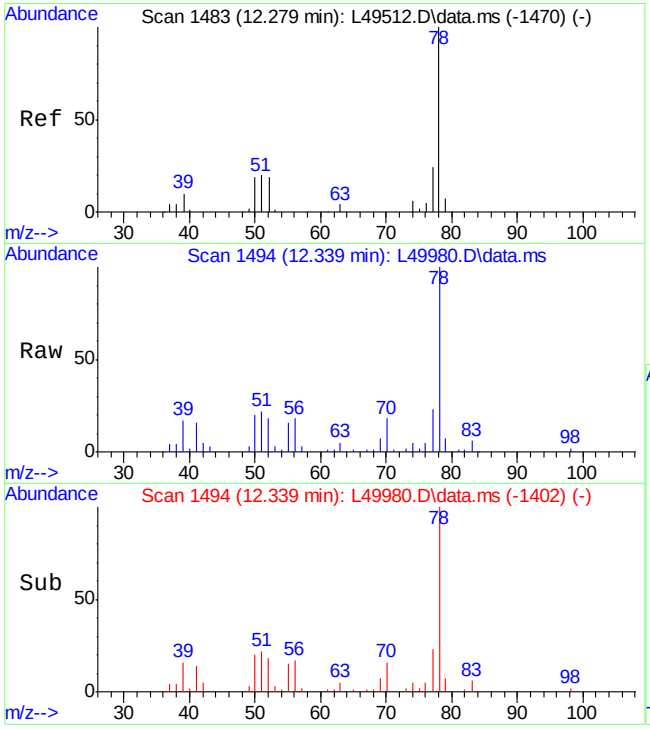





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

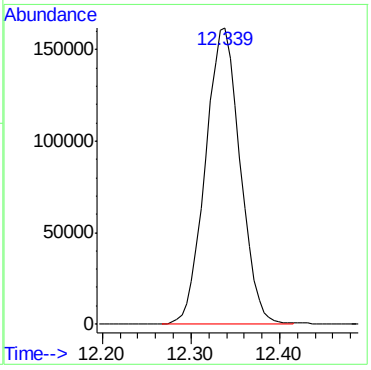
Tgt Ion:114 Resp: 1813343

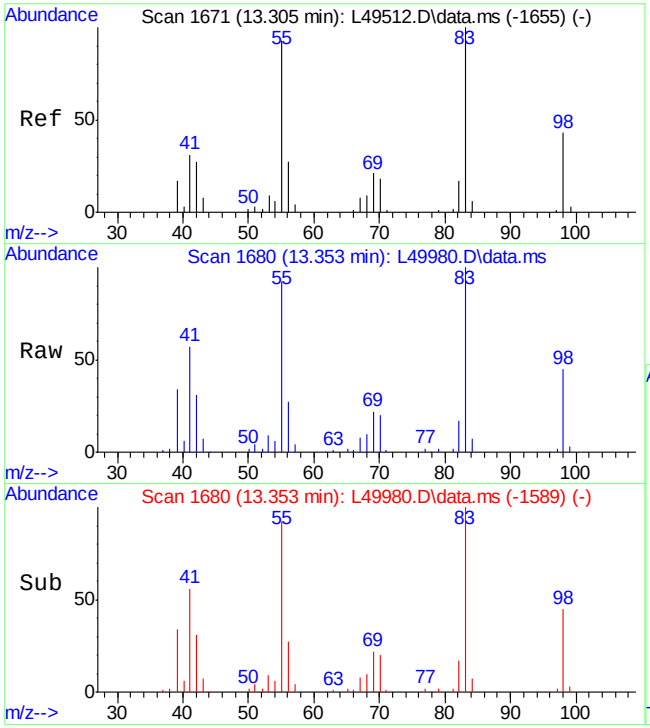



#45
Benzene
Concen: 32.44 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 78 Resp: 4383116

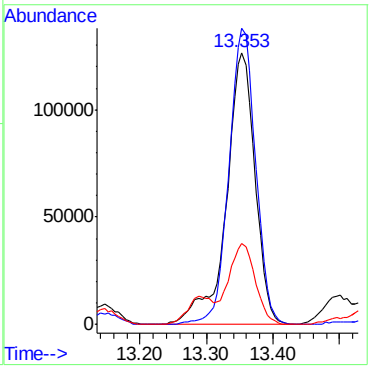


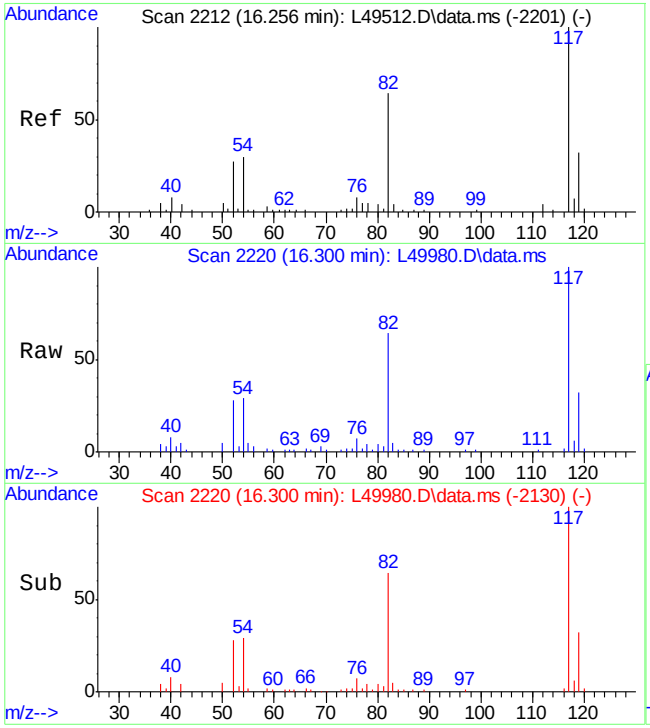



#48
Methylcyclohexane
Concen: 89.89 ug/Kg
RT: 13.353 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 55 Resp: 3816503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 100.9 | 80.6 | 120.6 |
| 56 | 27.2 | 11.5 | 51.5 |

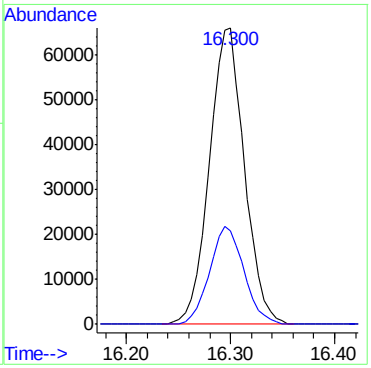


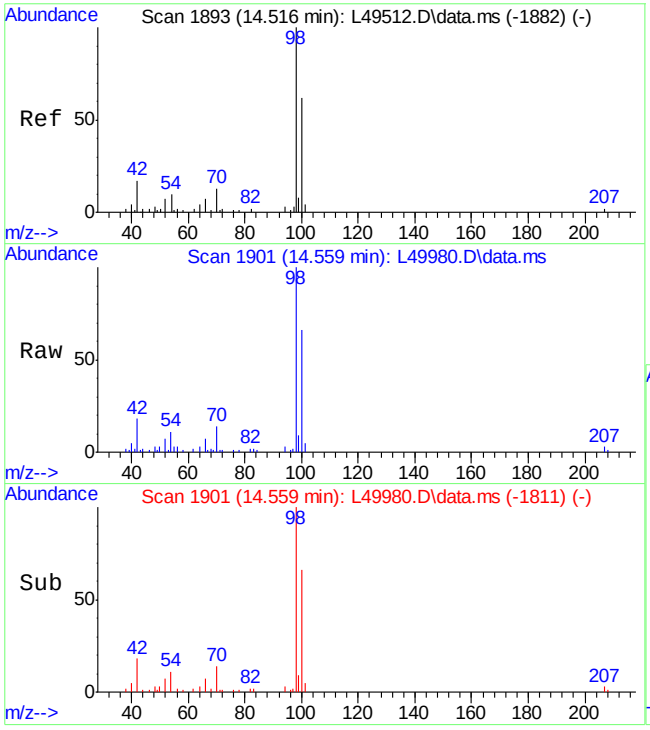




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.300 min Scan# 2220
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:117 Resp: 1548348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 10.2 | 50.2 |

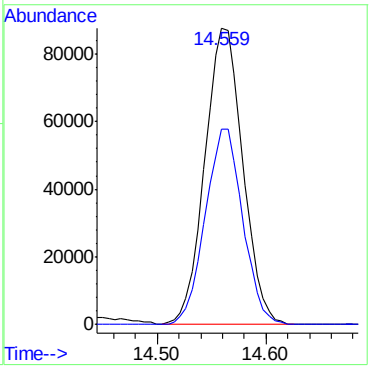


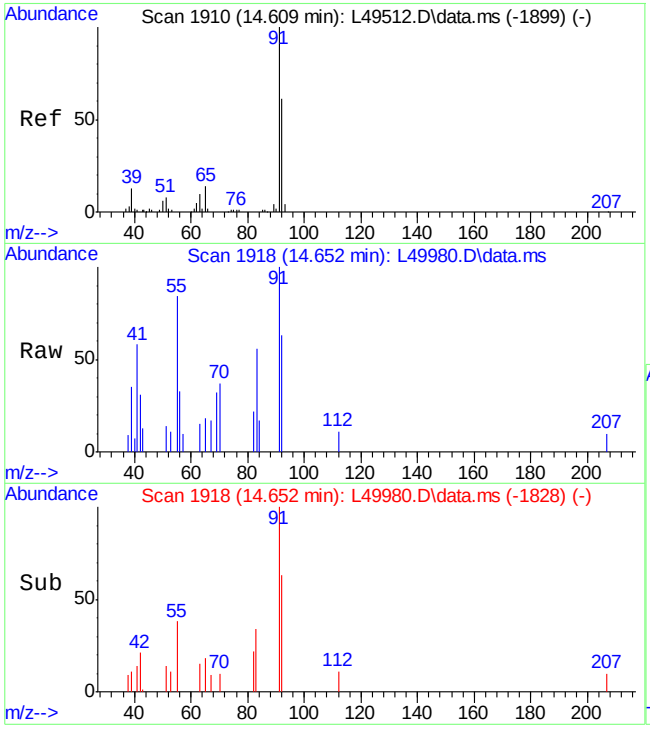



#56
Toluene-d8
Concen: 19.41 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 98 Resp: 2122115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 45.2 | 85.2 |

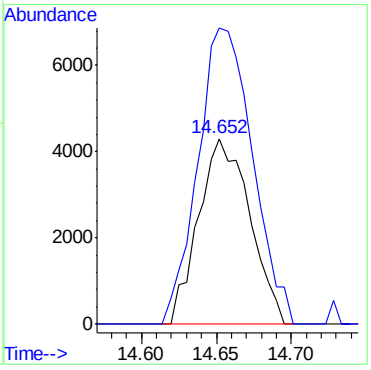


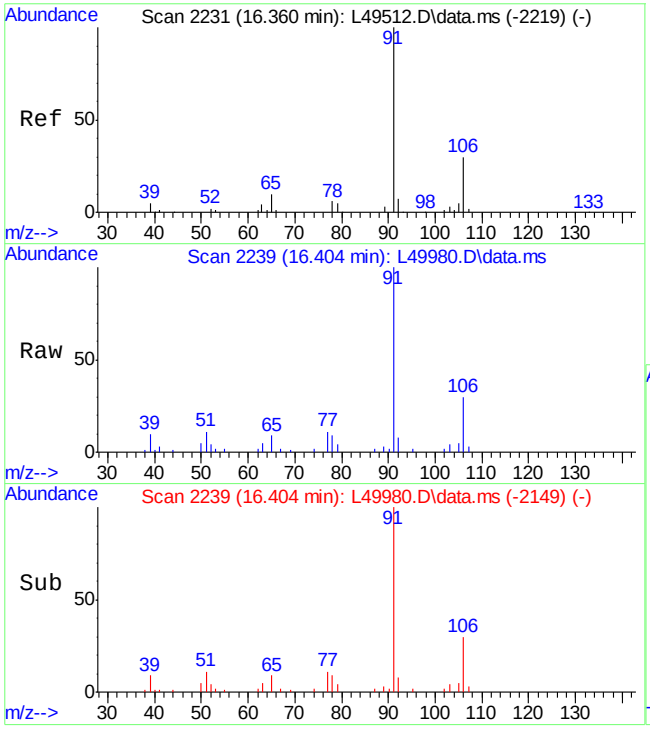




#57
Toluene
Concen: 1.33 ug/Kg
RT: 14.652 min Scan# 1918
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 92 Resp: 102197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.9 | 149.2 | 189.2 |

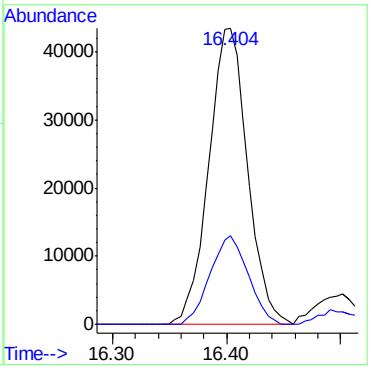


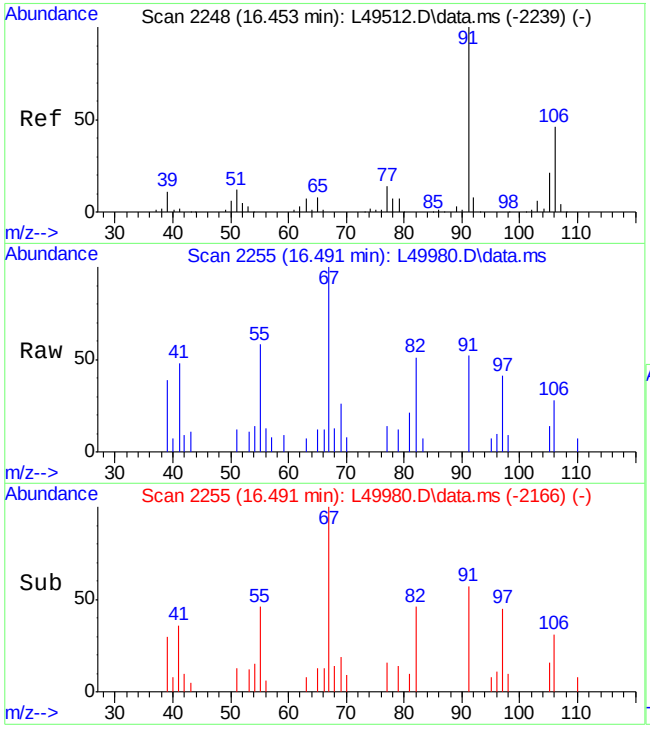



#67
Ethyl Benzene
Concen: 6.88 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 91 Resp: 1028827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.4 | 8.6 | 48.6 |

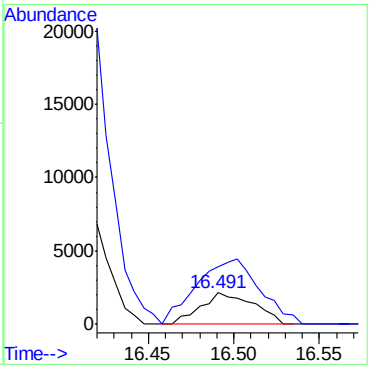


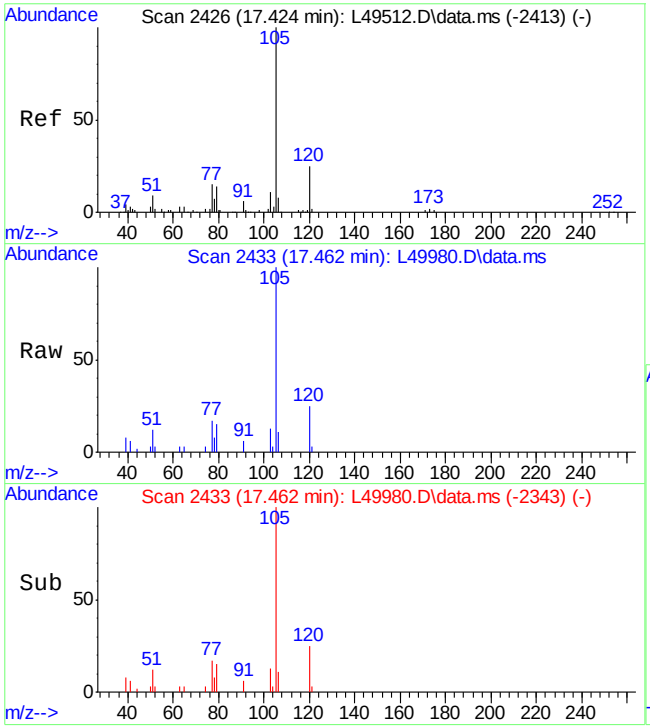




#68
Xylene, m+p
Concen: 0.86 ug/Kg
RT: 16.491 min Scan# 2255
Delta R.T. -0.016 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:106 Resp: 45895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 248.5 | 202.1 | 242.1# |

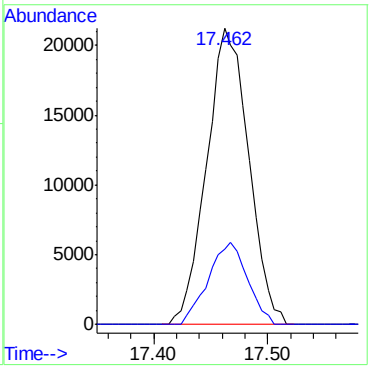


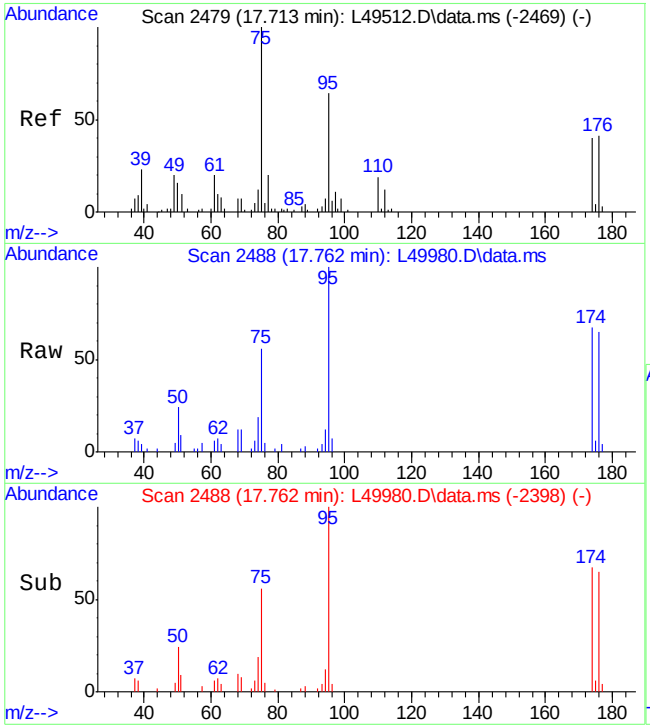



#73
Isopropylbenzene
Concen: 4.04 ug/Kg
RT: 17.462 min Scan# 2433
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:105 Resp: 544209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 4.1 | 44.1 |

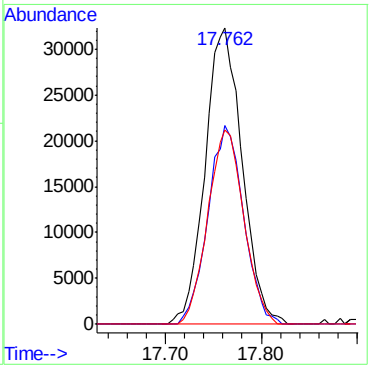


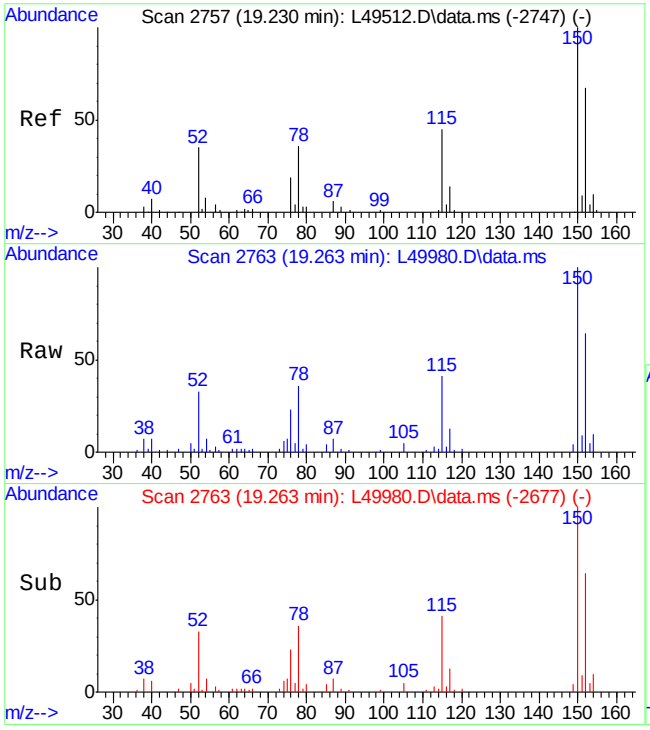




#74
4-Bromofluorobenzene
Concen: 19.09 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 95 Resp: 867456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.5 | 41.6 | 81.6 |
| 176 | 63.8 | 39.6 | 79.6 |

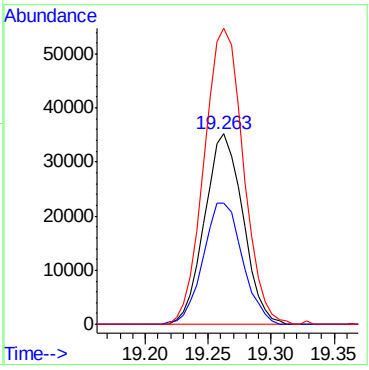


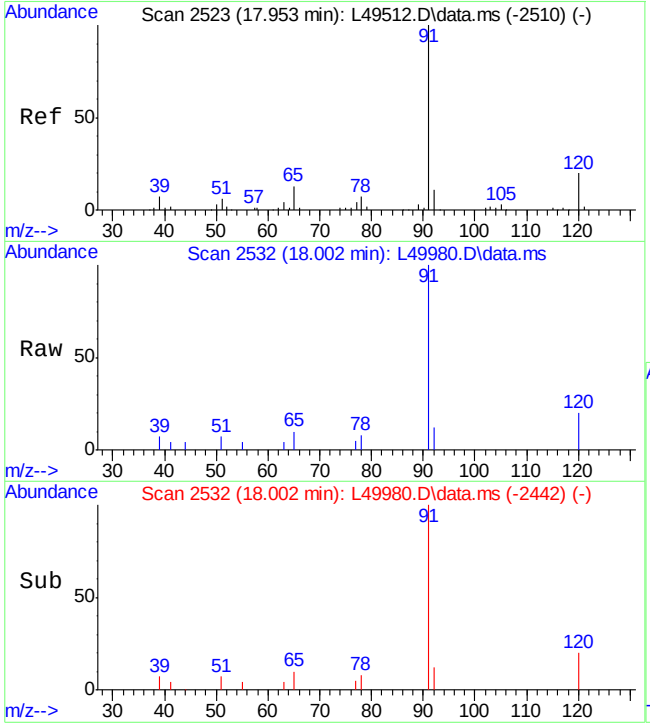



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:152 Resp: 743565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 48.8 | 88.8 |
| 150 | 158.5 | 174.3 | 214.3# |

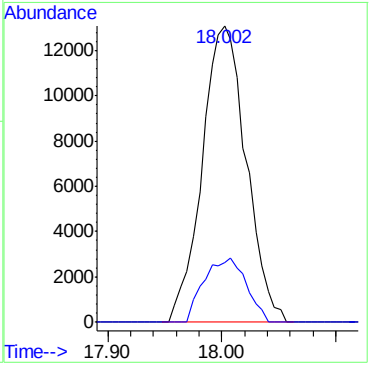


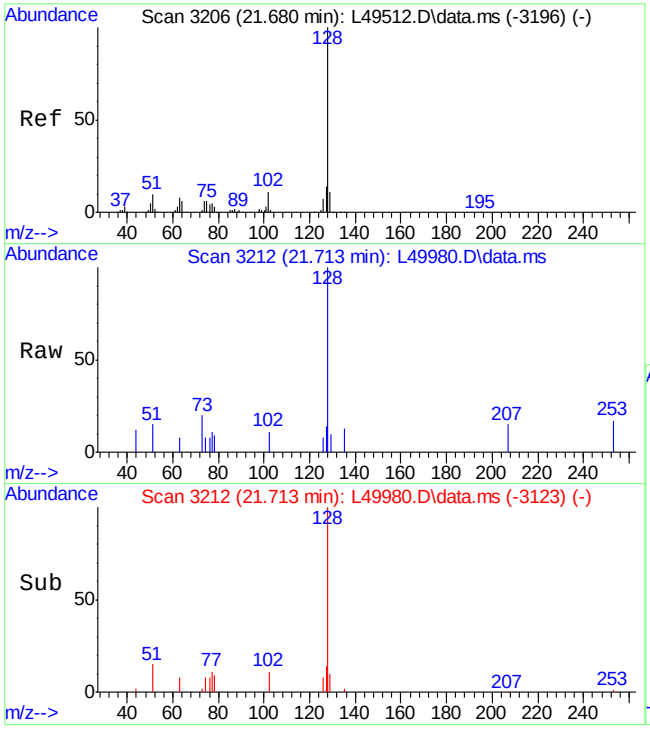




#79
n-Propylbenzene
Concen: 2.03 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 91 Resp: 350294

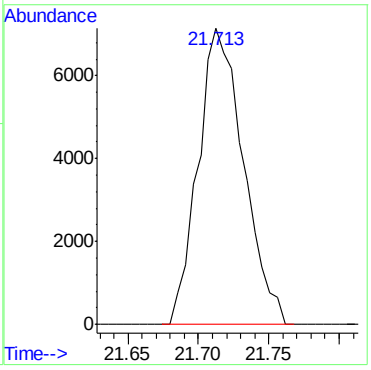
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.6 | 0.0 | 39.7 |

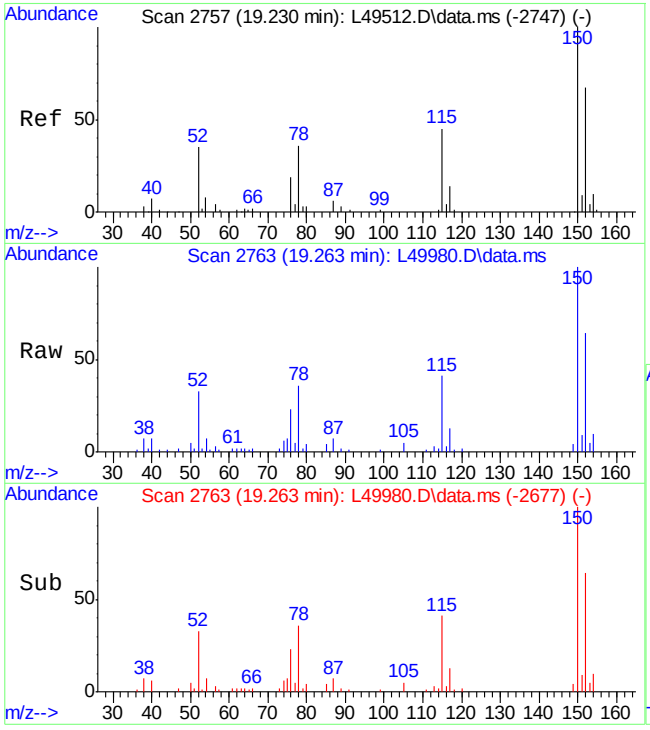





#97
Naphthalene
Concen: 1.42 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:128 Resp: 159964

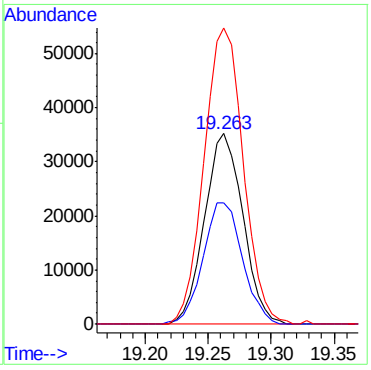


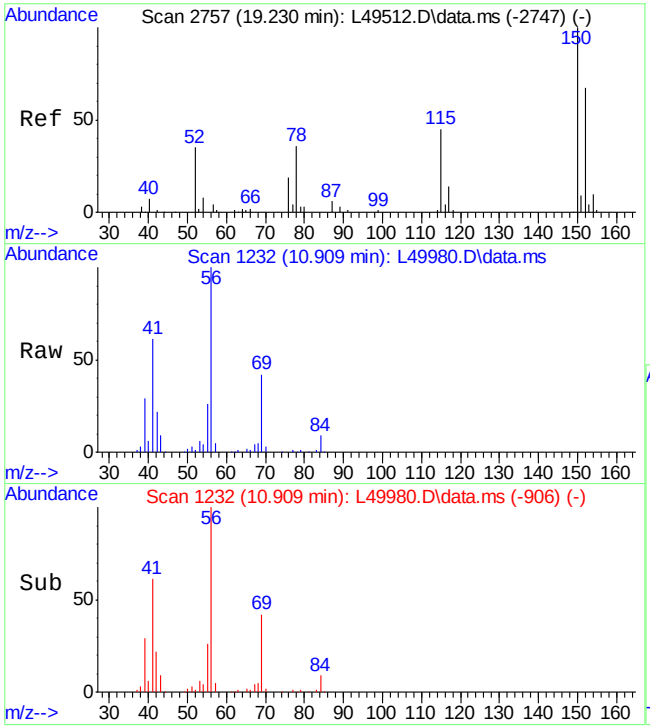




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:152 Resp: 743565

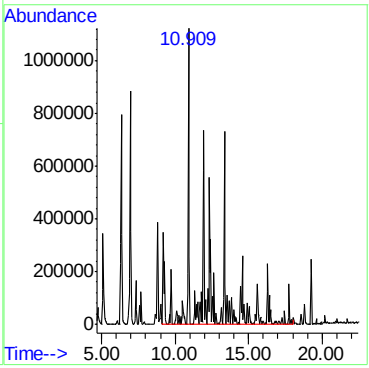
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 41.6 | 81.6 |
| 150 | 158.5 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 1264.60 ug/Kg m
RT: 10.909 min Scan# 1232
Delta R.T. -3.617 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:TIC Resp:257855550



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49980.D
Acq On : 12 Jul 2016 4:43 pm
Operator : johannat
Sample : C46435-4R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 02 11:00:28 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

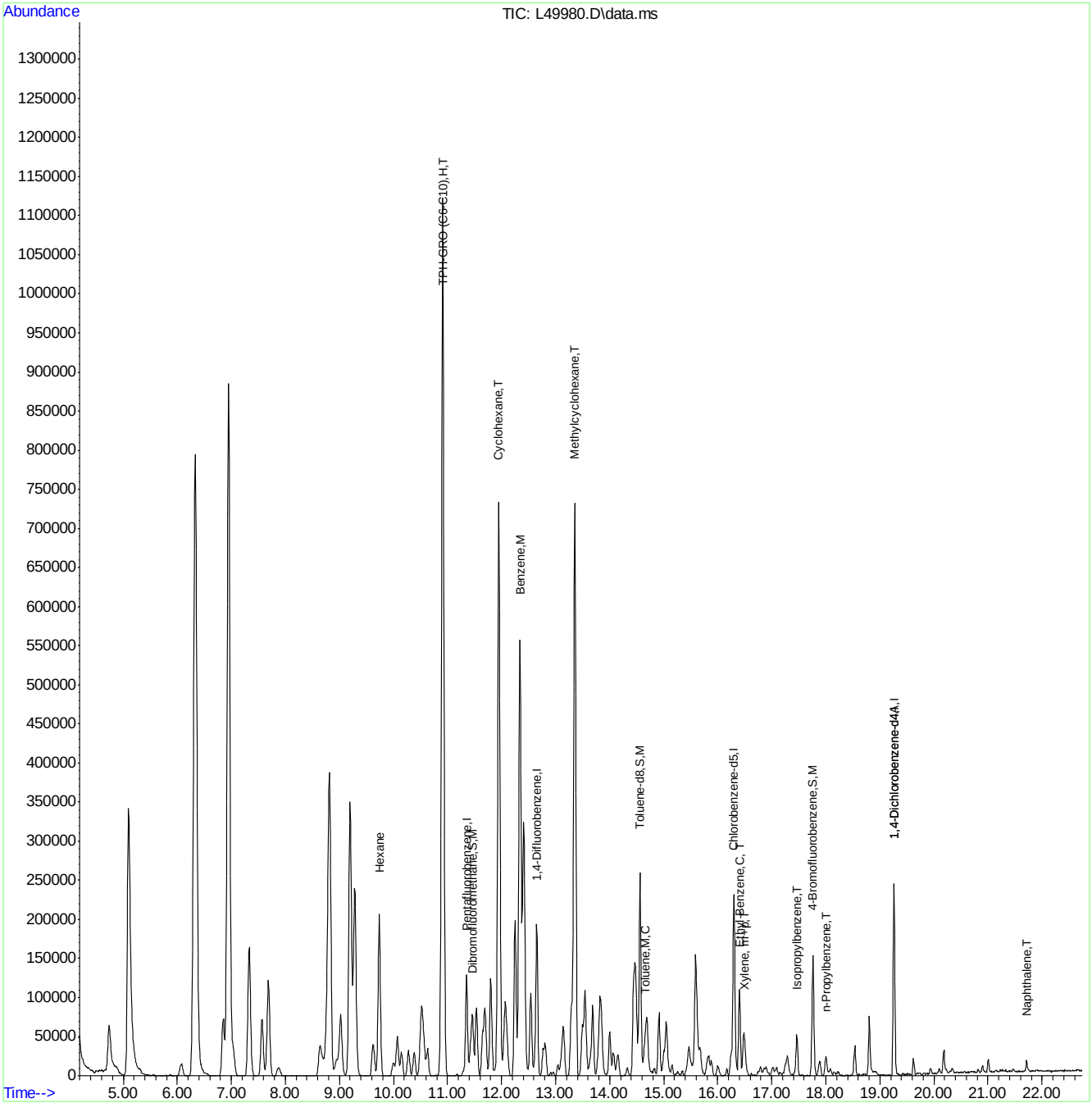
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.356 | 168 | 1046153 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 1813343 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.300 | 117 | 1548348 | 20.00 | ug/Kg | -0.01 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 743565 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 743565 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 588118 | 18.78 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 93.90% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2122115 | 19.41 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 97.05% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 867456 | 19.09 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 95.45% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.741 | 57 | 1510837 | 45.76 | ug/Kg | 97 |
| 38) Cyclohexane | 11.946 | 56 | 5129600 | 108.83 | ug/Kg | 96 |
| 45) Benzene | 12.339 | 78 | 4383116 | 32.44 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.353 | 55 | 3816503 | 89.89 | ug/Kg | 98 |
| 57) Toluene | 14.652 | 92 | 102197 | 1.33 | ug/Kg | 99 |
| 67) Ethyl Benzene | 16.404 | 91 | 1028827 | 6.88 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.491 | 106 | 45895 | 0.86 | ug/Kg# | 84 |
| 73) Isopropylbenzene | 17.462 | 105 | 544209 | 4.04 | ug/Kg | 97 |
| 79) n-Propylbenzene | 18.002 | 91 | 350294 | 2.03 | ug/Kg | 98 |
| 97) Naphthalene | 21.713 | 128 | 159964 | 1.42 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 10.909 | TIC | 257855550m | 1264.60 | ug/Kg | |

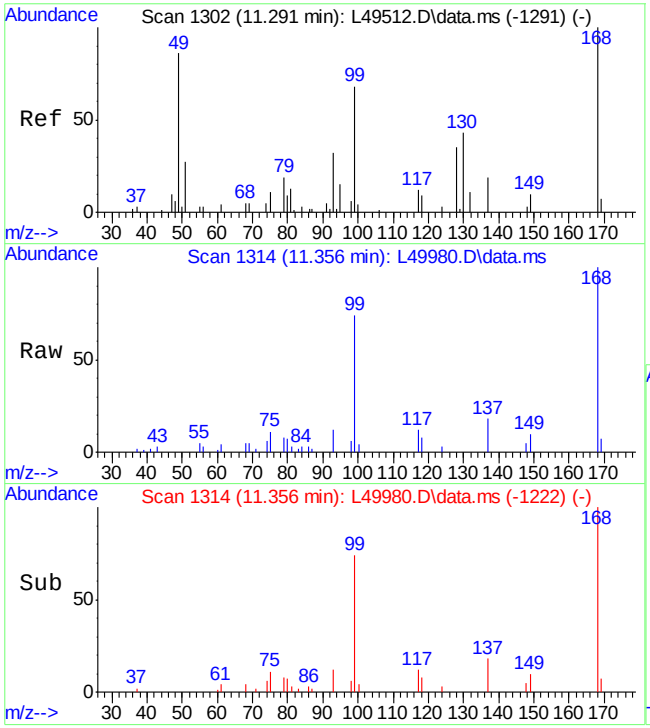
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49980.D
Acq On : 12 Jul 2016 4:43 pm
Operator : johannat
Sample : C46435-4R
Misc : MS1912,VL1499,5.13,,,,1
ALS Vial : 13 Sample Multiplier: 1

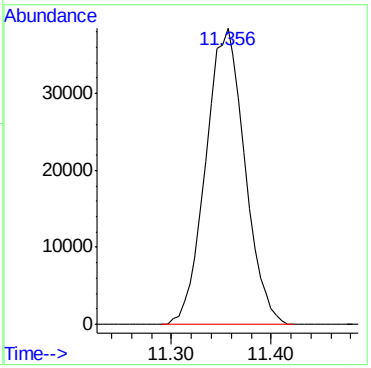
Quant Time: Aug 02 11:00:28 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

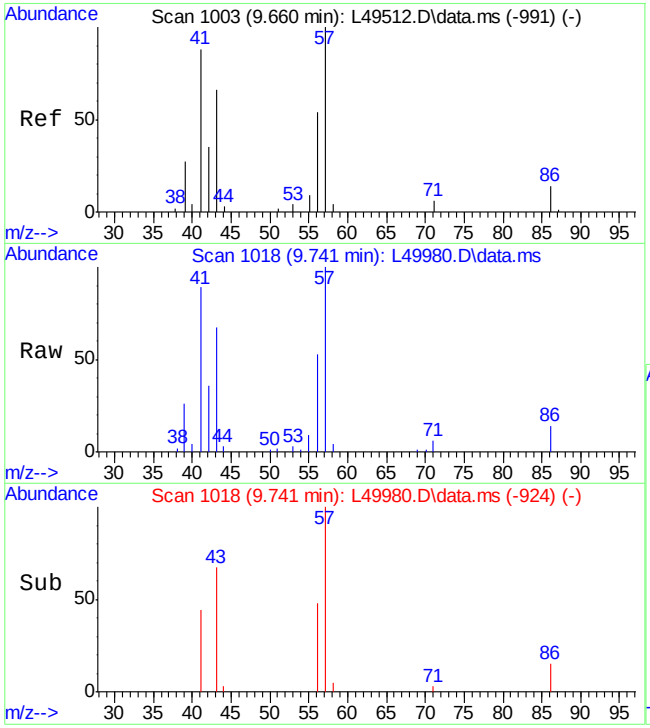





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.356 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:168 Resp: 1046153

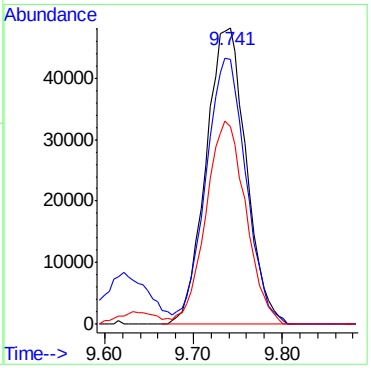


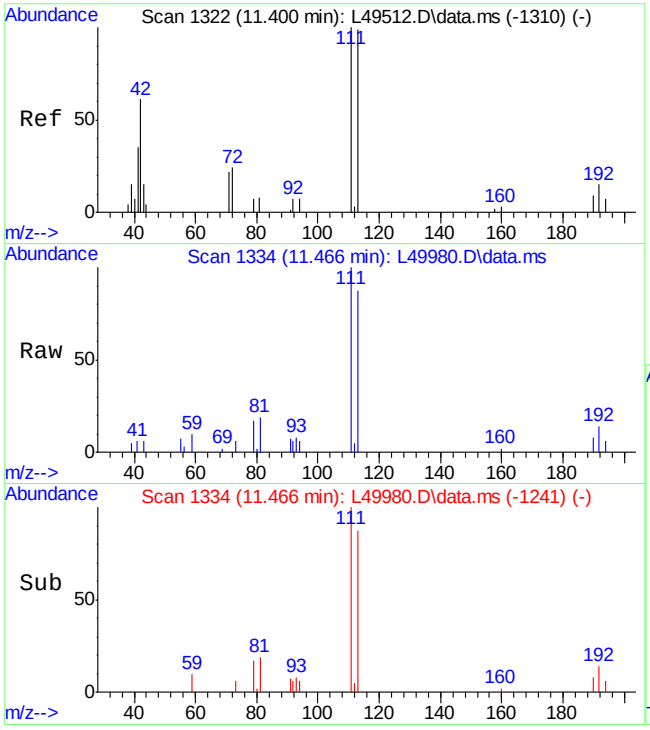




#24
Hexane
Concen: 45.76 ug/Kg
RT: 9.741 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 57 Resp: 1510837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 90.0 | 73.8 | 110.8 |
| 43 | 68.1 | 56.6 | 84.8 |

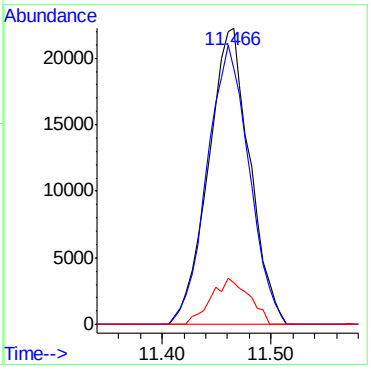


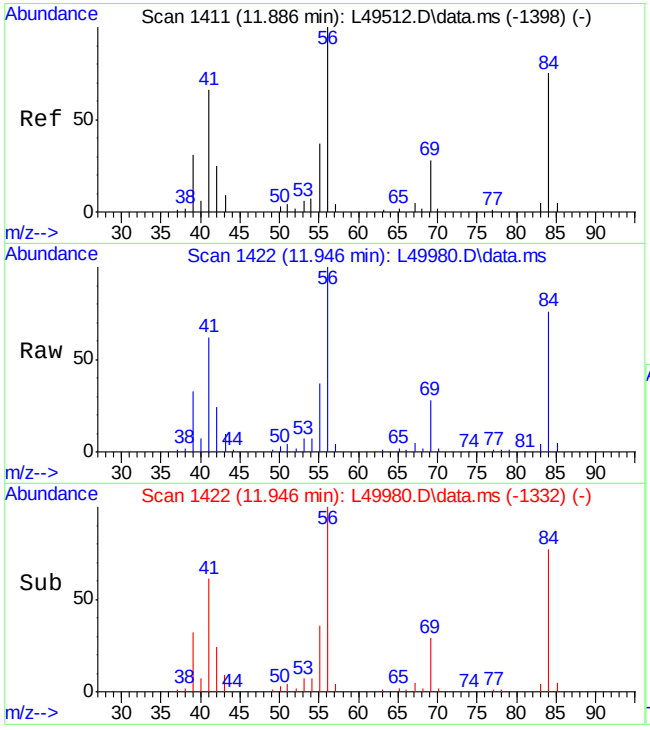



#36
Dibromofluoromethane
Concen: 18.78 ug/Kg
RT: 11.466 min Scan# 1334
Delta R.T. 0.006 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:111 Resp: 588118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.5 | 78.6 | 118.6 |
| 192 | 14.3 | 0.0 | 34.1 |

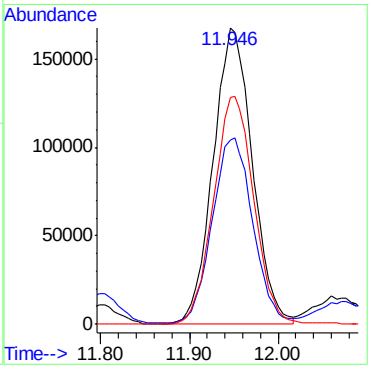


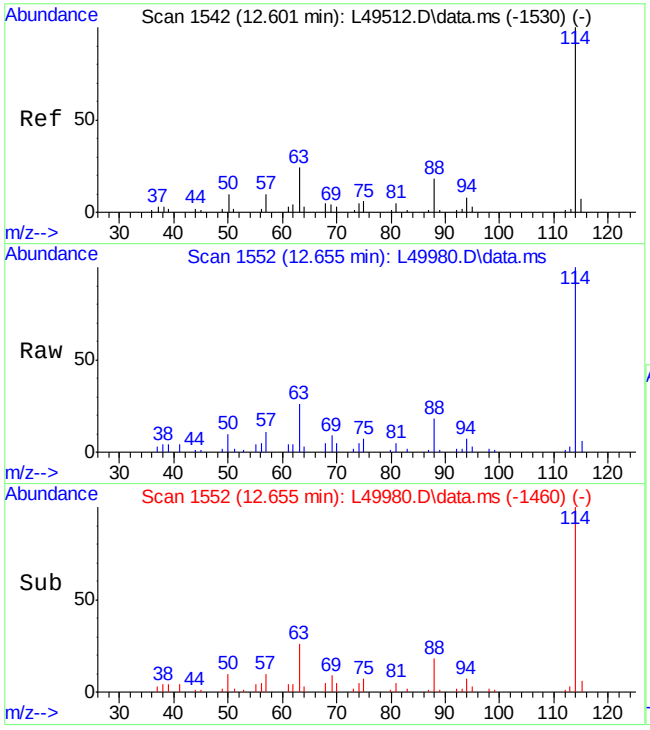




#38
Cyclohexane
Concen: 108.83 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 56 Resp: 5129600

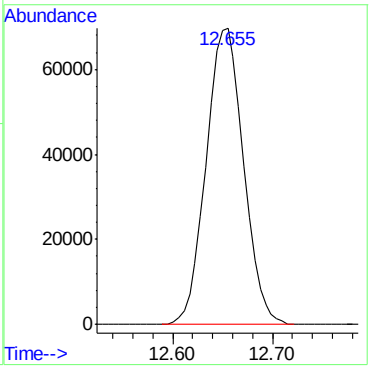
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 64.3 | 53.7 | 80.5 |
| 84 | 78.7 | 60.5 | 90.7 |

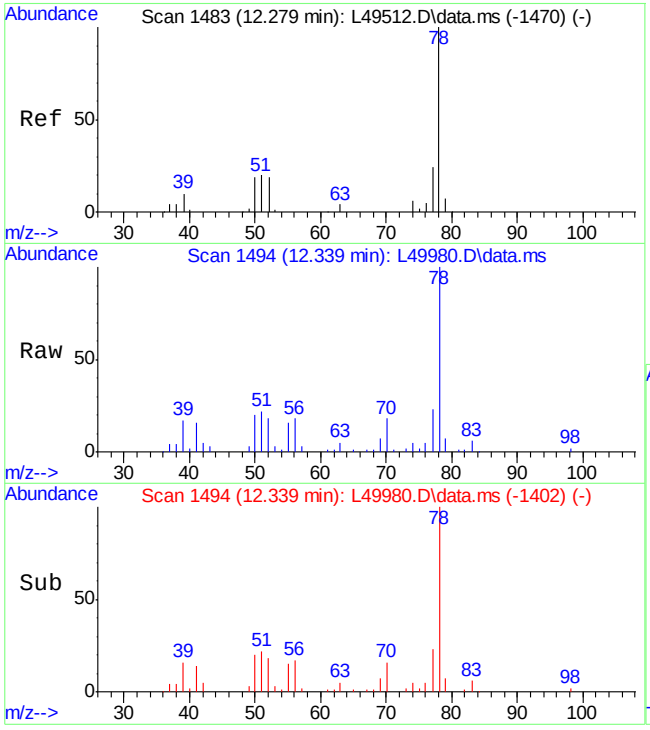





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

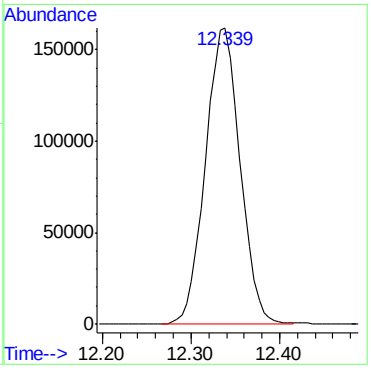
Tgt Ion:114 Resp: 1813343

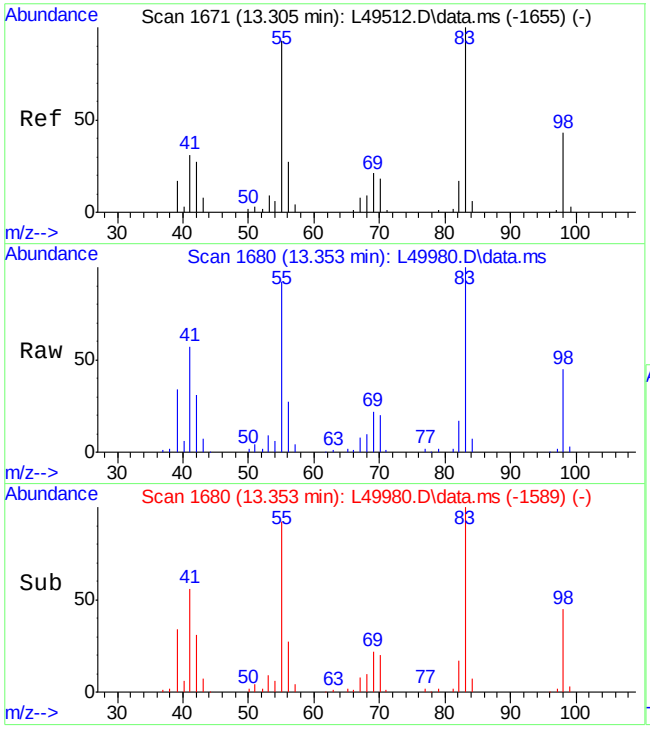



#45
Benzene
Concen: 32.44 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 78 Resp: 4383116

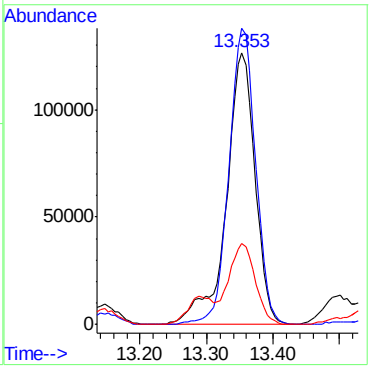


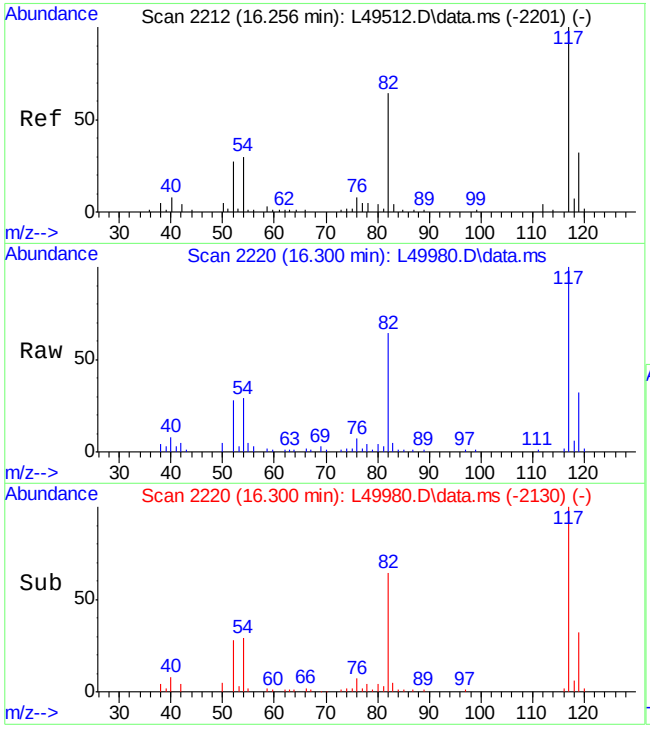



#48
Methylcyclohexane
Concen: 89.89 ug/Kg
RT: 13.353 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 55 Resp: 3816503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 100.9 | 80.6 | 120.6 |
| 56 | 27.2 | 11.5 | 51.5 |

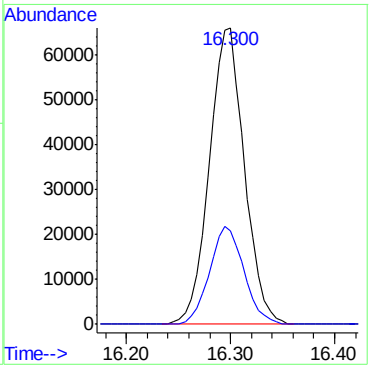


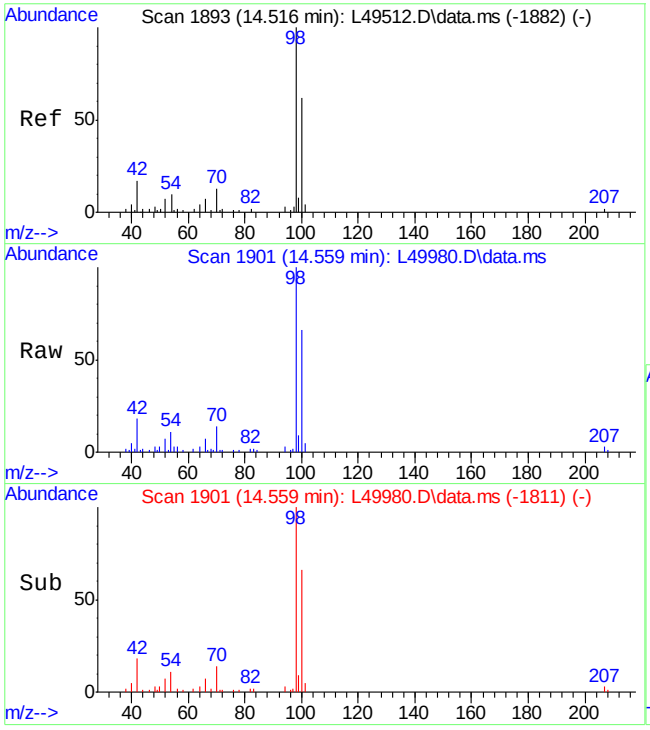




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.300 min Scan# 2220
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:117 Resp: 1548348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 10.2 | 50.2 |

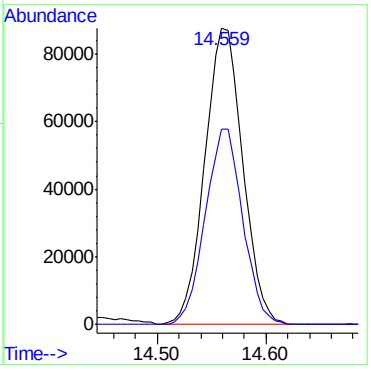


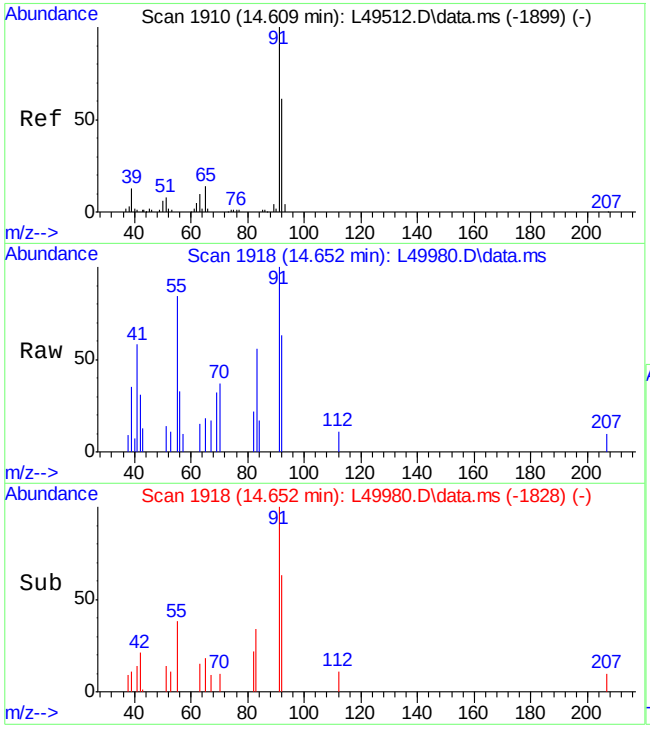



#56
Toluene-d8
Concen: 19.41 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 98 Resp: 2122115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 45.2 | 85.2 |

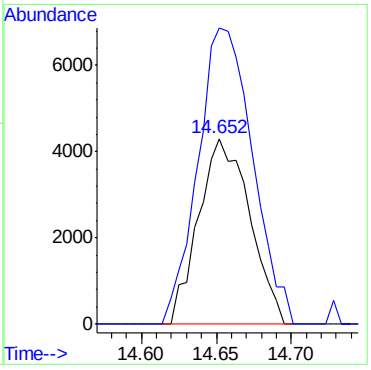


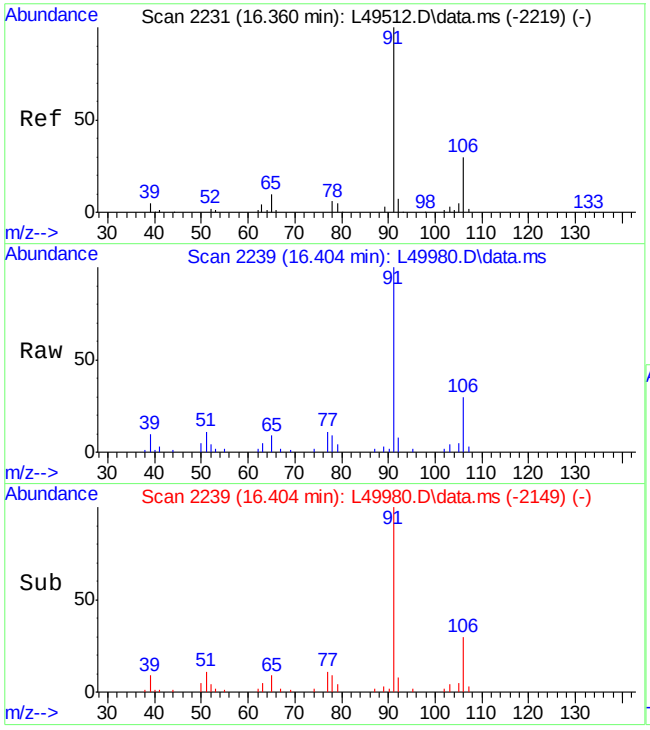




#57
Toluene
Concen: 1.33 ug/Kg
RT: 14.652 min Scan# 1918
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 92 Resp: 102197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.9 | 149.2 | 189.2 |

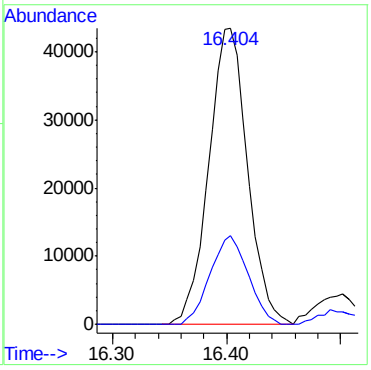


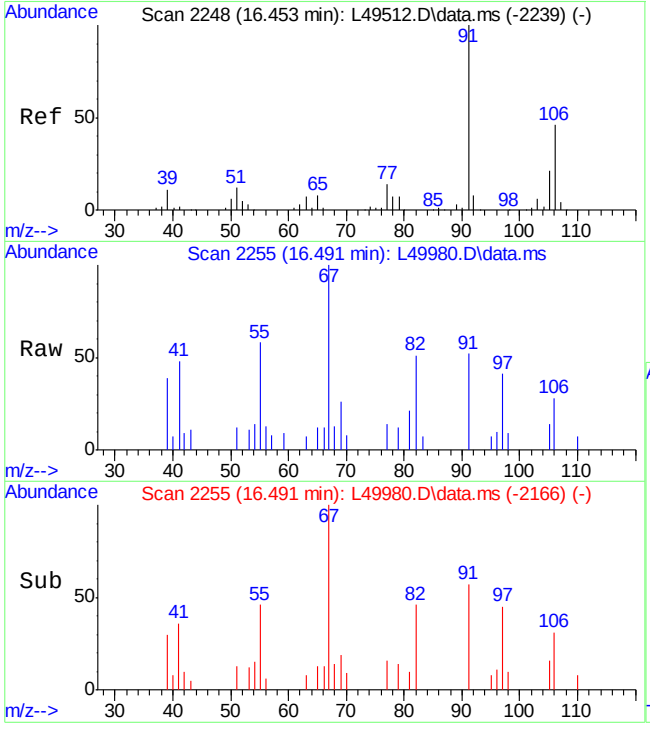



#67
Ethyl Benzene
Concen: 6.88 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 91 Resp: 1028827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.4 | 8.6 | 48.6 |

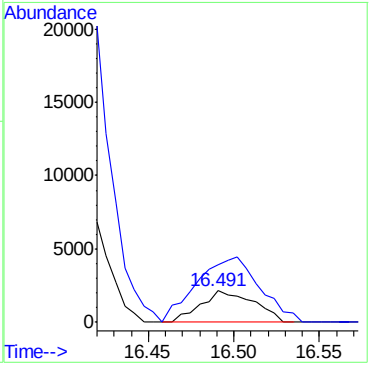


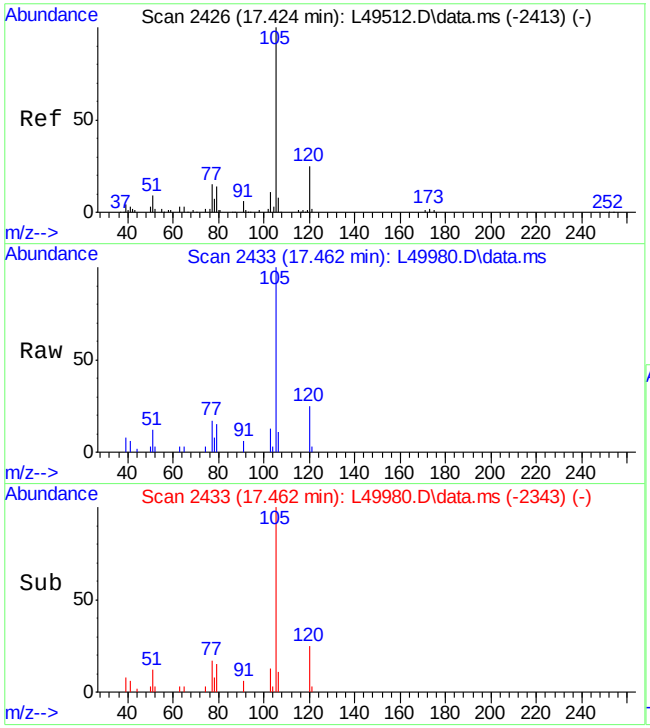




#68
Xylene, m+p
Concen: 0.86 ug/Kg
RT: 16.491 min Scan# 2255
Delta R.T. -0.016 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:106 Resp: 45895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 248.5 | 202.1 | 242.1# |

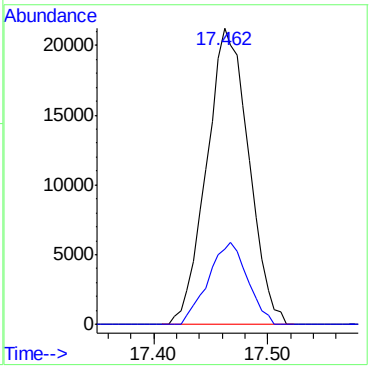


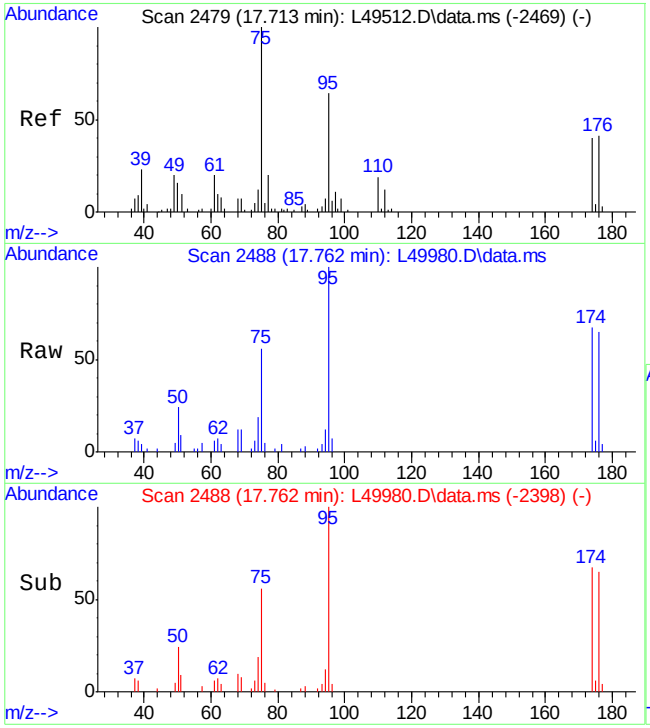



#73
Isopropylbenzene
Concen: 4.04 ug/Kg
RT: 17.462 min Scan# 2433
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:105 Resp: 544209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 4.1 | 44.1 |

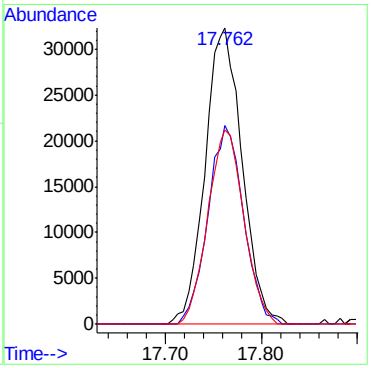


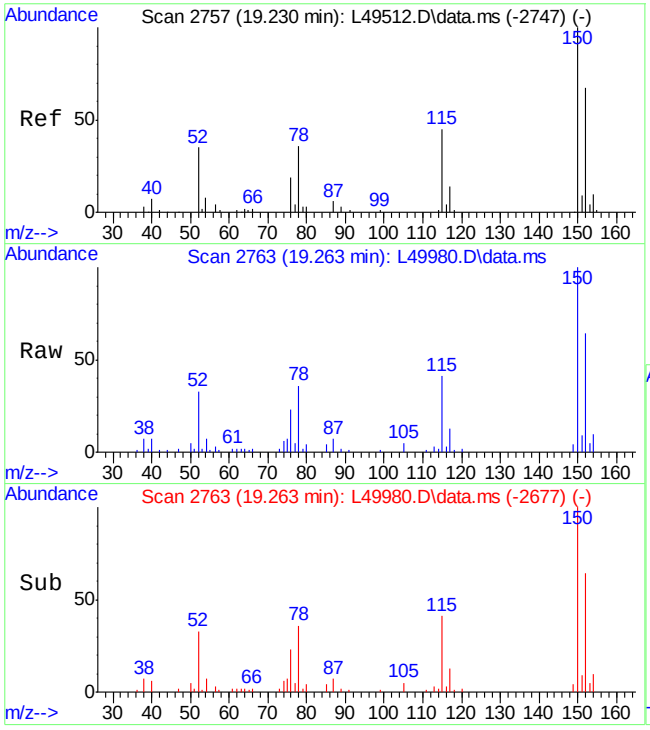




#74
4-Bromofluorobenzene
Concen: 19.09 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 95 Resp: 867456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.5 | 41.6 | 81.6 |
| 176 | 63.8 | 39.6 | 79.6 |

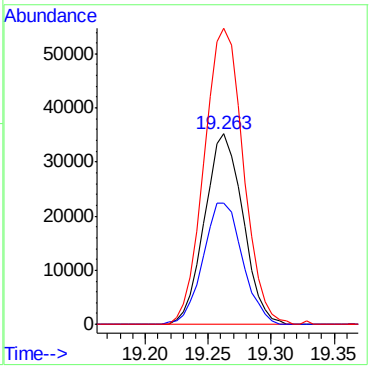


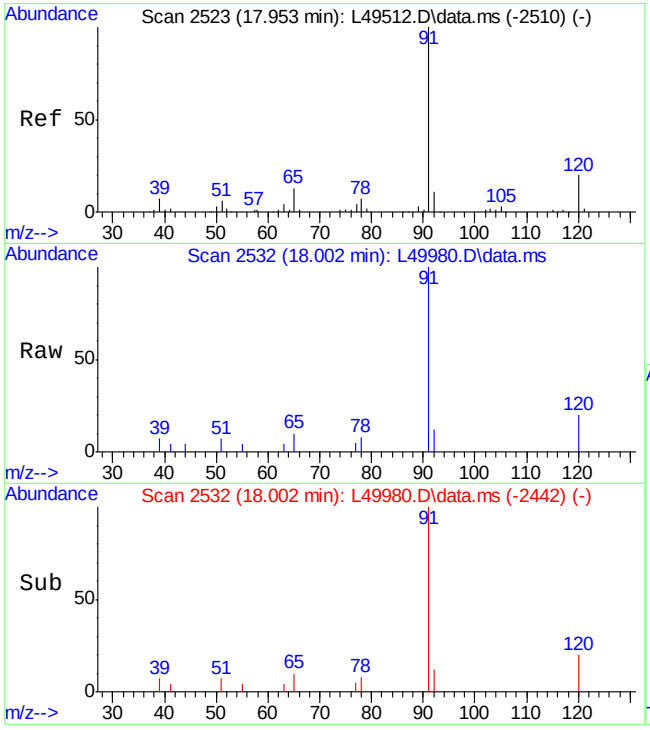



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:152 Resp: 743565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 48.8 | 88.8 |
| 150 | 158.5 | 174.3 | 214.3# |

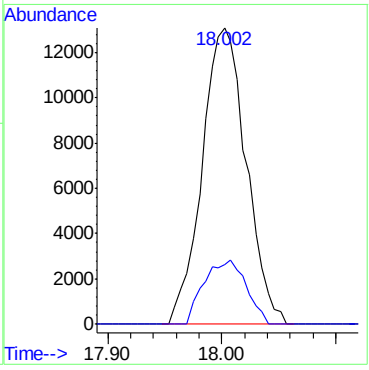


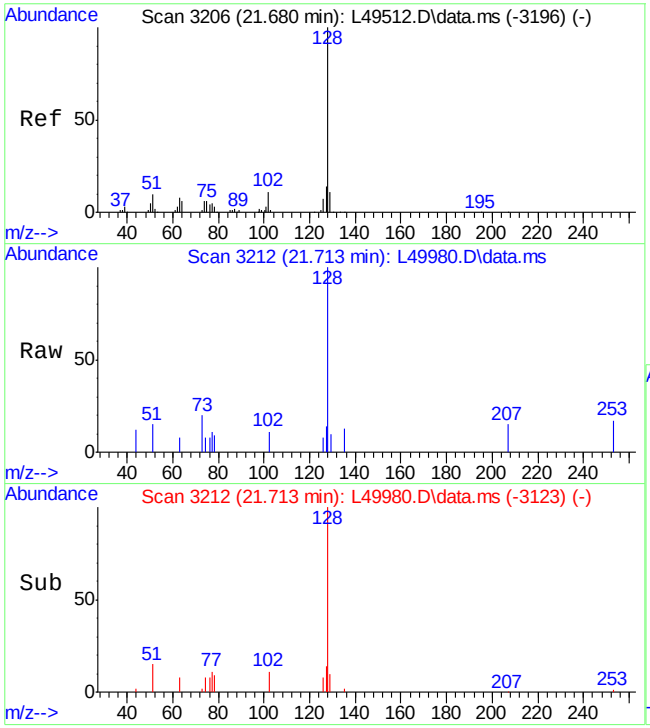




#79
n-Propylbenzene
Concen: 2.03 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.011 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion: 91 Resp: 350294

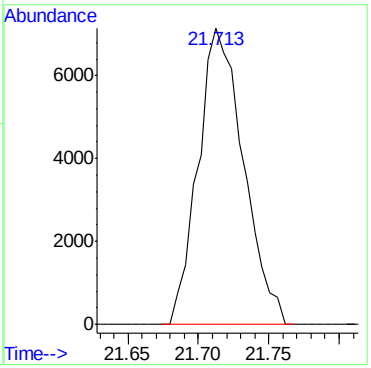
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.6 | 0.0 | 39.7 |

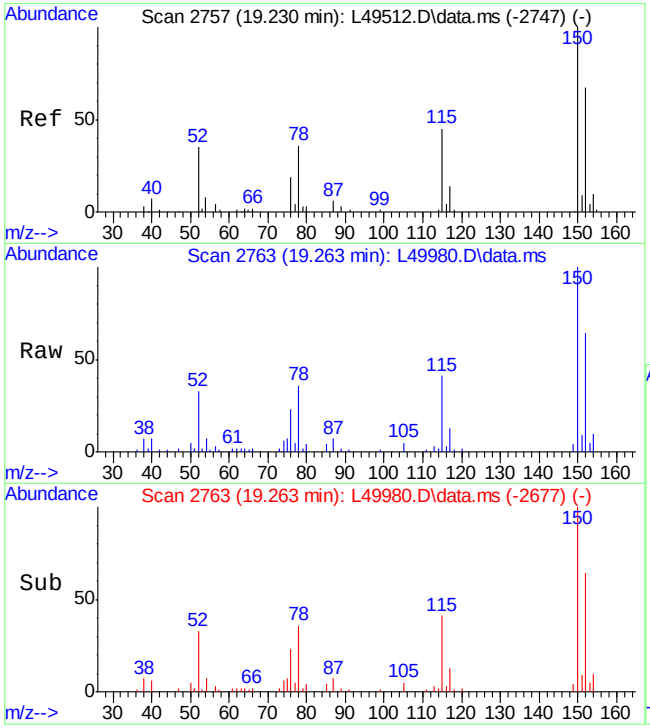





#97
Naphthalene
Concen: 1.42 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:128 Resp: 159964

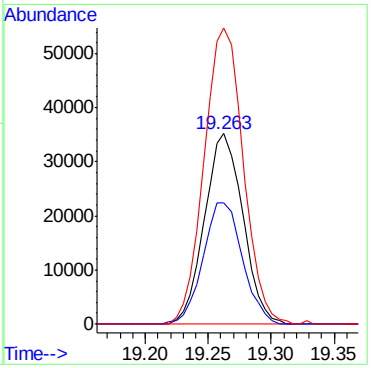


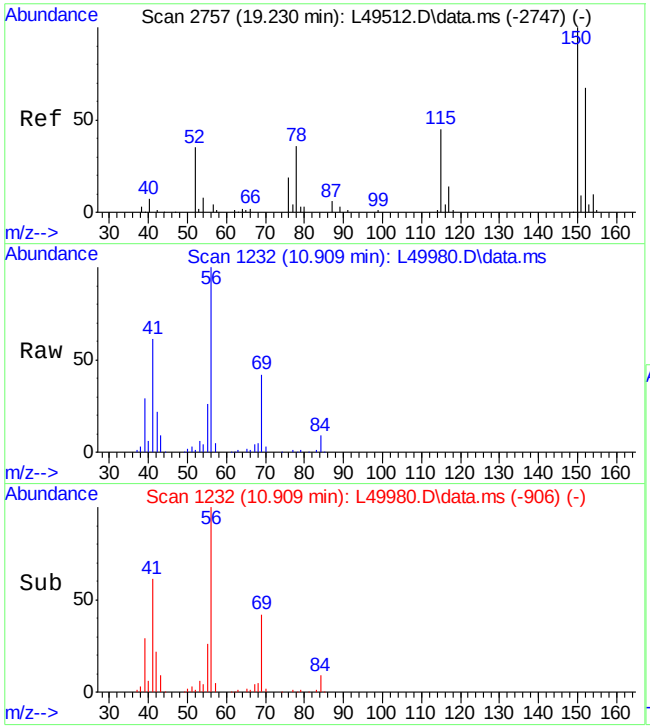




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:152 Resp: 743565

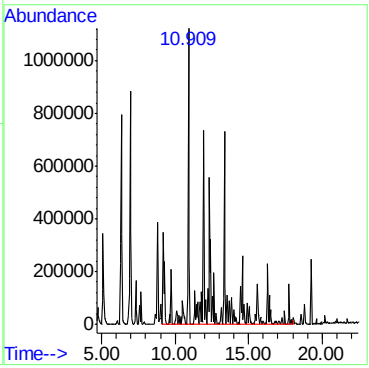
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 41.6 | 81.6 |
| 150 | 158.5 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 1264.60 ug/Kg m
RT: 10.909 min Scan# 1232
Delta R.T. -3.617 min
Lab File: L49980.D
Acq: 12 Jul 2016 4:43 pm

Tgt Ion:TIC Resp:257855550



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49988.D
Acq On : 12 Jul 2016 8:39 pm
Operator : johannat
Sample : C46435-7R
Misc : MS1912,VL1499,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 02 11:02:07 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

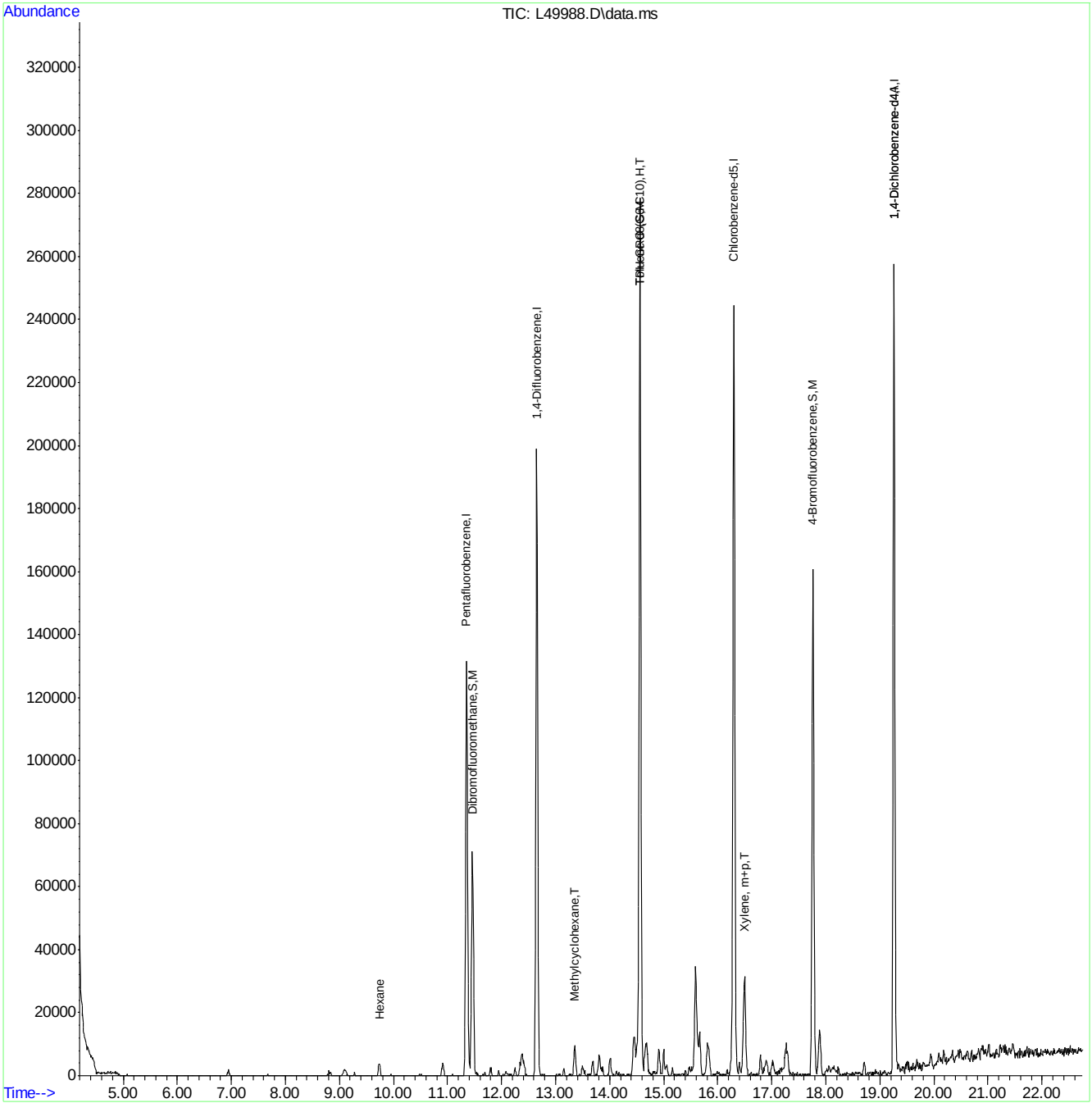
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1186401 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2053361 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1756464 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 830575 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 830575 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 633667 | 17.84 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 89.20% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2435693 | 19.63 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 98.15% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 939651 | 18.23 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 91.15% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.742 | 57 | 30073 | 0.80 | ug/Kg | 89 |
| 48) Methylcyclohexane | 13.354 | 55 | 60691 | 1.26 | ug/Kg | 91 |
| 68) Xylene, m+p | 16.497 | 106 | 91613 | 1.52 | ug/Kg | 95 |
| 100) TPH-GRO (C6-C10) | 14.560 | TIC | 35170756m | 88.68 | ug/Kg | |

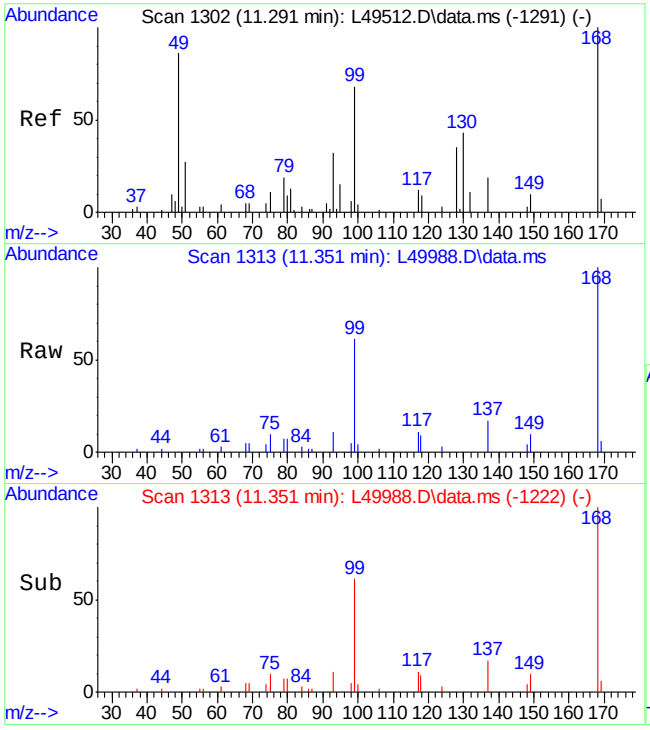
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49988.D
Acq On : 12 Jul 2016 8:39 pm
Operator : johannat
Sample : C46435-7R
Misc : MS1912,VL1499,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

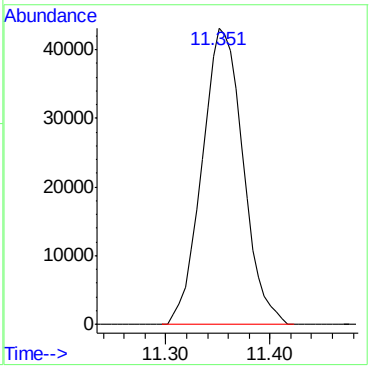
Quant Time: Aug 02 11:02:07 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

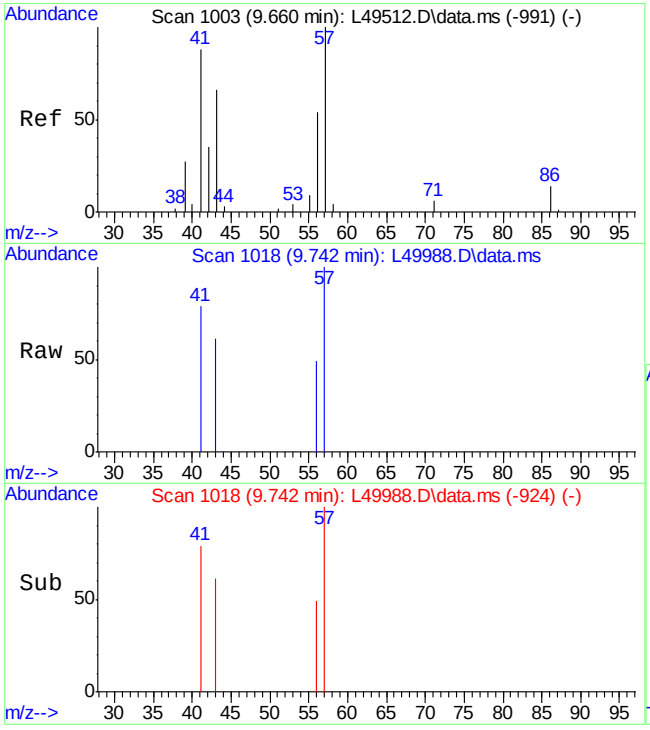





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:168 Resp: 1186401

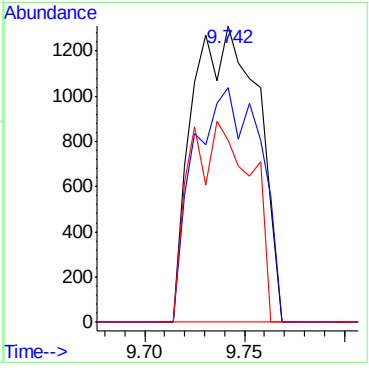


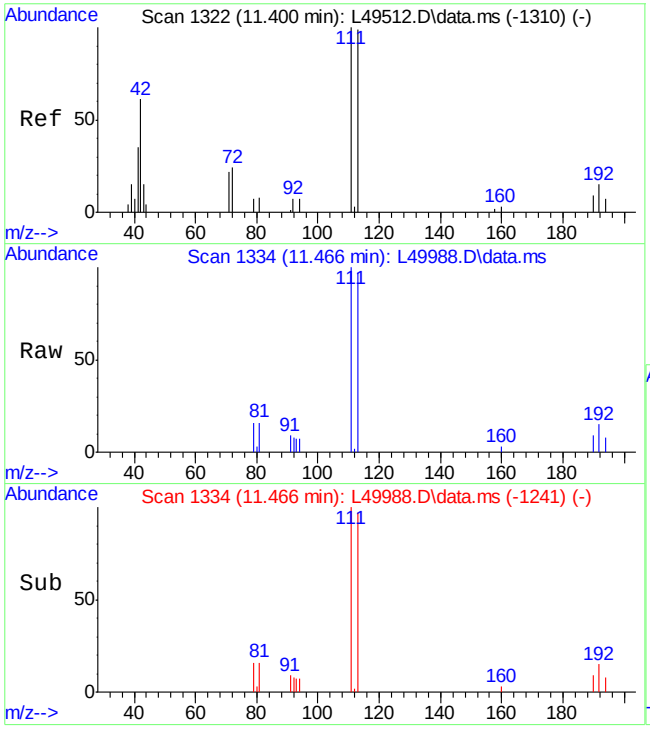




#24
Hexane
Concen: 0.80 ug/Kg
RT: 9.742 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 57 Resp: 30073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 79.8 | 73.8 | 110.8 |
| 43 | 63.4 | 56.6 | 84.8 |

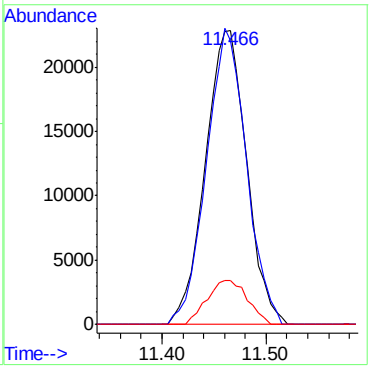


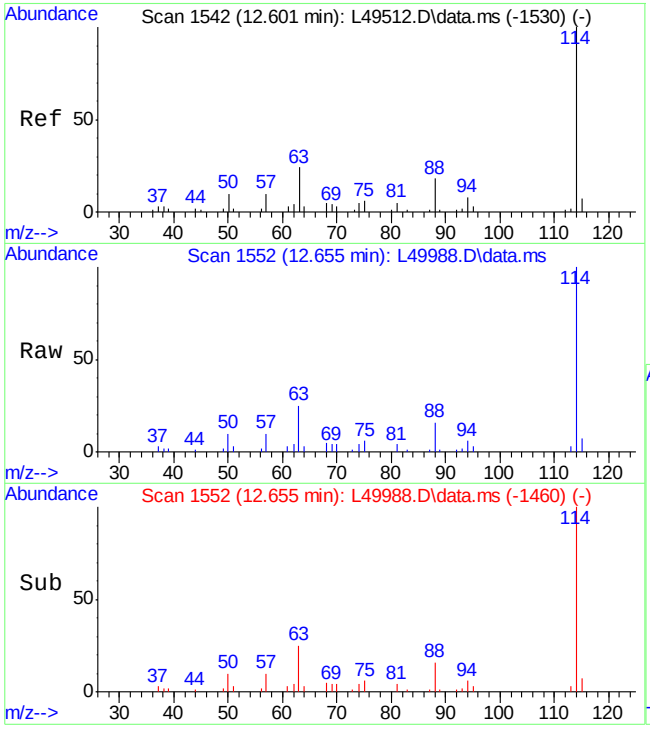



#36
Dibromofluoromethane
Concen: 17.84 ug/Kg
RT: 11.466 min Scan# 1334
Delta R.T. 0.006 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:111 Resp: 633667

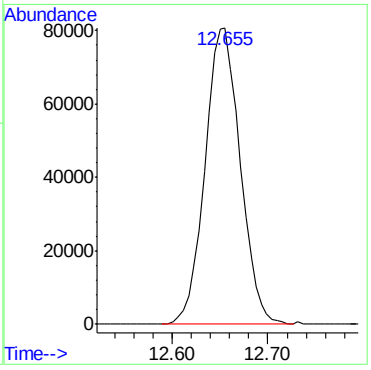
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 78.6 | 118.6 |
| 192 | 14.7 | 0.0 | 34.1 |

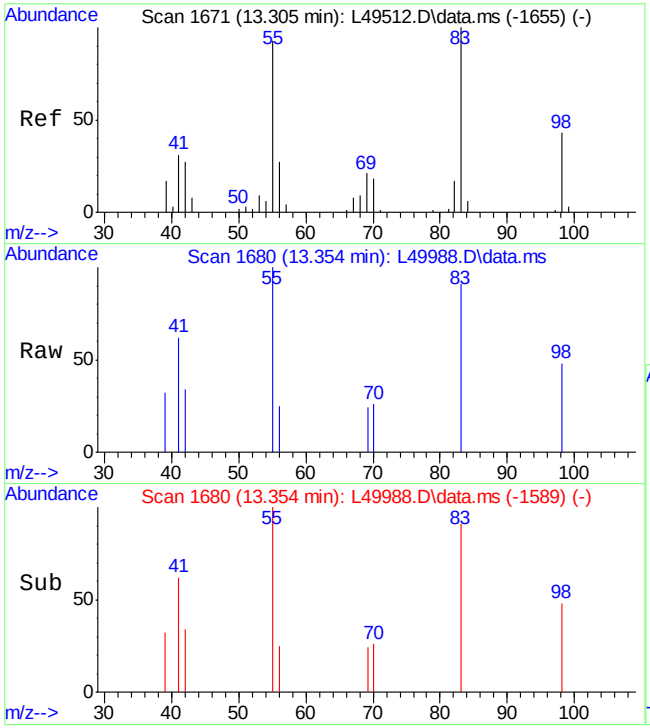



#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.001 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:114 Resp: 2053361

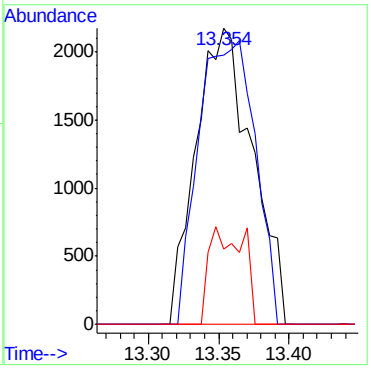


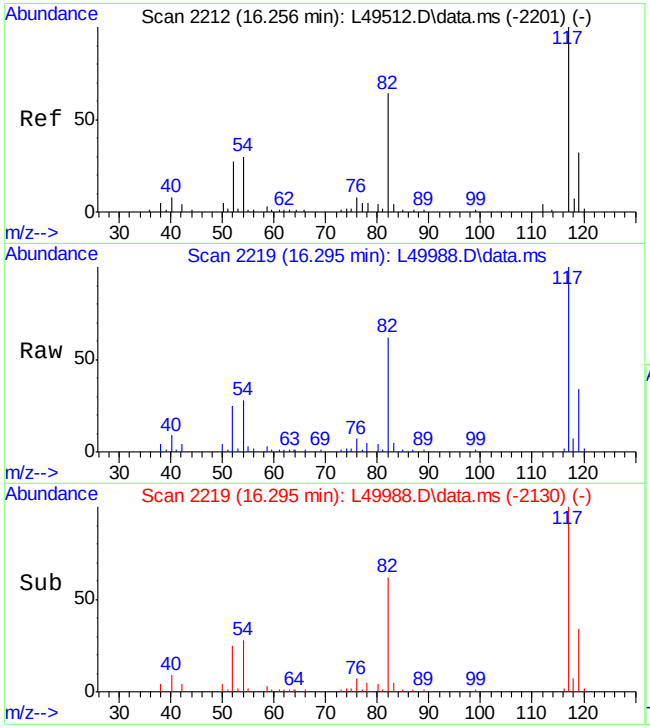



#48
Methylcyclohexane
Concen: 1.26 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 55 Resp: 60691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 96.0 | 80.6 | 120.6 |
| 56 | 19.6 | 11.5 | 51.5 |

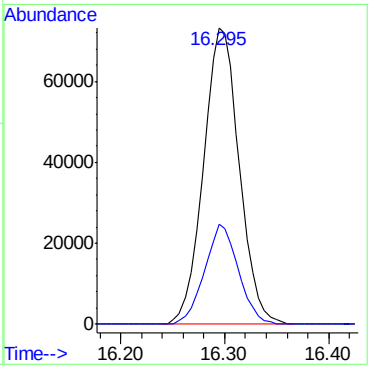


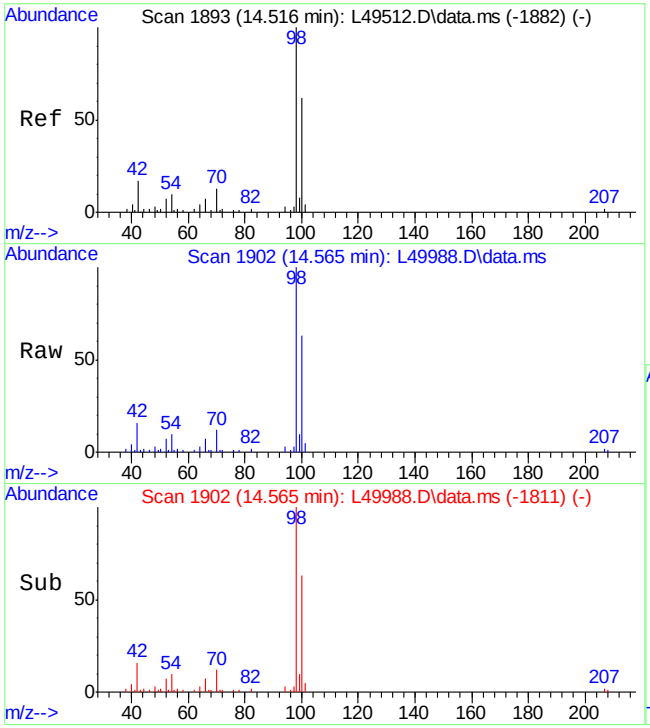




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:117 Resp: 1756464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 10.2 | 50.2 |

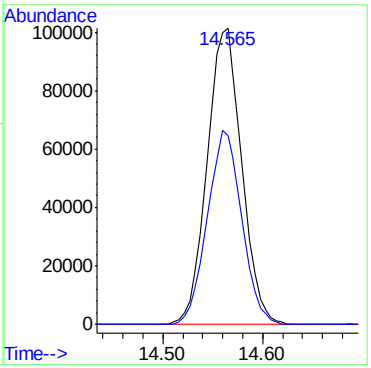


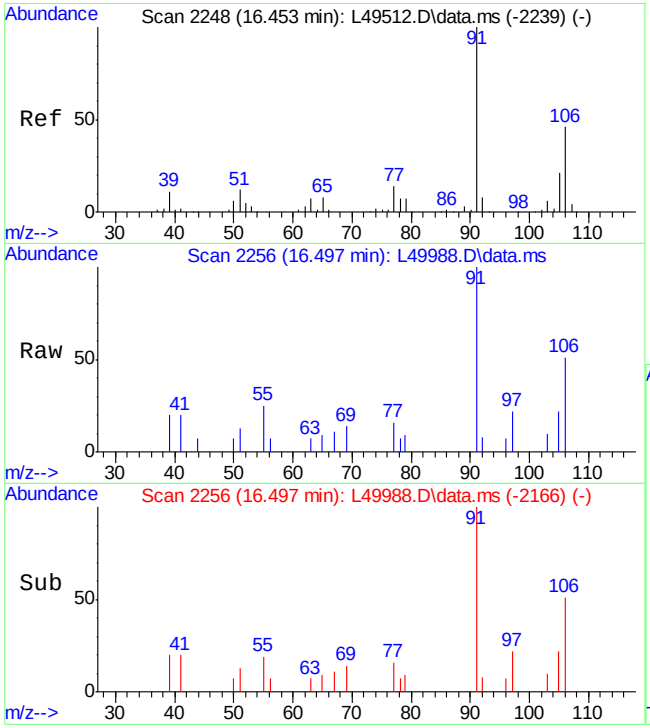



#56
Toluene-d8
Concen: 19.63 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 98 Resp: 2435693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 45.2 | 85.2 |

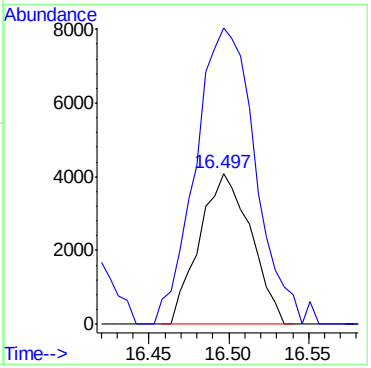


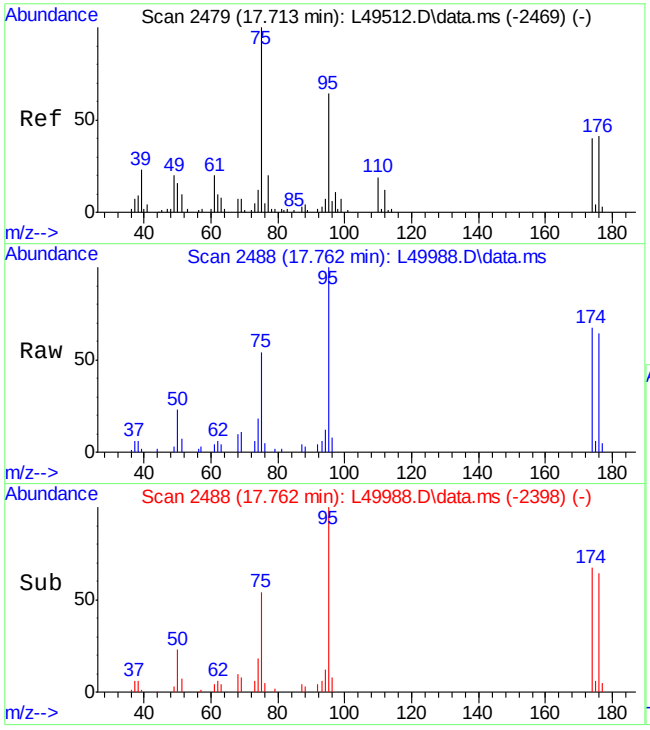




#68
Xylene, m+p
Concen: 1.52 ug/Kg
RT: 16.497 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:106 Resp: 91613

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 230.1 | 202.1 | 242.1 |

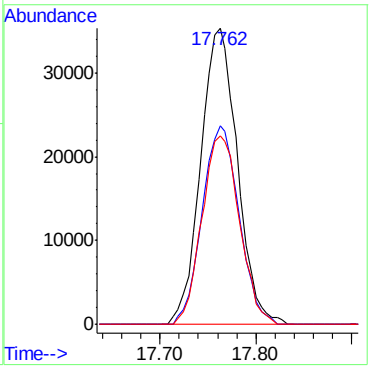


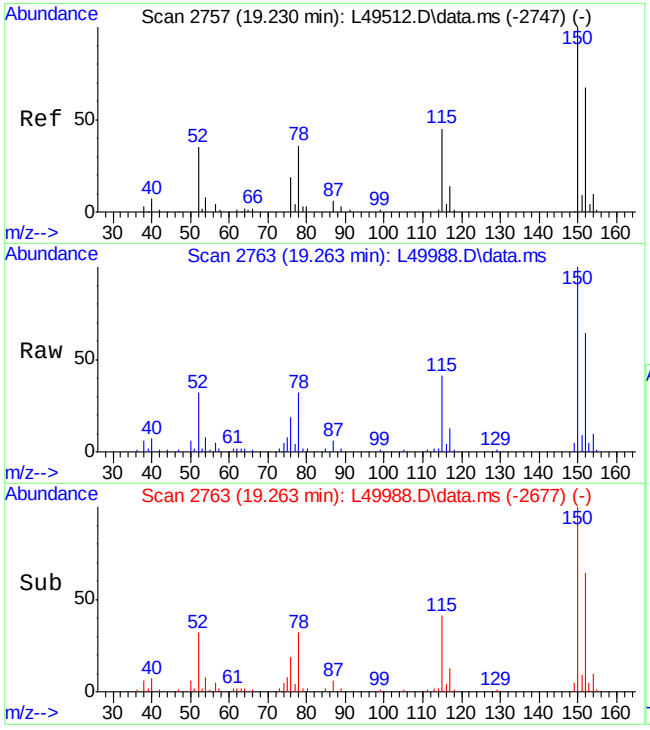



#74
4-Bromofluorobenzene
Concen: 18.23 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 95 Resp: 939651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 67.4 | 41.6 | 81.6 |
| 176 | 65.0 | 39.6 | 79.6 |

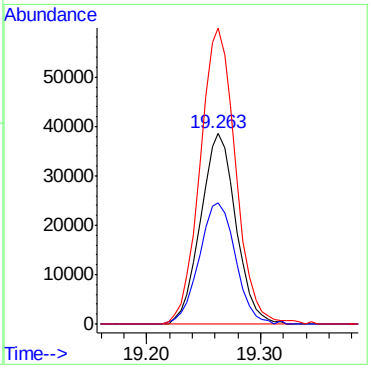


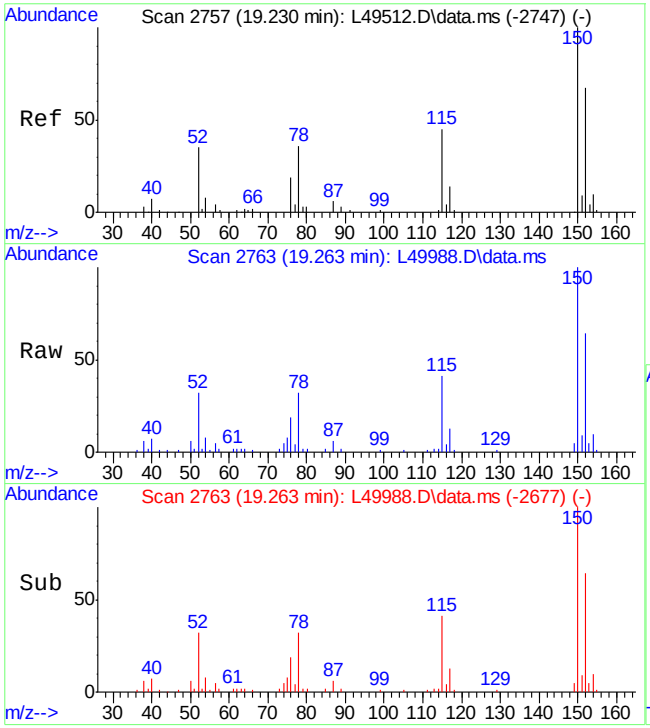




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:152 Resp: 830575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.8 | 48.8 | 88.8 |
| 150 | 156.4 | 174.3 | 214.3# |

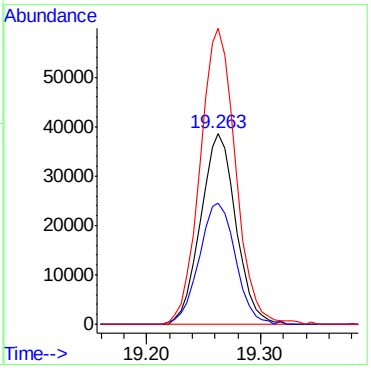


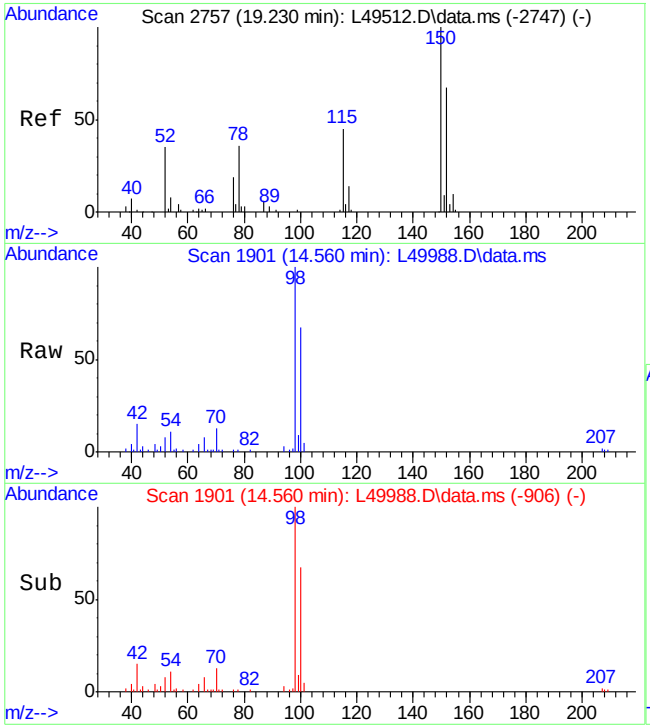



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:152 Resp: 830575

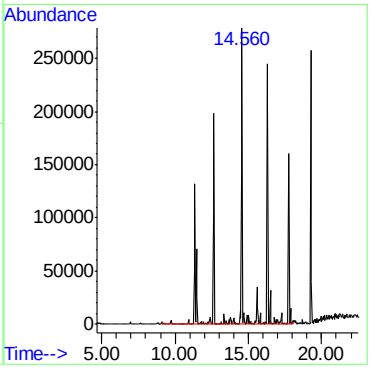
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.8 | 41.6 | 81.6 |
| 150 | 156.4 | 176.9 | 216.9# |




#100
TPH-GRO (C6-C10)
Concen: 88.68 ug/Kg m
RT: 14.560 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:TIC Resp:35170756



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49988.D
Acq On : 12 Jul 2016 8:39 pm
Operator : johannat
Sample : C46435-7R
Misc : MS1912,VL1499,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 02 11:02:07 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

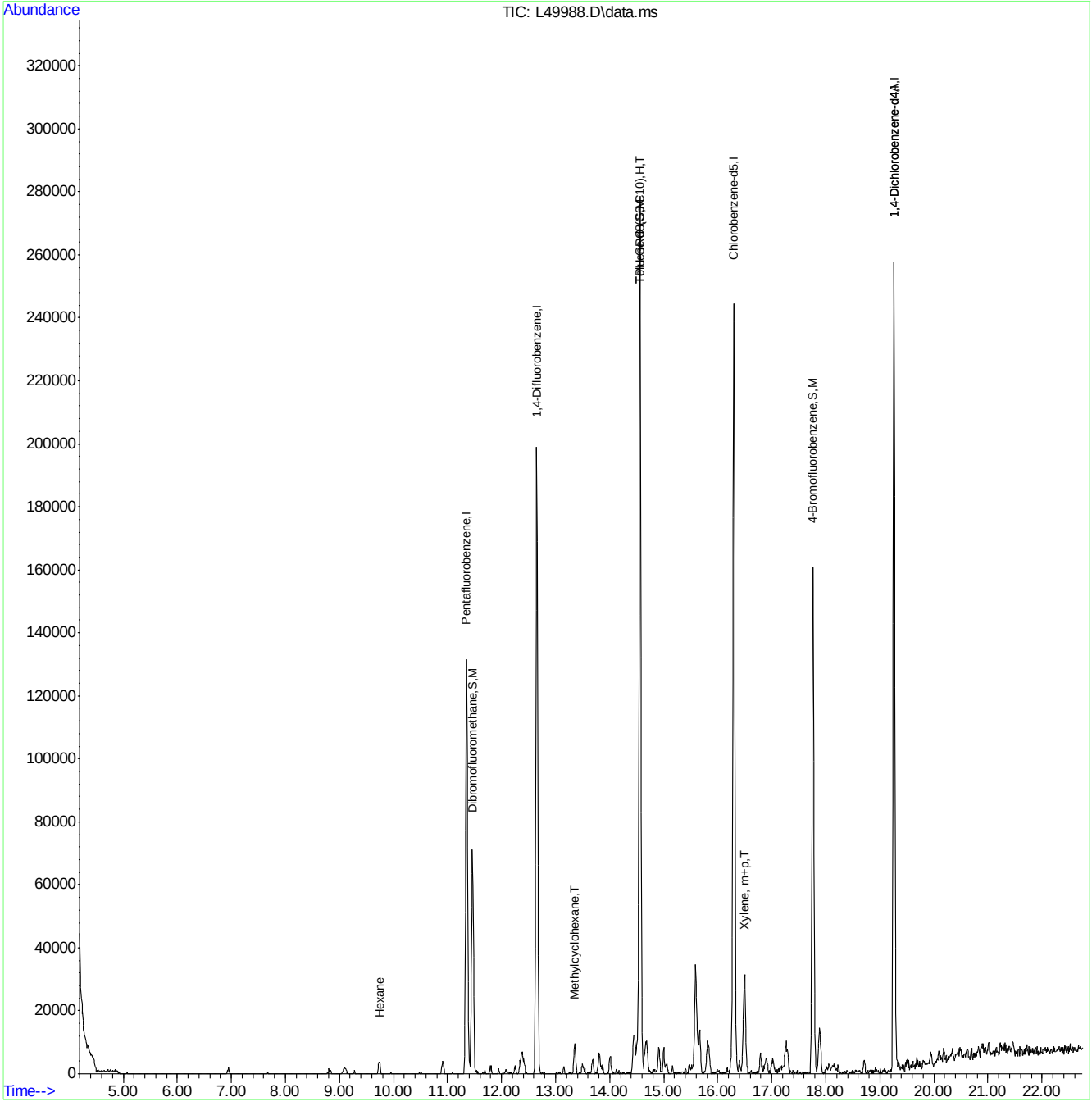
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1186401 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2053361 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1756464 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 830575 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 830575 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 633667 | 17.84 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 89.20% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2435693 | 19.63 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 98.15% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 939651 | 18.23 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 91.15% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.742 | 57 | 30073 | 0.80 | ug/Kg | 89 |
| 48) Methylcyclohexane | 13.354 | 55 | 60691 | 1.26 | ug/Kg | 91 |
| 68) Xylene, m+p | 16.497 | 106 | 91613 | 1.52 | ug/Kg | 95 |
| 100) TPH-GRO (C6-C10) | 14.560 | TIC | 35170756m | 88.68 | ug/Kg | |

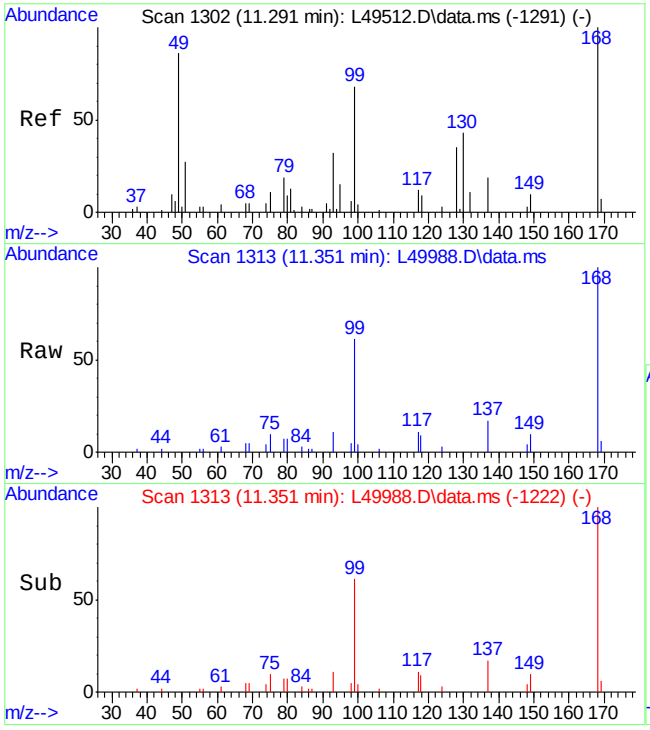
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49988.D
Acq On : 12 Jul 2016 8:39 pm
Operator : johannat
Sample : C46435-7R
Misc : MS1912,VL1499,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

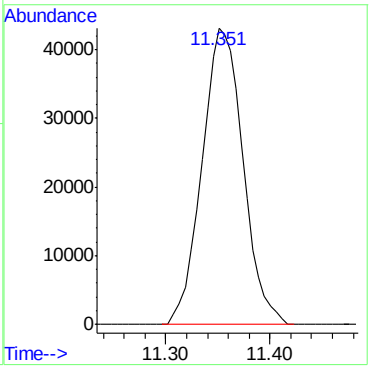
Quant Time: Aug 02 11:02:07 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

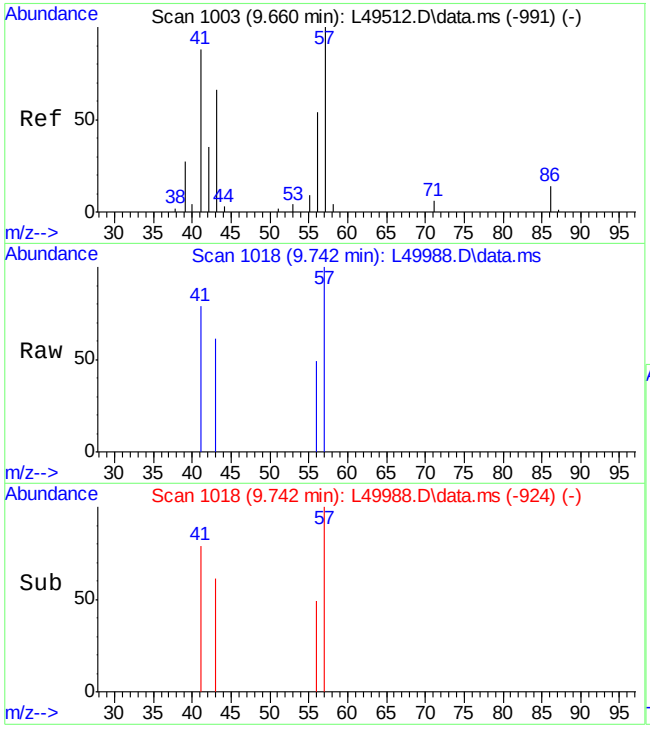





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:168 Resp: 1186401

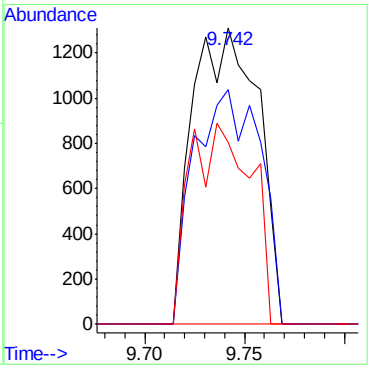


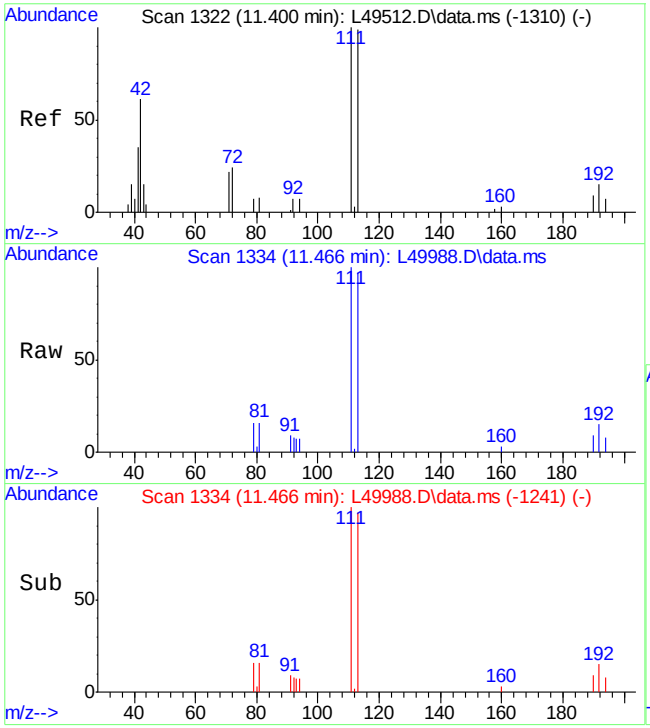




#24
Hexane
Concen: 0.80 ug/Kg
RT: 9.742 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 57 Resp: 30073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 79.8 | 73.8 | 110.8 |
| 43 | 63.4 | 56.6 | 84.8 |

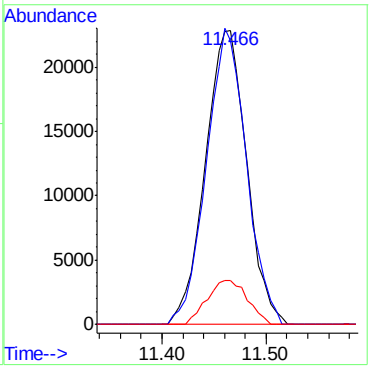


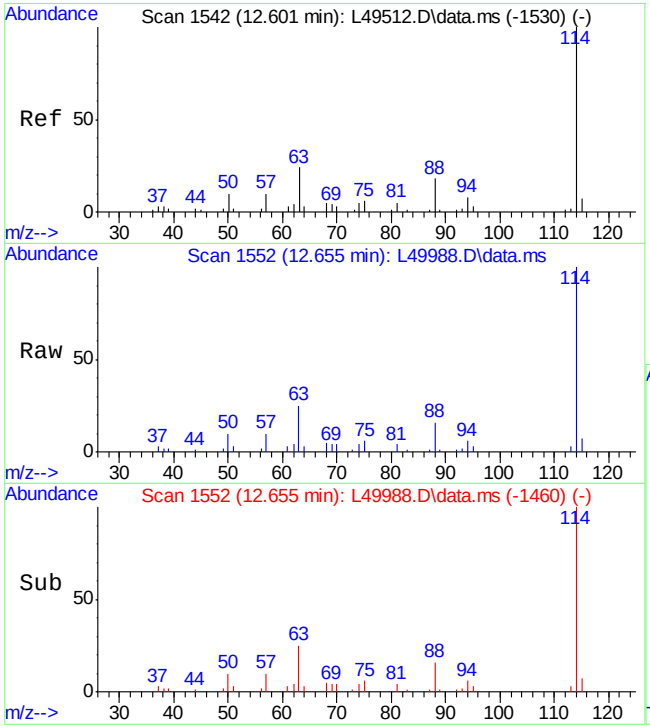



#36
Dibromofluoromethane
Concen: 17.84 ug/Kg
RT: 11.466 min Scan# 1334
Delta R.T. 0.006 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:111 Resp: 633667

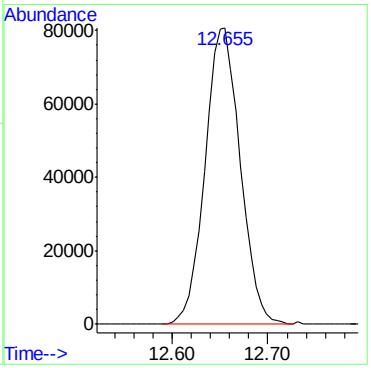
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 78.6 | 118.6 |
| 192 | 14.7 | 0.0 | 34.1 |

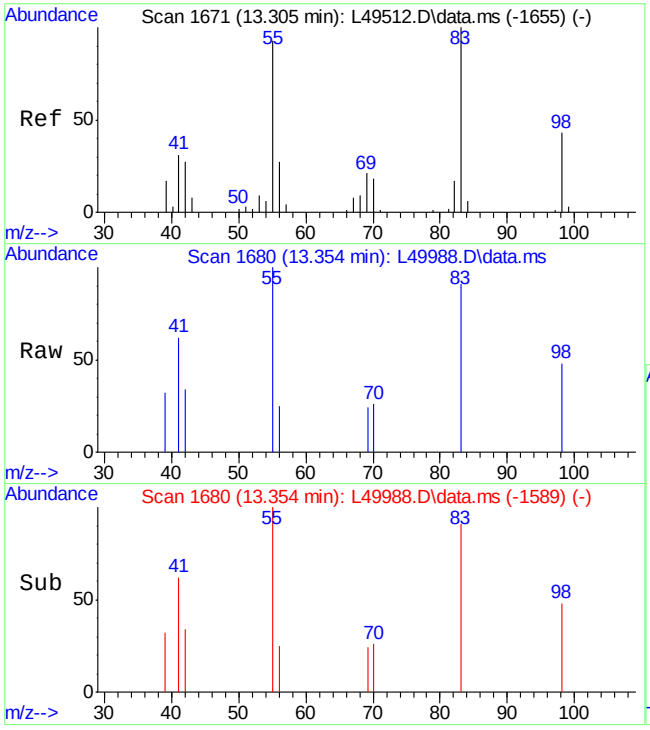



#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.001 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:114 Resp: 2053361

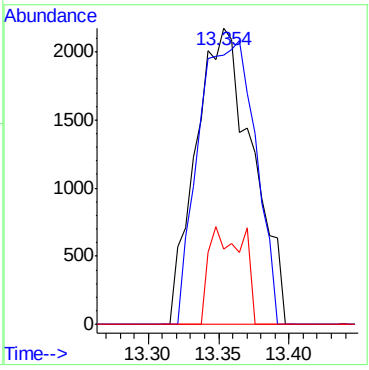


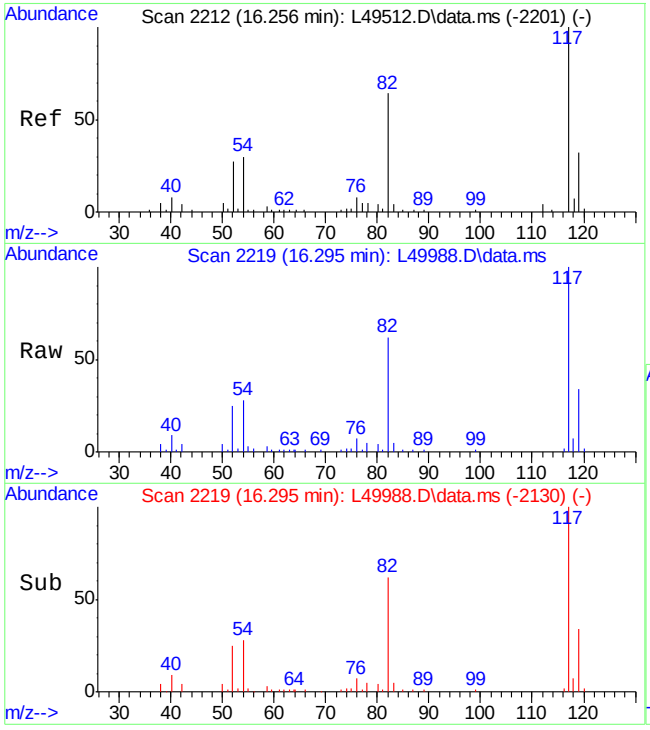



#48
Methylcyclohexane
Concen: 1.26 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 55 Resp: 60691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 96.0 | 80.6 | 120.6 |
| 56 | 19.6 | 11.5 | 51.5 |

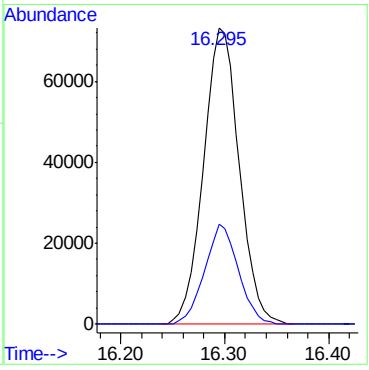


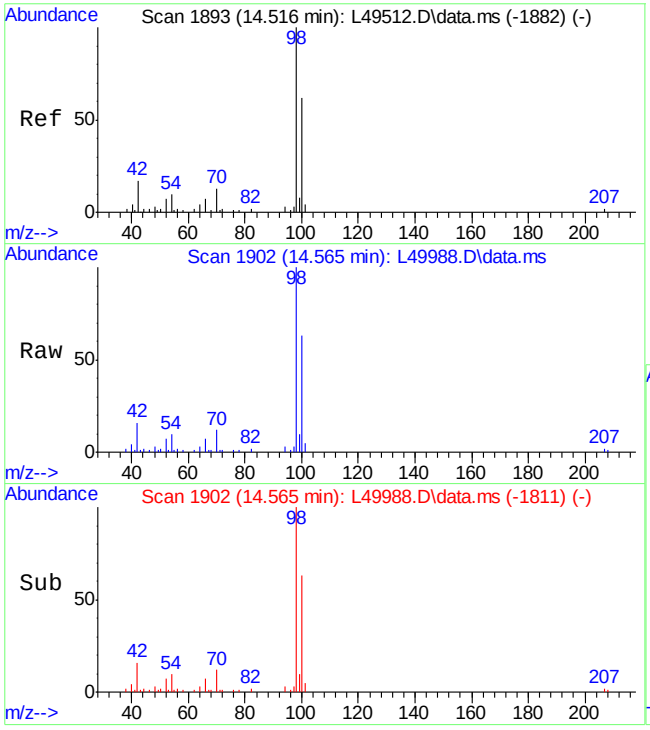




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:117 Resp: 1756464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 10.2 | 50.2 |

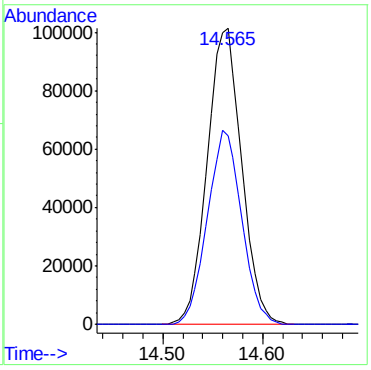


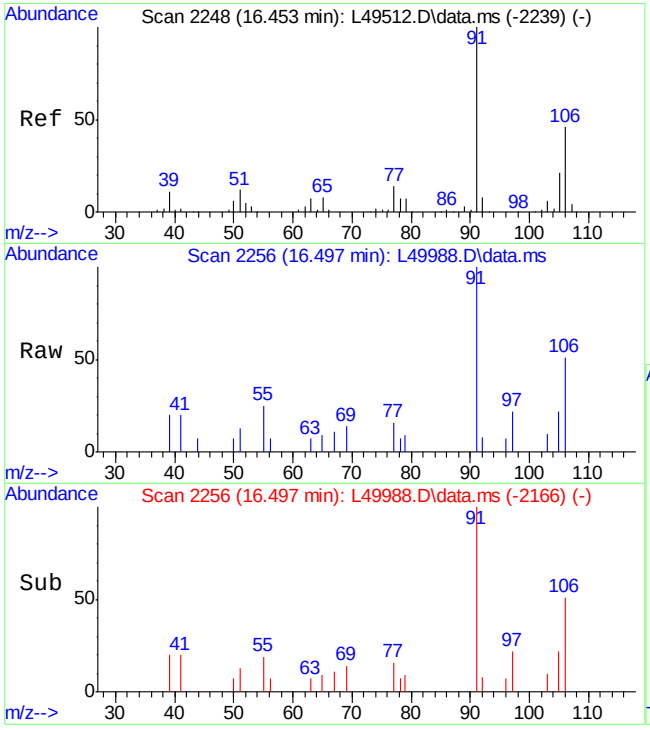



#56
Toluene-d8
Concen: 19.63 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 98 Resp: 2435693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 45.2 | 85.2 |

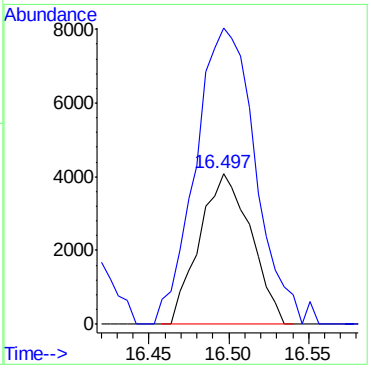


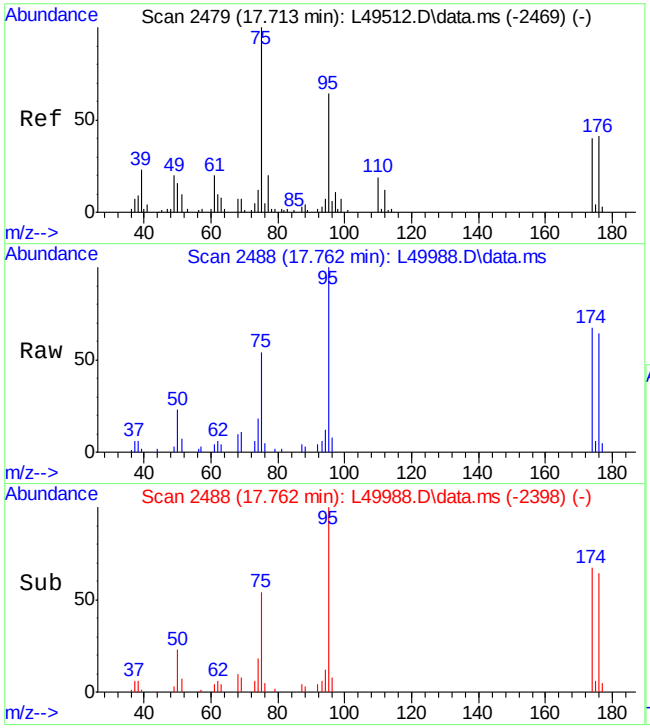




#68
Xylene, m+p
Concen: 1.52 ug/Kg
RT: 16.497 min Scan# 2256
Delta R.T. -0.010 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:106 Resp: 91613

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 230.1 | 202.1 | 242.1 |

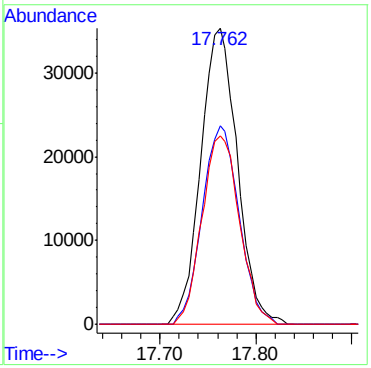


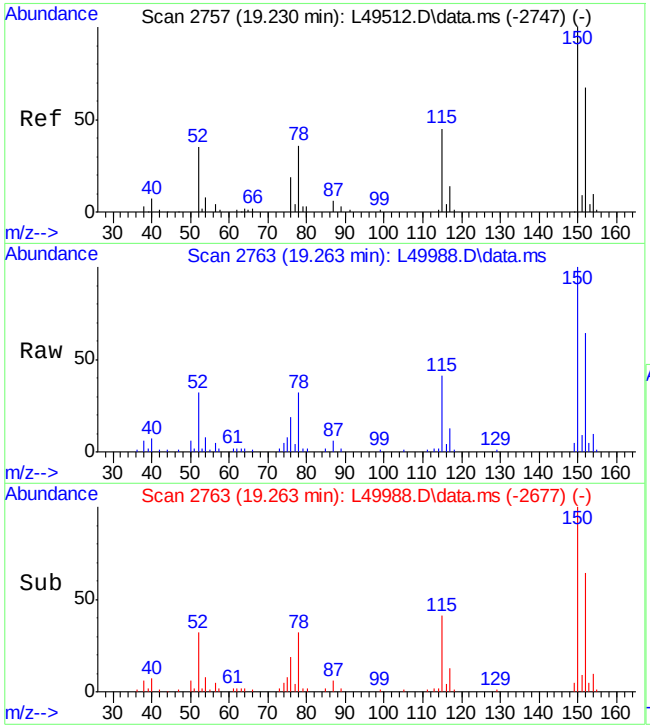



#74
4-Bromofluorobenzene
Concen: 18.23 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion: 95 Resp: 939651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 67.4 | 41.6 | 81.6 |
| 176 | 65.0 | 39.6 | 79.6 |

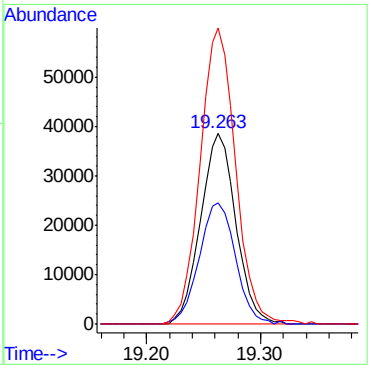


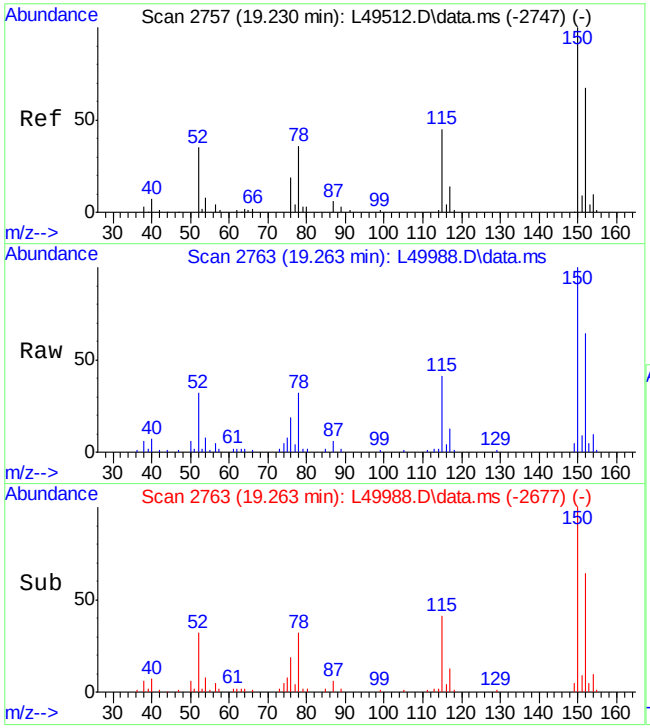




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:152 Resp: 830575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.8 | 48.8 | 88.8 |
| 150 | 156.4 | 174.3 | 214.3# |

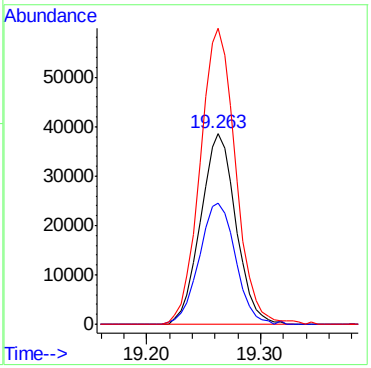


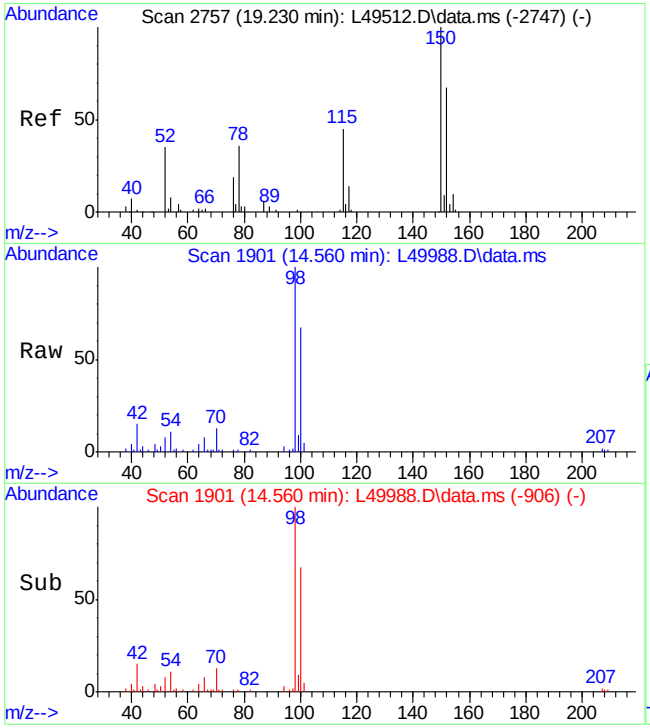



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:152 Resp: 830575

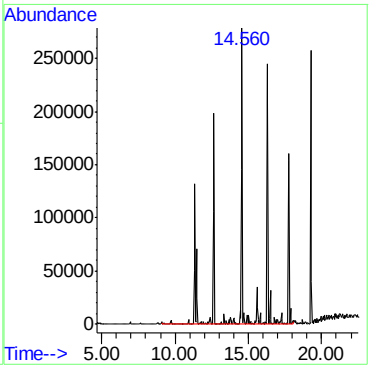
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.8 | 41.6 | 81.6 |
| 150 | 156.4 | 176.9 | 216.9# |




#100
TPH-GRO (C6-C10)
Concen: 88.68 ug/Kg m
RT: 14.560 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49988.D
Acq: 12 Jul 2016 8:39 pm

Tgt Ion:TIC Resp:35170756



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49961.D
Acq On : 11 Jul 2016 8:43 pm
Operator : johannat
Sample : C46435-8R
Misc : MS1912,VL1498,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 02 10:54:56 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

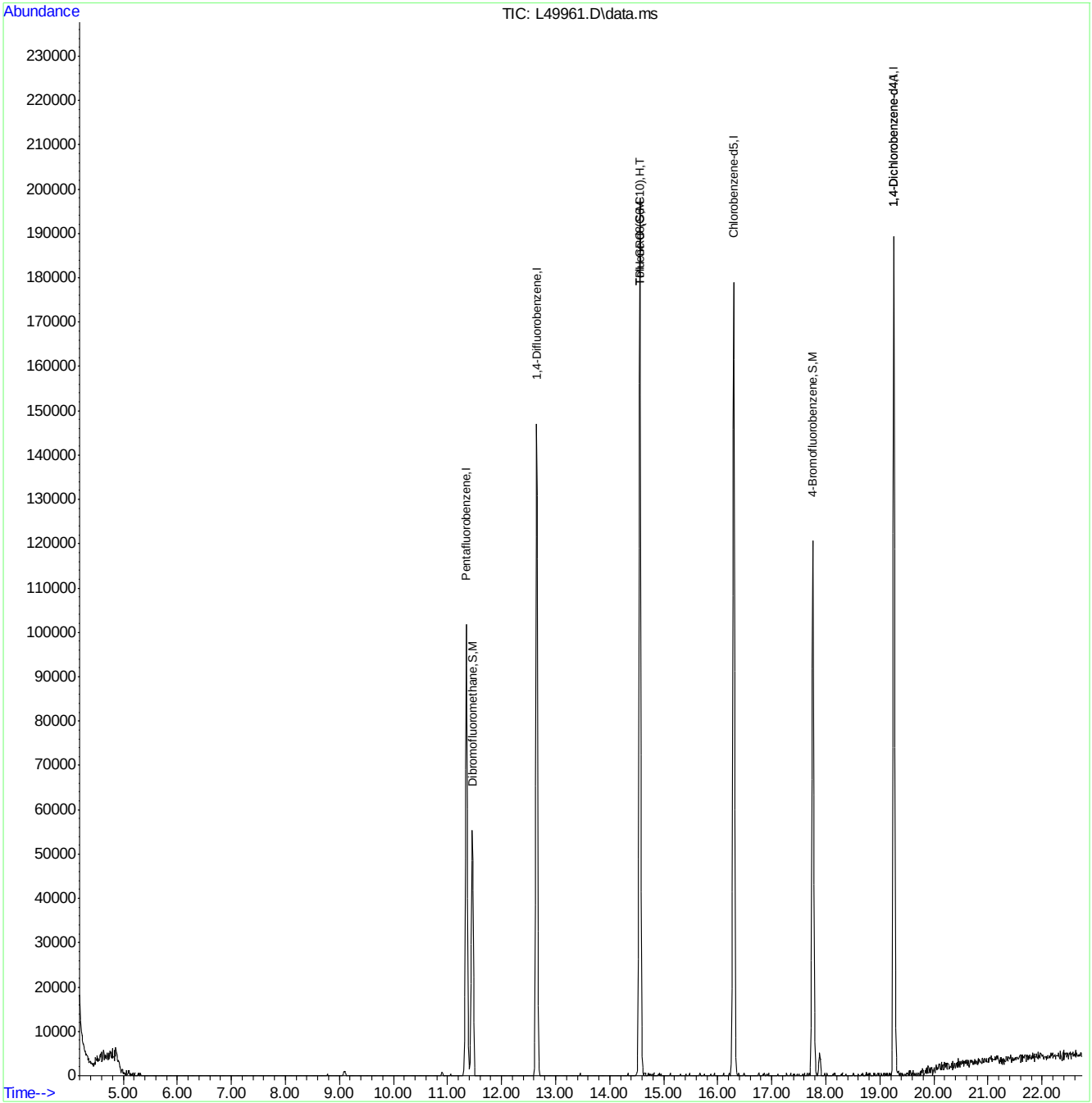
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 811973 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1405340 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.294 | 117 | 1223799 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.257 | 152 | 574021 | 20.00 | ug/Kg | -0.04 |
| 99) 1,4-Dichlorobenzene-d4A | 19.257 | 152 | 574021 | 20.00 | ug/Kg | -0.04 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 487565 | 20.06 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 100.30% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 1645436 | 19.04 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 95.20% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 690527 | 19.22 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 96.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 19778336m | 58.20 | ug/Kg | |

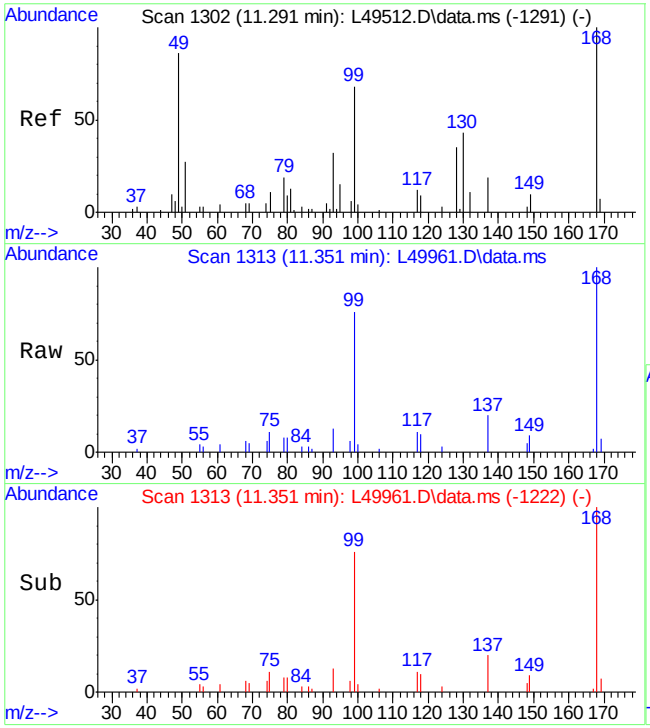
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49961.D
Acq On : 11 Jul 2016 8:43 pm
Operator : johannat
Sample : C46435-8R
Misc : MS1912,VL1498,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

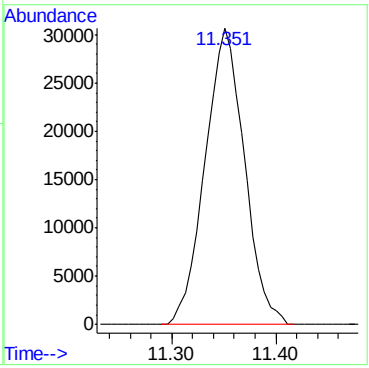
Quant Time: Aug 02 10:54:56 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

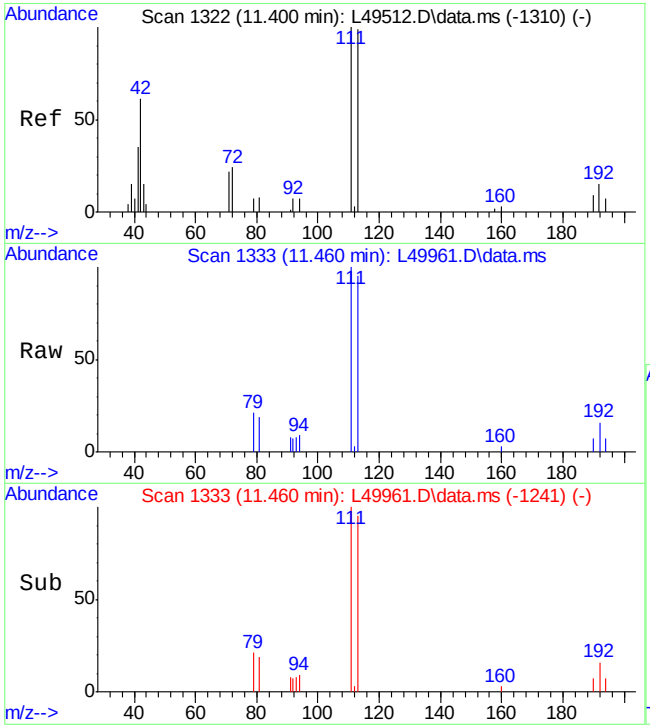





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:168 Resp: 811973

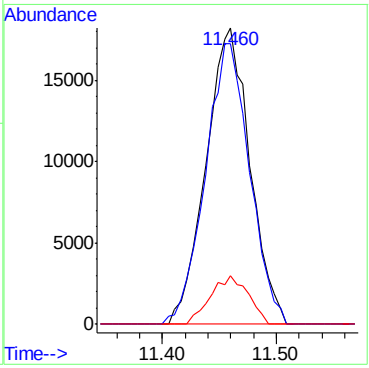


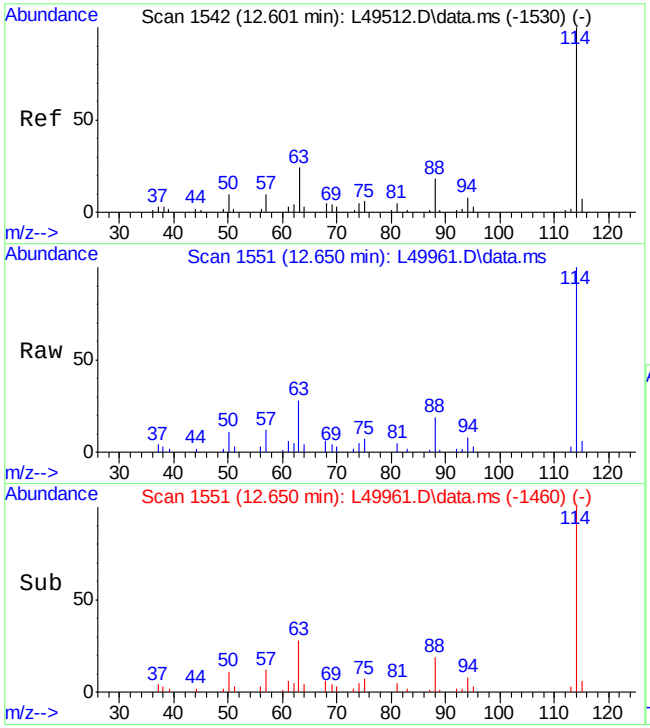




#36
Dibromofluoromethane
Concen: 20.06 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:111 Resp: 487565

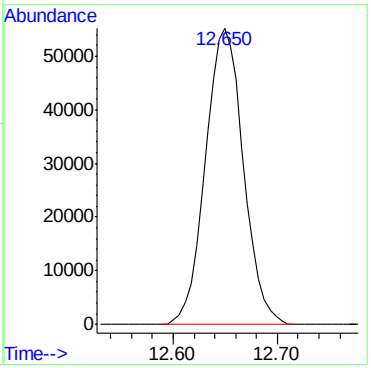
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.4 | 78.6 | 118.6 |
| 192 | 14.0 | 0.0 | 34.1 |

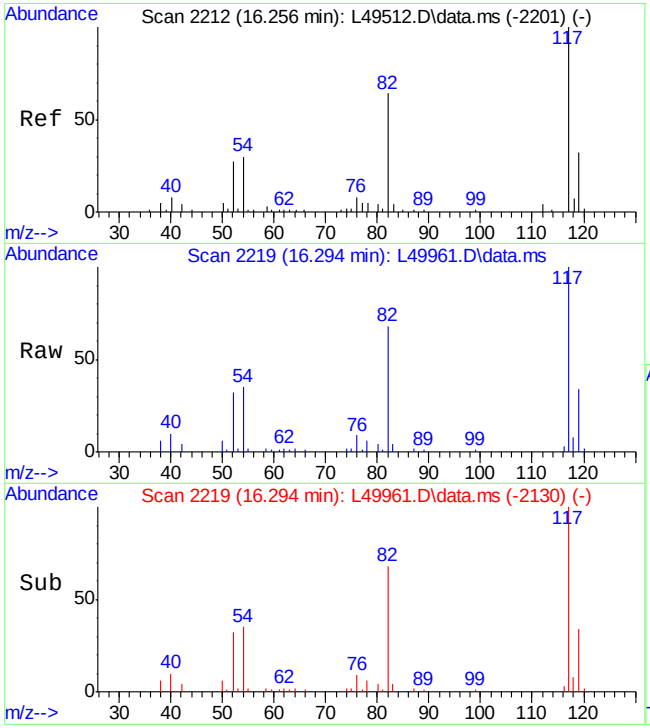





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:114 Resp: 1405340

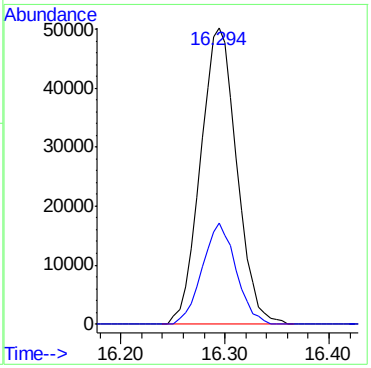


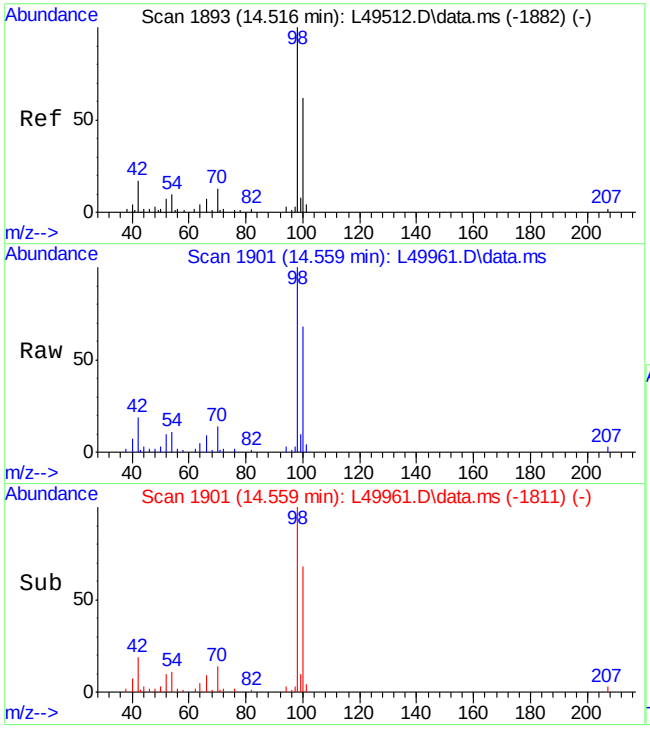




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.294 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:117 Resp: 1223799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.7 | 10.2 | 50.2 |

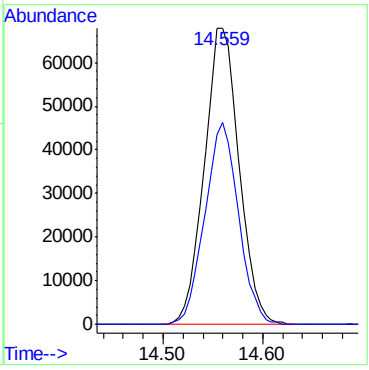


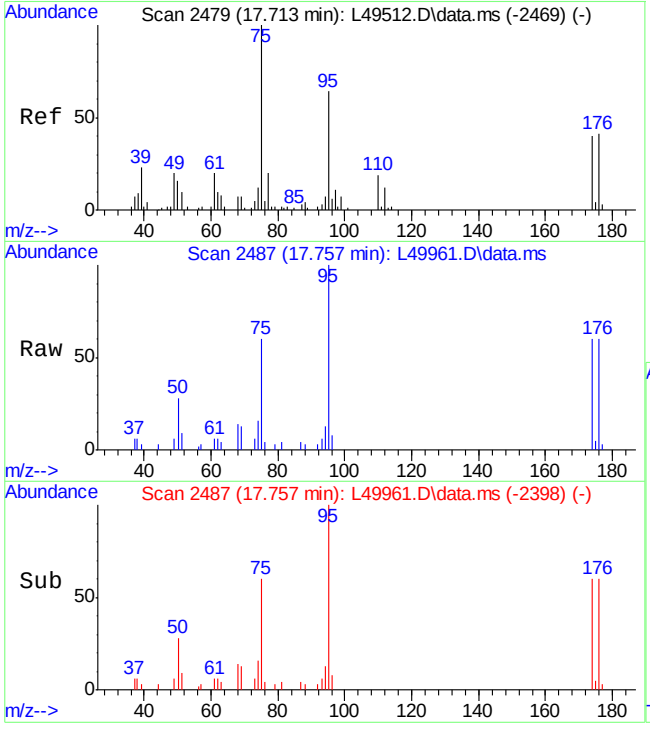



#56
Toluene-d8
Concen: 19.04 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion: 98 Resp: 1645436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 45.2 | 85.2 |

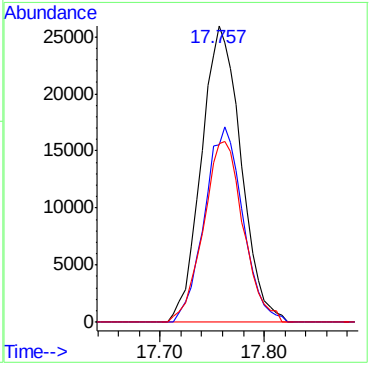


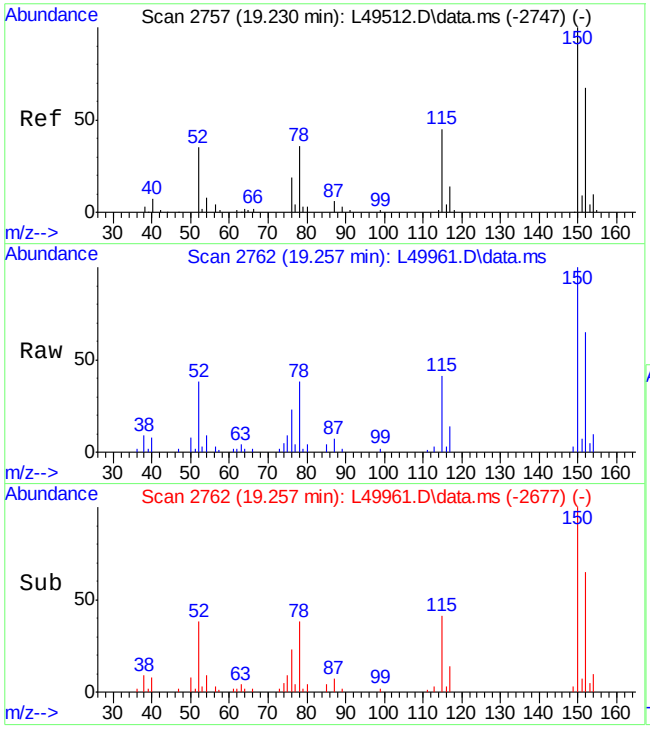




#74
4-Bromofluorobenzene
Concen: 19.22 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion: 95 Resp: 690527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.1 | 41.6 | 81.6 |
| 176 | 61.3 | 39.6 | 79.6 |

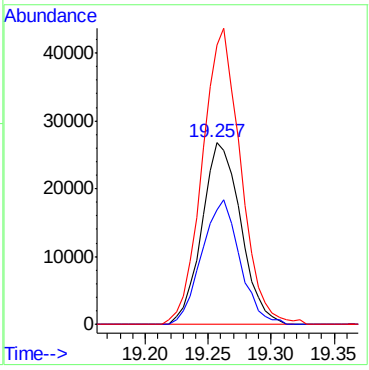


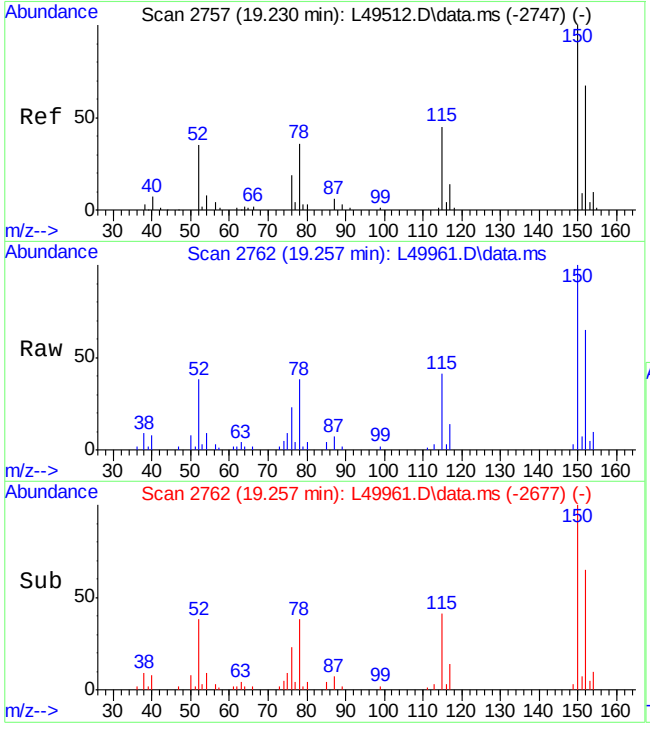



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.257 min Scan# 2762
Delta R.T. -0.035 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:152 Resp: 574021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.9 | 48.8 | 88.8 |
| 150 | 160.4 | 174.3 | 214.3# |

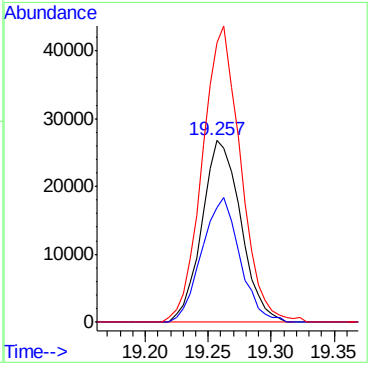


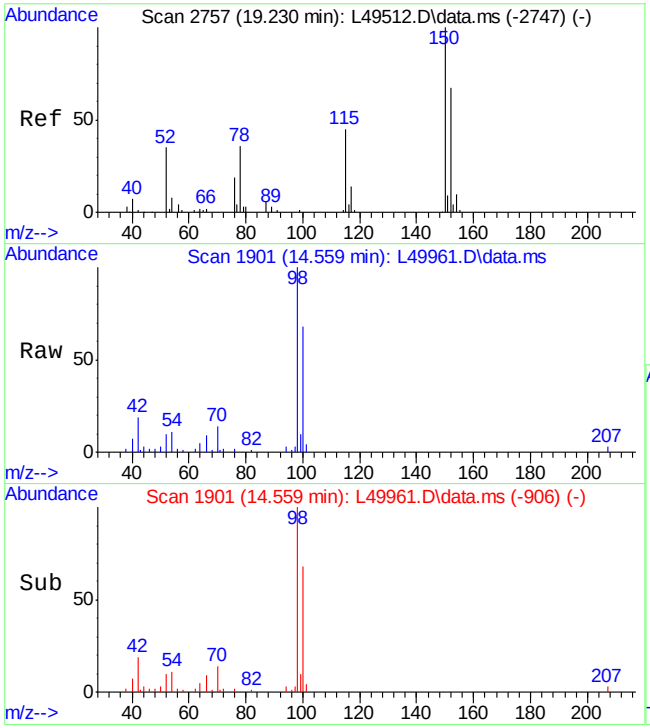




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.257 min Scan# 2762
Delta R.T. -0.035 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:152 Resp: 574021

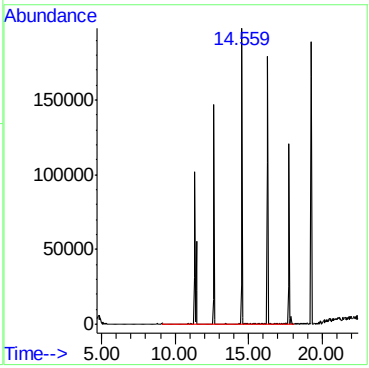
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.9 | 41.6 | 81.6 |
| 150 | 160.4 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 58.20 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:TIC Resp:19778336



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49961.D
Acq On : 11 Jul 2016 8:43 pm
Operator : johannat
Sample : C46435-8R
Misc : MS1912,VL1498,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 02 10:54:56 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

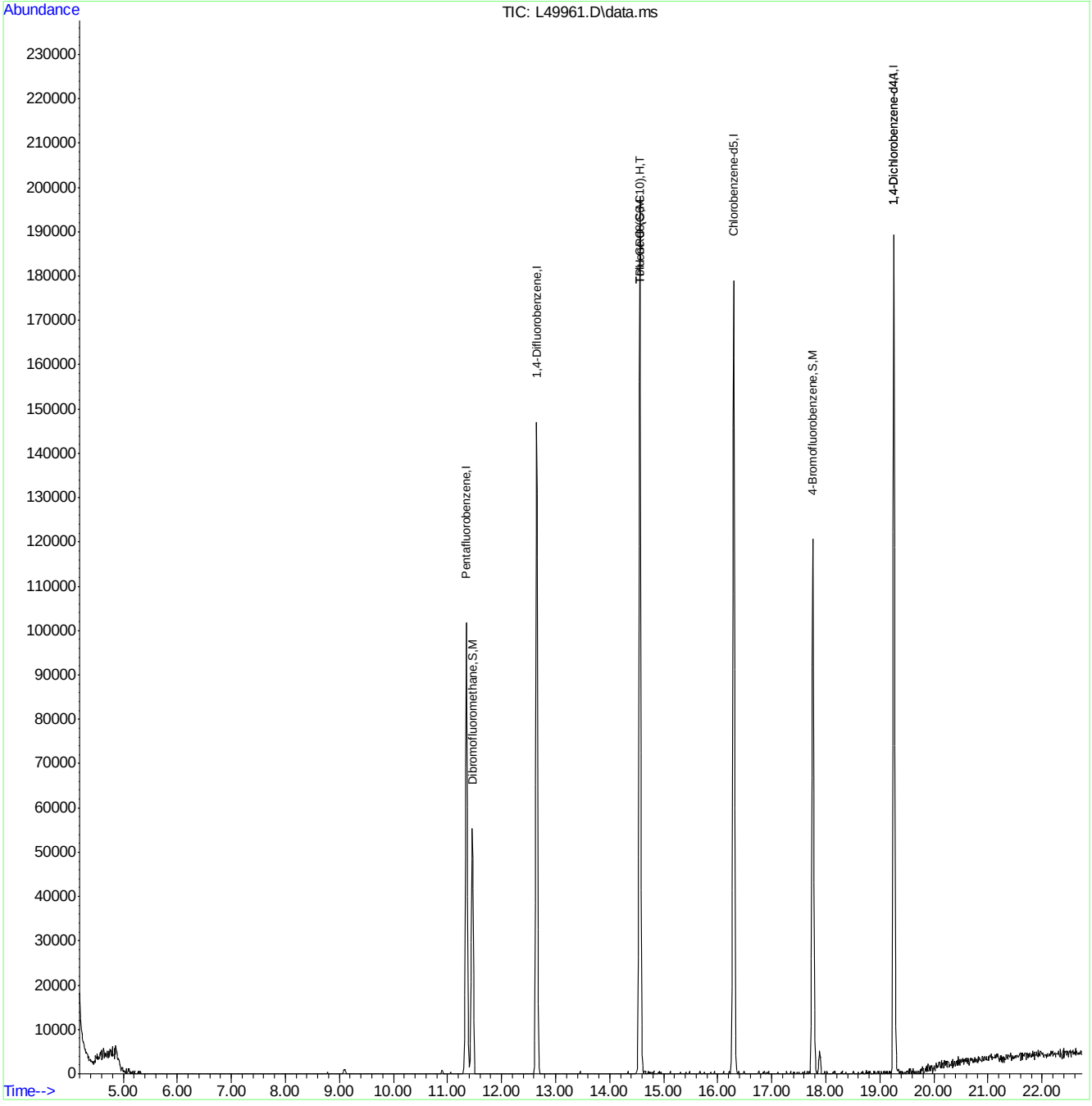
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 811973 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1405340 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.294 | 117 | 1223799 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.257 | 152 | 574021 | 20.00 | ug/Kg | -0.04 |
| 99) 1,4-Dichlorobenzene-d4A | 19.257 | 152 | 574021 | 20.00 | ug/Kg | -0.04 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 487565 | 20.06 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 100.30% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 1645436 | 19.04 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 95.20% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 690527 | 19.22 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 96.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 19778336m | 58.20 | ug/Kg | |

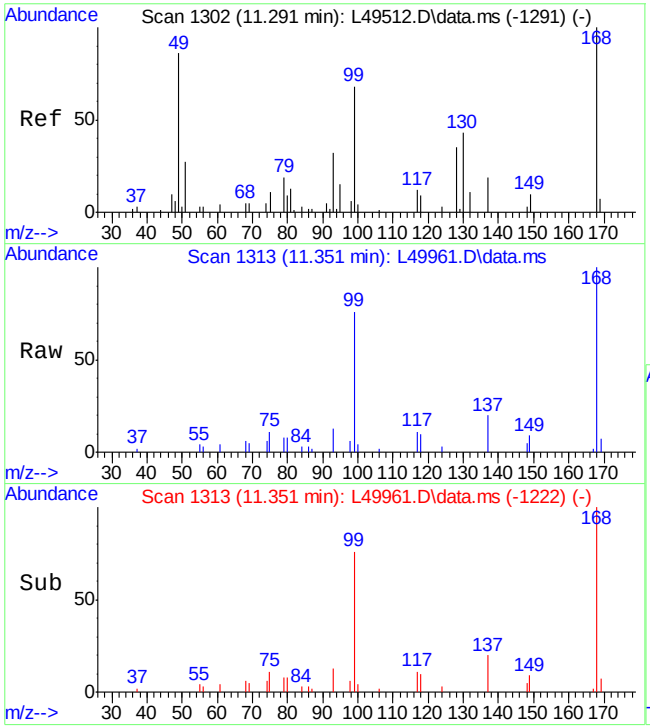
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49961.D
Acq On : 11 Jul 2016 8:43 pm
Operator : johannat
Sample : C46435-8R
Misc : MS1912,VL1498,5.77,,,,1
ALS Vial : 21 Sample Multiplier: 1

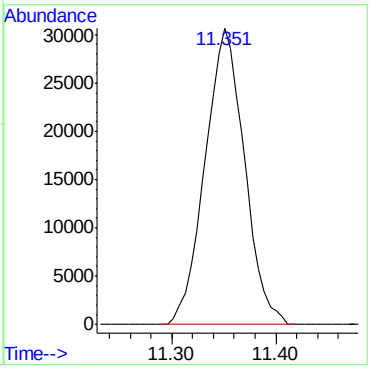
Quant Time: Aug 02 10:54:56 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

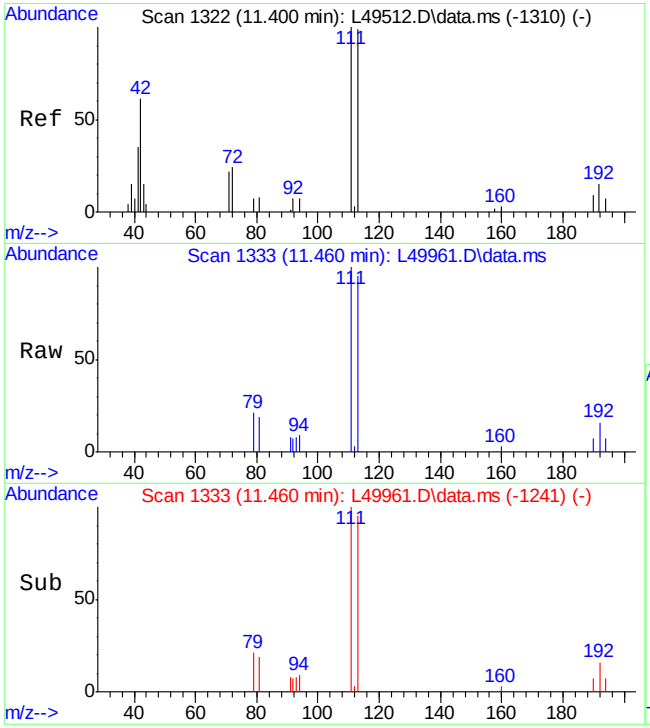





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:168 Resp: 811973

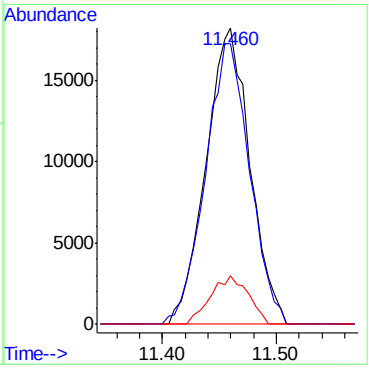


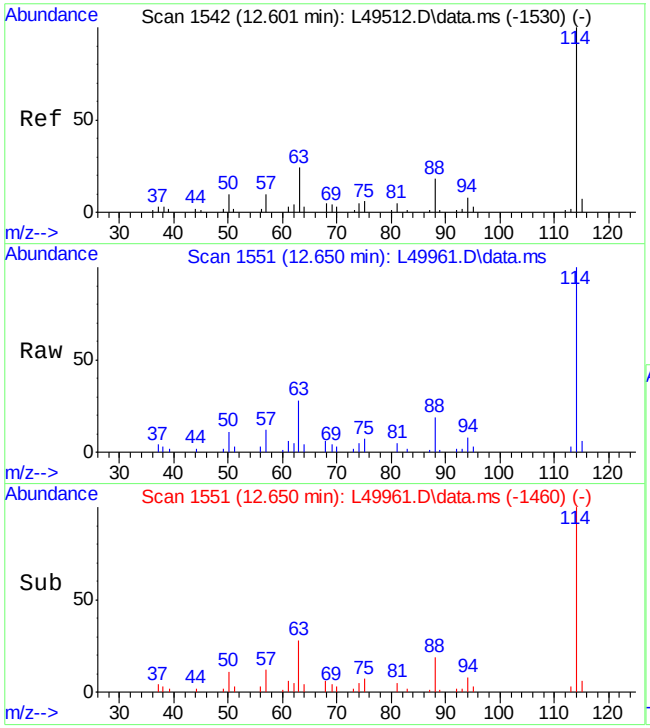




#36
Dibromofluoromethane
Concen: 20.06 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:111 Resp: 487565

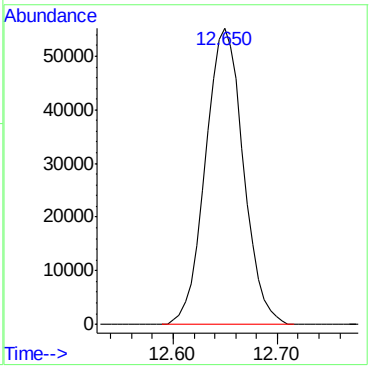
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.4 | 78.6 | 118.6 |
| 192 | 14.0 | 0.0 | 34.1 |

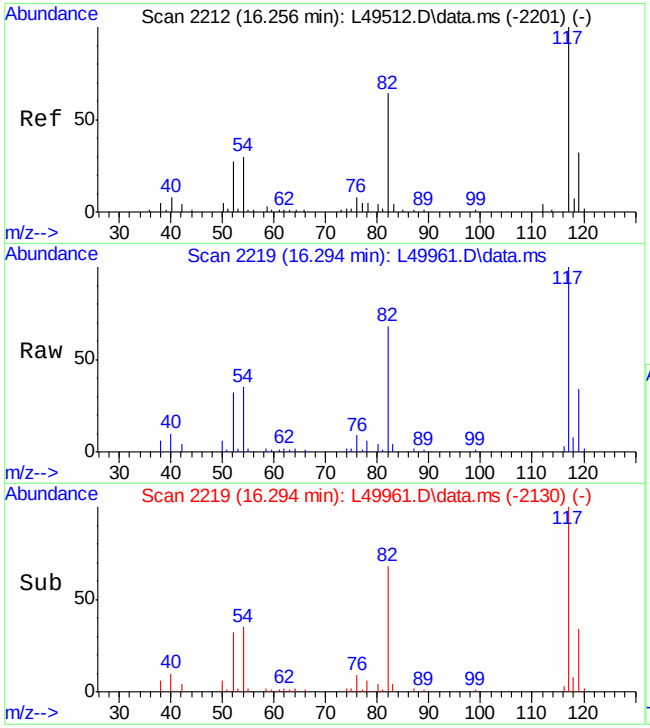





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:114 Resp: 1405340

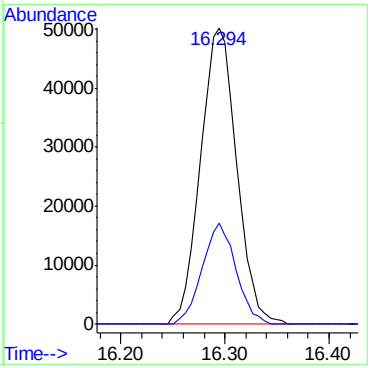


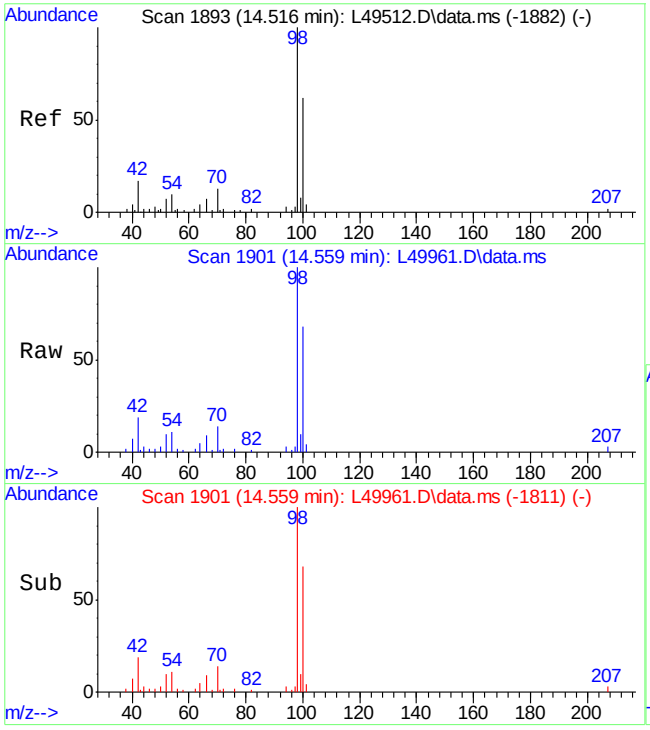




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.294 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:117 Resp: 1223799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.7 | 10.2 | 50.2 |

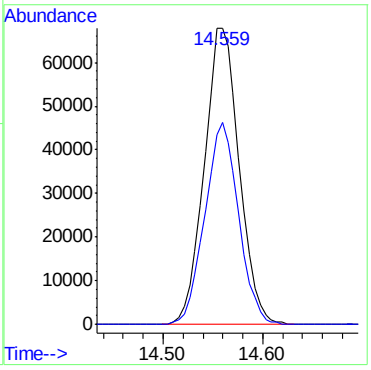


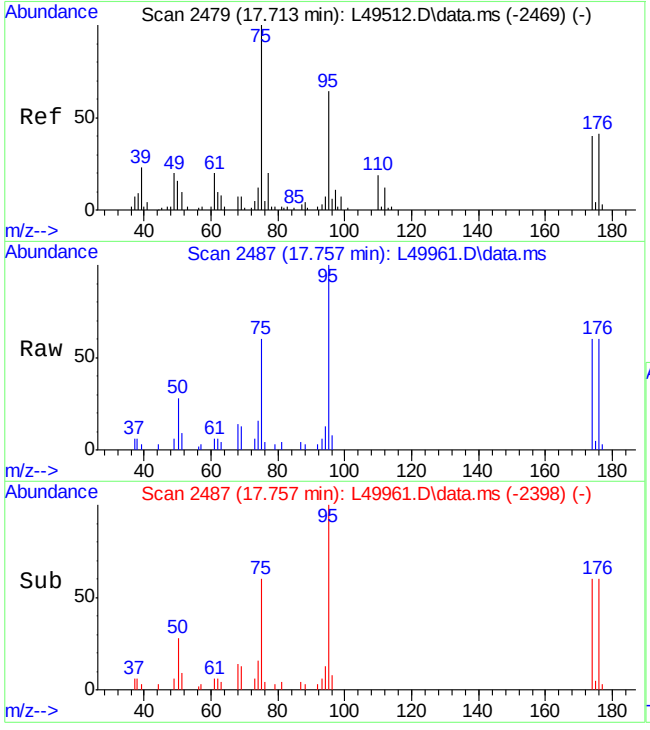



#56
Toluene-d8
Concen: 19.04 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion: 98 Resp: 1645436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 45.2 | 85.2 |

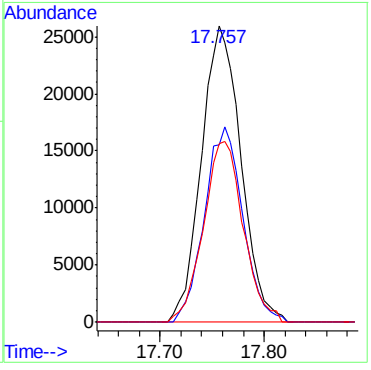


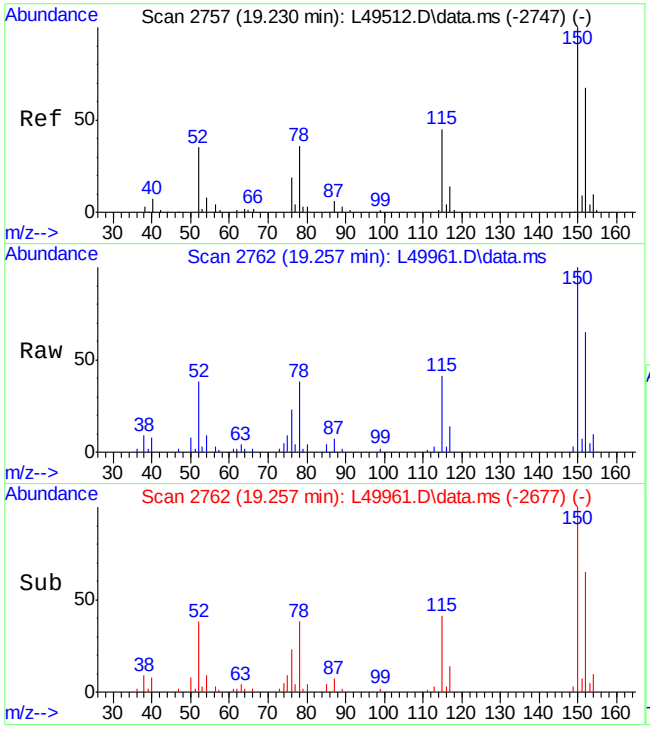




#74
4-Bromofluorobenzene
Concen: 19.22 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion: 95 Resp: 690527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.1 | 41.6 | 81.6 |
| 176 | 61.3 | 39.6 | 79.6 |

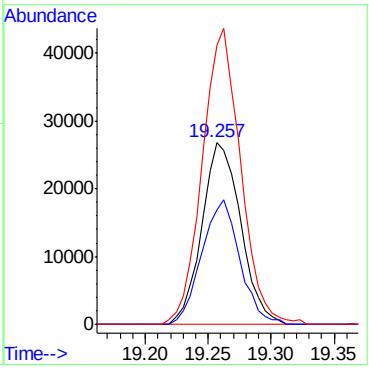


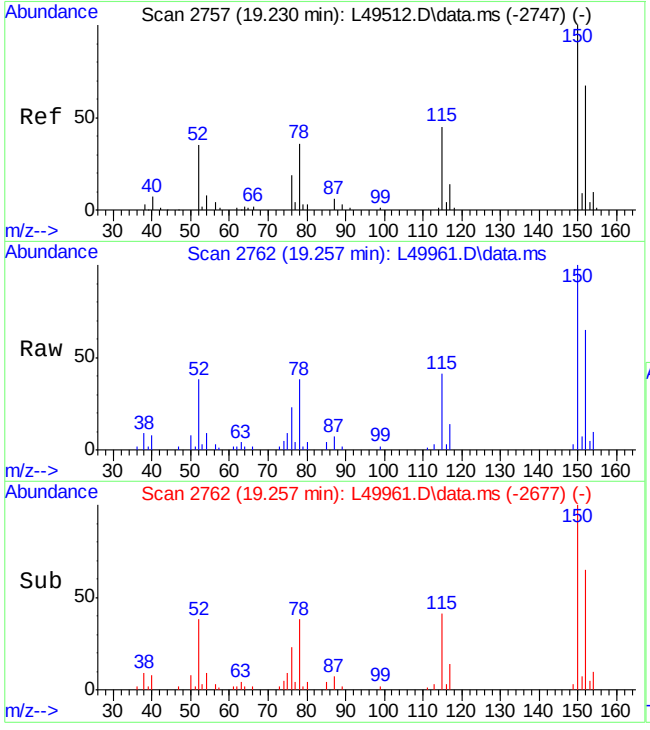



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.257 min Scan# 2762
Delta R.T. -0.035 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:152 Resp: 574021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.9 | 48.8 | 88.8 |
| 150 | 160.4 | 174.3 | 214.3# |

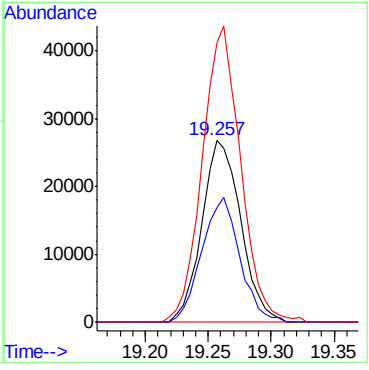


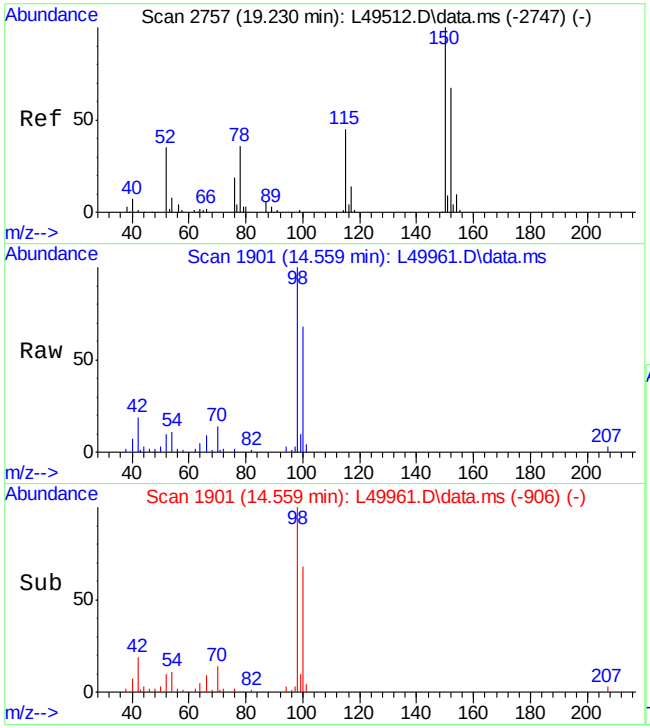




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.257 min Scan# 2762
Delta R.T. -0.035 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:152 Resp: 574021

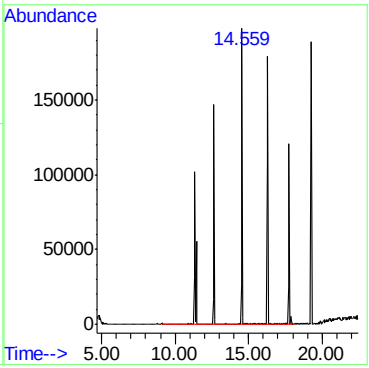
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.9 | 41.6 | 81.6 |
| 150 | 160.4 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 58.20 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49961.D
Acq: 11 Jul 2016 8:43 pm

Tgt Ion:TIC Resp:19778336



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49962.D
Acq On : 11 Jul 2016 9:13 pm
Operator : johannat
Sample : C46435-9R
Misc : MS1912,VL1498,5.31,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 02 10:55:04 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

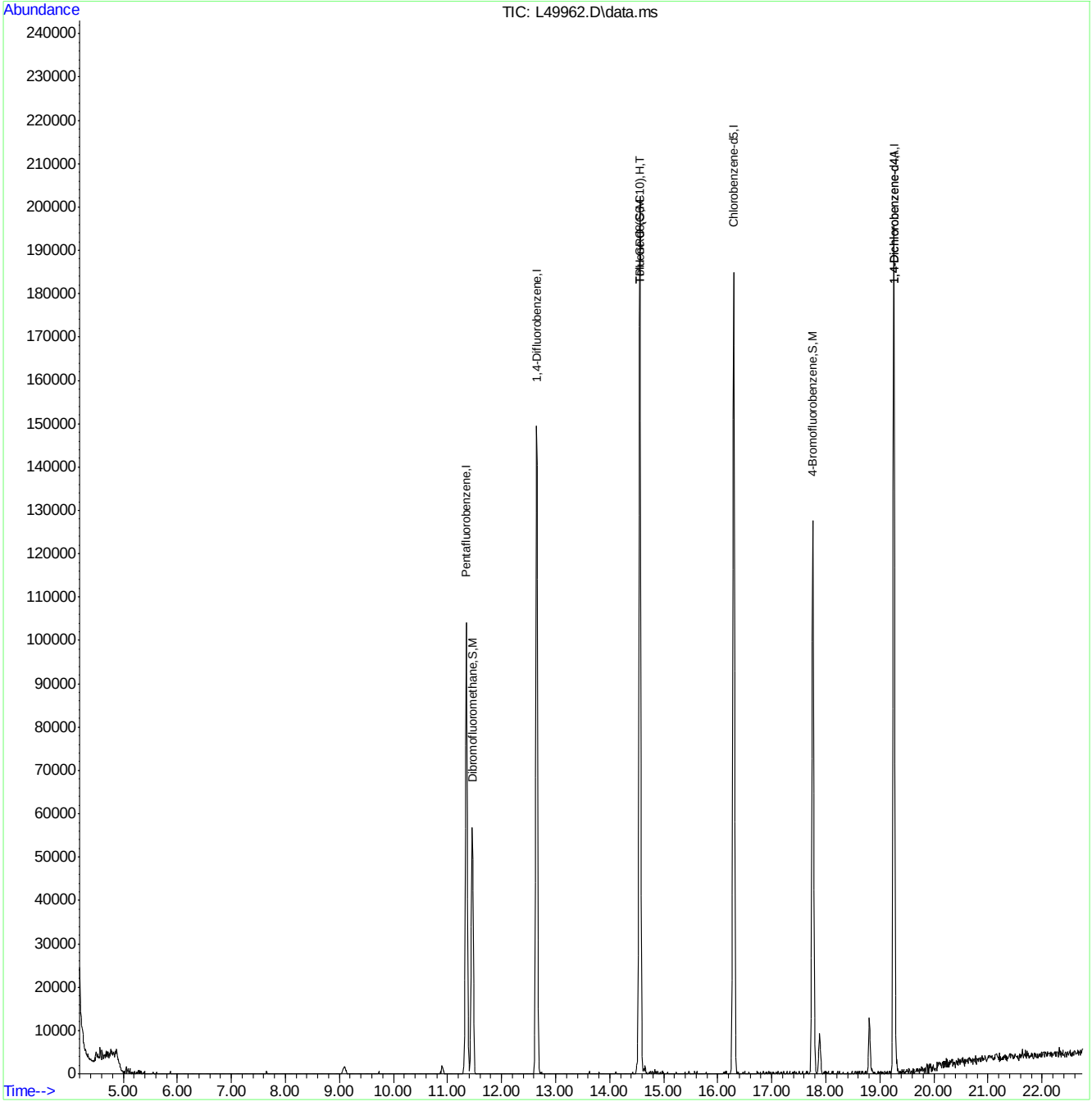
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.346 | 168 | 857163 | 20.00 | ug/Kg | -0.01 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1447511 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1244719 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 608381 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 608381 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.455 | 111 | 507463 | 19.77 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 98.85% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 1697641 | 19.31 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.55% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 716820 | 19.62 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 98.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 20775324m | 57.02 | ug/Kg | |

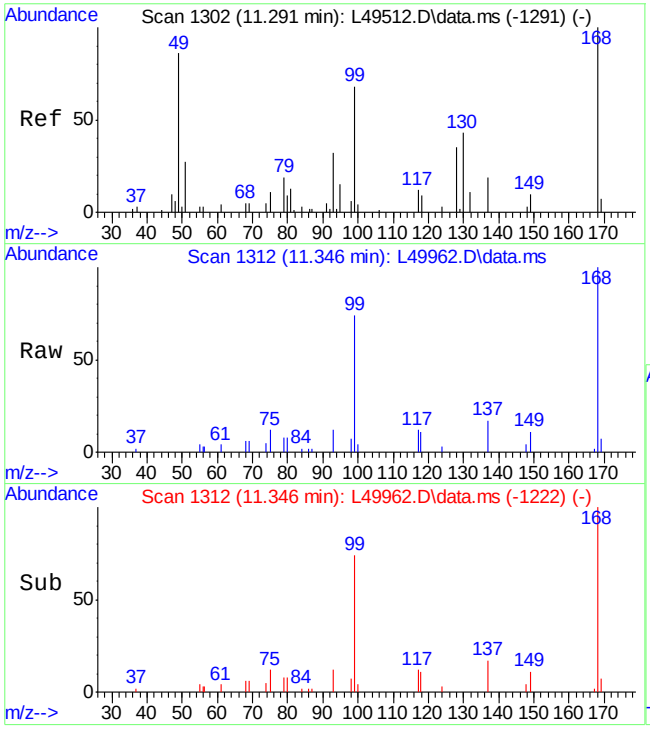
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49962.D
Acq On : 11 Jul 2016 9:13 pm
Operator : johannat
Sample : C46435-9R
Misc : MS1912,VL1498,5.31,,,,1
ALS Vial : 22 Sample Multiplier: 1

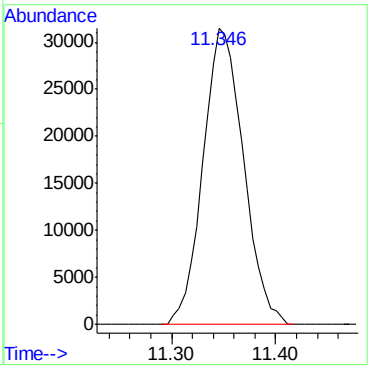
Quant Time: Aug 02 10:55:04 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

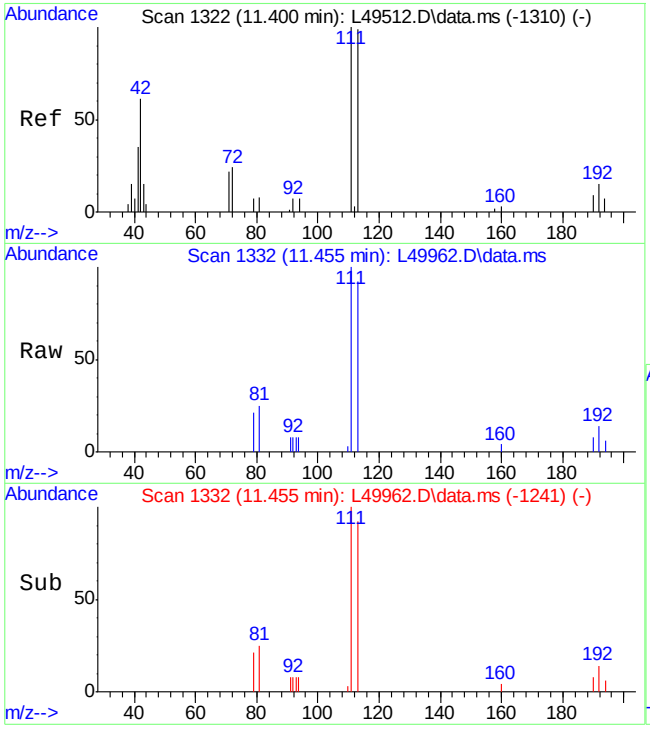





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.346 min Scan# 1312
Delta R.T. -0.010 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:168 Resp: 857163

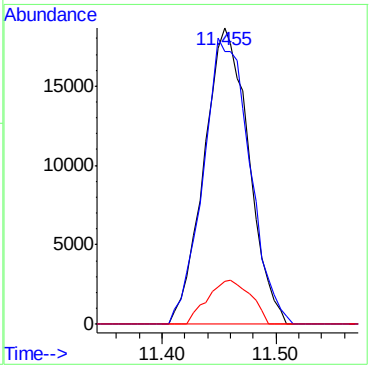


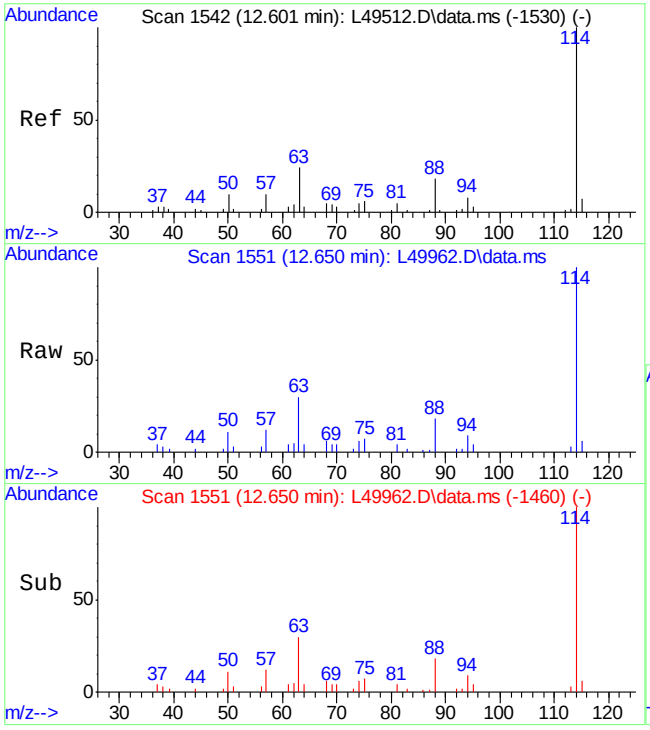




#36
Dibromofluoromethane
Concen: 19.77 ug/Kg
RT: 11.455 min Scan# 1332
Delta R.T. -0.005 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:111 Resp: 507463

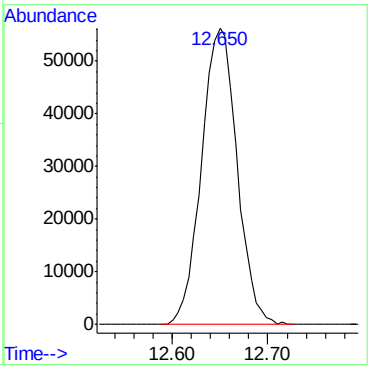
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.9 | 78.6 | 118.6 |
| 192 | 14.2 | 0.0 | 34.1 |

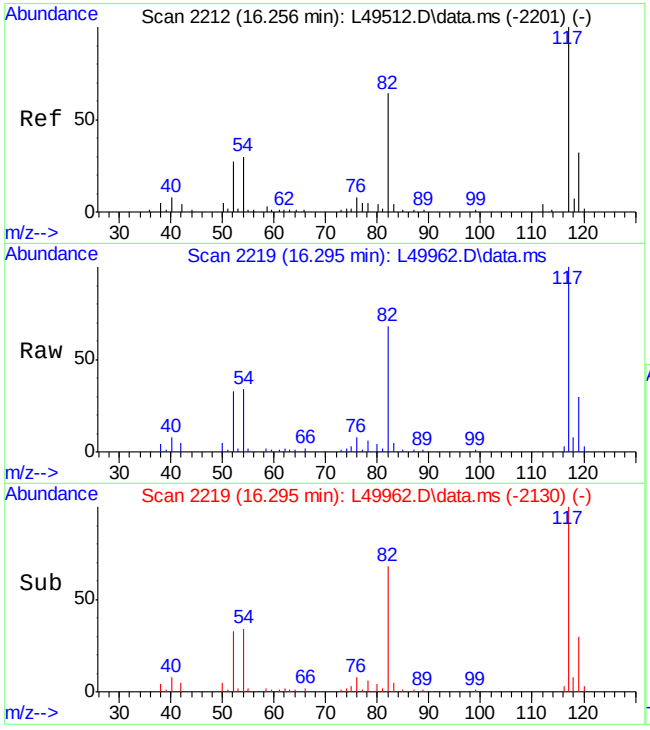





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:114 Resp: 1447511

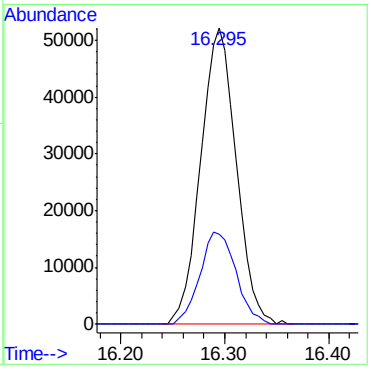


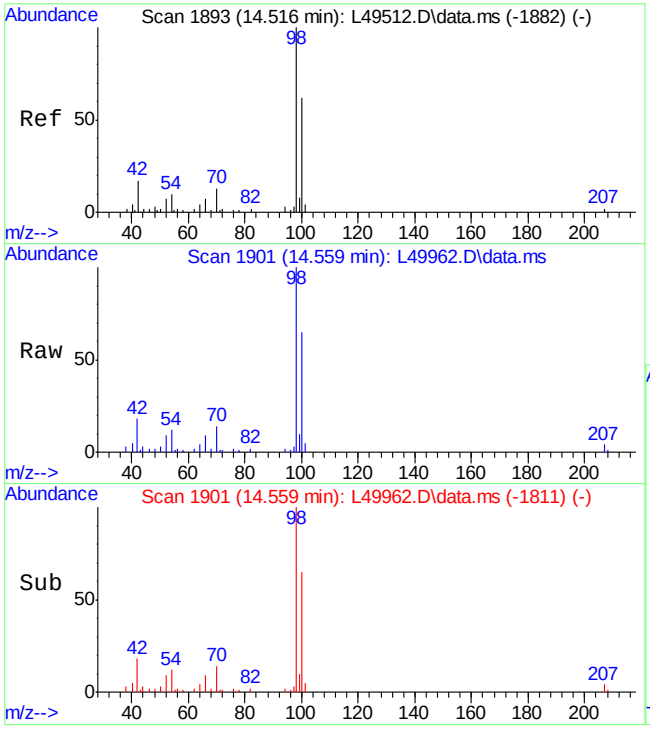




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:117 Resp: 1244719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.5 | 10.2 | 50.2 |

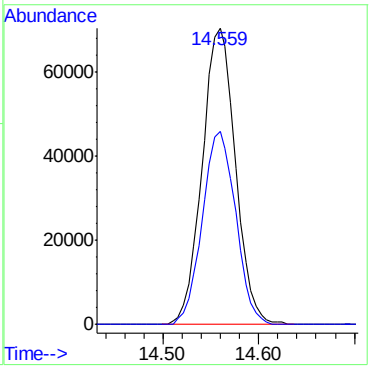


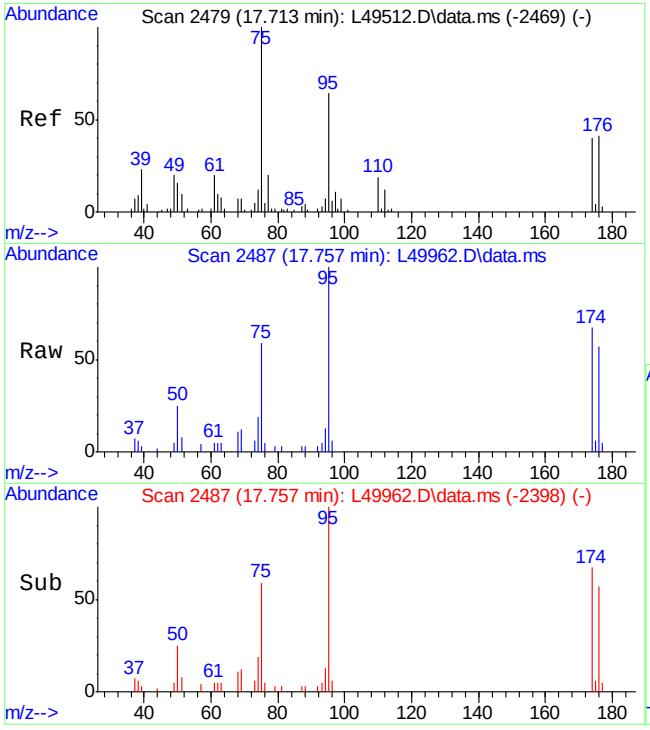



#56
Toluene-d8
Concen: 19.31 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion: 98 Resp: 1697641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 45.2 | 85.2 |

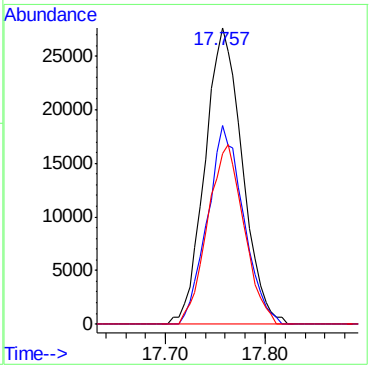


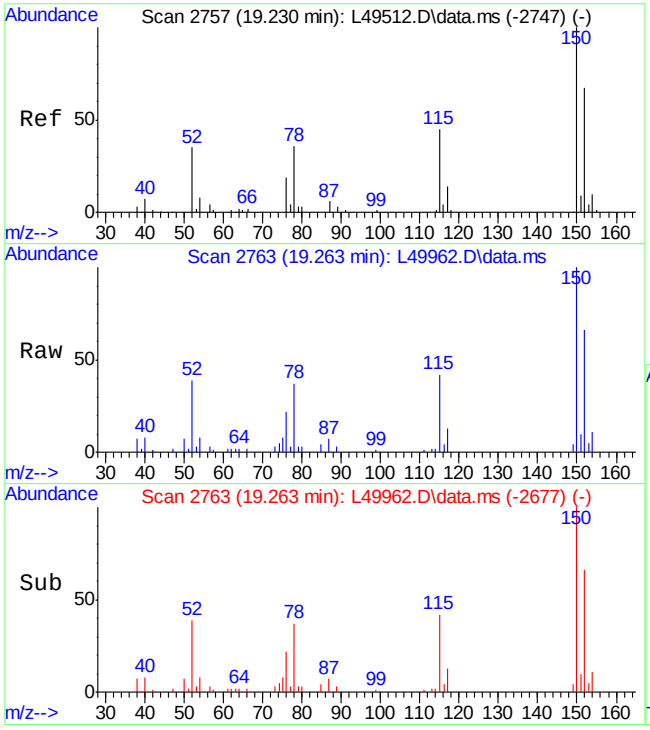




#74
4-Bromofluorobenzene
Concen: 19.62 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion: 95 Resp: 716820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.8 | 41.6 | 81.6 |
| 176 | 59.3 | 39.6 | 79.6 |

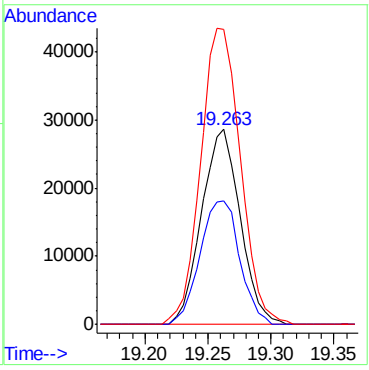


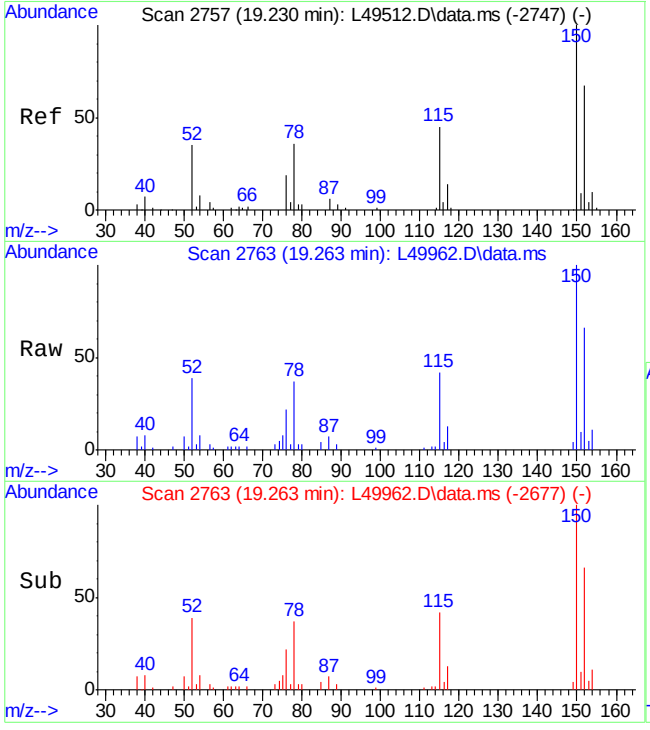



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:152 Resp: 608381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 48.8 | 88.8 |
| 150 | 156.6 | 174.3 | 214.3# |

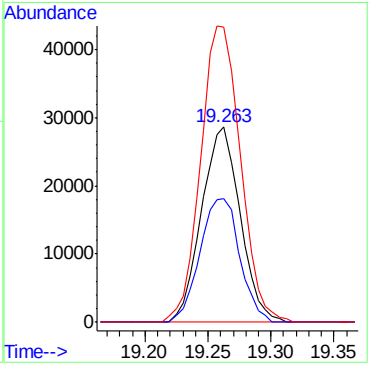


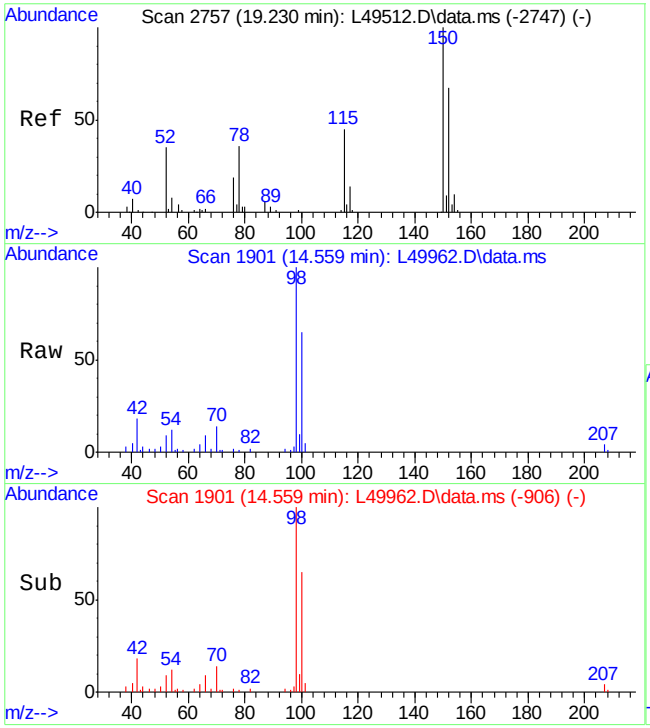




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:152 Resp: 608381

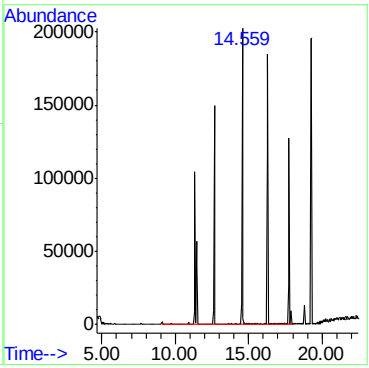
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 41.6 | 81.6 |
| 150 | 156.6 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 57.02 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:TIC Resp:20775324



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49962.D
Acq On : 11 Jul 2016 9:13 pm
Operator : johannat
Sample : C46435-9R
Misc : MS1912,VL1498,5.31,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 02 10:55:04 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

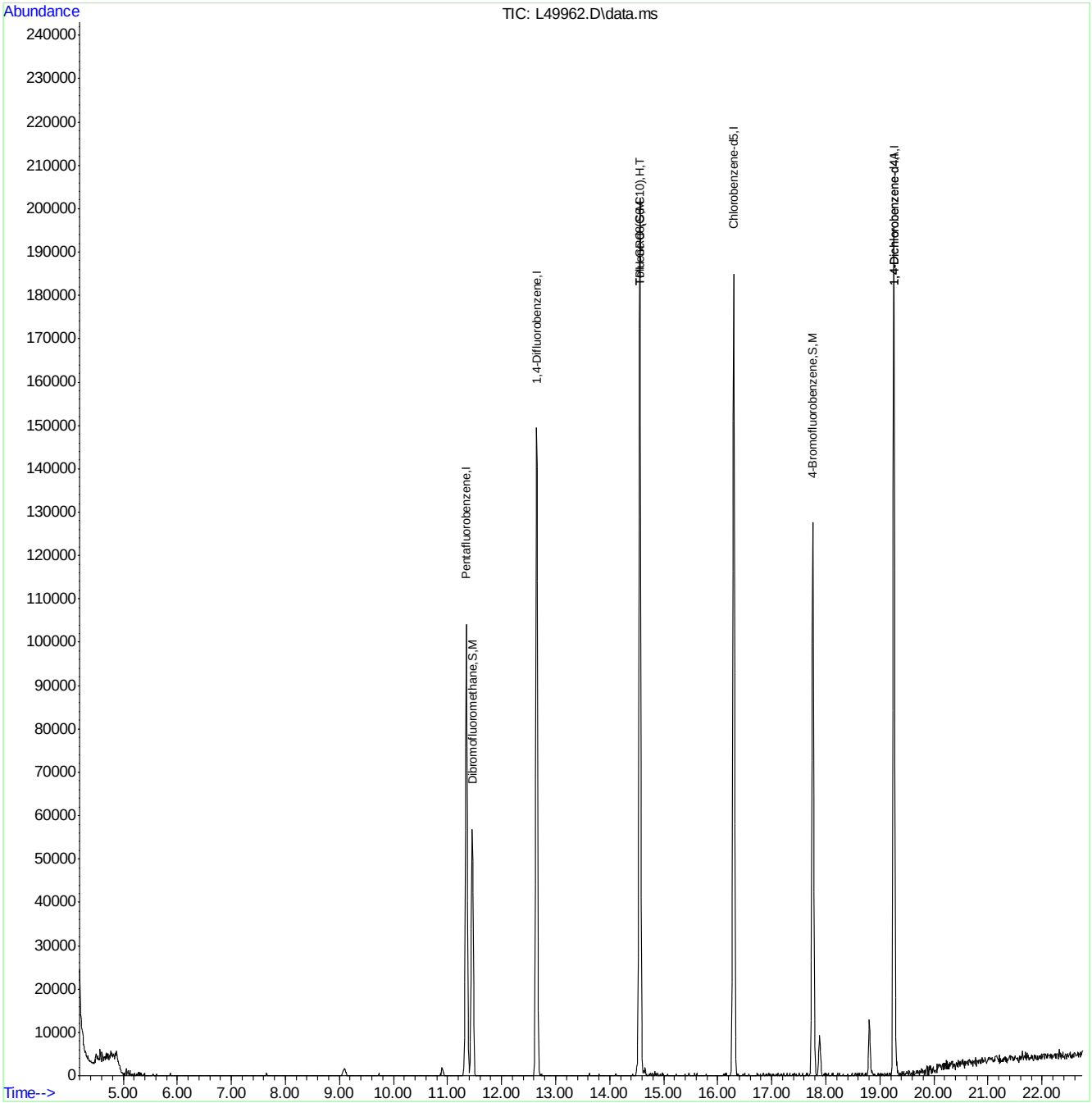
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.346 | 168 | 857163 | 20.00 | ug/Kg | -0.01 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1447511 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1244719 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 608381 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 608381 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.455 | 111 | 507463 | 19.77 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 98.85% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 1697641 | 19.31 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.55% | | | |
| 74) 4-Bromofluorobenzene | 17.757 | 95 | 716820 | 19.62 | ug/Kg | -0.02 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 98.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 20775324m | 57.02 | ug/Kg | |

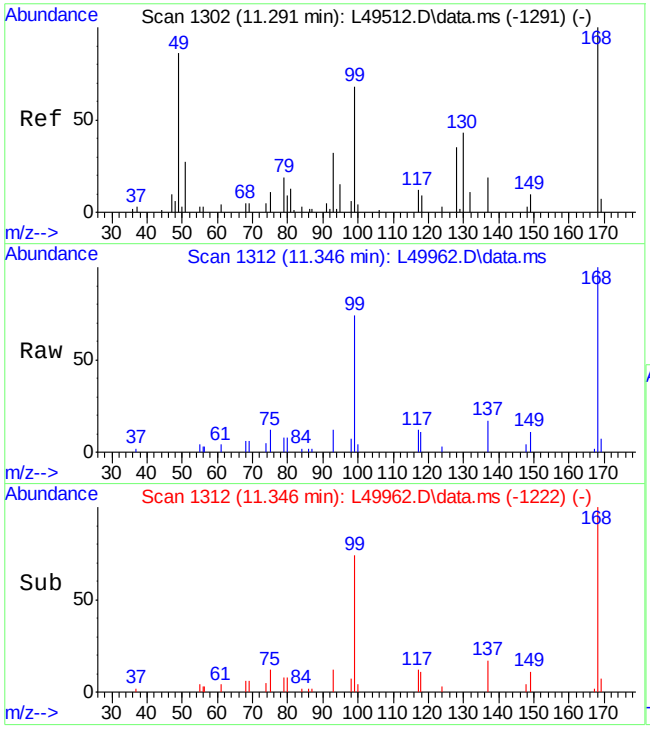
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49962.D
Acq On : 11 Jul 2016 9:13 pm
Operator : johannat
Sample : C46435-9R
Misc : MS1912,VL1498,5.31,,,,1
ALS Vial : 22 Sample Multiplier: 1

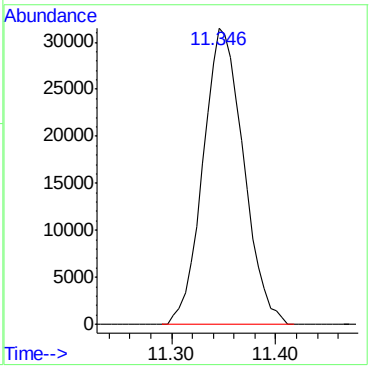
Quant Time: Aug 02 10:55:04 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

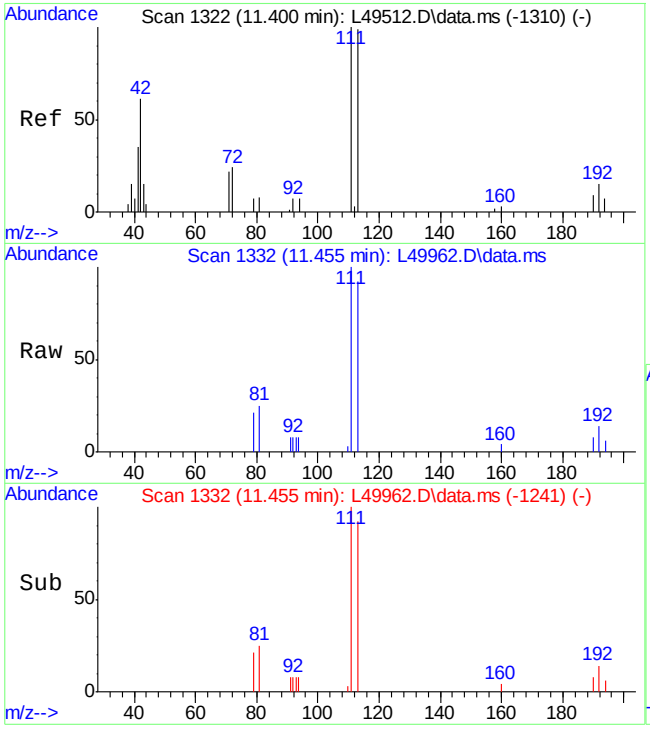





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.346 min Scan# 1312
Delta R.T. -0.010 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:168 Resp: 857163

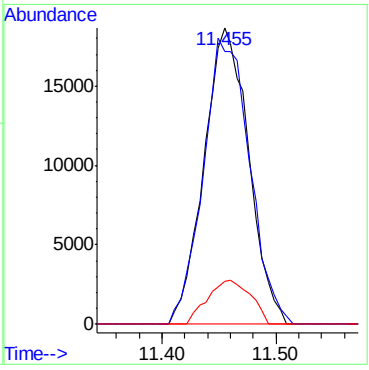


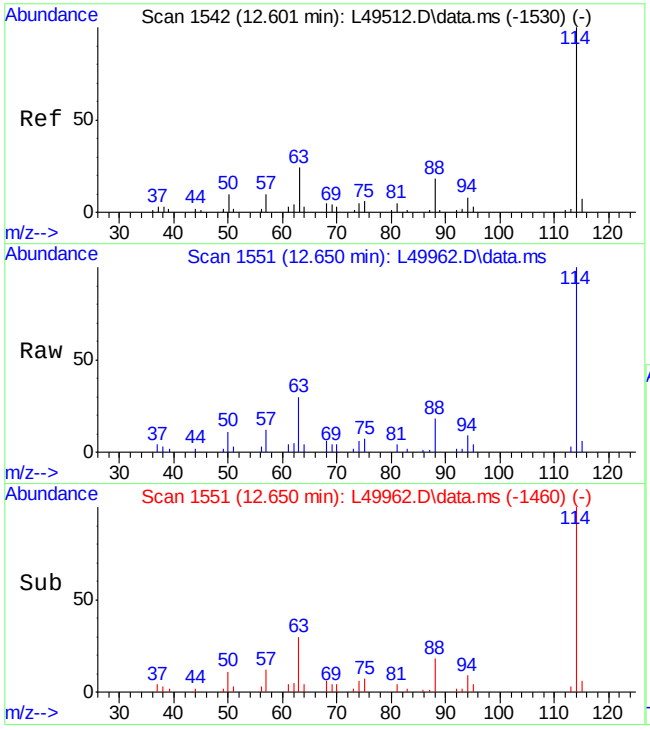




#36
Dibromofluoromethane
Concen: 19.77 ug/Kg
RT: 11.455 min Scan# 1332
Delta R.T. -0.005 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:111 Resp: 507463

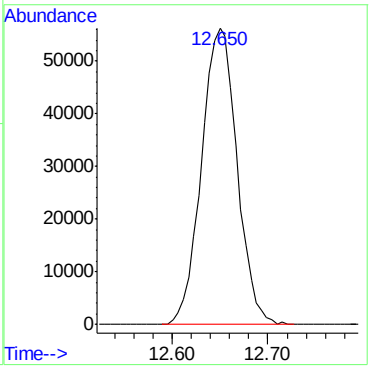
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.9 | 78.6 | 118.6 |
| 192 | 14.2 | 0.0 | 34.1 |

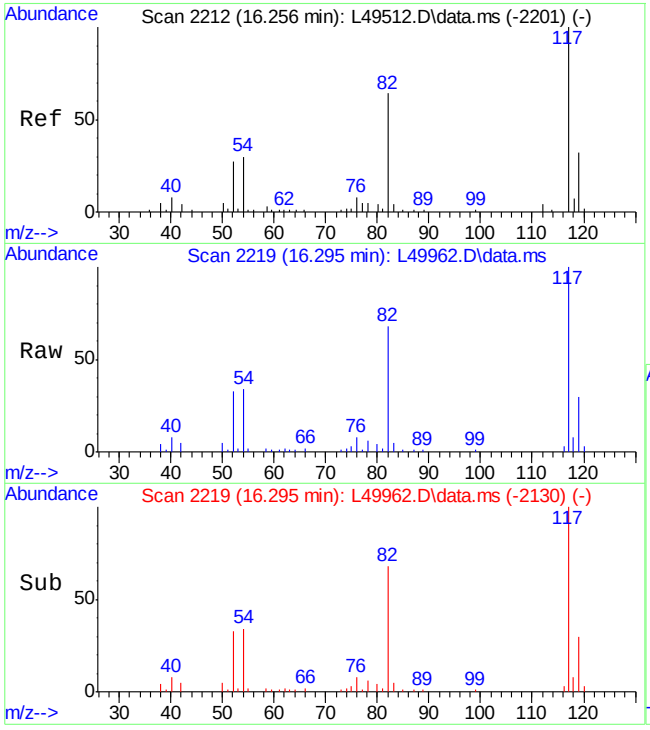





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:114 Resp: 1447511

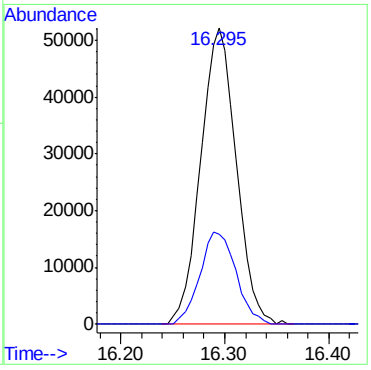


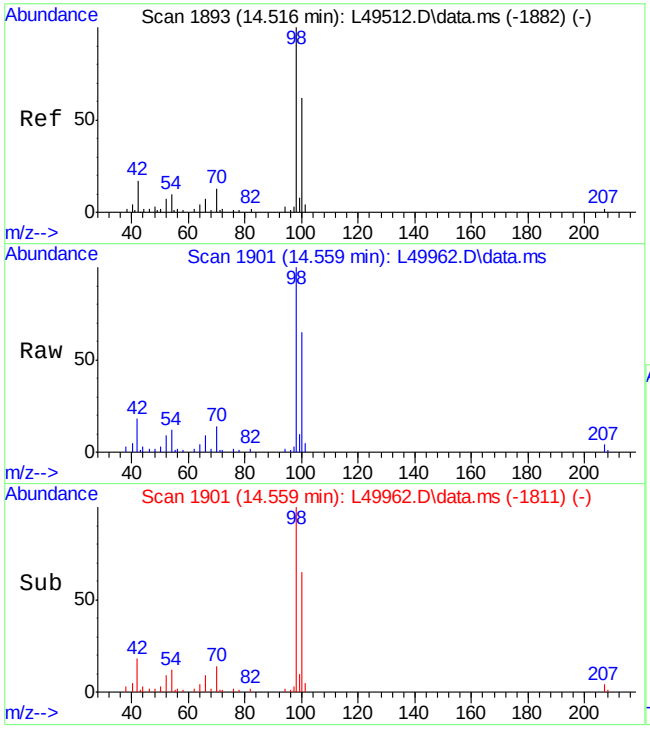




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:117 Resp: 1244719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.5 | 10.2 | 50.2 |

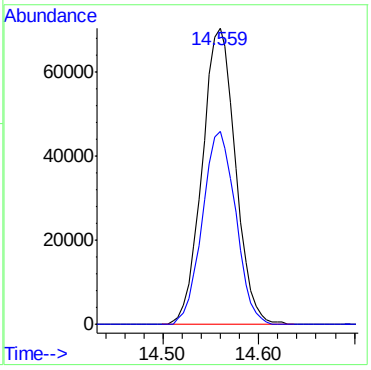


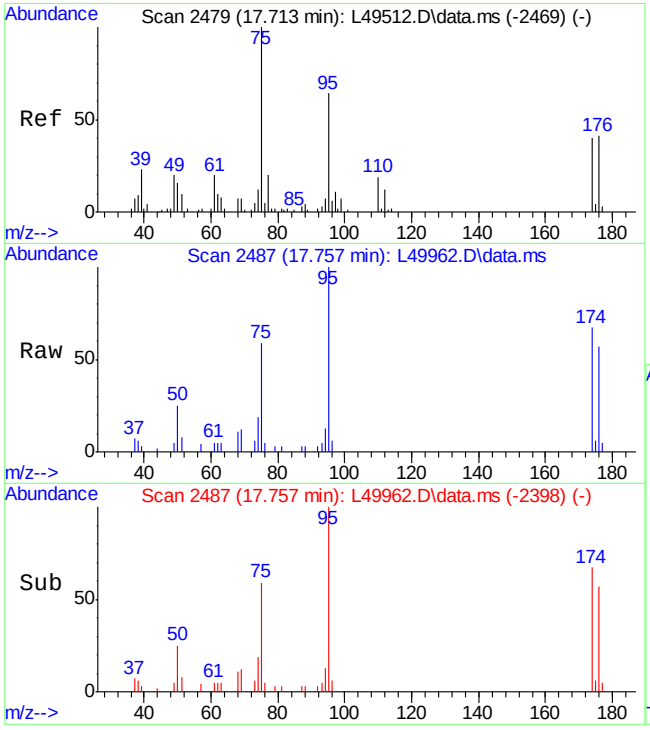



#56
Toluene-d8
Concen: 19.31 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion: 98 Resp: 1697641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 45.2 | 85.2 |

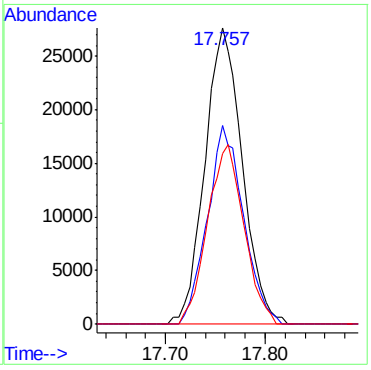


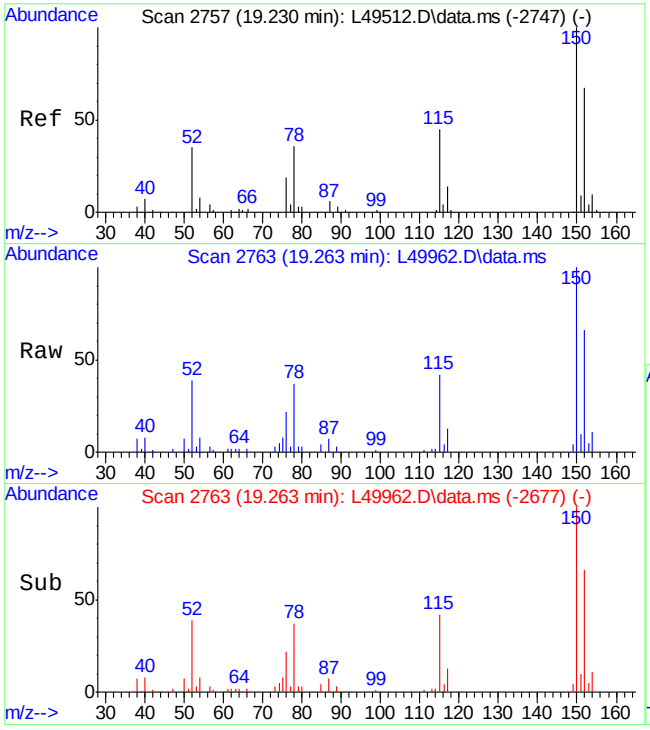




#74
4-Bromofluorobenzene
Concen: 19.62 ug/Kg
RT: 17.757 min Scan# 2487
Delta R.T. -0.016 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion: 95 Resp: 716820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.8 | 41.6 | 81.6 |
| 176 | 59.3 | 39.6 | 79.6 |

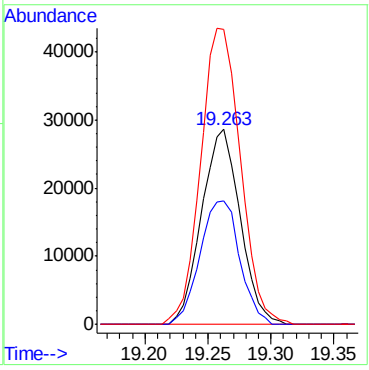


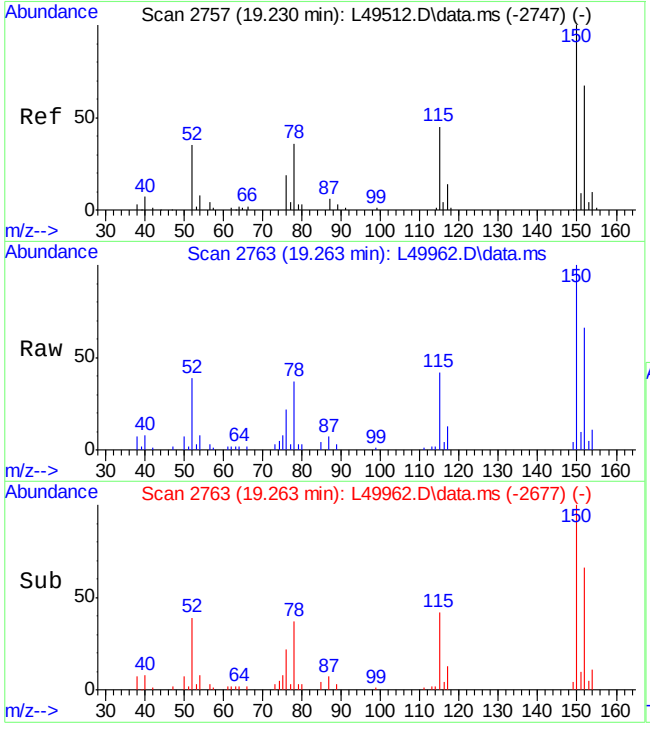



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:152 Resp: 608381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 48.8 | 88.8 |
| 150 | 156.6 | 174.3 | 214.3# |

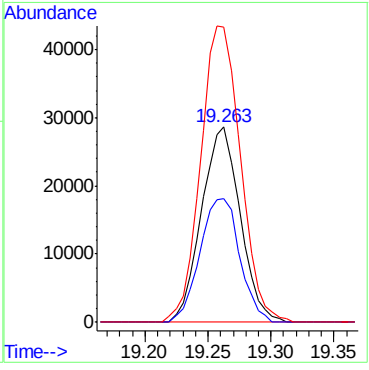


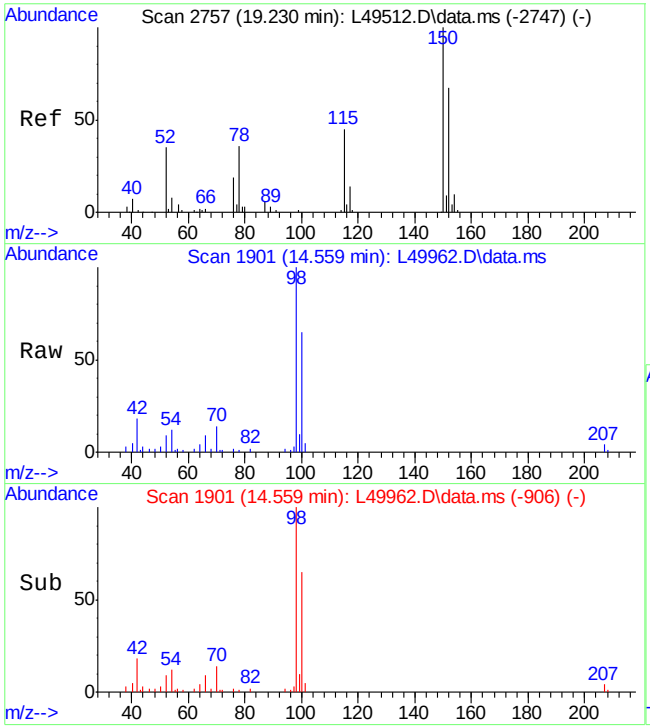




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:152 Resp: 608381

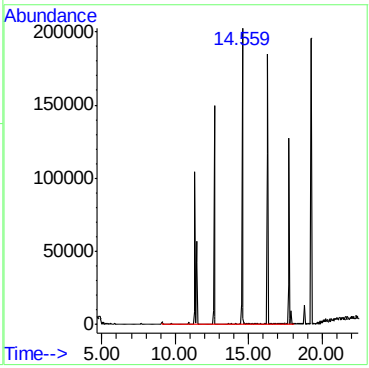
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 41.6 | 81.6 |
| 150 | 156.6 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 57.02 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49962.D
Acq: 11 Jul 2016 9:13 pm

Tgt Ion:TIC Resp:20775324



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61920.D
Acq On : 18 Jul 2016 8:16 pm
Operator : johannat
Sample : C46435-10R
Misc : MS1912,VM1861,5.38,,20,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 02 10:12:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

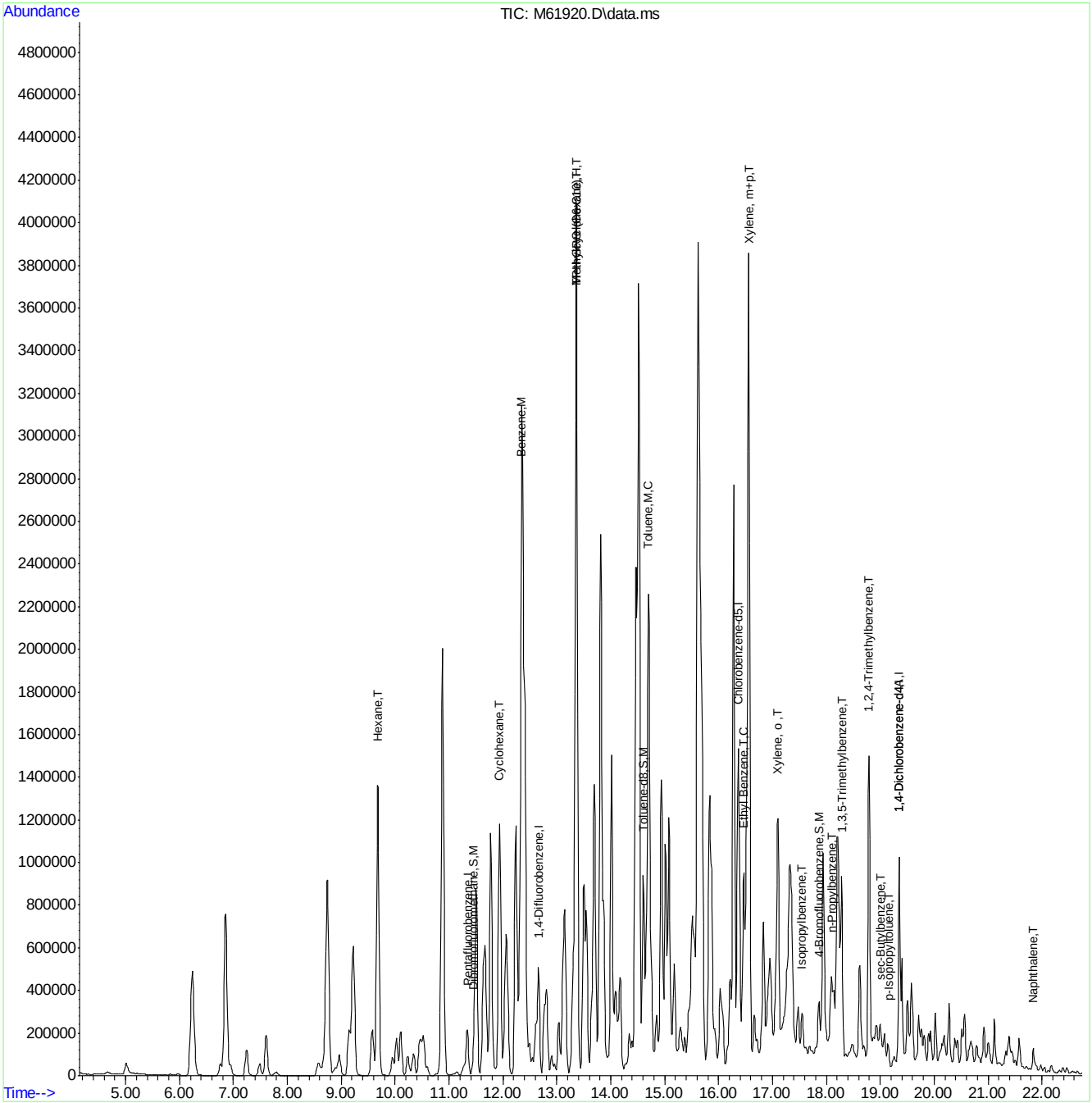
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 195289 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 284799 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 280012 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.351 | 152 | 171327 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.351 | 152 | 171327 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 82385 | 17.78 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 88.90% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 338641 | 19.84 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 99.20% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 154717 | 21.82 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 109.10% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 24) Hexane | 9.674 | 57 | 1091196 | 125.64 | ppb | 99 |
| 38) Cyclohexane | 11.932 | 56 | 902318 | 84.00 | ppb | 93 |
| 45) Benzene | 12.344 | 78 | 88845 | 3.90 | ppb | 100 |
| 48) Methylcyclohexane | 13.357 | 55 | 2264077 | 246.67 | ppb | 93 |
| 57) Toluene | 14.697 | 92 | 517952 | 38.32 | ppb | 99 |
| 67) Ethyl Benzene | 16.470 | 91 | 722750 | 28.41 | ppb | 98 |
| 68) Xylene, m+p | 16.565 | 106 | 1254021 | 130.42 | ppb | 91 |
| 69) Xylene, o | 17.103 | 106 | 409536 | 41.98 | ppb | 94 |
| 73) Isopropylbenzene | 17.546 | 105 | 205553 | 8.37 | ppb | 100 |
| 79) n-Propylbenzene | 18.095 | 91 | 347776 | 10.51 | ppb | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.285 | 105 | 369088 | 16.49 | ppb | 83 |
| 86) 1,2,4-Trimethylbenzene | 18.792 | 105 | 1120672 | 48.06 | ppb | 92 |
| 87) sec-Butylbenzene | 19.003 | 105 | 39575 | 1.36 | ppb | 99 |
| 88) p-Isopropyltoluene | 19.150 | 119 | 48735 | 2.01 | ppb | 98 |
| 97) Naphthalene | 21.841 | 128 | 107566 | 5.22 | ppb | 100 |
| 100) TPH-GRO (C6-C10) | 13.357 | TIC | 243485523m | 6745.57 | ppb | |

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

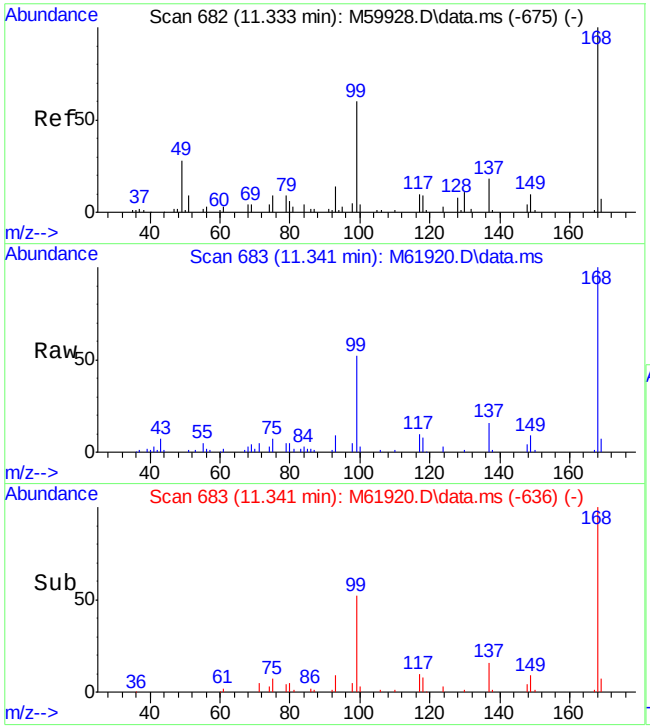
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61920.D
Acq On : 18 Jul 2016 8:16 pm
Operator : johannat
Sample : C46435-10R
Misc : MS1912,VM1861,5.38,,20,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 02 10:12:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

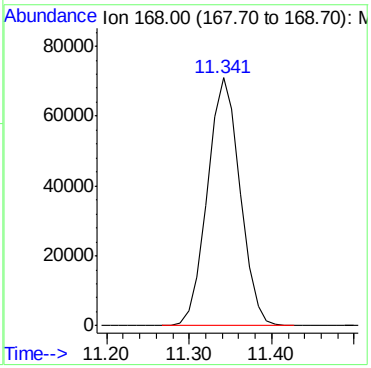


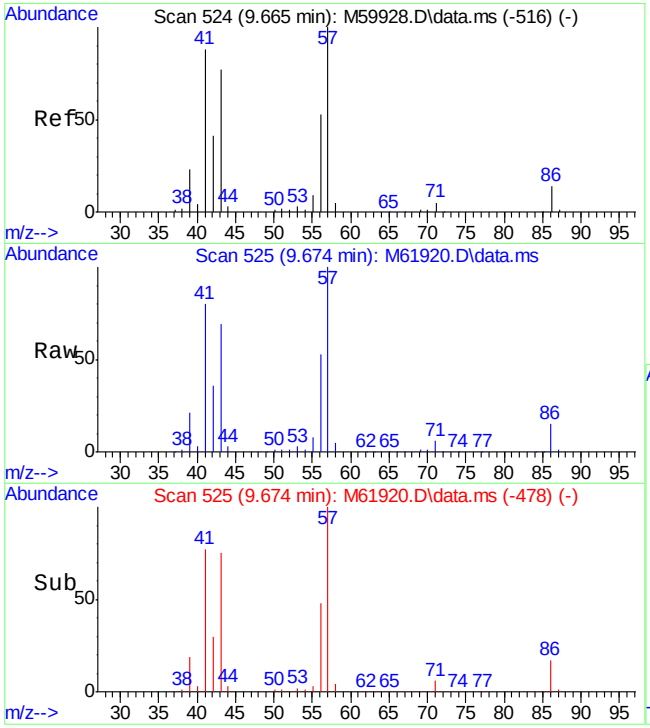

VM1860S.M Tue Aug 02 11:53:52 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:168 Resp: 195289

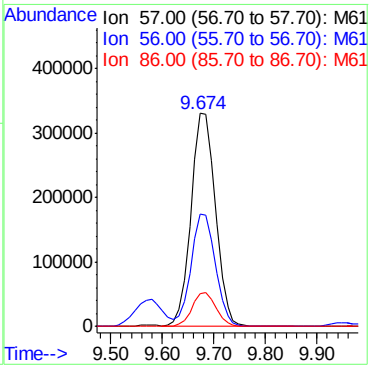


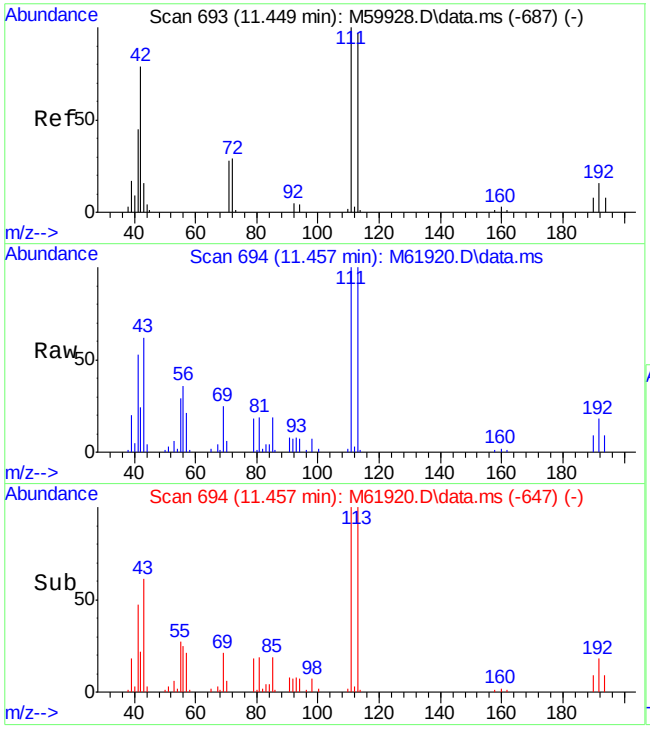




#24
Hexane
Concen: 125.64 ppb
RT: 9.674 min Scan# 525
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 57 Resp: 1091196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.5 | 32.9 | 72.9 |
| 86 | 15.6 | 0.0 | 34.1 |

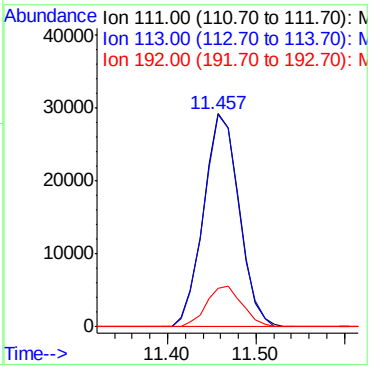


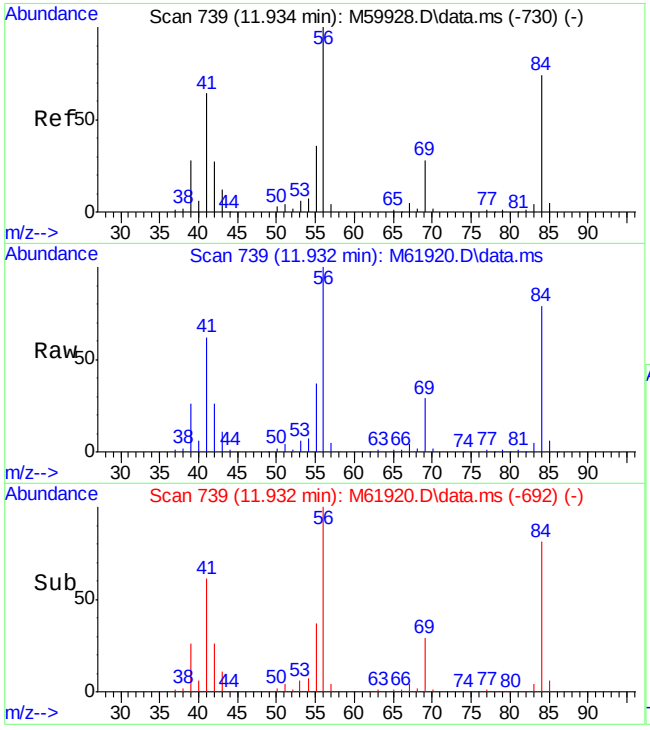



#36
Dibromofluoromethane
Concen: 17.78 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:111 Resp: 82385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.9 | 77.7 | 117.7 |
| 192 | 19.1 | 0.0 | 36.3 |

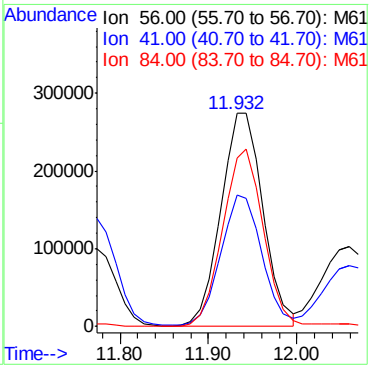


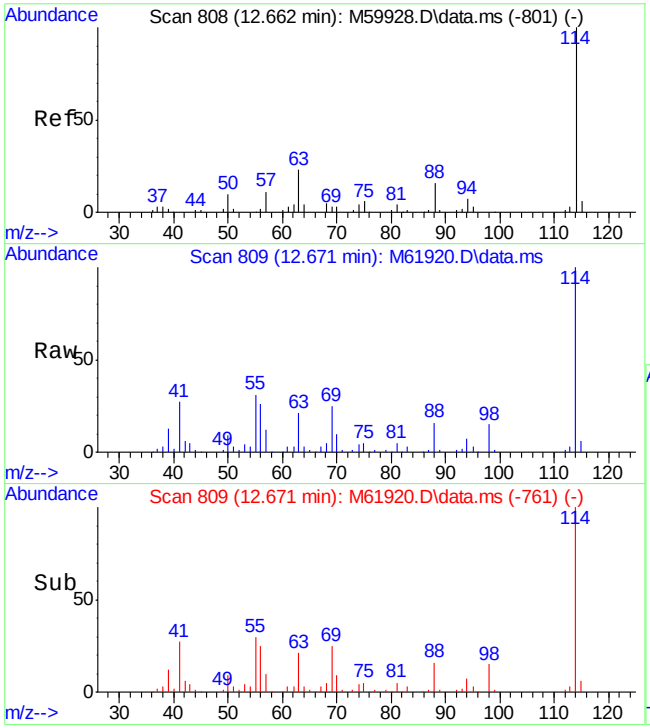




#38
Cyclohexane
Concen: 84.00 ppb
RT: 11.932 min Scan# 739
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 56 Resp: 902318

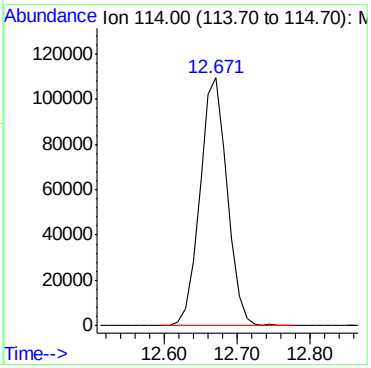
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 59.2 | 46.3 | 86.3 |
| 84 | 81.0 | 56.0 | 96.0 |

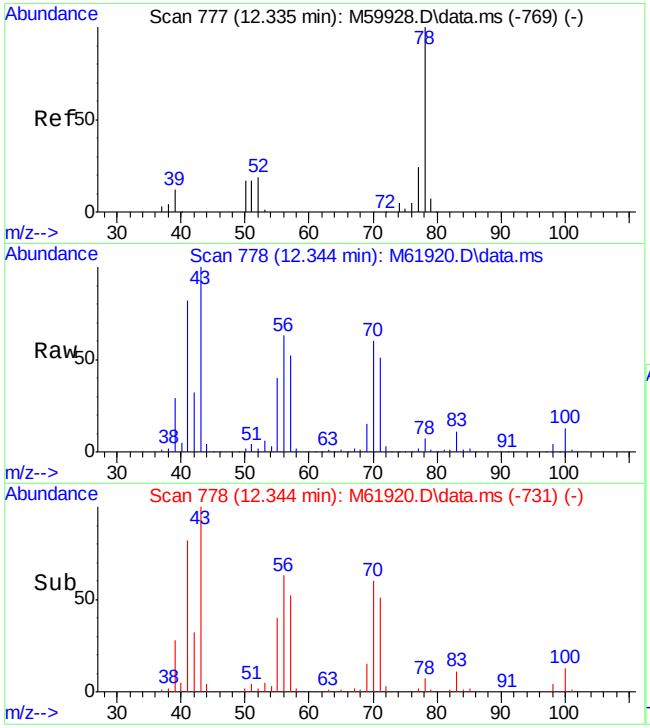





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

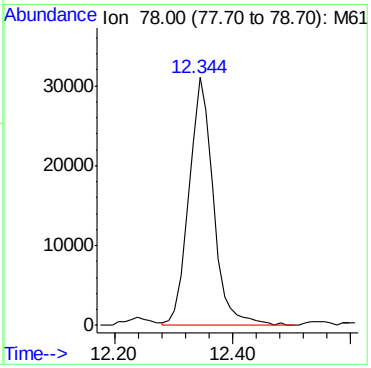
Tgt Ion:114 Resp: 284799

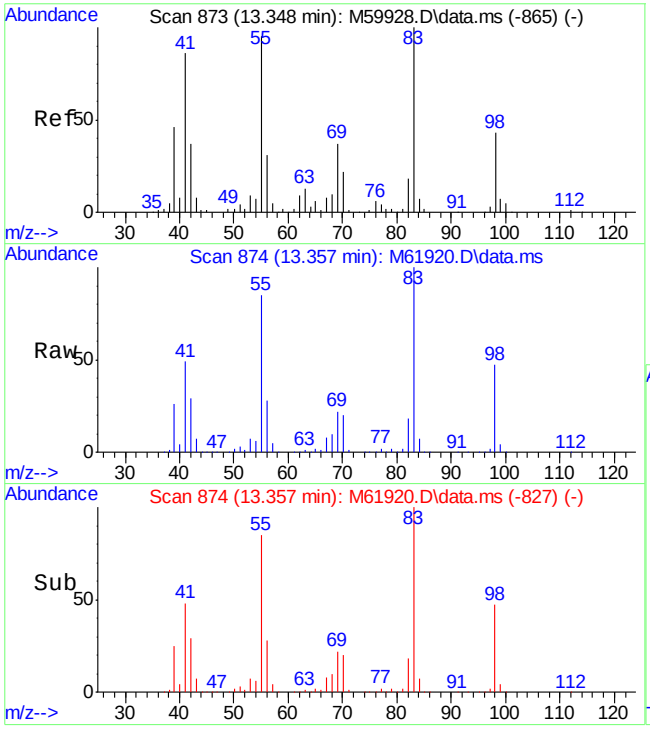



#45
Benzene
Concen: 3.90 ppb
RT: 12.344 min Scan# 778
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 78 Resp: 88845

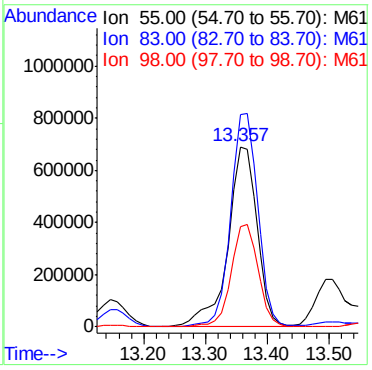


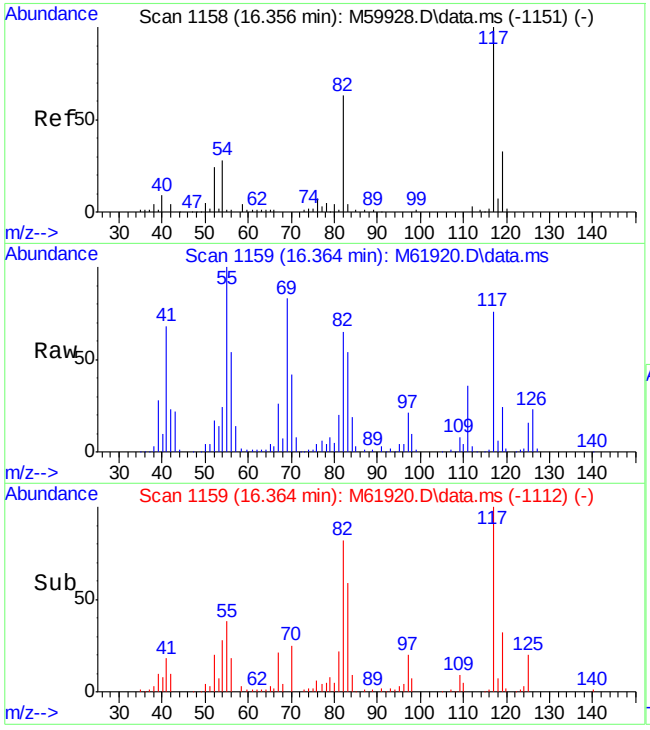



#48
Methylcyclohexane
Concen: 246.67 ppb
RT: 13.357 min Scan# 874
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 55 Resp: 2264077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 110.3 | 84.5 | 124.5 |
| 98 | 52.7 | 27.0 | 67.0 |

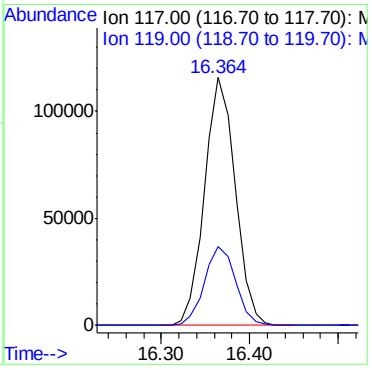


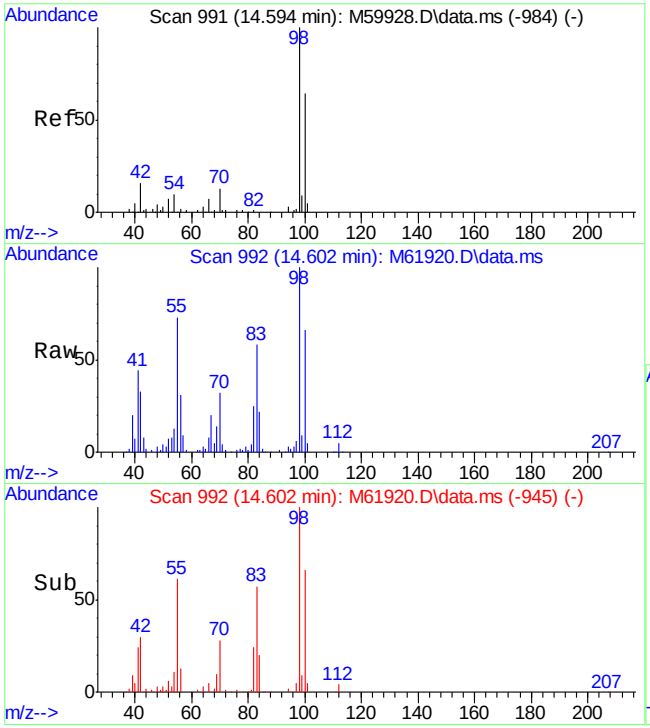




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:117 Resp: 280012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.2 | 11.2 | 51.2 |

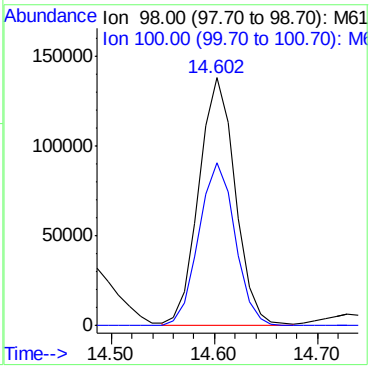


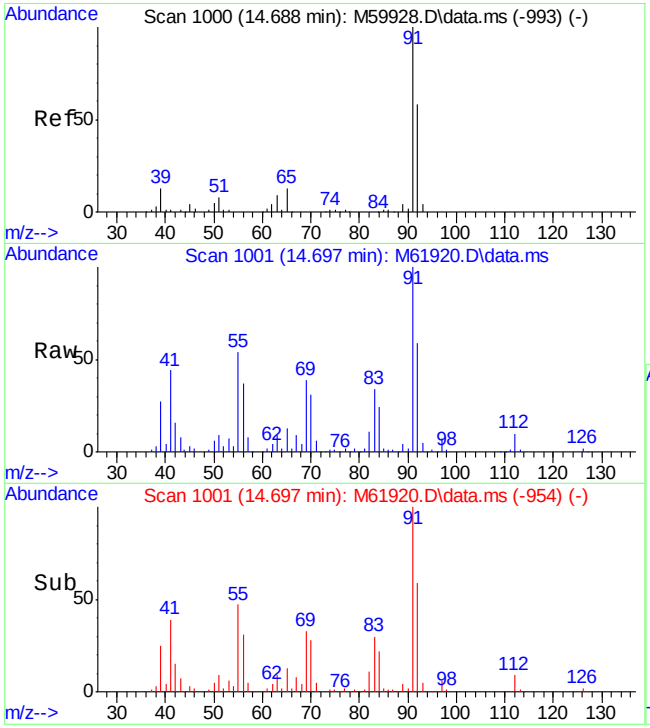



#56
Toluene-d8
Concen: 19.84 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 98 Resp: 338641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

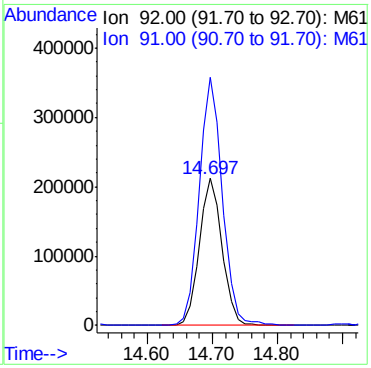


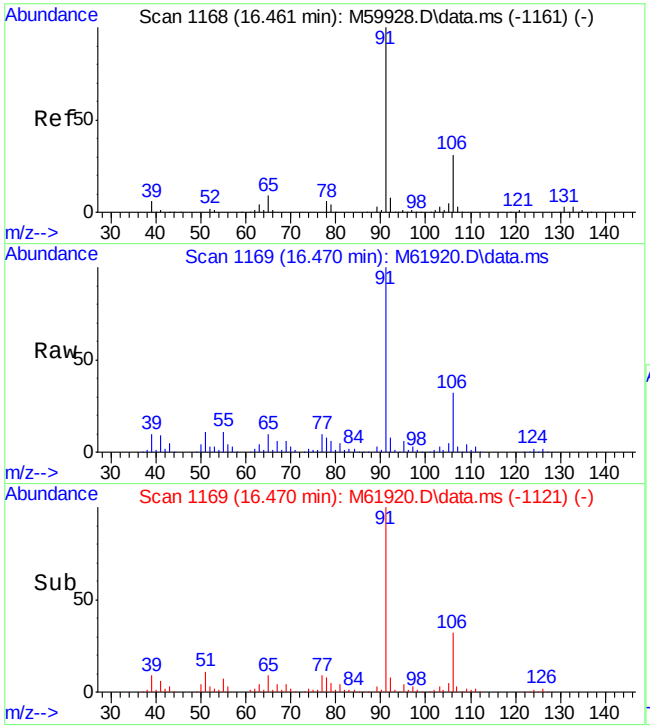




#57
Toluene
Concen: 38.32 ppb
RT: 14.697 min Scan# 1001
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 92 Resp: 517952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.1 | 150.5 | 190.5 |

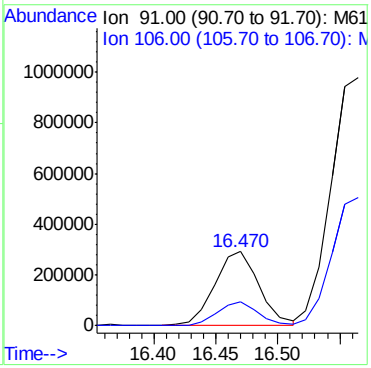


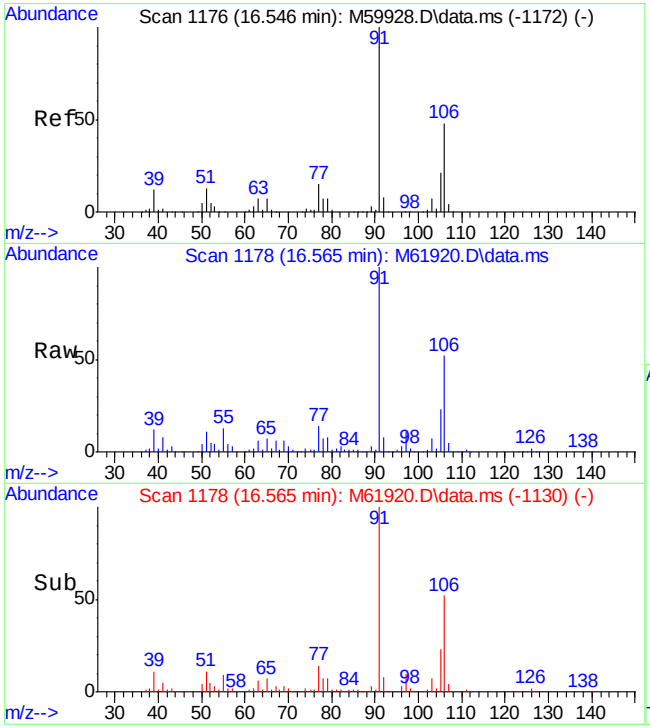



#67
Ethyl Benzene
Concen: 28.41 ppb
RT: 16.470 min Scan# 1169
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 91 Resp: 722750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 10.2 | 50.2 |

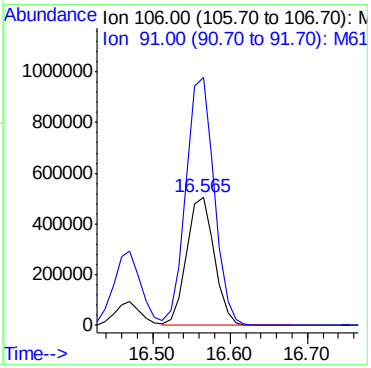


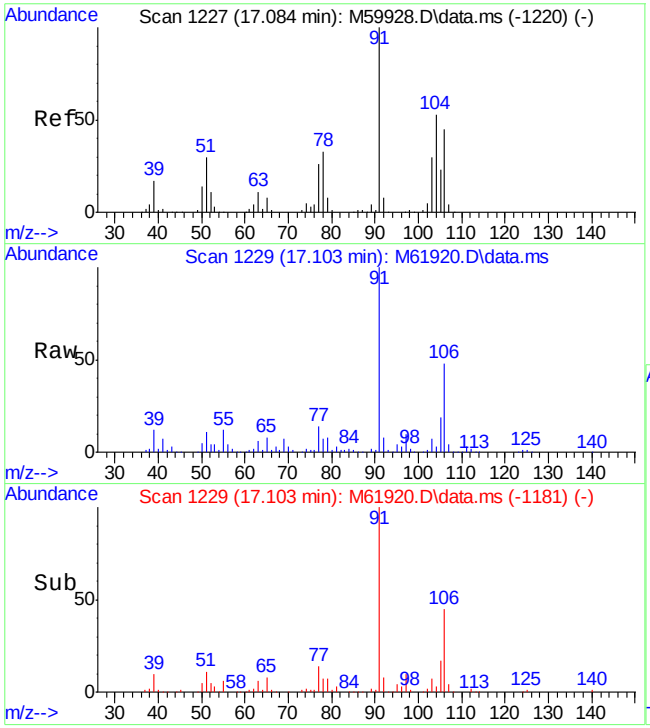




#68
Xylene, m+p
Concen: 130.42 ppb
RT: 16.565 min Scan# 1178
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:106 Resp: 1254021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 196.7 | 191.5 | 231.5 |

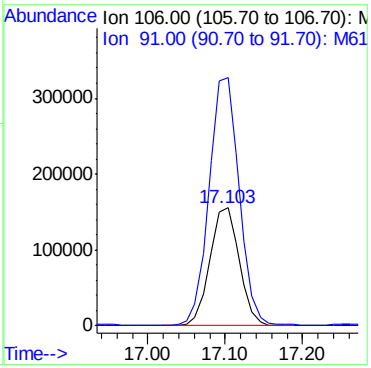


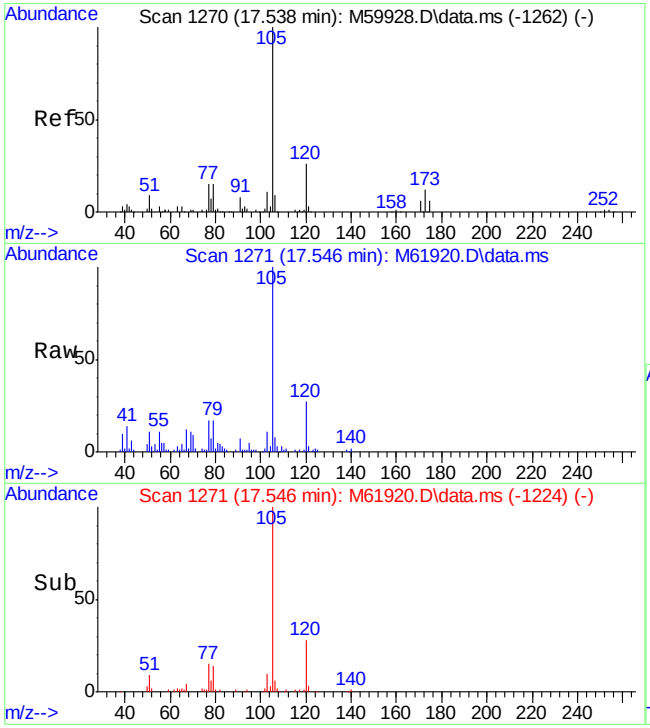



#69
Xylene, o
Concen: 41.98 ppb
RT: 17.103 min Scan# 1229
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:106 Resp: 409536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.9 | 203.2 | 243.2 |

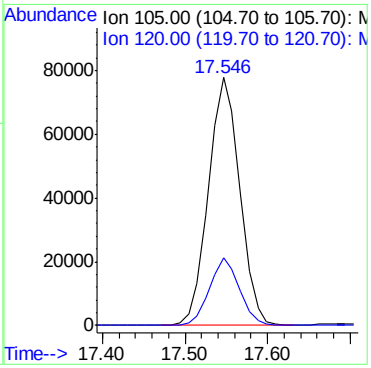


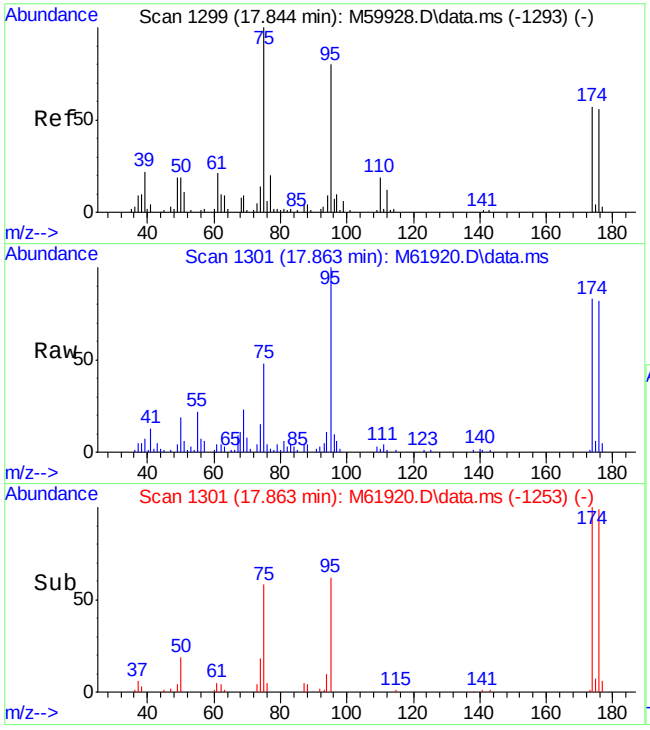




#73
Isopropylbenzene
Concen: 8.37 ppb
RT: 17.546 min Scan# 1271
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 205553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 5.7 | 45.7 |

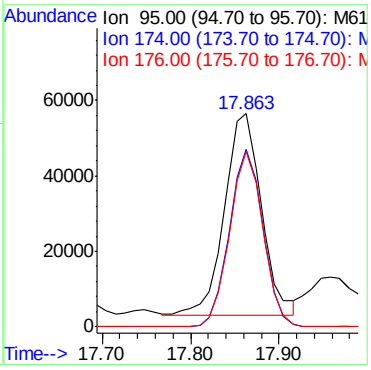


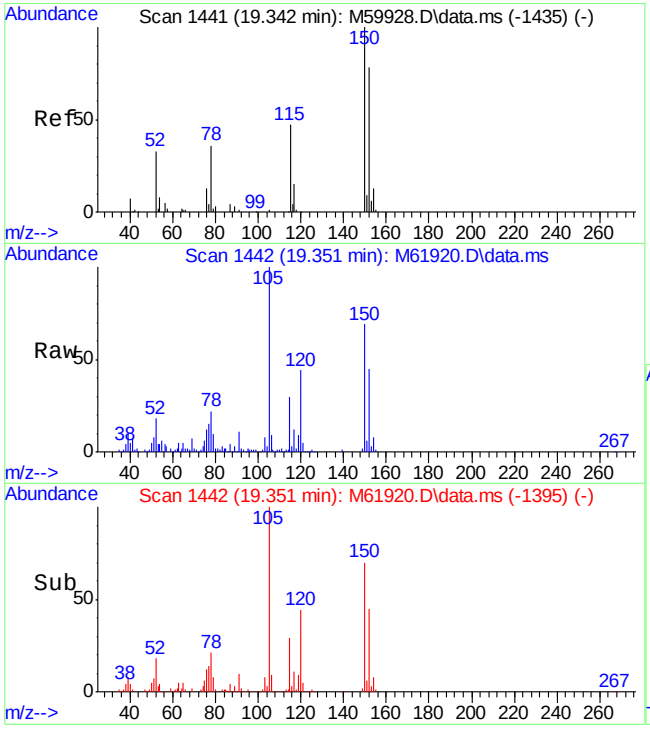



#74
4-Bromofluorobenzene
Concen: 21.82 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 95 Resp: 154717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 80.3 | 54.3 | 94.3 |
| 176 | 78.9 | 51.5 | 91.5 |

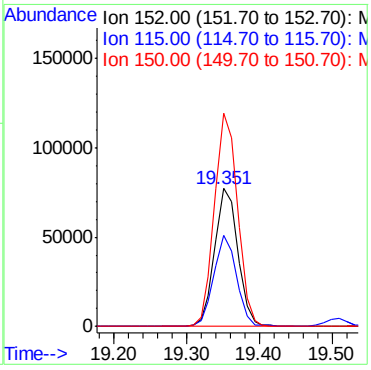


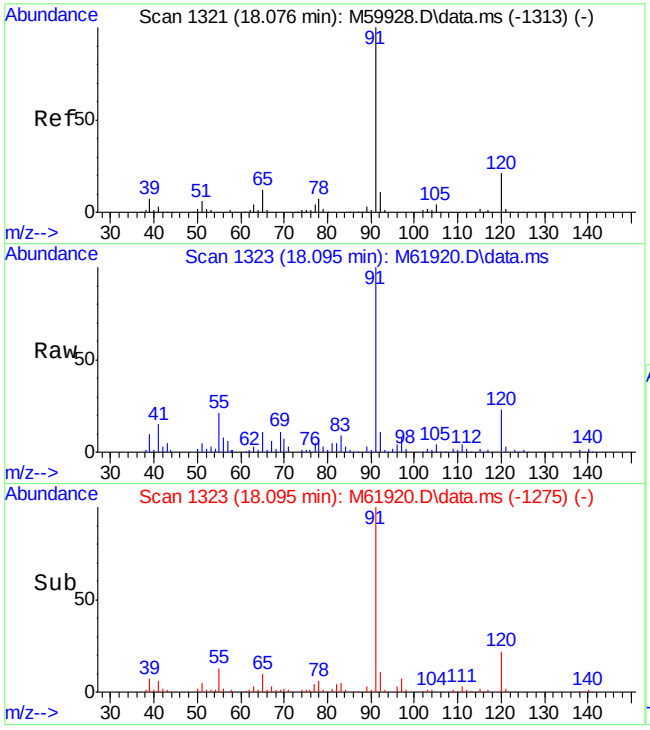




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.351 min Scan# 1442
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:152 Resp: 171327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.5 | 40.9 | 80.9 |
| 150 | 152.0 | 178.6 | 218.6# |

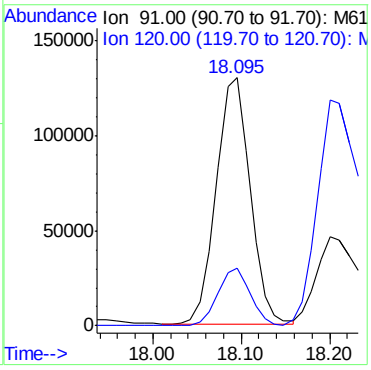


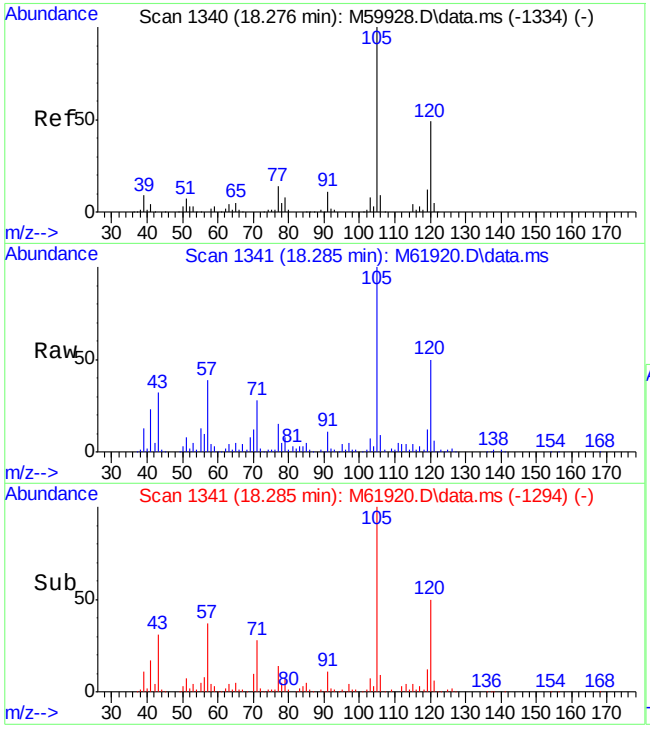



#79
n-Propylbenzene
Concen: 10.51 ppb
RT: 18.095 min Scan# 1323
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 91 Resp: 347776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 1.3 | 41.3 |

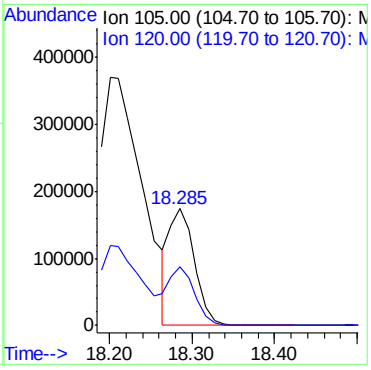


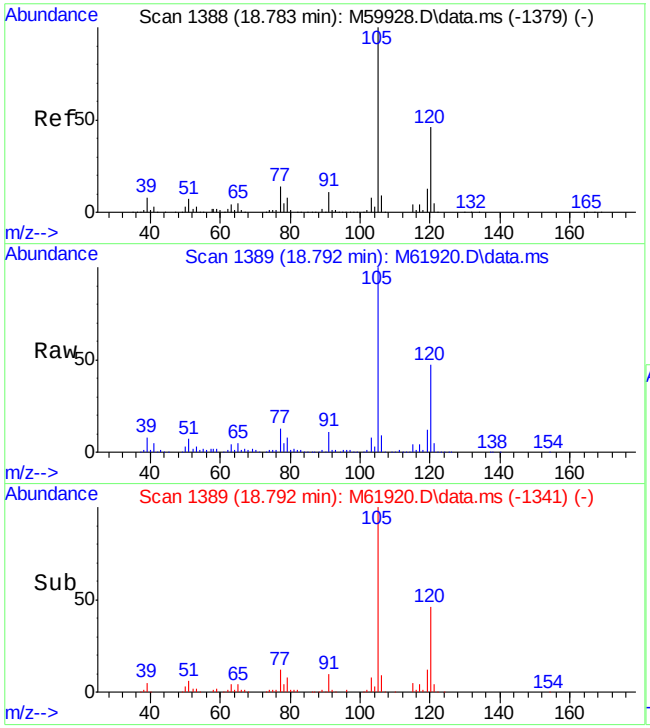




#81
1,3,5-Trimethylbenzene
Concen: 16.49 ppb
RT: 18.285 min Scan# 1341
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 369088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 57.6 | 26.6 | 66.6 |

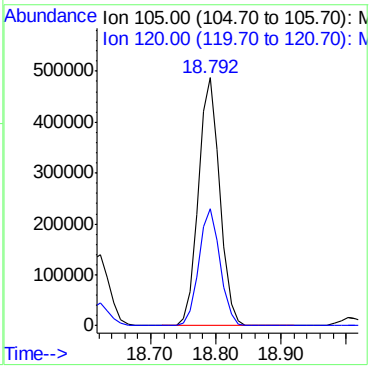


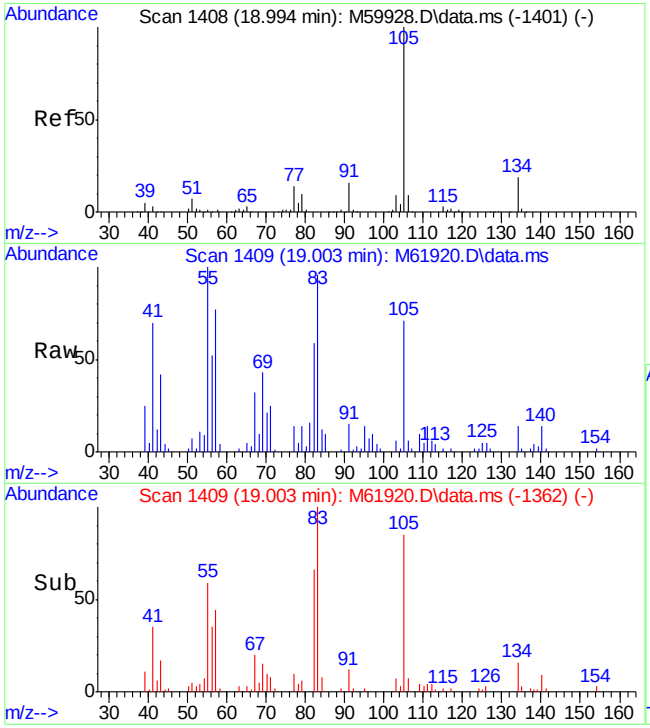



#86
1,2,4-Trimethylbenzene
Concen: 48.06 ppb
RT: 18.792 min Scan# 1389
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 1120672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 32.4 | 72.4 |

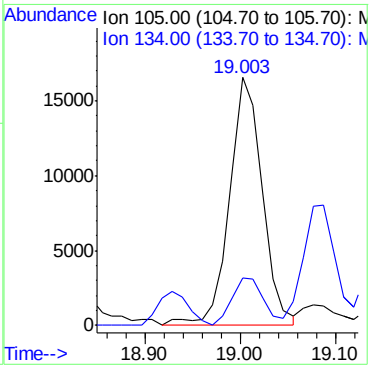


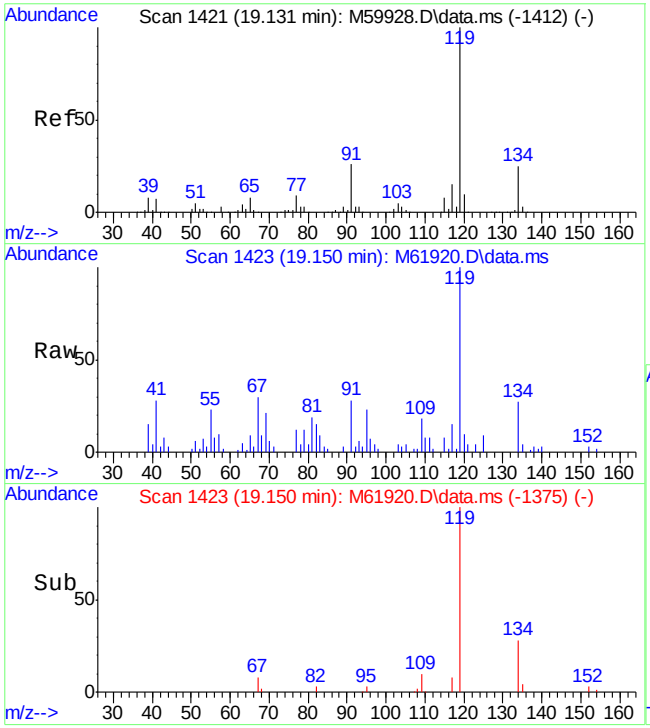




#87
sec-Butylbenzene
Concen: 1.36 ppb
RT: 19.003 min Scan# 1409
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 39575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.9 | 0.0 | 38.7 |

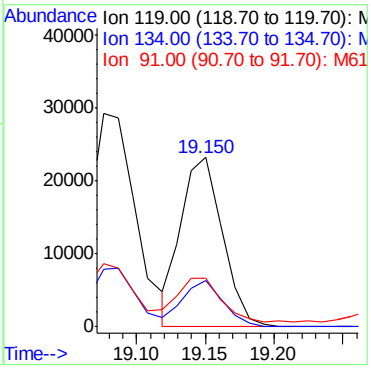


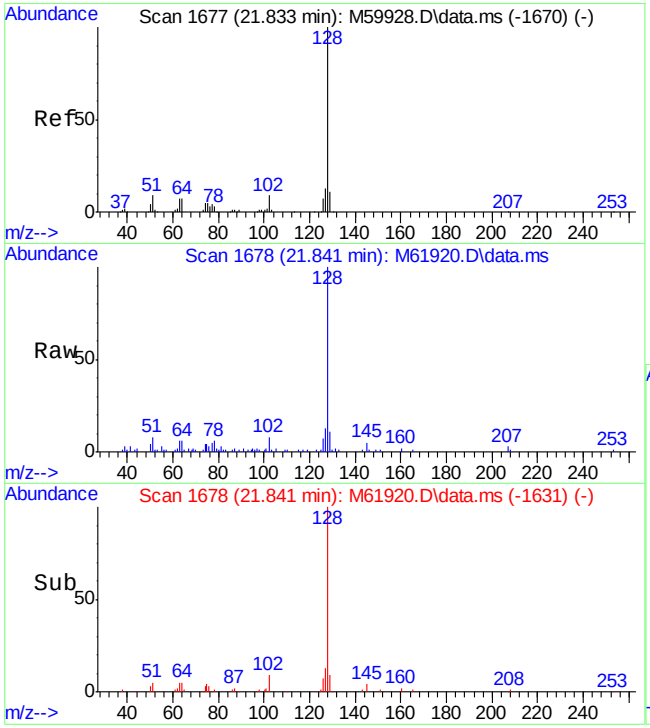



#88
p-Isopropyltoluene
Concen: 2.01 ppb
RT: 19.150 min Scan# 1423
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:119 Resp: 48735

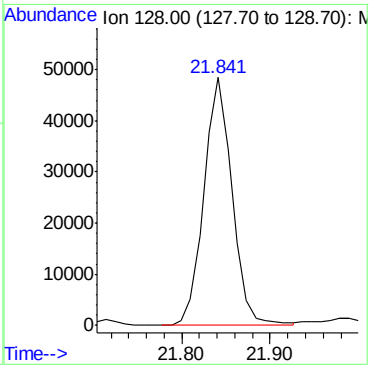
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.5 | 6.0 | 46.0 |
| 91 | 27.7 | 6.0 | 46.0 |

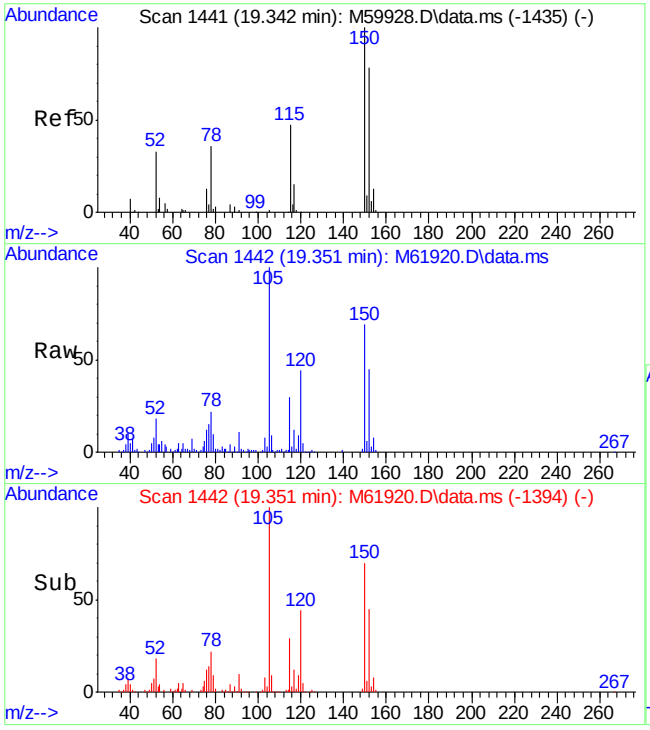



#97
Naphthalene
Concen: 5.22 ppb
RT: 21.841 min Scan# 1678
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:128 Resp: 107566

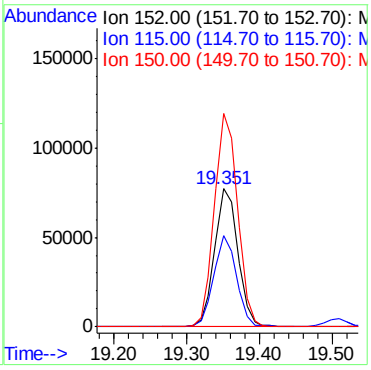


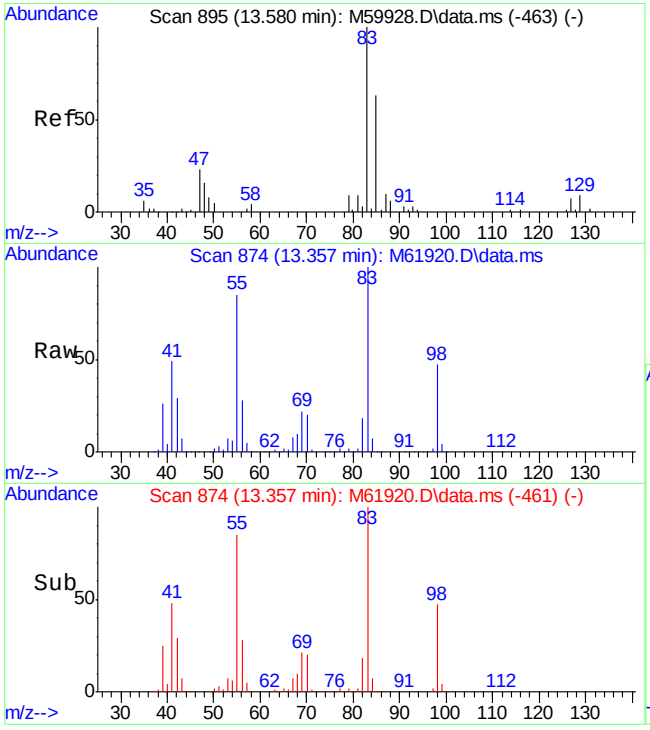



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.351 min Scan# 1442
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:152 Resp: 171327

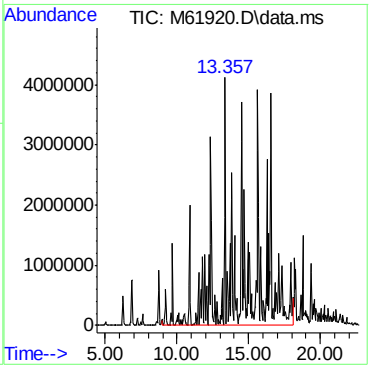
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.5 | 37.3 | 77.3 |
| 150 | 152.0 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 6745.57 ppb m
RT: 13.357 min Scan# 874
Delta R.T. -0.193 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:TIC Resp:243485523



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61920.D
Acq On : 18 Jul 2016 8:16 pm
Operator : johannat
Sample : C46435-10R
Misc : MS1912,VM1861,5.38,,20,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 02 10:12:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

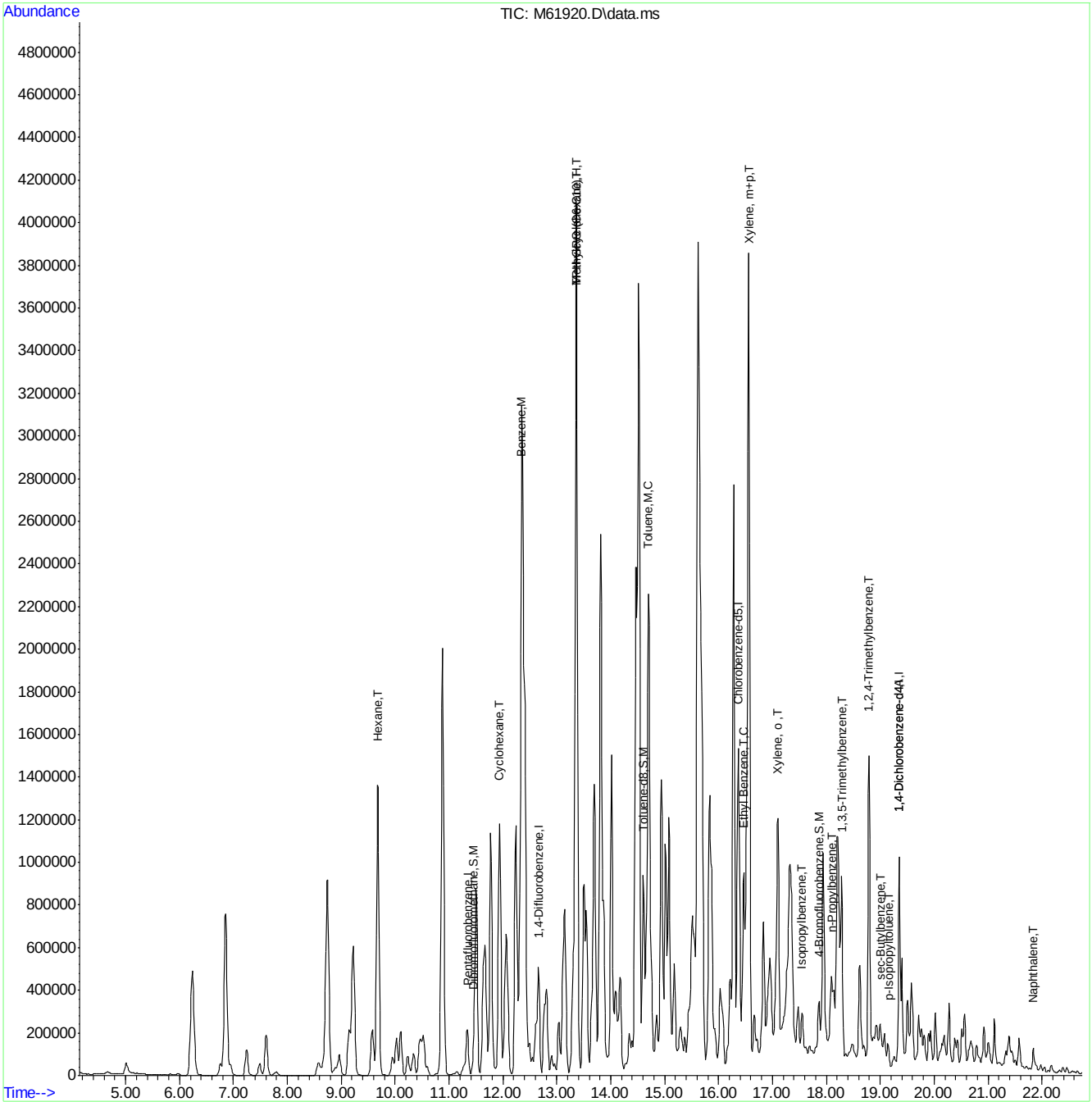
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 195289 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 284799 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 280012 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.351 | 152 | 171327 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.351 | 152 | 171327 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 82385 | 17.78 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 88.90% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 338641 | 19.84 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 99.20% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 154717 | 21.82 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 109.10% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 24) Hexane | 9.674 | 57 | 1091196 | 125.64 | ppb | 99 |
| 38) Cyclohexane | 11.932 | 56 | 902318 | 84.00 | ppb | 93 |
| 45) Benzene | 12.344 | 78 | 88845 | 3.90 | ppb | 100 |
| 48) Methylcyclohexane | 13.357 | 55 | 2264077 | 246.67 | ppb | 93 |
| 57) Toluene | 14.697 | 92 | 517952 | 38.32 | ppb | 99 |
| 67) Ethyl Benzene | 16.470 | 91 | 722750 | 28.41 | ppb | 98 |
| 68) Xylene, m+p | 16.565 | 106 | 1254021 | 130.42 | ppb | 91 |
| 69) Xylene, o | 17.103 | 106 | 409536 | 41.98 | ppb | 94 |
| 73) Isopropylbenzene | 17.546 | 105 | 205553 | 8.37 | ppb | 100 |
| 79) n-Propylbenzene | 18.095 | 91 | 347776 | 10.51 | ppb | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.285 | 105 | 369088 | 16.49 | ppb | 83 |
| 86) 1,2,4-Trimethylbenzene | 18.792 | 105 | 1120672 | 48.06 | ppb | 92 |
| 87) sec-Butylbenzene | 19.003 | 105 | 39575 | 1.36 | ppb | 99 |
| 88) p-Isopropyltoluene | 19.150 | 119 | 48735 | 2.01 | ppb | 98 |
| 97) Naphthalene | 21.841 | 128 | 107566 | 5.22 | ppb | 100 |
| 100) TPH-GRO (C6-C10) | 13.357 | TIC | 243485523m | 6745.57 | ppb | |

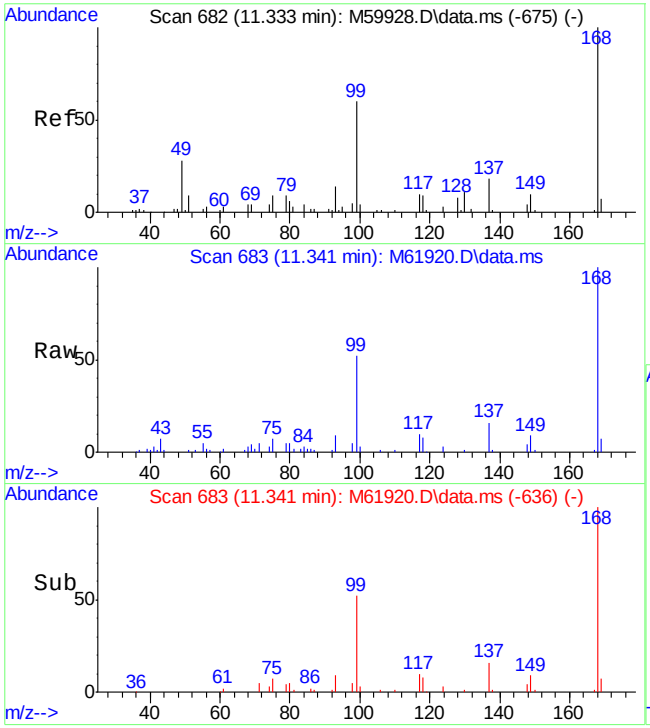
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61920.D
Acq On : 18 Jul 2016 8:16 pm
Operator : johannat
Sample : C46435-10R
Misc : MS1912,VM1861,5.38,,20,5,1
ALS Vial : 14 Sample Multiplier: 1

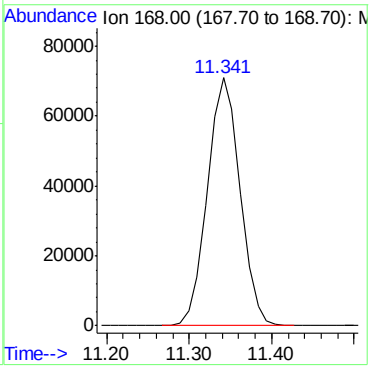
Quant Time: Aug 02 10:12:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

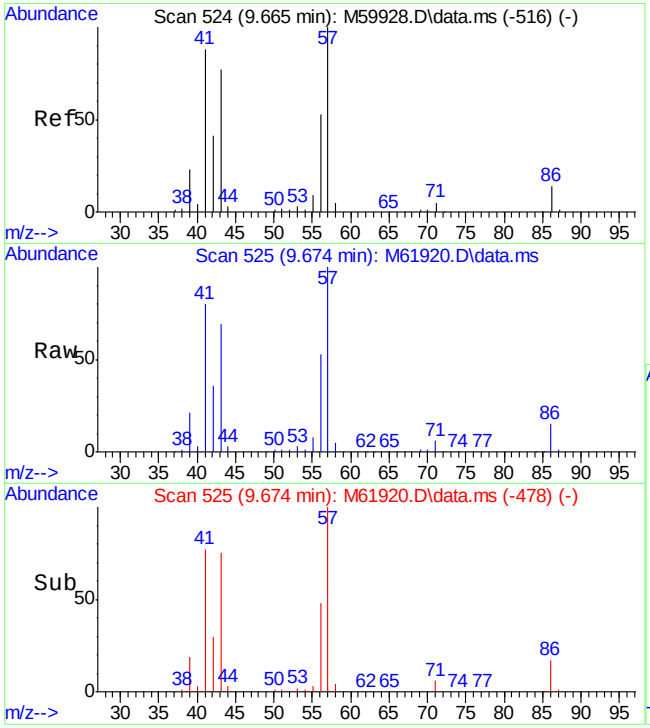





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:168 Resp: 195289

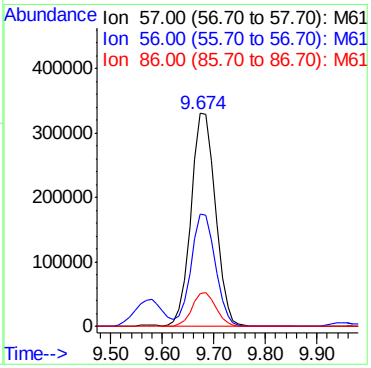


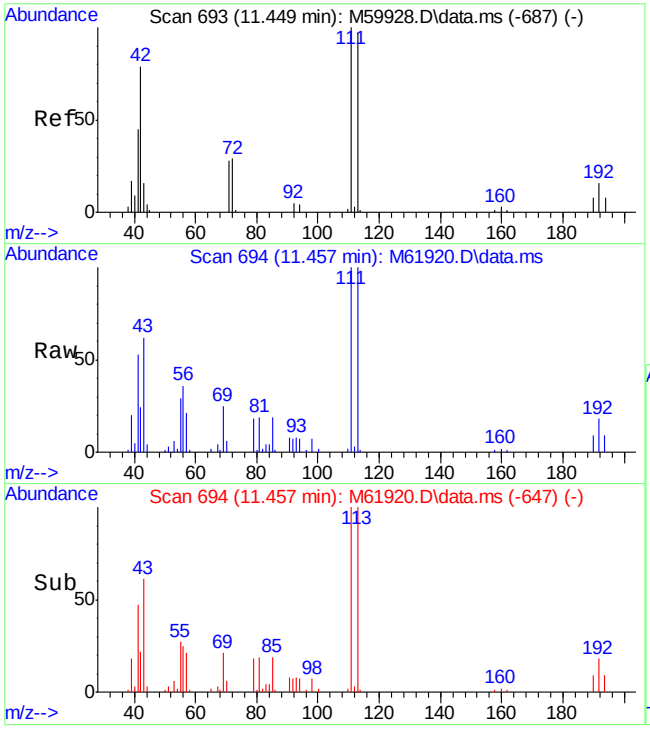




#24
Hexane
Concen: 125.64 ppb
RT: 9.674 min Scan# 525
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 57 Resp: 1091196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.5 | 32.9 | 72.9 |
| 86 | 15.6 | 0.0 | 34.1 |

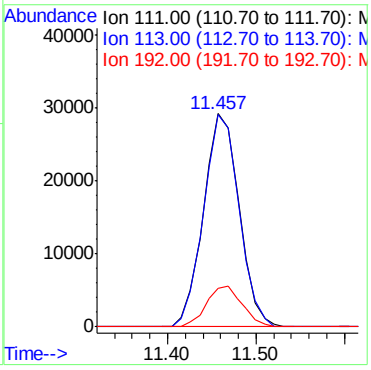


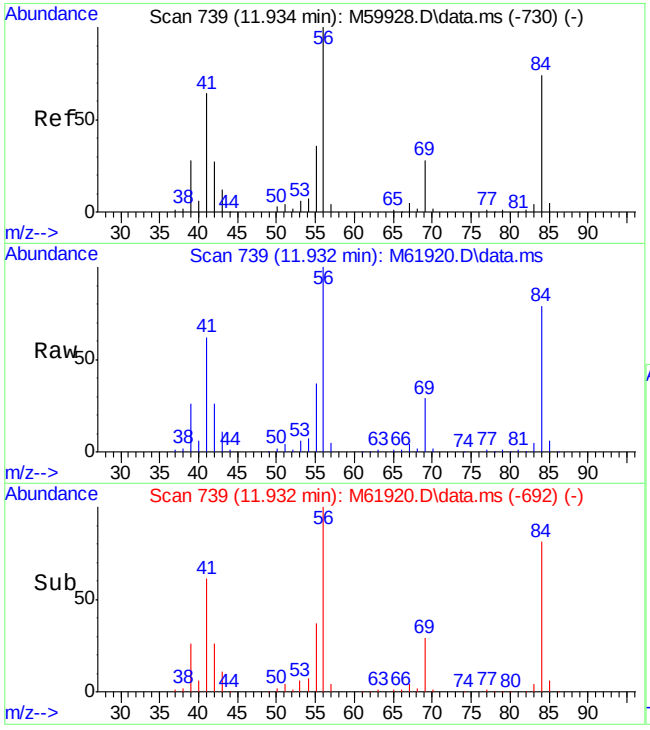



#36
Dibromofluoromethane
Concen: 17.78 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:111 Resp: 82385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.9 | 77.7 | 117.7 |
| 192 | 19.1 | 0.0 | 36.3 |

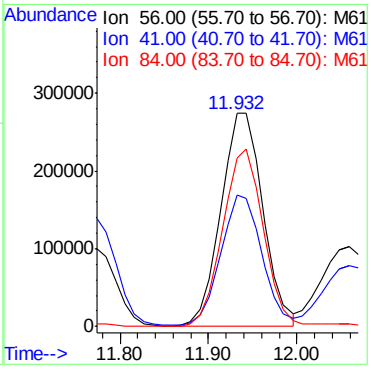


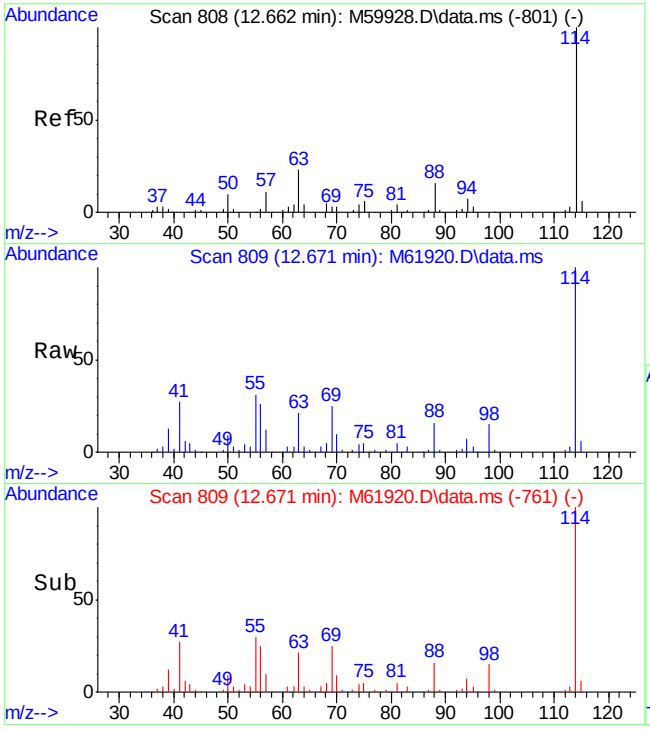




#38
Cyclohexane
Concen: 84.00 ppb
RT: 11.932 min Scan# 739
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 56 Resp: 902318

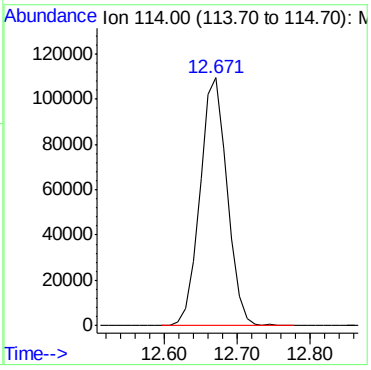
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 59.2 | 46.3 | 86.3 |
| 84 | 81.0 | 56.0 | 96.0 |

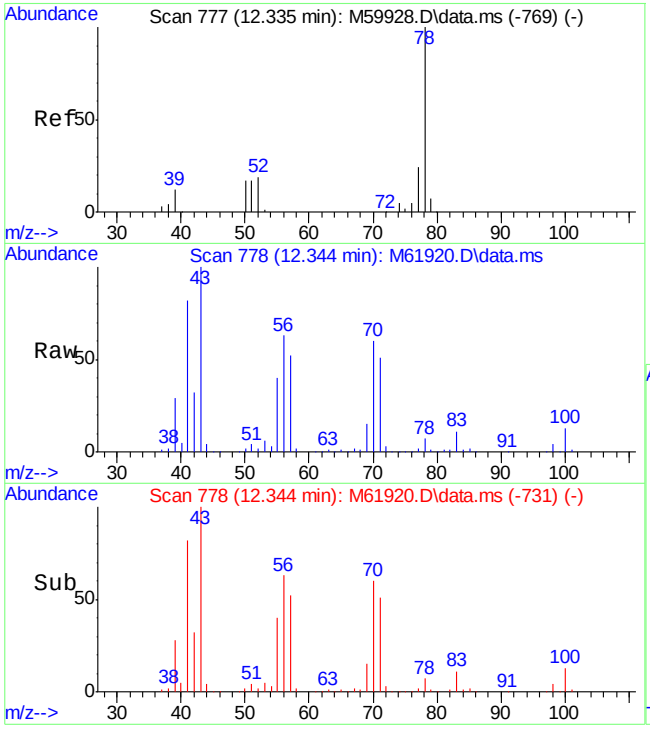





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

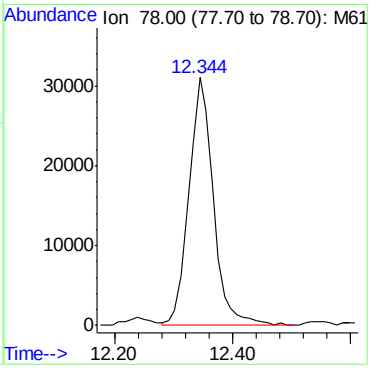
Tgt Ion:114 Resp: 284799

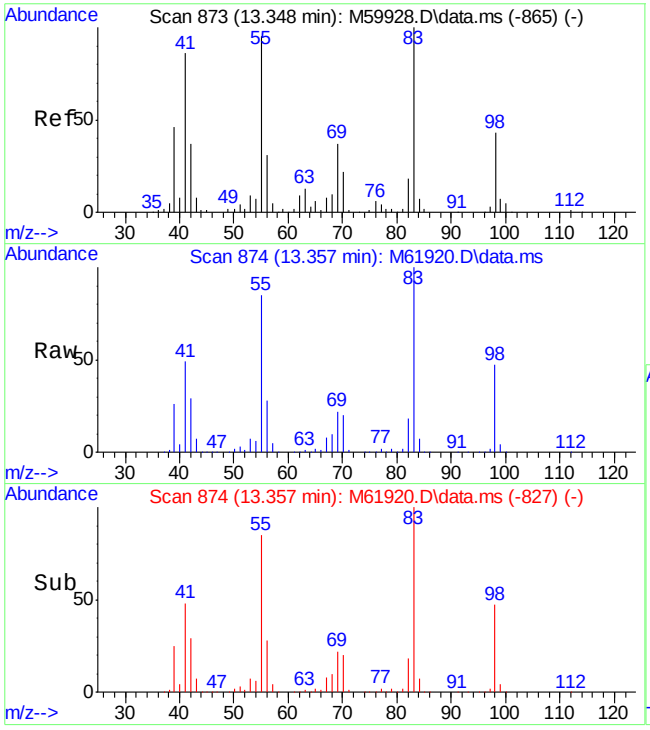



#45
Benzene
Concen: 3.90 ppb
RT: 12.344 min Scan# 778
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 78 Resp: 88845

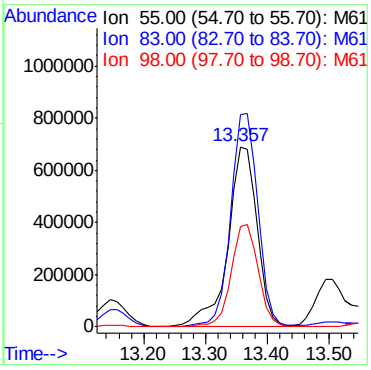


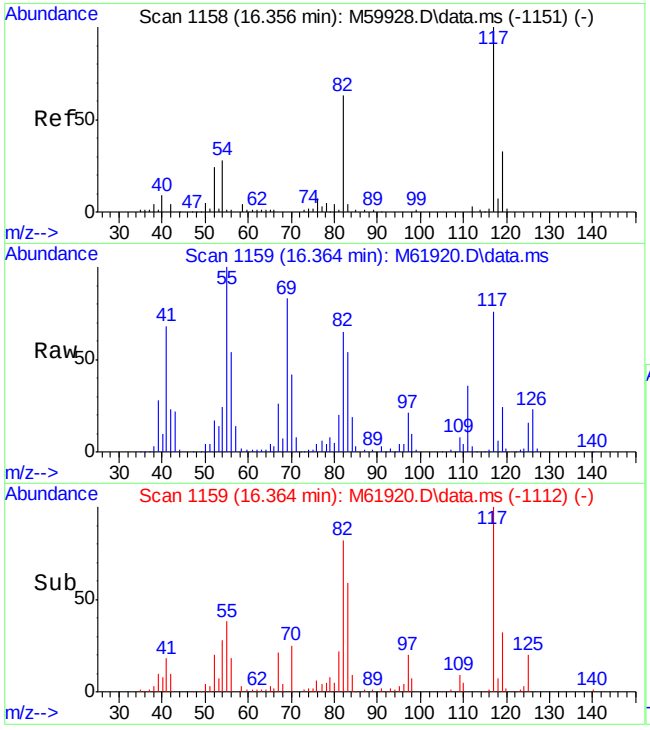



#48
Methylcyclohexane
Concen: 246.67 ppb
RT: 13.357 min Scan# 874
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 55 Resp: 2264077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 110.3 | 84.5 | 124.5 |
| 98 | 52.7 | 27.0 | 67.0 |

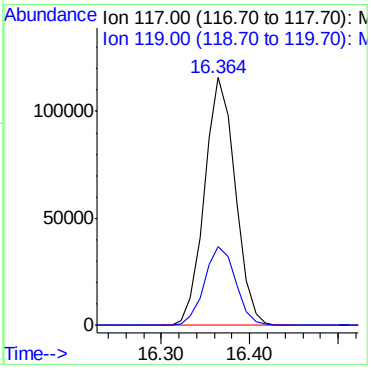


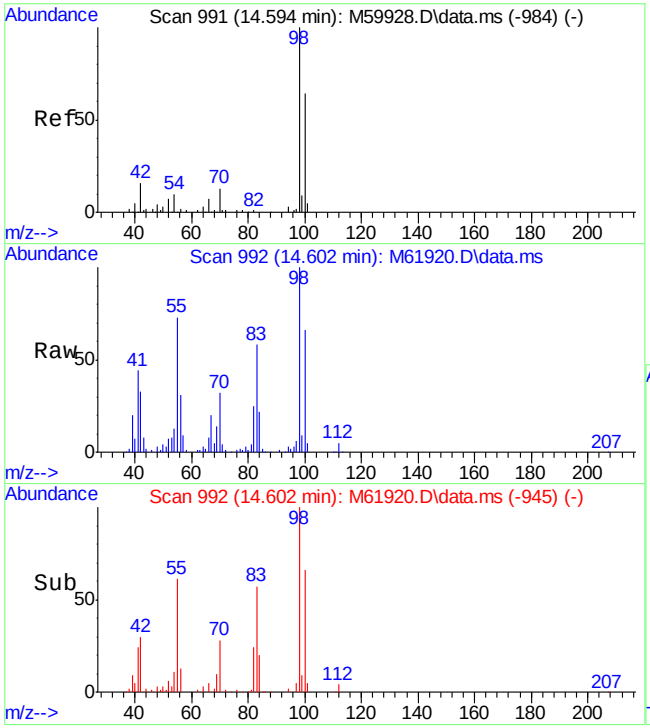




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:117 Resp: 280012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.2 | 11.2 | 51.2 |

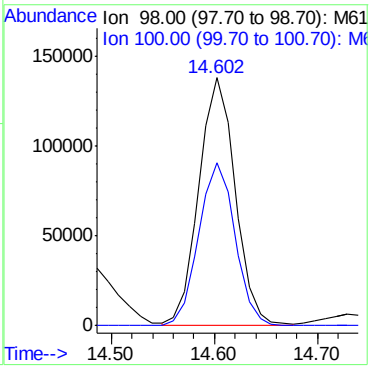


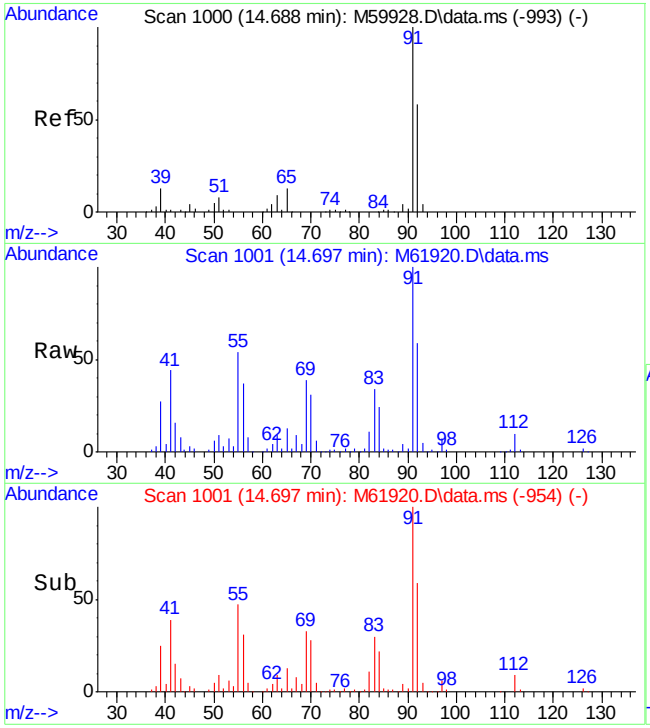



#56
Toluene-d8
Concen: 19.84 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 98 Resp: 338641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

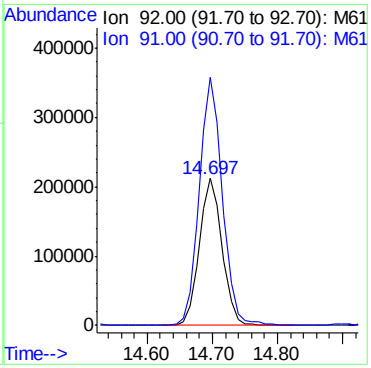


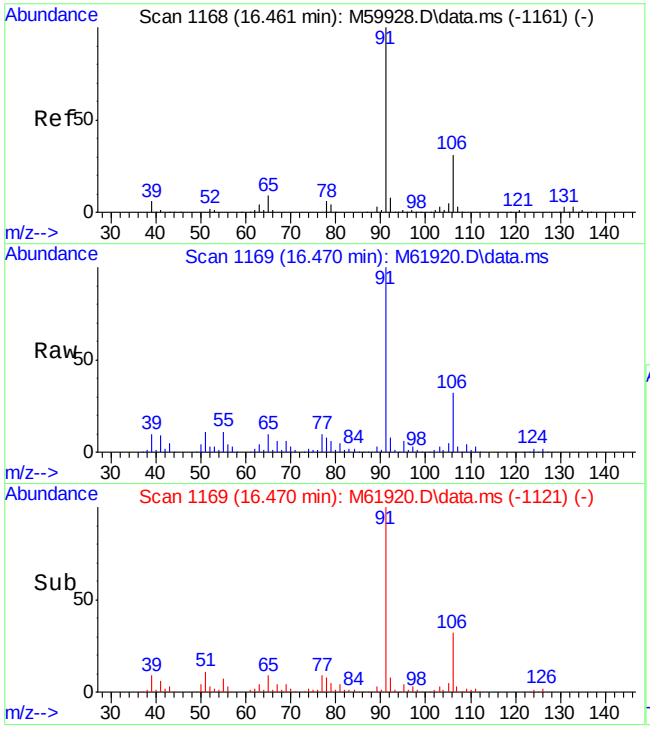




#57
Toluene
Concen: 38.32 ppb
RT: 14.697 min Scan# 1001
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 92 Resp: 517952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.1 | 150.5 | 190.5 |

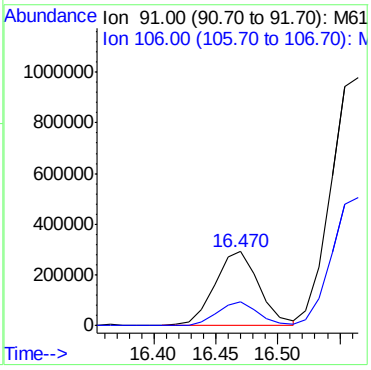


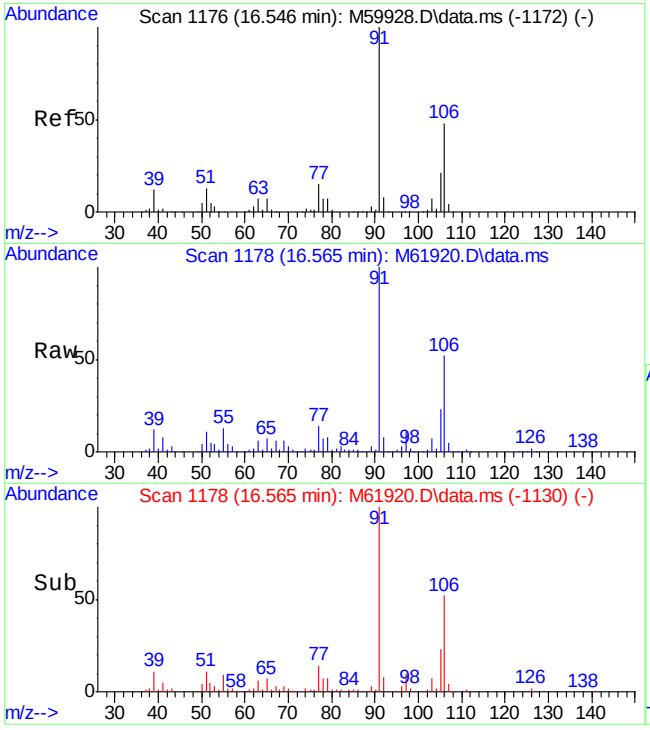



#67
Ethyl Benzene
Concen: 28.41 ppb
RT: 16.470 min Scan# 1169
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 91 Resp: 722750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 10.2 | 50.2 |

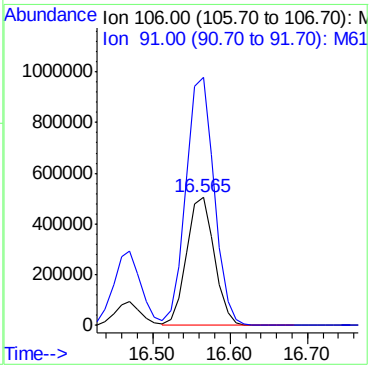


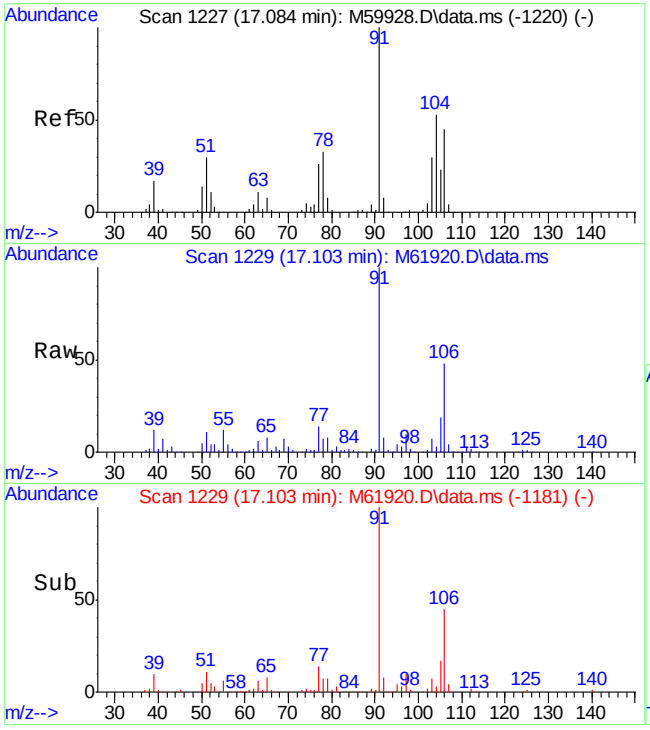




#68
Xylene, m+p
Concen: 130.42 ppb
RT: 16.565 min Scan# 1178
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:106 Resp: 1254021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 196.7 | 191.5 | 231.5 |

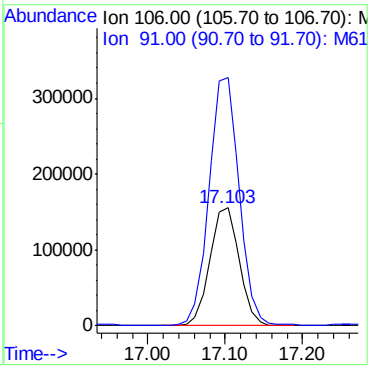


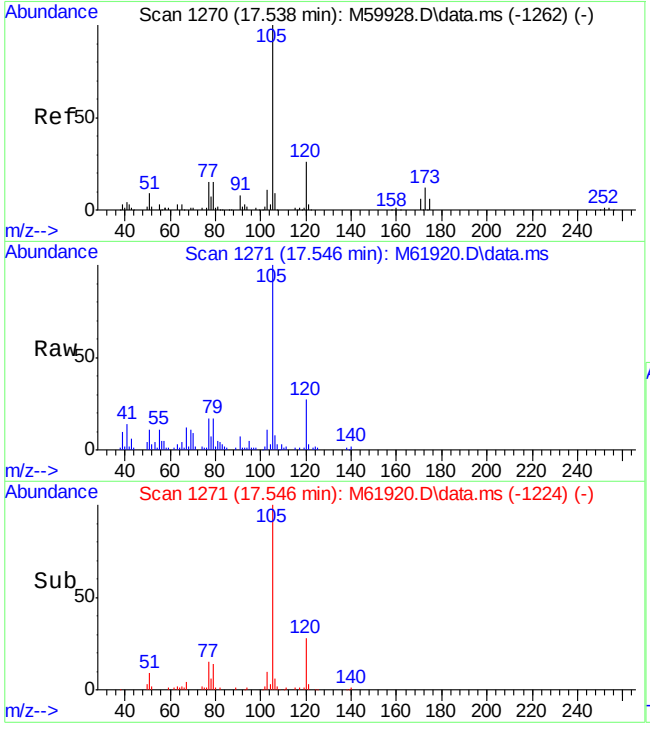



#69
Xylene, o
Concen: 41.98 ppb
RT: 17.103 min Scan# 1229
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:106 Resp: 409536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.9 | 203.2 | 243.2 |

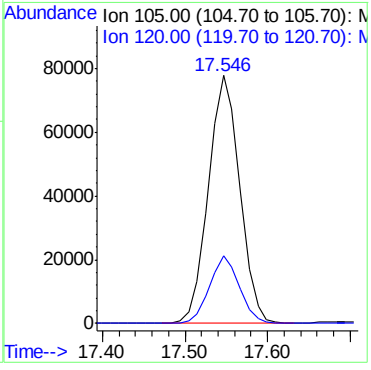


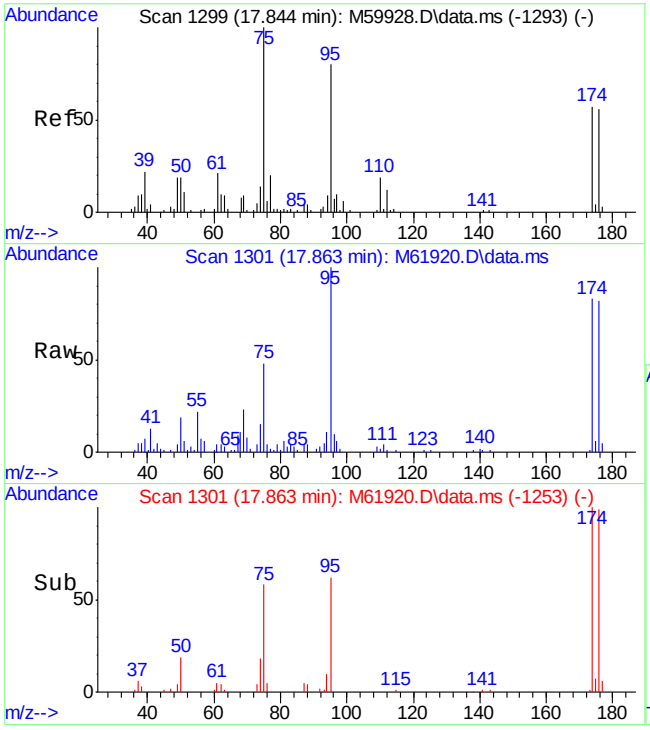




#73
Isopropylbenzene
Concen: 8.37 ppb
RT: 17.546 min Scan# 1271
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 205553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 5.7 | 45.7 |

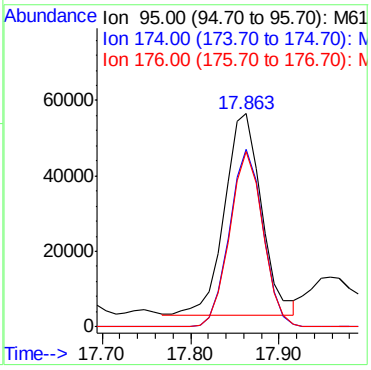


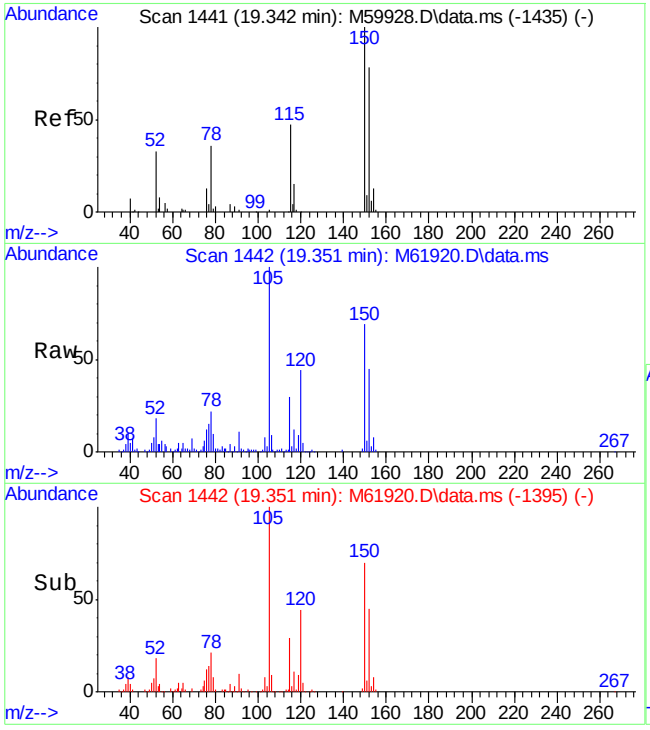



#74
4-Bromofluorobenzene
Concen: 21.82 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 95 Resp: 154717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 80.3 | 54.3 | 94.3 |
| 176 | 78.9 | 51.5 | 91.5 |

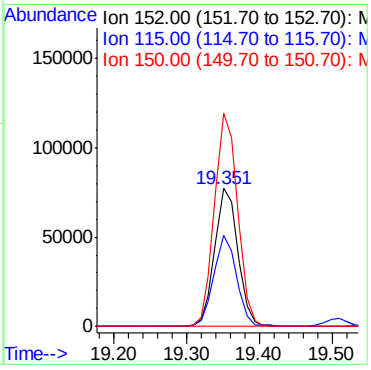


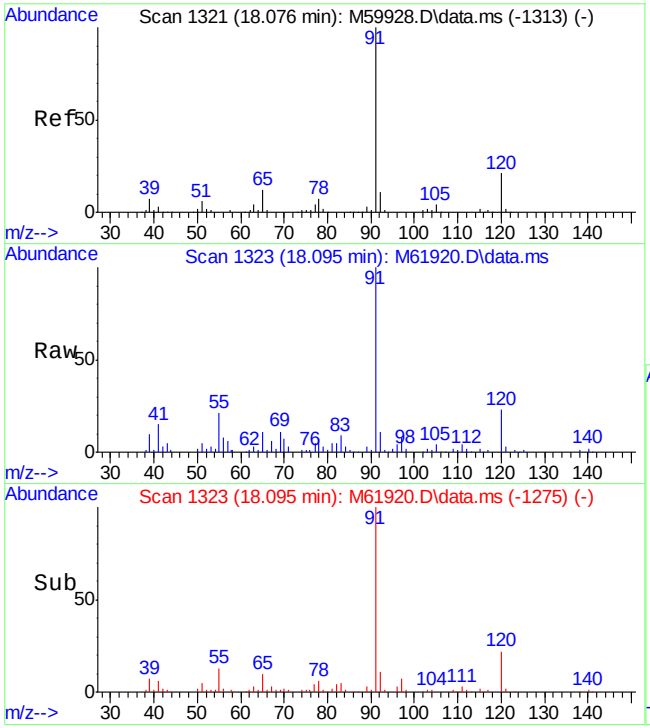




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.351 min Scan# 1442
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:152 Resp: 171327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.5 | 40.9 | 80.9 |
| 150 | 152.0 | 178.6 | 218.6# |

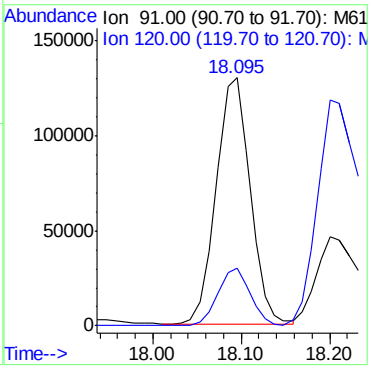


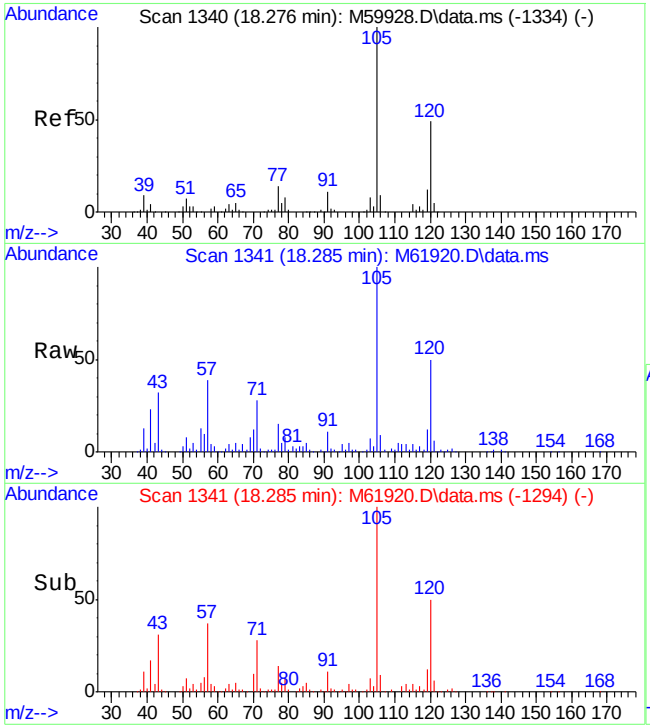



#79
n-Propylbenzene
Concen: 10.51 ppb
RT: 18.095 min Scan# 1323
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion: 91 Resp: 347776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 1.3 | 41.3 |

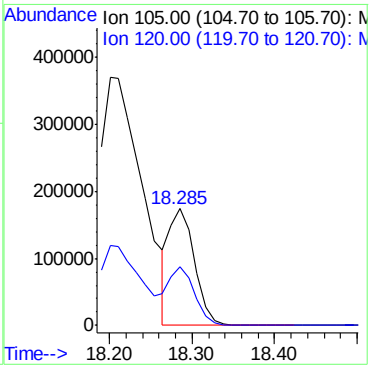


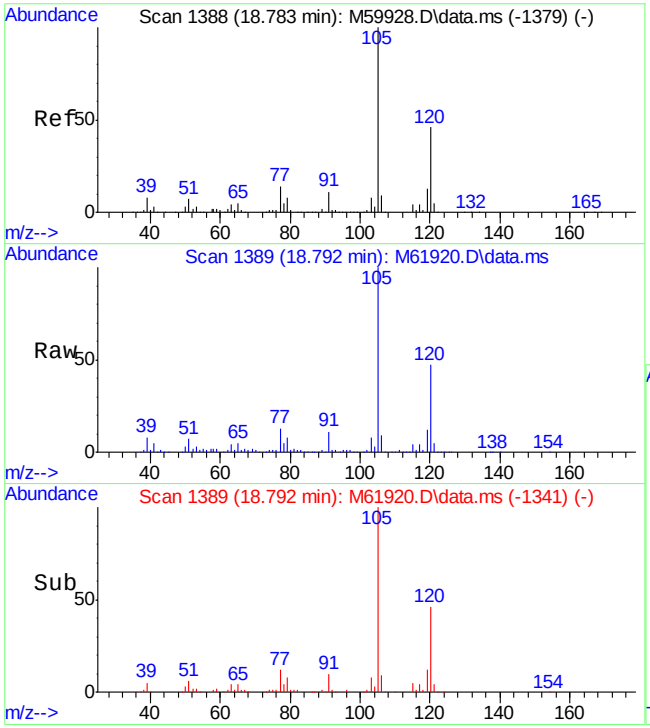




#81
1,3,5-Trimethylbenzene
Concen: 16.49 ppb
RT: 18.285 min Scan# 1341
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 369088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 57.6 | 26.6 | 66.6 |

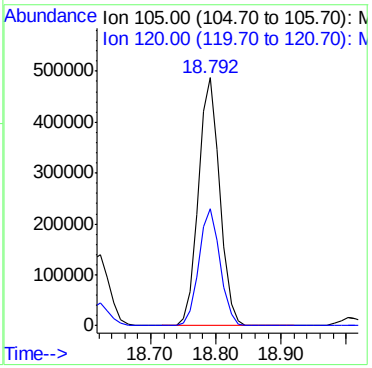


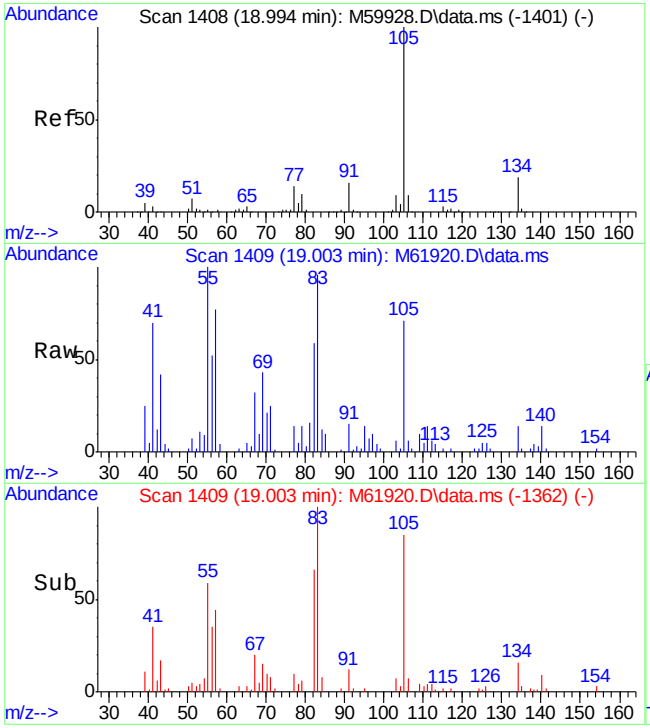



#86
1,2,4-Trimethylbenzene
Concen: 48.06 ppb
RT: 18.792 min Scan# 1389
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 1120672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 32.4 | 72.4 |

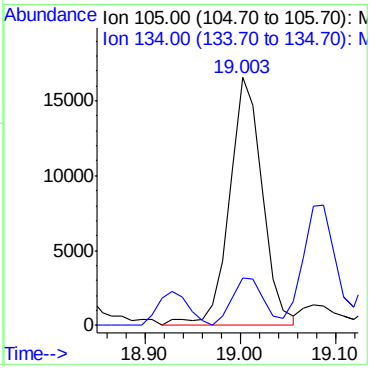


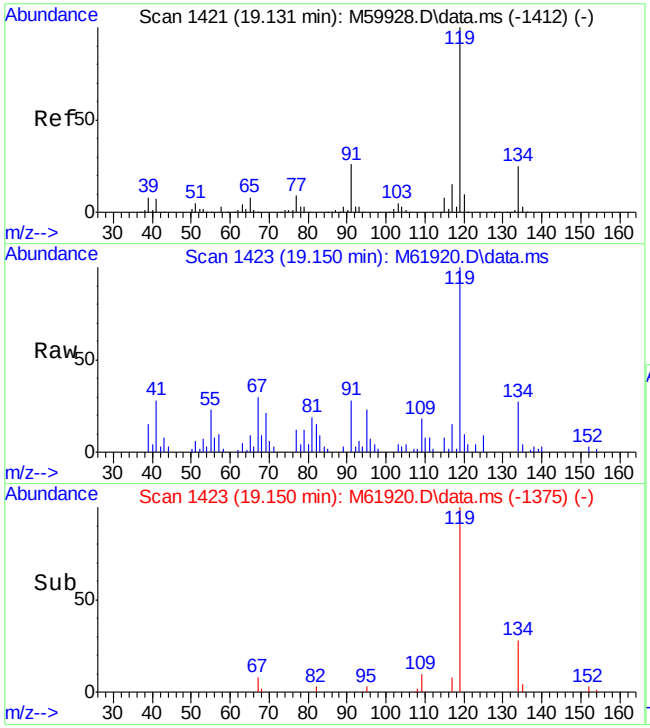




#87
sec-Butylbenzene
Concen: 1.36 ppb
RT: 19.003 min Scan# 1409
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:105 Resp: 39575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.9 | 0.0 | 38.7 |

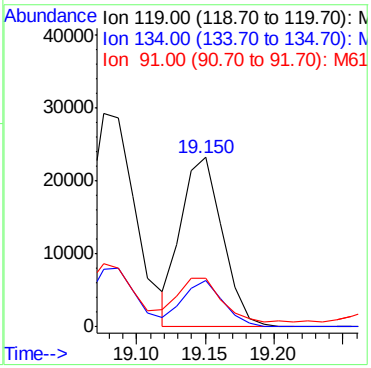


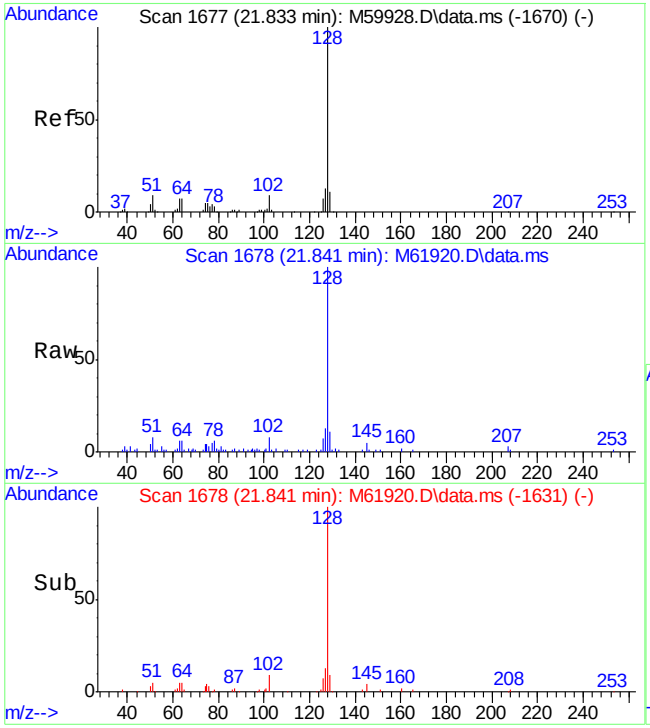



#88
p-Isopropyltoluene
Concen: 2.01 ppb
RT: 19.150 min Scan# 1423
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:119 Resp: 48735

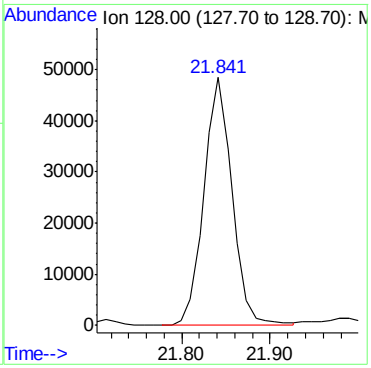
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.5 | 6.0 | 46.0 |
| 91 | 27.7 | 6.0 | 46.0 |

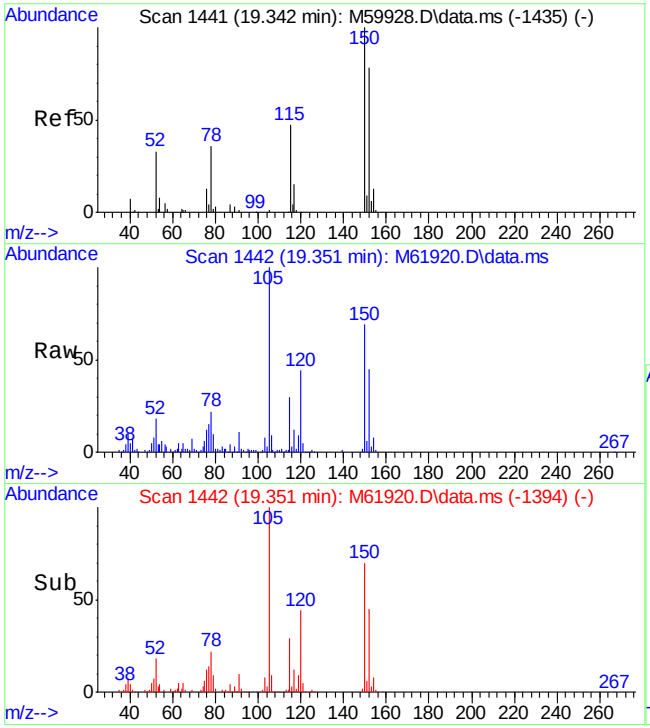



#97
Naphthalene
Concen: 5.22 ppb
RT: 21.841 min Scan# 1678
Delta R.T. -0.002 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:128 Resp: 107566

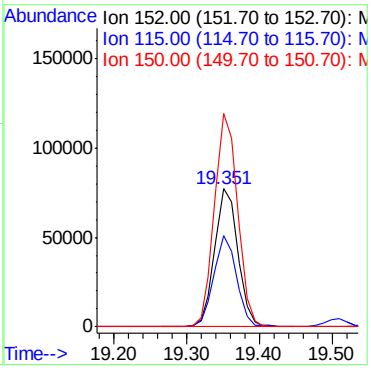


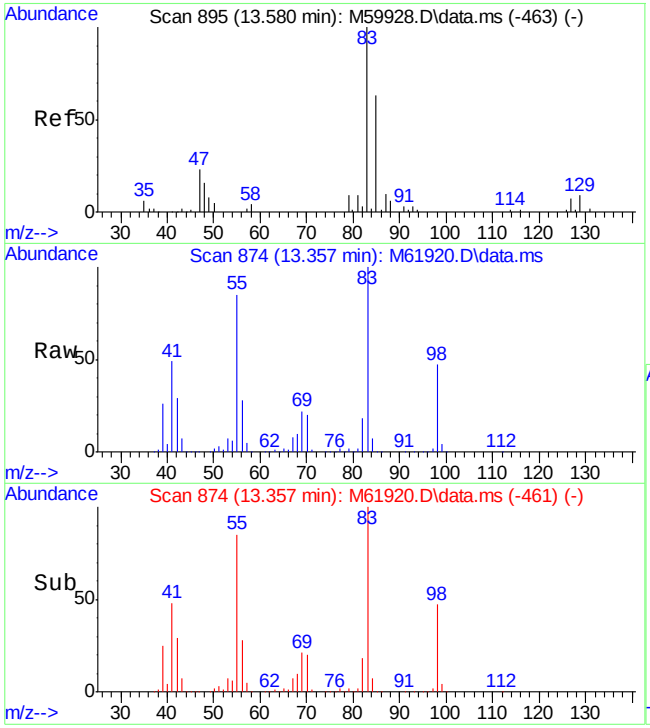



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.351 min Scan# 1442
Delta R.T. 0.009 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:152 Resp: 171327

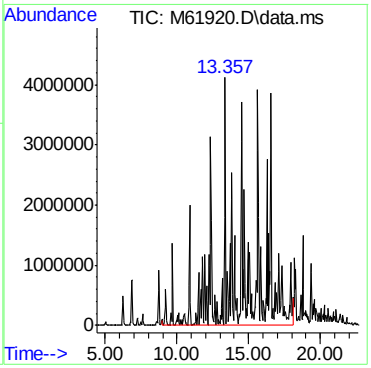
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.5 | 37.3 | 77.3 |
| 150 | 152.0 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 6745.57 ppb m
RT: 13.357 min Scan# 874
Delta R.T. -0.193 min
Lab File: M61920.D
Acq: 18 Jul 2016 8:16 pm

Tgt Ion:TIC Resp:243485523



Manual Integrations APPROVED (compounds with "m" flag)
James Rhudy 07/13/16 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49982.D
Acq On : 12 Jul 2016 5:42 pm
Operator : johannat
Sample : C46435-11R
Misc : MS1912,VL1499,5.51,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 02 11:01:16 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.356 | 168 | 1220208 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 2132511 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.294 | 117 | 1822657 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 855408 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 855408 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 658511 | 18.03 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 90.15% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2562816 | 19.91 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.55% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 1019721 | 19.06 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 95.30% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.679 | 58 | 173785m | 50.01 | ug/Kg | |
| 24) Hexane | 9.730 | 57 | 1948175 | 50.59 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.609 | 72 | 45662 | 9.98 | ug/Kg# | 91 |
| 38) Cyclohexane | 11.946 | 56 | 1279270 | 23.27 | ug/Kg | 95 |
| 45) Benzene | 12.339 | 78 | 215132 | 1.35 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.353 | 55 | 2909107 | 58.26 | ug/Kg | 99 |
| 57) Toluene | 14.657 | 92 | 918854 | 10.17 | ug/Kg | 96 |
| 67) Ethyl Benzene | 16.398 | 91 | 1278057 | 7.26 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.491 | 106 | 2221882 | 35.57 | ug/Kg | 97 |
| 69) Xylene, o | 17.026 | 106 | 701772 | 11.00 | ug/Kg | 97 |
| 73) Isopropylbenzene | 17.467 | 105 | 293635 | 1.85 | ug/Kg | 100 |
| 79) n-Propylbenzene | 18.002 | 91 | 636675 | 3.20 | ug/Kg | 99 |
| 81) 1,3,5-Trimethylbenzene | 18.199 | 105 | 648114 | 4.87 | ug/Kg | 94 |
| 84) tert-Butylbenzene | 18.706 | 119 | 239580 | 1.87 | ug/Kg# | 73 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 2129390 | 15.00 | ug/Kg | 91 |
| 88) p-Isopropyltoluene | 19.066 | 119 | 83362 | 0.61 | ug/Kg | 91 |
| 92) n-Butylbenzene | 19.519 | 91 | 175100 | 1.19 | ug/Kg# | 41 |
| 97) Naphthalene | 21.713 | 128 | 746443 | 5.75 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 16.491 | TIC | 302378278m | 1290.51 | ug/Kg | |

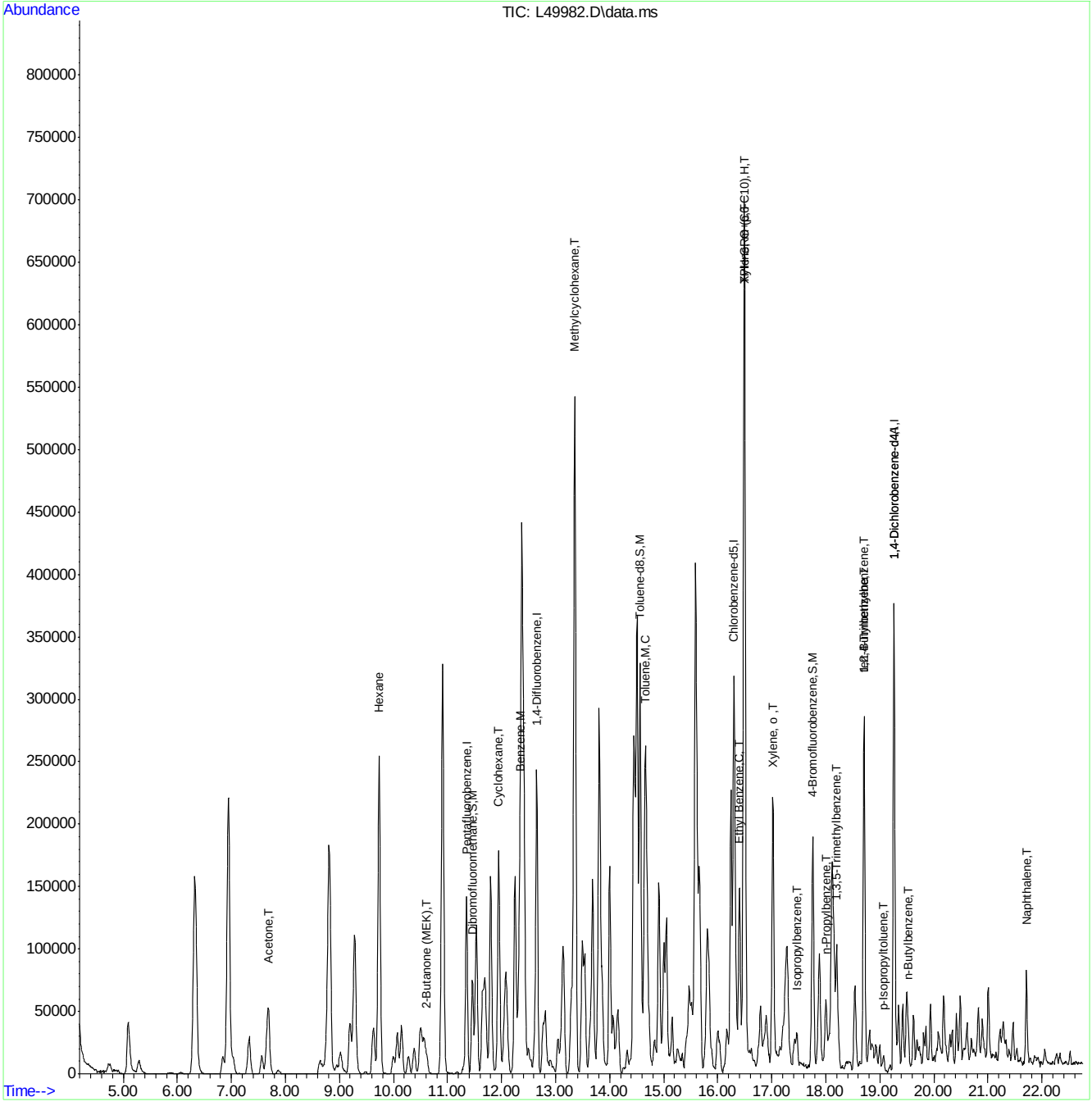
(#) = qualifier out of range (m) = manual integration (+) = signals summed

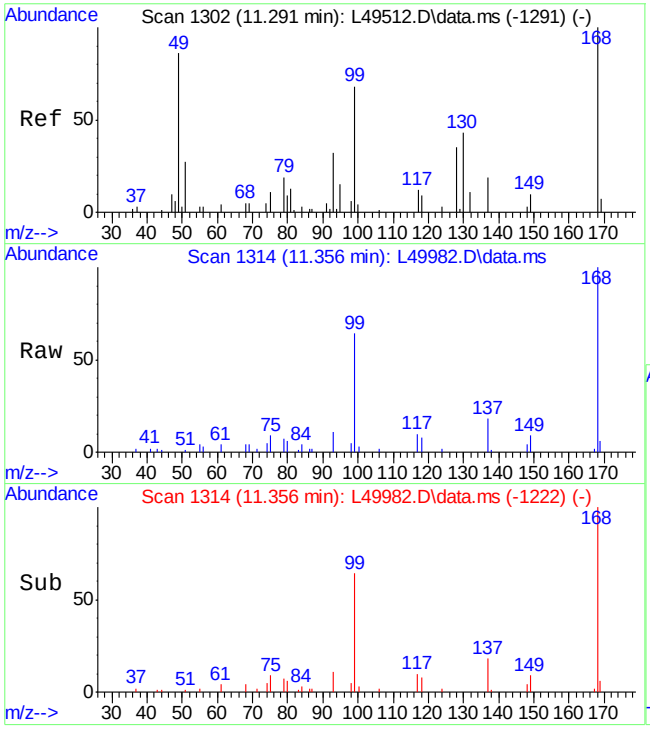
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49982.D
Acq On : 12 Jul 2016 5:42 pm
Operator : johannat
Sample : C46435-11R
Misc : MS1912,VL1499,5.51,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 02 11:01:16 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

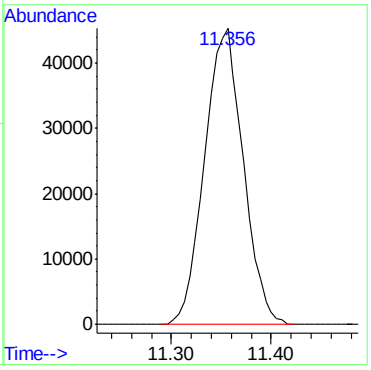


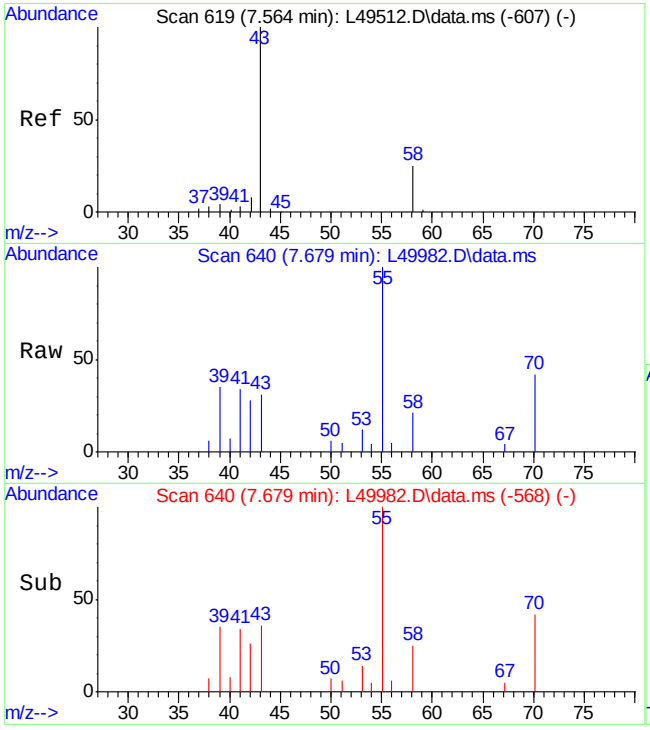





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.356 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:168 Resp: 1220208

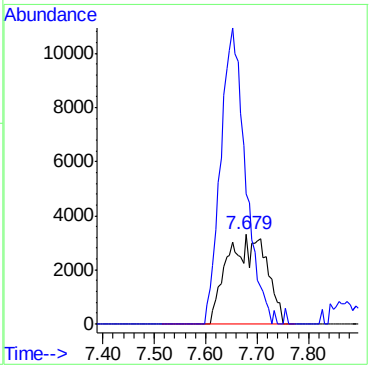


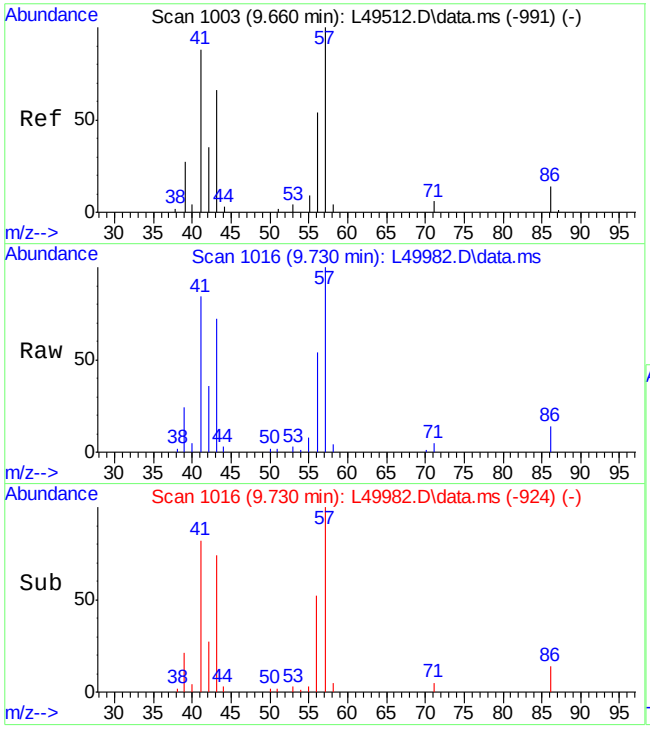




#11
Acetone
Concen: 50.01 ug/Kg m
RT: 7.679 min Scan# 640
Delta R.T. 0.044 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 58 Resp: 173785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 213.1 | 428.1 | 468.1# |

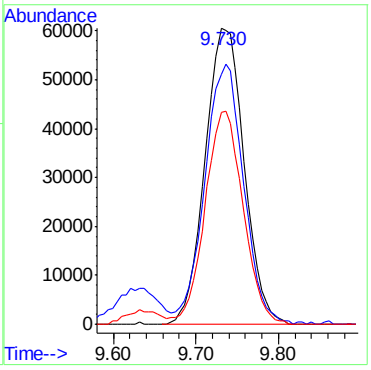


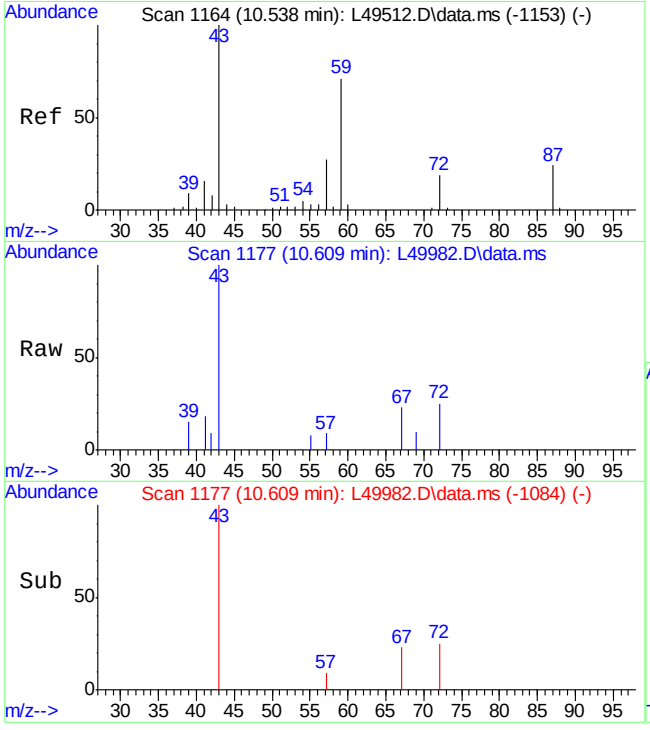



#24
Hexane
Concen: 50.59 ug/Kg
RT: 9.730 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 57 Resp: 1948175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 87.7 | 73.8 | 110.8 |
| 43 | 70.3 | 56.6 | 84.8 |

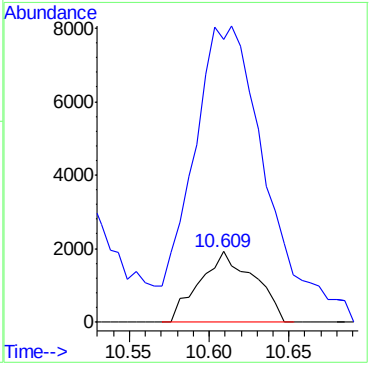


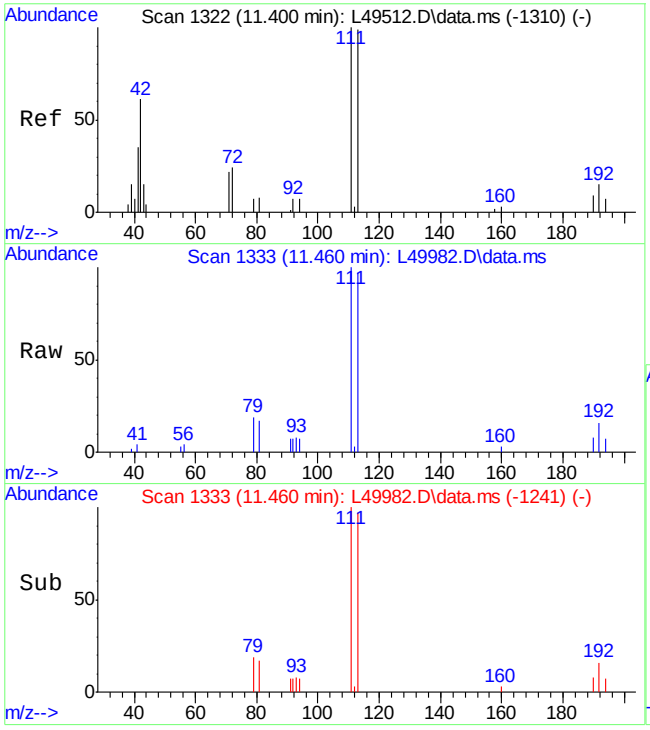




#30
2-Butanone (MEK)
Concen: 9.98 ug/Kg
RT: 10.609 min Scan# 1177
Delta R.T. 0.006 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 72 Resp: 45662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 566.5 | 573.4 | 613.4# |

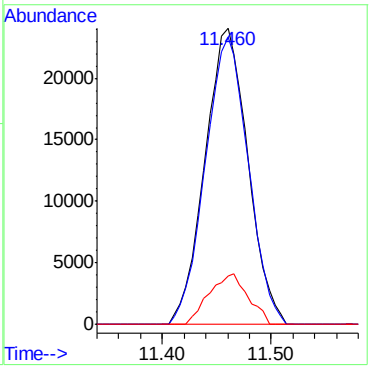


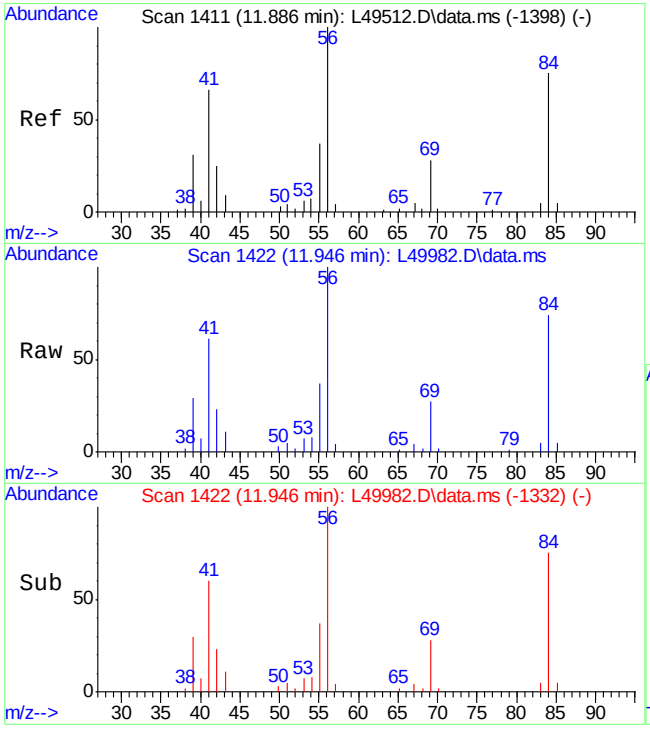



#36
Dibromofluoromethane
Concen: 18.03 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:111 Resp: 658511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.9 | 78.6 | 118.6 |
| 192 | 15.5 | 0.0 | 34.1 |

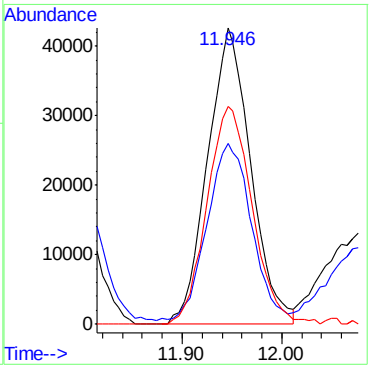


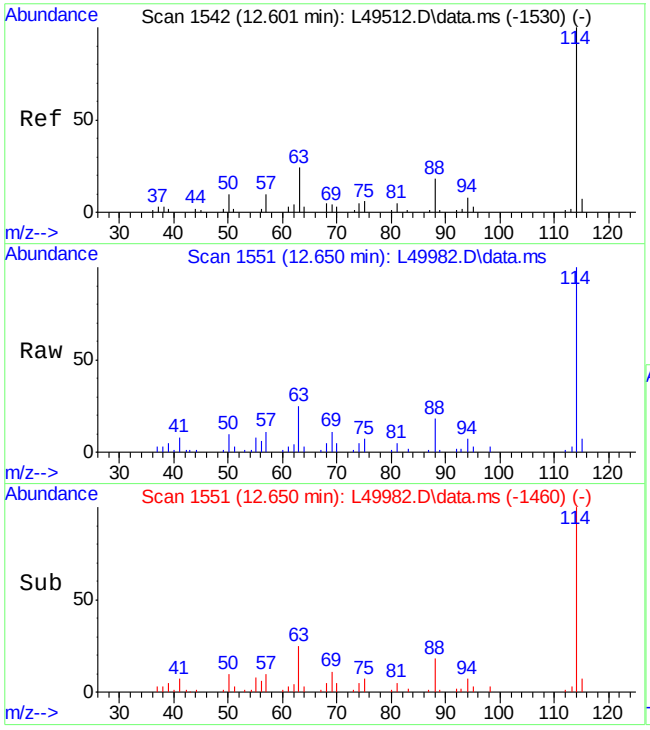




#38
Cyclohexane
Concen: 23.27 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 56 Resp: 1279270

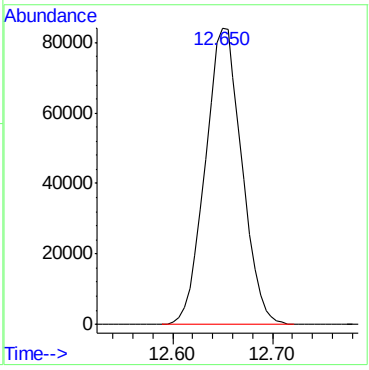
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 60.8 | 53.7 | 80.5 |
| 84 | 77.0 | 60.5 | 90.7 |

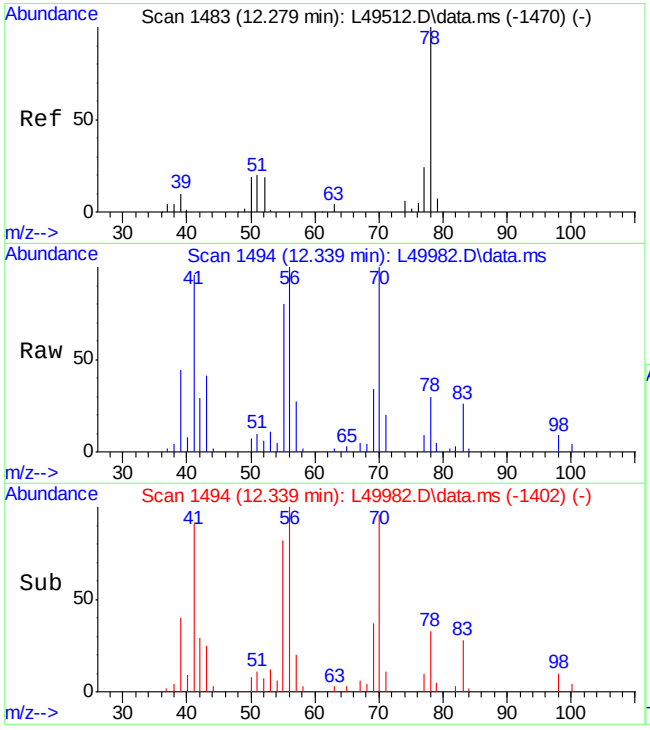





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

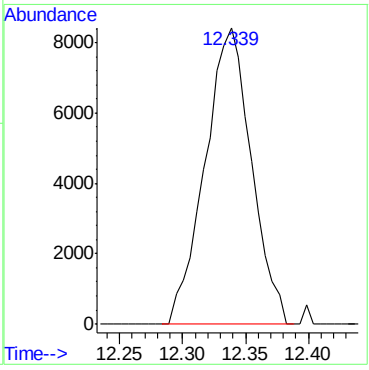
Tgt Ion:114 Resp: 2132511

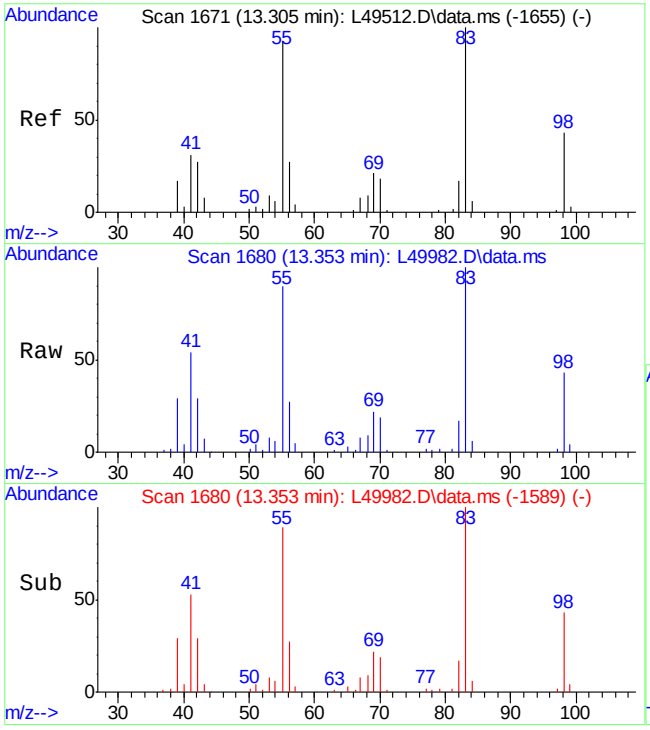



#45
Benzene
Concen: 1.35 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 78 Resp: 215132

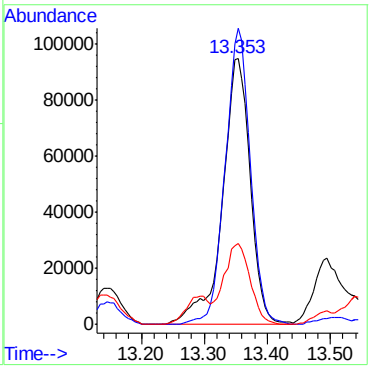


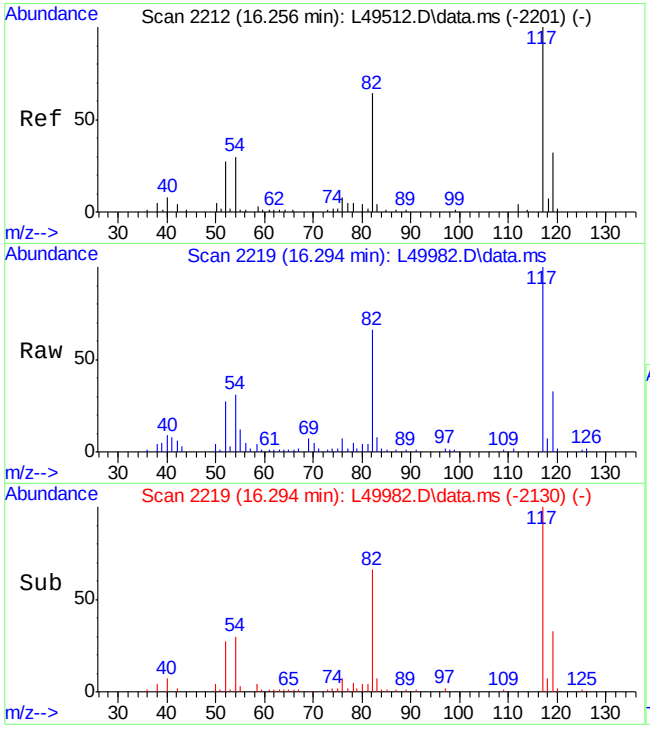



#48
Methylcyclohexane
Concen: 58.26 ug/Kg
RT: 13.353 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 55 Resp: 2909107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 100.6 | 80.6 | 120.6 |
| 56 | 29.0 | 11.5 | 51.5 |

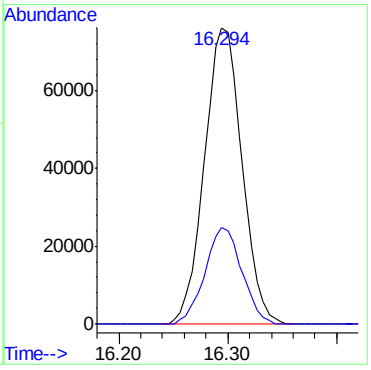


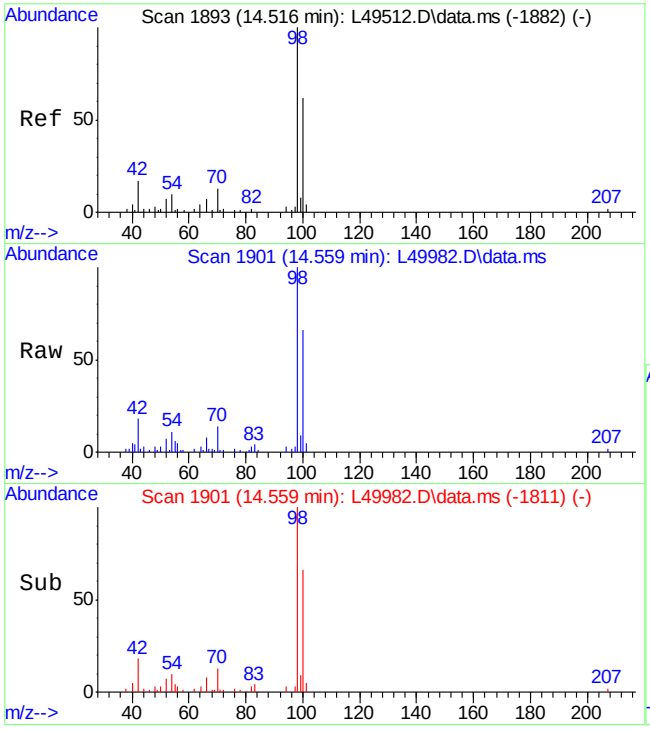




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.294 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:117 Resp: 1822657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.0 | 10.2 | 50.2 |

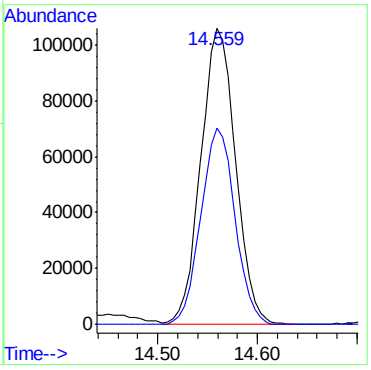


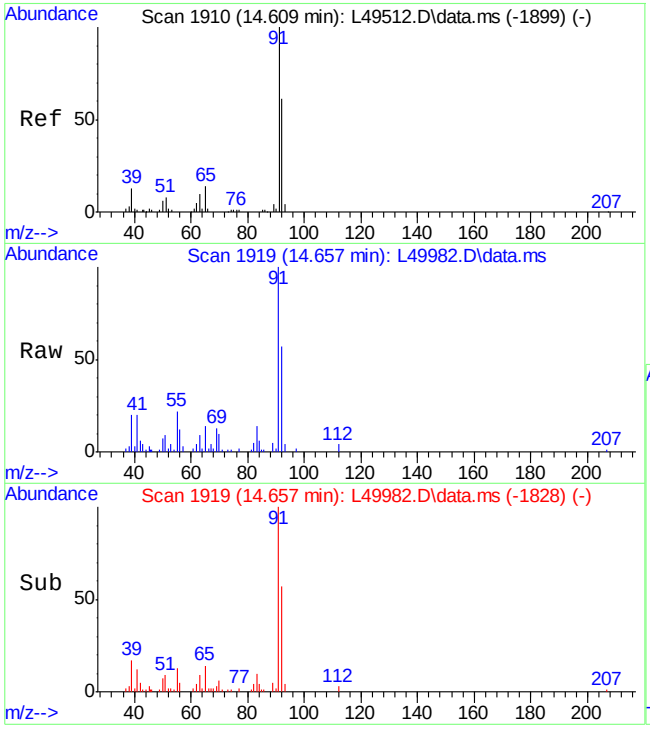



#56
Toluene-d8
Concen: 19.91 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 98 Resp: 2562816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 45.2 | 85.2 |

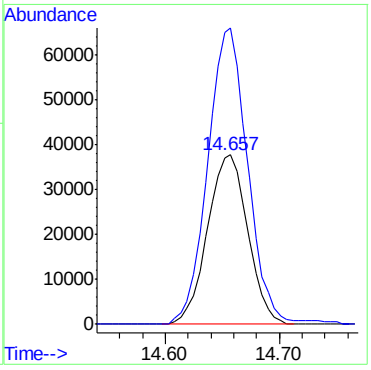


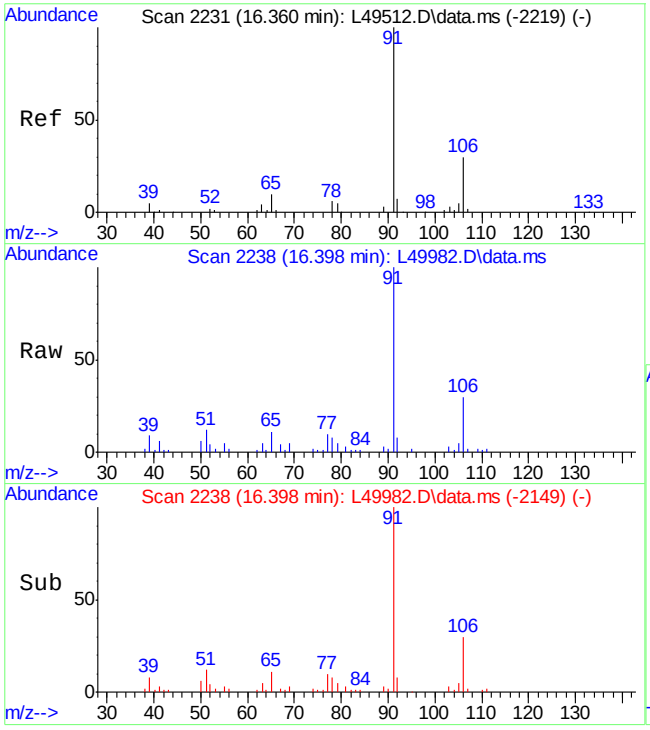




#57
Toluene
Concen: 10.17 ug/Kg
RT: 14.657 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 92 Resp: 918854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.3 | 149.2 | 189.2 |

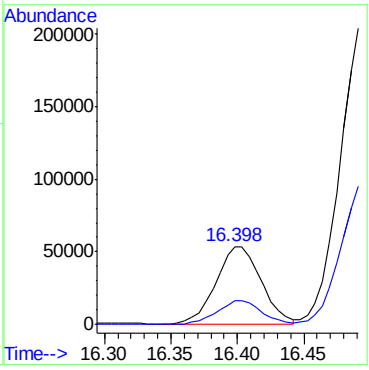


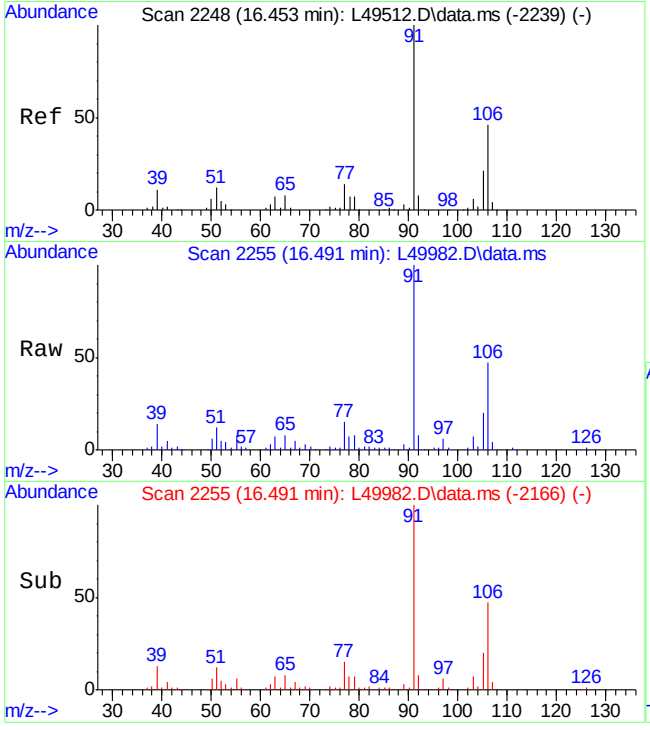



#67
Ethyl Benzene
Concen: 7.26 ug/Kg
RT: 16.398 min Scan# 2238
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 1278057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.2 | 8.6 | 48.6 |

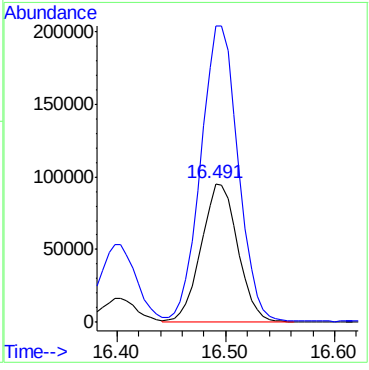


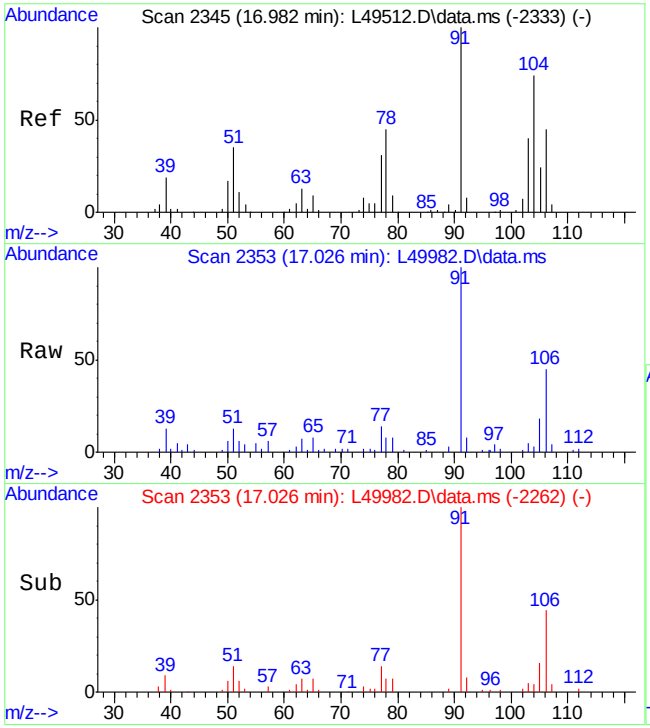




#68
Xylene, m+p
Concen: 35.57 ug/Kg
RT: 16.491 min Scan# 2255
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:106 Resp: 2221882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.5 | 202.1 | 242.1 |

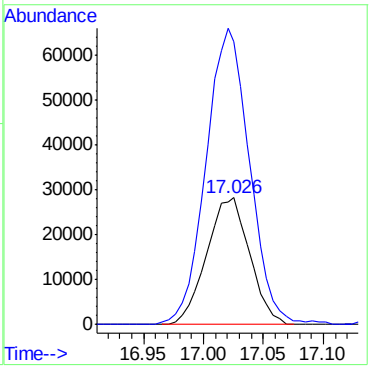


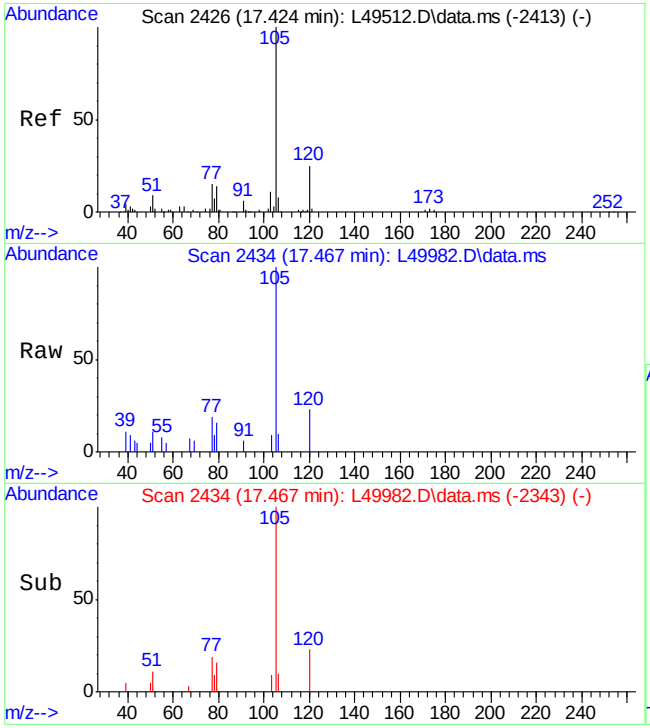



#69
Xylene, o
Concen: 11.00 ug/Kg
RT: 17.026 min Scan# 2353
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:106 Resp: 701772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 237.0 | 212.6 | 252.6 |

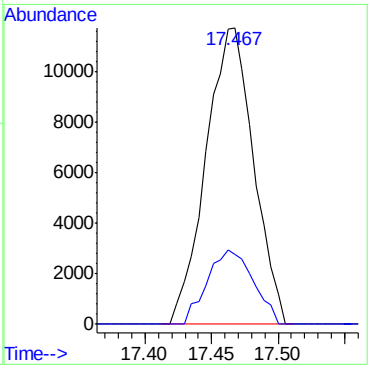


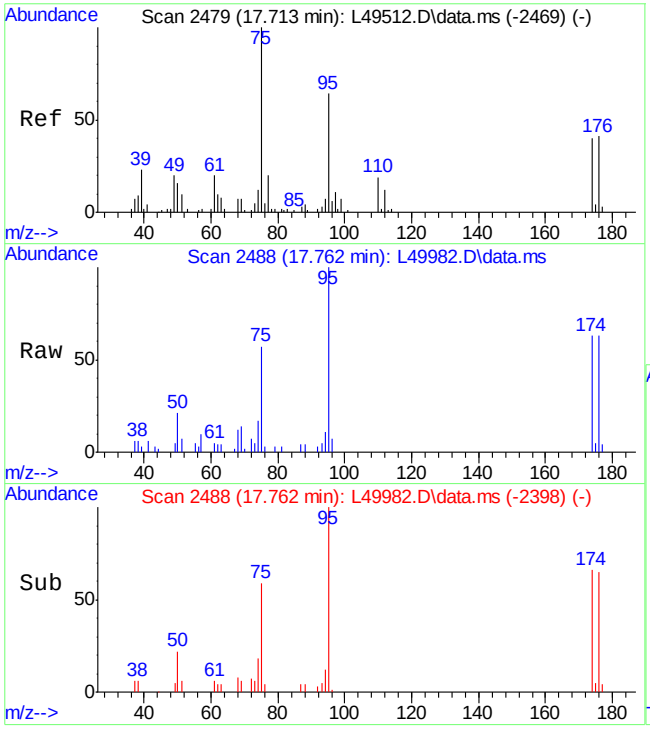




#73
Isopropylbenzene
Concen: 1.85 ug/Kg
RT: 17.467 min Scan# 2434
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 293635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.1 | 4.1 | 44.1 |

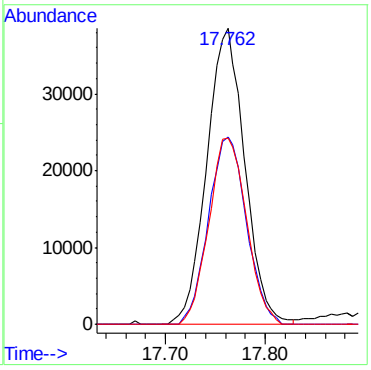


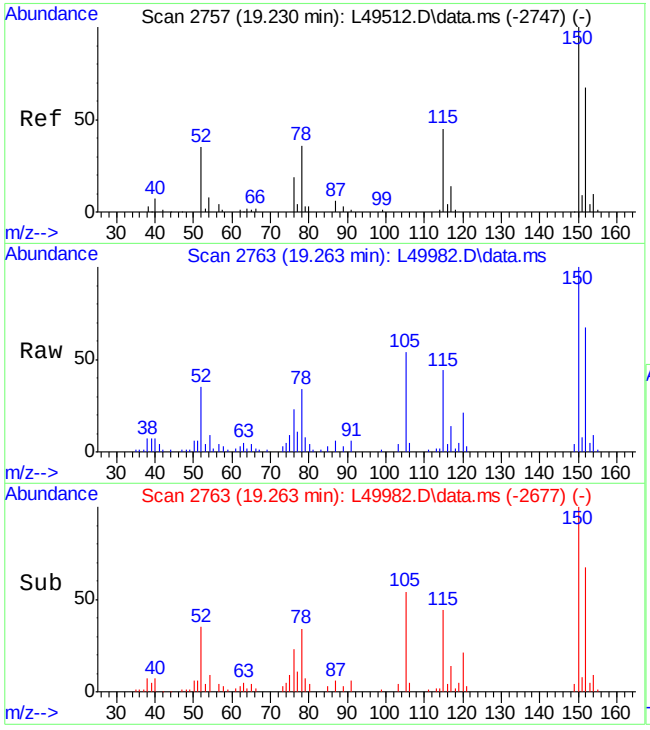



#74
4-Bromofluorobenzene
Concen: 19.06 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 95 Resp: 1019721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 63.2 | 41.6 | 81.6 |
| 176 | 62.3 | 39.6 | 79.6 |

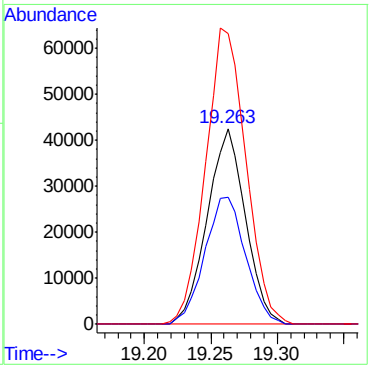


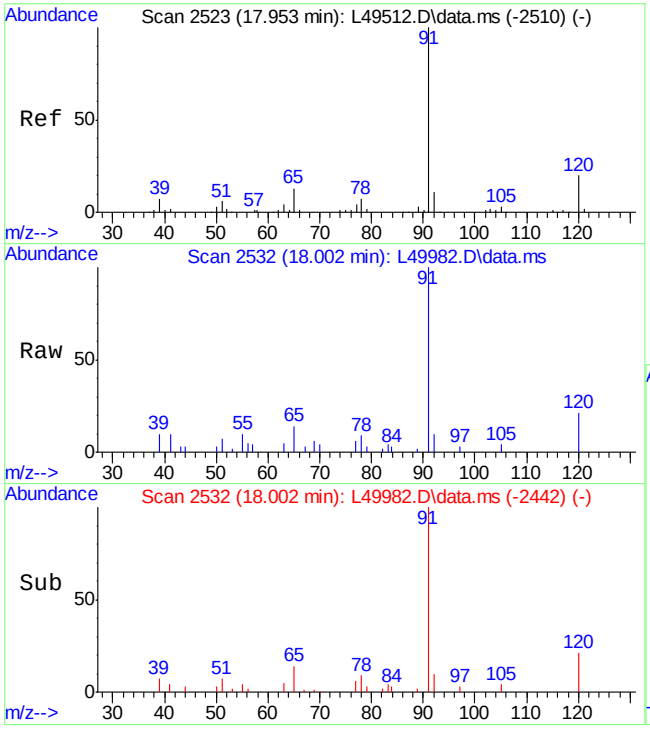




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:152 Resp: 855408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 69.2 | 48.8 | 88.8 |
| 150 | 159.7 | 174.3 | 214.3# |

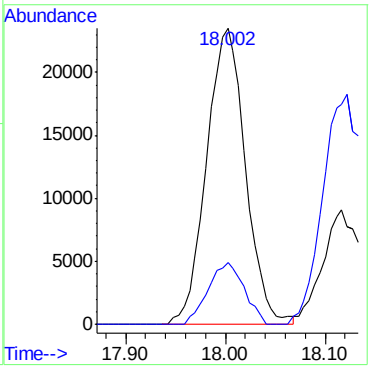


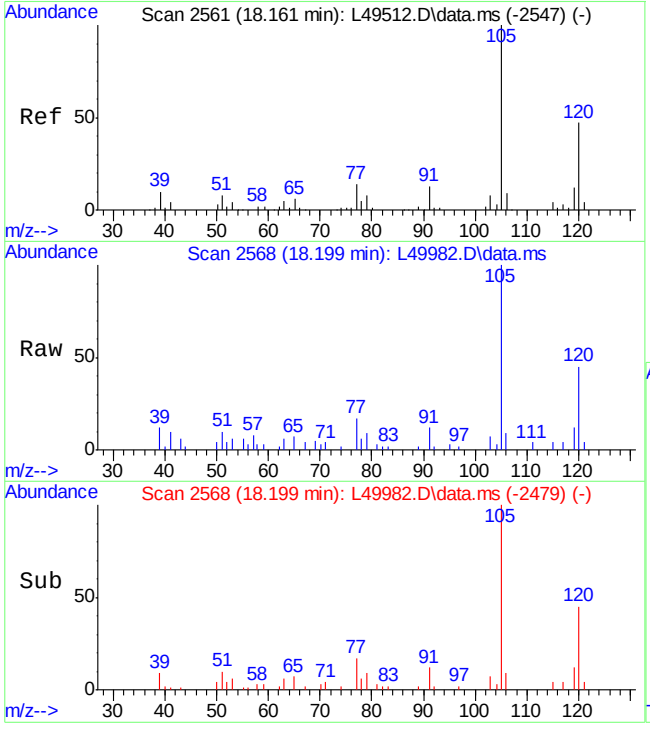



#79
n-Propylbenzene
Concen: 3.20 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 636675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 19.3 | 0.0 | 39.7 |

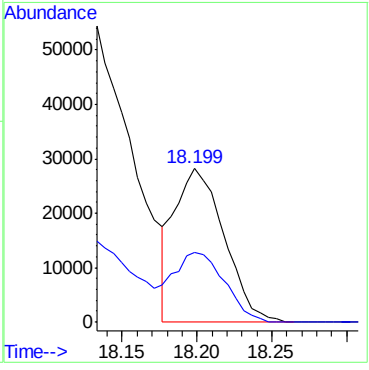


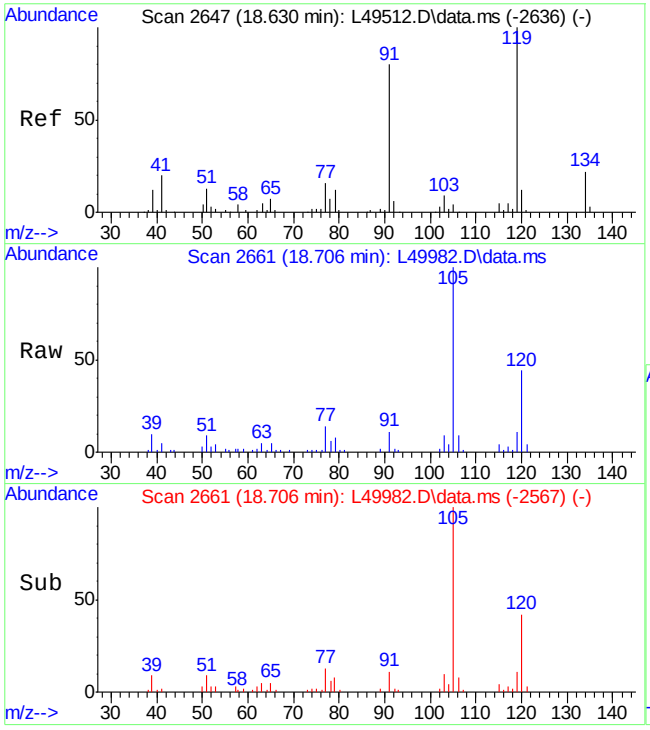




#81
1,3,5-Trimethylbenzene
Concen: 4.87 ug/Kg
RT: 18.199 min Scan# 2568
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 648114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.7 | 24.8 | 64.8 |

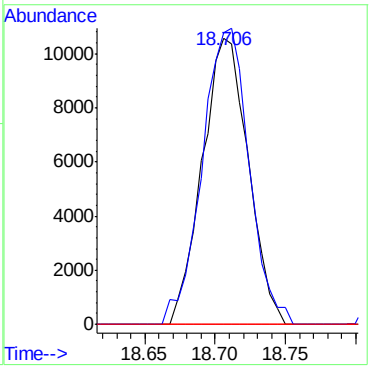


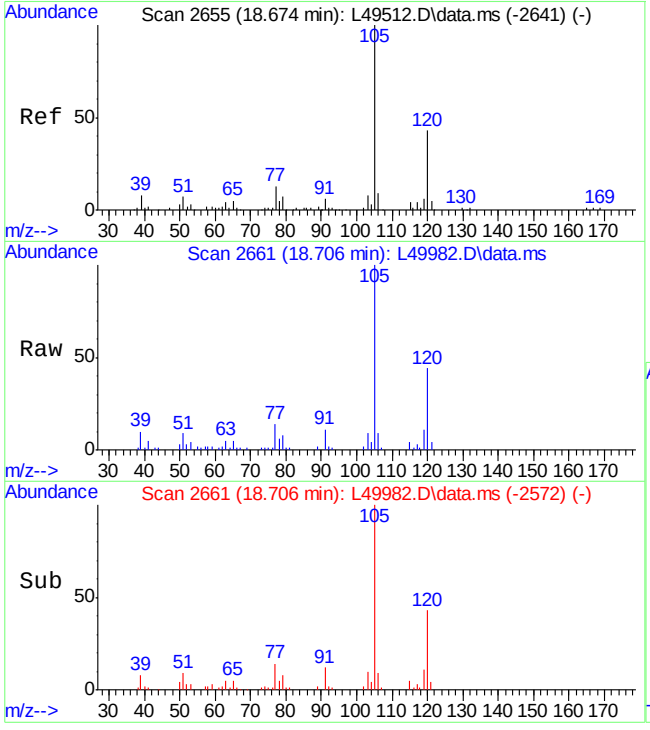



#84
tert-Butylbenzene
Concen: 1.87 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. 0.014 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:119 Resp: 239580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 105.4 | 64.0 | 104.0# |
| 134 | 0.0 | 0.0 | 38.8 |

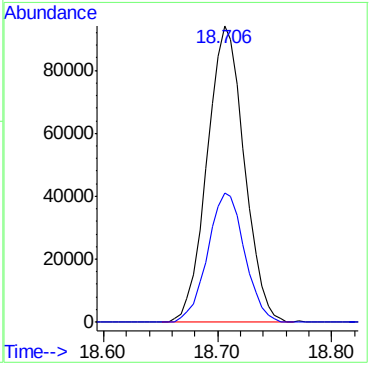


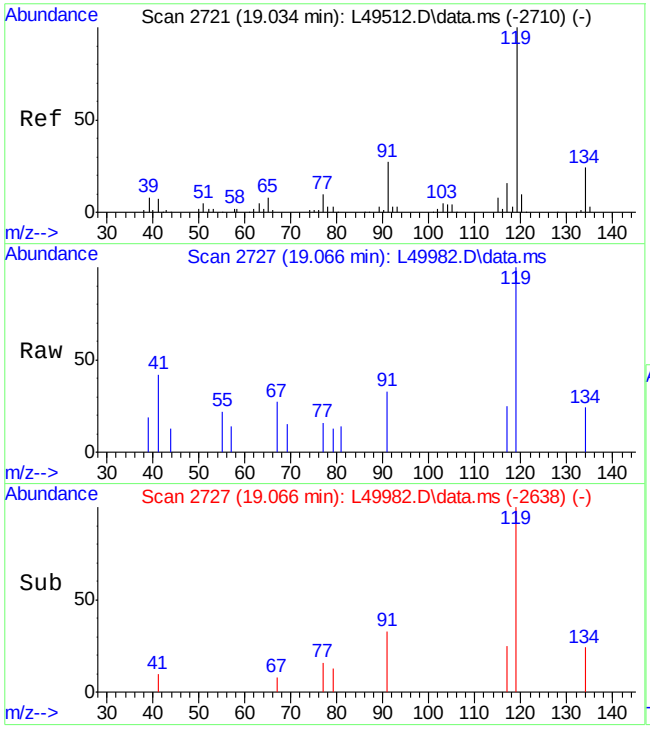




#86
1,2,4-Trimethylbenzene
Concen: 15.00 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 2129390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.3 | 29.7 | 69.7 |

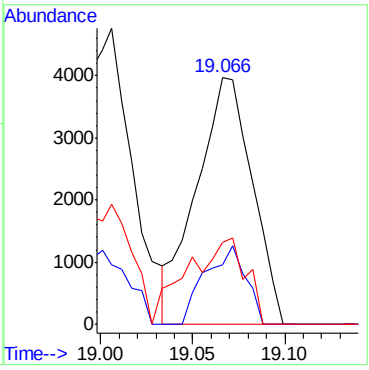


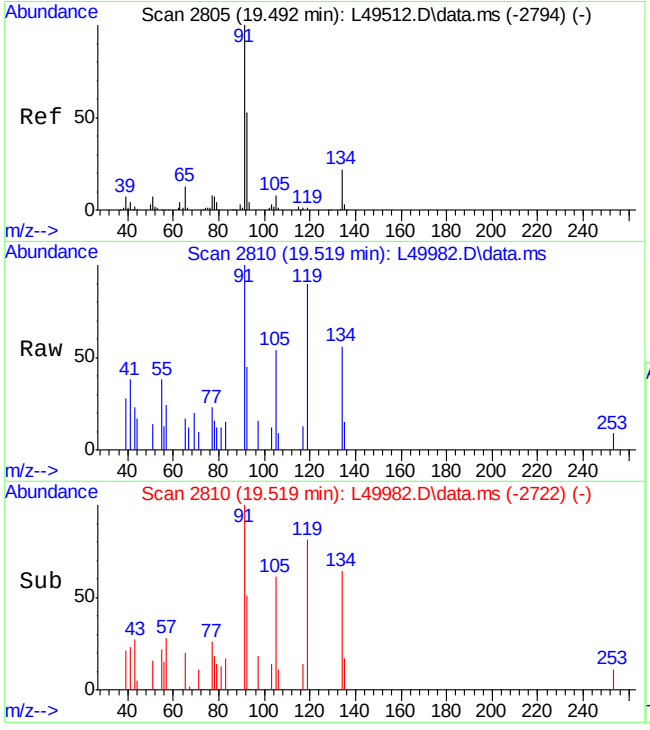



#88
p-Isopropyltoluene
Concen: 0.61 ug/Kg
RT: 19.066 min Scan# 2727
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:119 Resp: 83362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 23.0 | 3.9 | 43.9 |
| 91 | 36.5 | 8.5 | 48.5 |

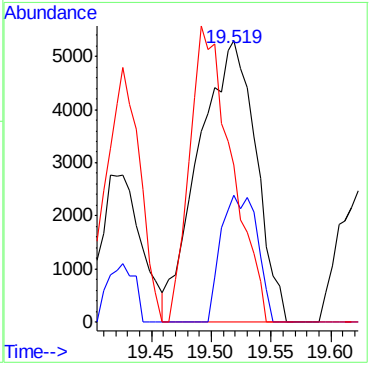


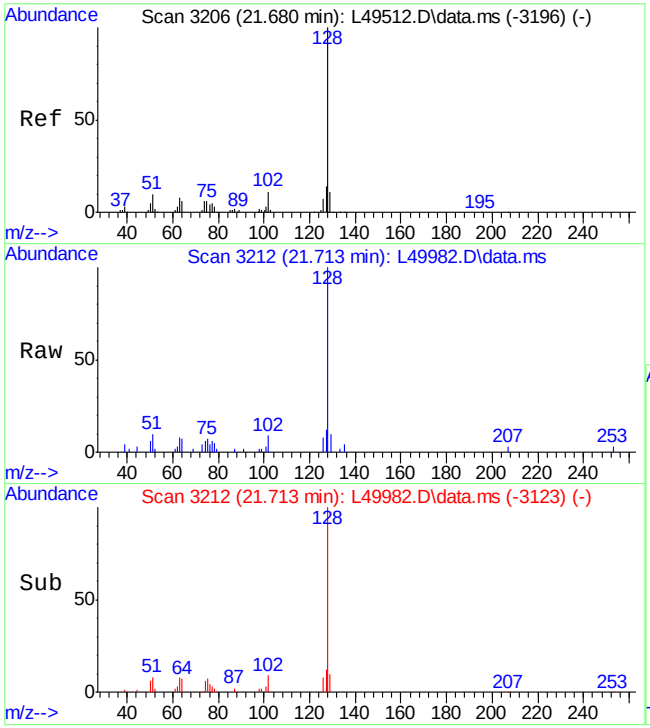




#92
n-Butylbenzene
Concen: 1.19 ug/Kg
RT: 19.519 min Scan# 2810
Delta R.T. -0.022 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 175100

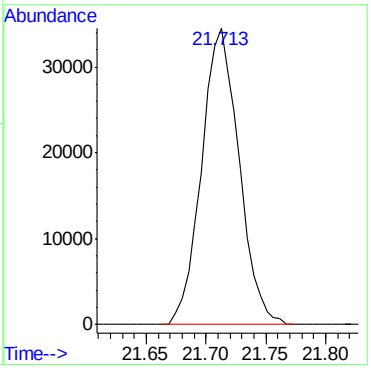
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 29.0 | 35.1 | 75.1# |
| 134 | 77.4 | 1.1 | 41.1# |

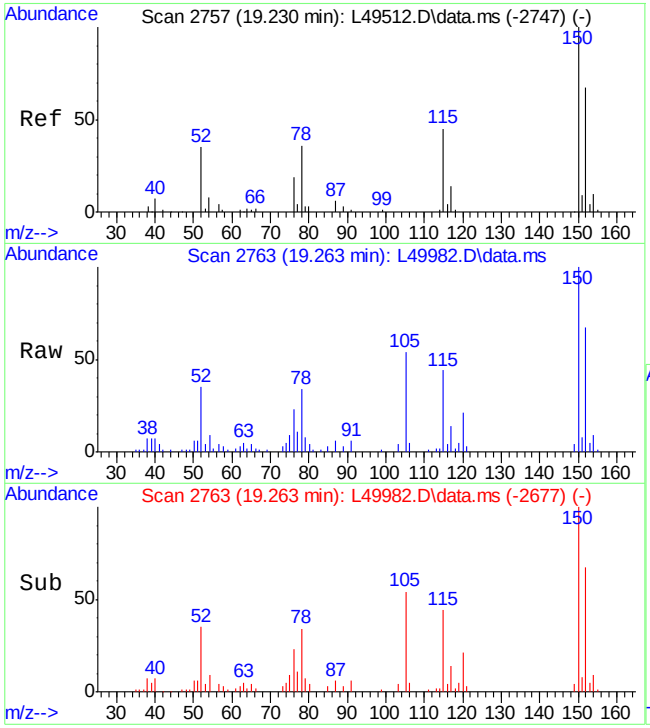





#97
Naphthalene
Concen: 5.75 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:128 Resp: 746443

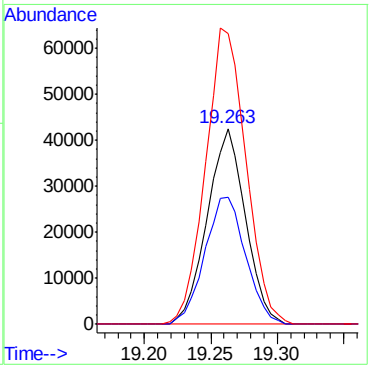


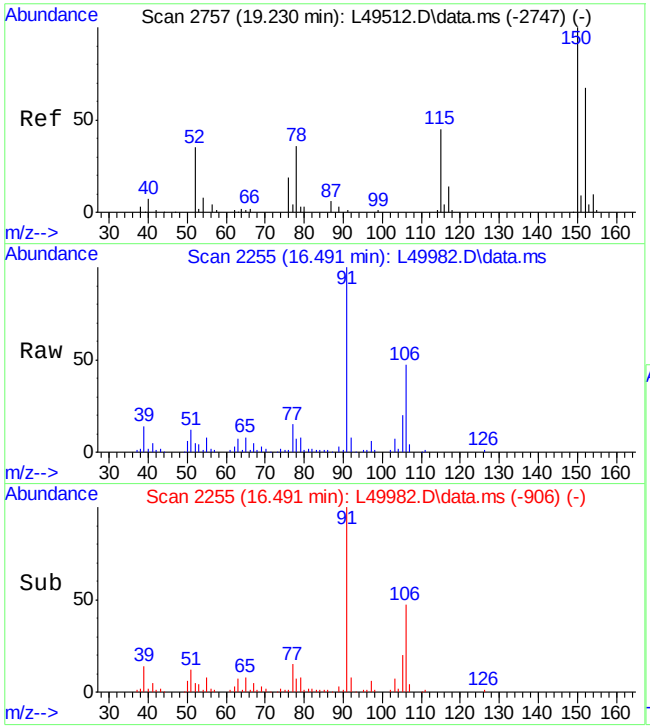




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:152 Resp: 855408

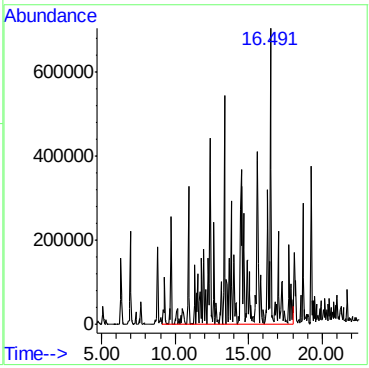
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 69.2 | 41.6 | 81.6 |
| 150 | 159.7 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 1290.51 ug/Kg m
RT: 16.491 min Scan# 2255
Delta R.T. 1.965 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:TIC Resp:302378278



Manual Integrations APPROVED (compounds with "m" flag)
Helena Ueng
08/02/16 18:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49982.D
Acq On : 12 Jul 2016 5:42 pm
Operator : johannat
Sample : C46435-11R
Misc : MS1912,VL1499,5.51,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 02 11:01:16 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

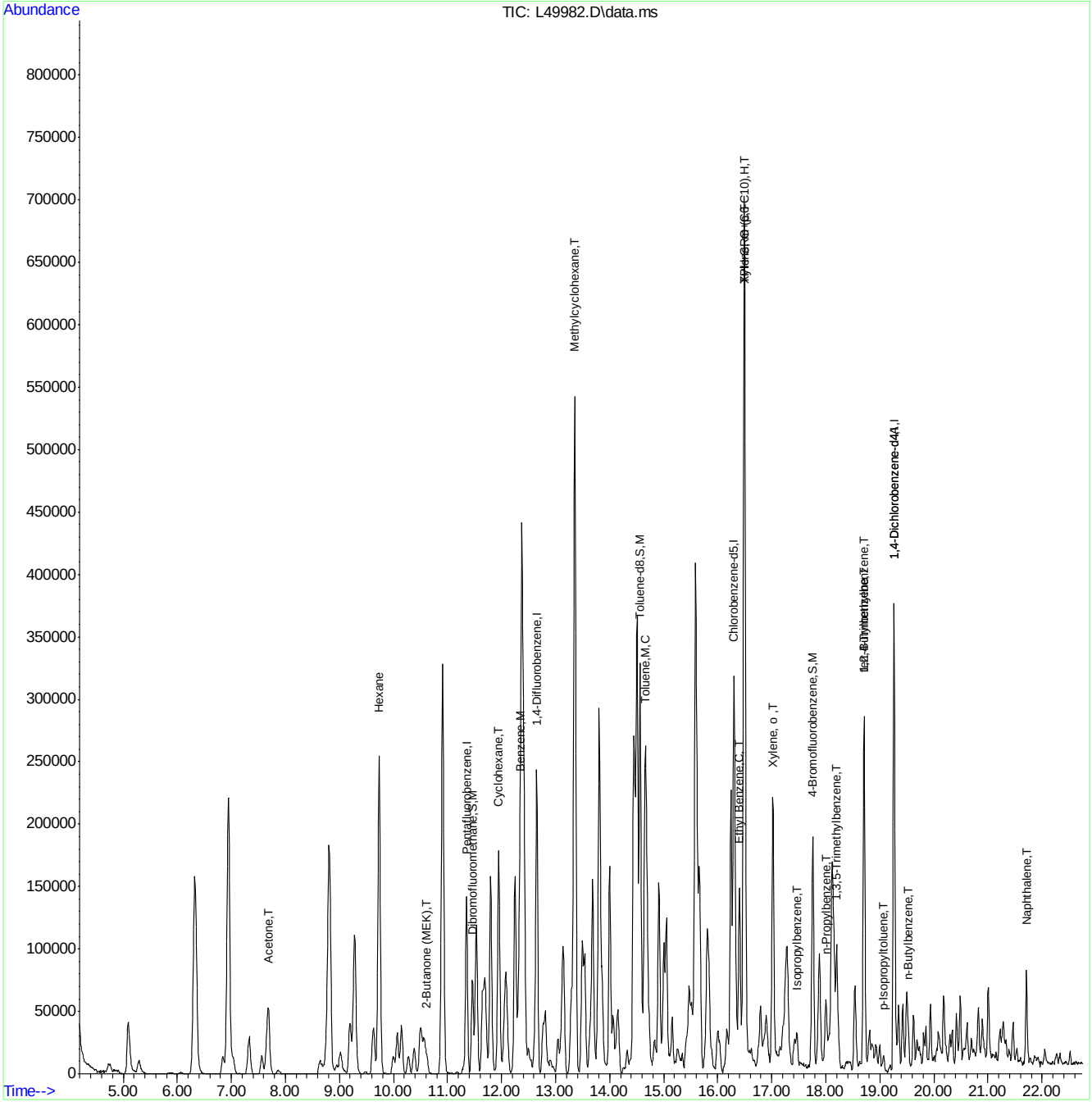
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.356 | 168 | 1220208 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 2132511 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.294 | 117 | 1822657 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 855408 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 855408 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 658511 | 18.03 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 90.15% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2562816 | 19.91 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.55% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 1019721 | 19.06 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 95.30% | | | |
| Target Compounds | | | | | | Qvalue |
| 11) Acetone | 7.679 | 58 | 173785m | 50.01 | ug/Kg | |
| 24) Hexane | 9.730 | 57 | 1948175 | 50.59 | ug/Kg | 97 |
| 30) 2-Butanone (MEK) | 10.609 | 72 | 45662 | 9.98 | ug/Kg# | 91 |
| 38) Cyclohexane | 11.946 | 56 | 1279270 | 23.27 | ug/Kg | 95 |
| 45) Benzene | 12.339 | 78 | 215132 | 1.35 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.353 | 55 | 2909107 | 58.26 | ug/Kg | 99 |
| 57) Toluene | 14.657 | 92 | 918854 | 10.17 | ug/Kg | 96 |
| 67) Ethyl Benzene | 16.398 | 91 | 1278057 | 7.26 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.491 | 106 | 2221882 | 35.57 | ug/Kg | 97 |
| 69) Xylene, o | 17.026 | 106 | 701772 | 11.00 | ug/Kg | 97 |
| 73) Isopropylbenzene | 17.467 | 105 | 293635 | 1.85 | ug/Kg | 100 |
| 79) n-Propylbenzene | 18.002 | 91 | 636675 | 3.20 | ug/Kg | 99 |
| 81) 1,3,5-Trimethylbenzene | 18.199 | 105 | 648114 | 4.87 | ug/Kg | 94 |
| 84) tert-Butylbenzene | 18.706 | 119 | 239580 | 1.87 | ug/Kg# | 73 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 2129390 | 15.00 | ug/Kg | 91 |
| 88) p-Isopropyltoluene | 19.066 | 119 | 83362 | 0.61 | ug/Kg | 91 |
| 92) n-Butylbenzene | 19.519 | 91 | 175100 | 1.19 | ug/Kg# | 41 |
| 97) Naphthalene | 21.713 | 128 | 746443 | 5.75 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 16.491 | TIC | 302378278m | 1290.51 | ug/Kg | |

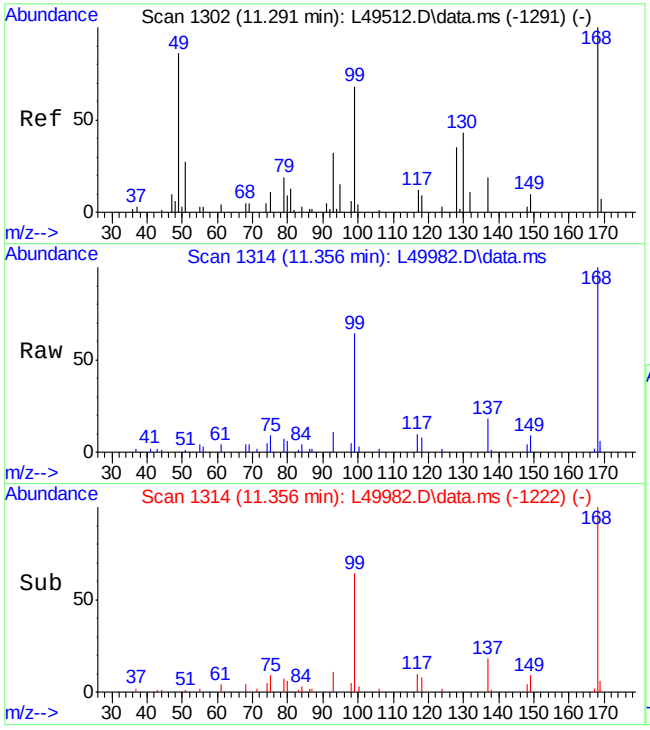
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49982.D
Acq On : 12 Jul 2016 5:42 pm
Operator : johannat
Sample : C46435-11R
Misc : MS1912,VL1499,5.51,,,,1
ALS Vial : 15 Sample Multiplier: 1

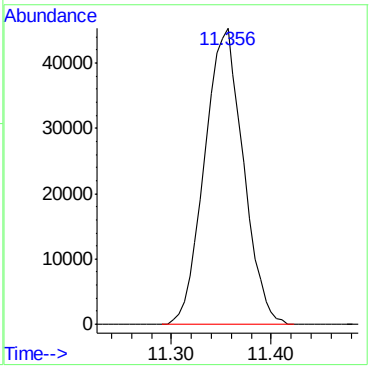
Quant Time: Aug 02 11:01:16 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

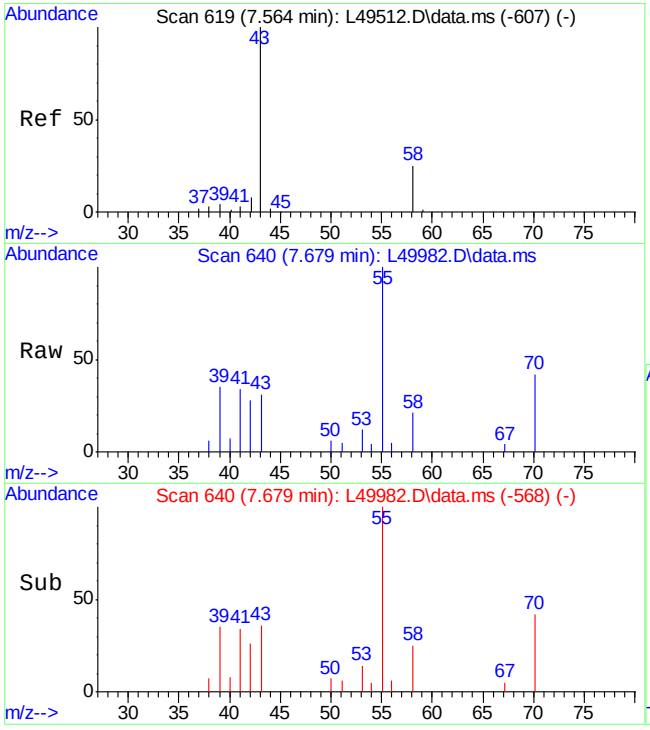





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.356 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:168 Resp: 1220208

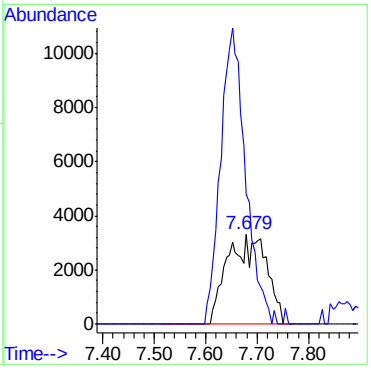


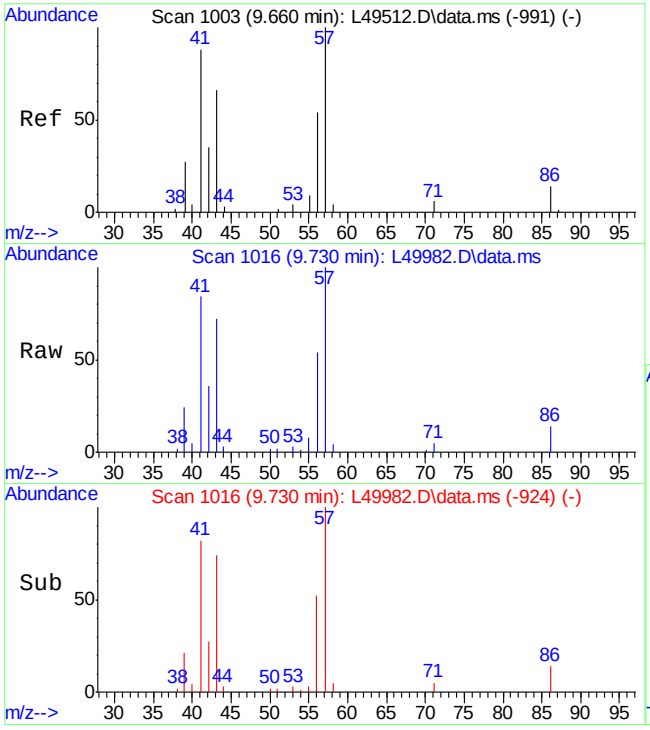




#11
Acetone
Concen: 50.01 ug/Kg m
RT: 7.679 min Scan# 640
Delta R.T. 0.044 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 58 Resp: 173785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 58 | 100 | | |
| 43 | 213.1 | 428.1 | 468.1# |

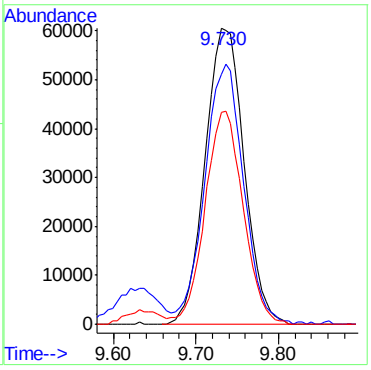


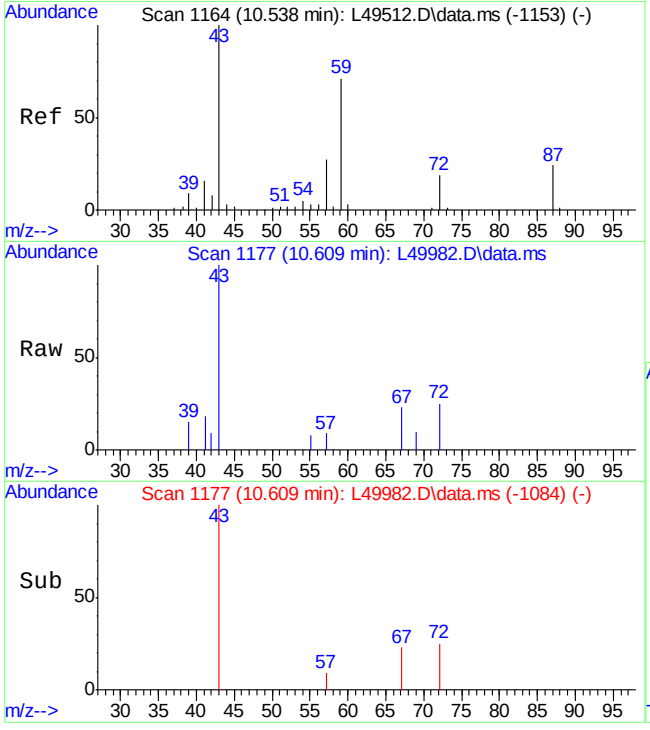



#24
Hexane
Concen: 50.59 ug/Kg
RT: 9.730 min Scan# 1016
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 57 Resp: 1948175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 87.7 | 73.8 | 110.8 |
| 43 | 70.3 | 56.6 | 84.8 |

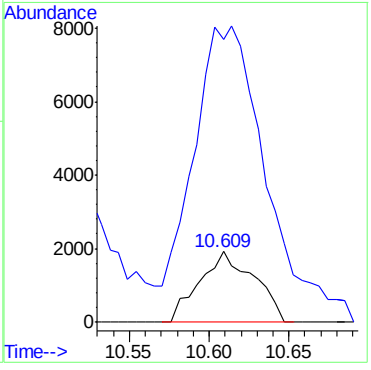


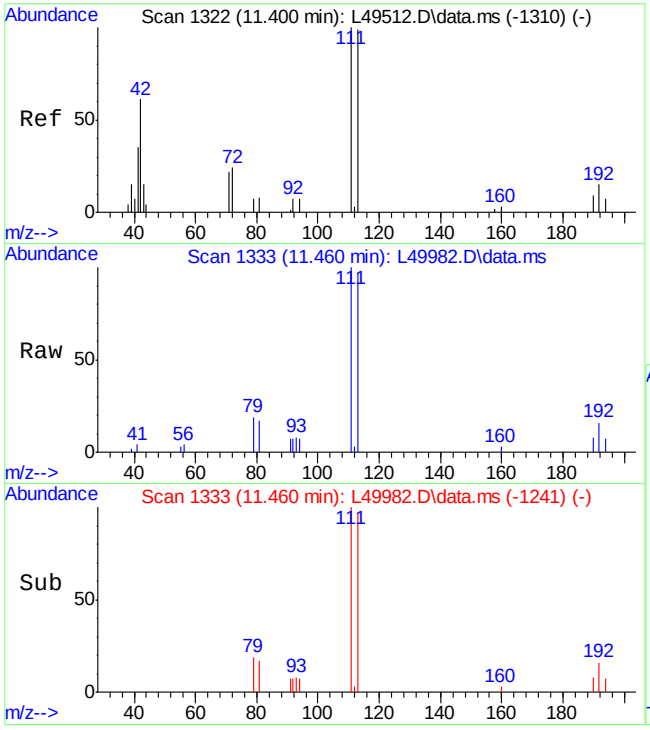




#30
2-Butanone (MEK)
Concen: 9.98 ug/Kg
RT: 10.609 min Scan# 1177
Delta R.T. 0.006 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 72 Resp: 45662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 72 | 100 | | |
| 43 | 566.5 | 573.4 | 613.4# |

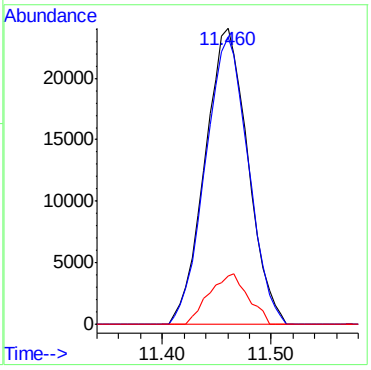


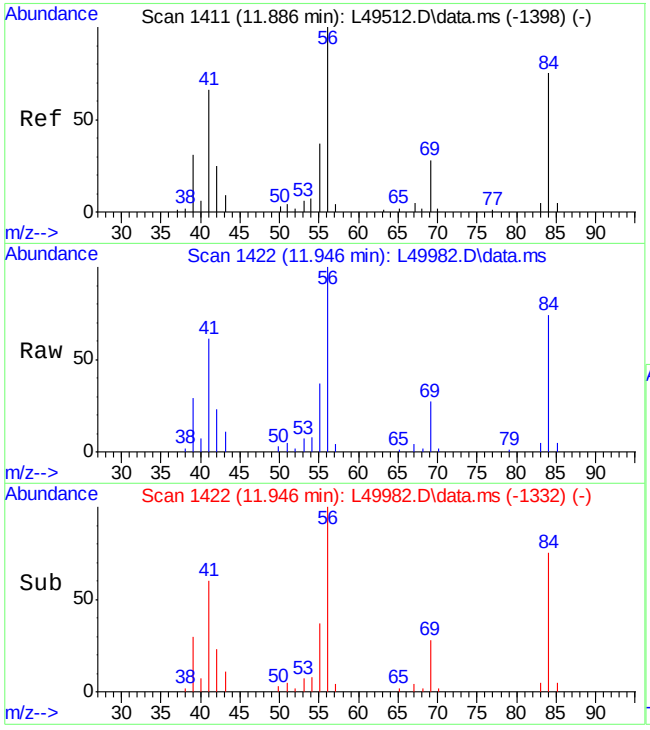



#36
Dibromofluoromethane
Concen: 18.03 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:111 Resp: 658511

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.9 | 78.6 | 118.6 |
| 192 | 15.5 | 0.0 | 34.1 |

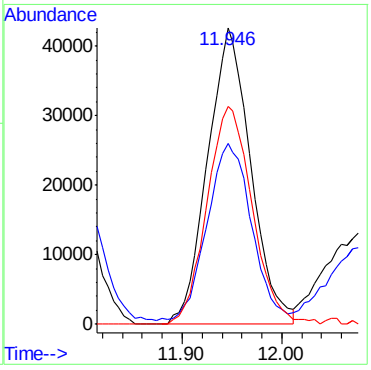


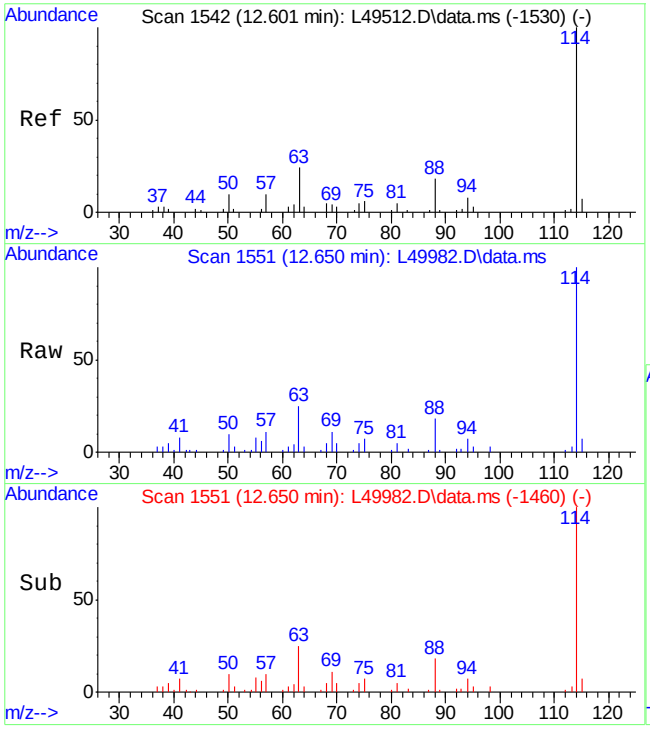




#38
Cyclohexane
Concen: 23.27 ug/Kg
RT: 11.946 min Scan# 1422
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 56 Resp: 1279270

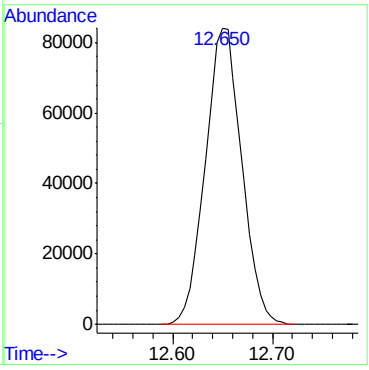
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 60.8 | 53.7 | 80.5 |
| 84 | 77.0 | 60.5 | 90.7 |

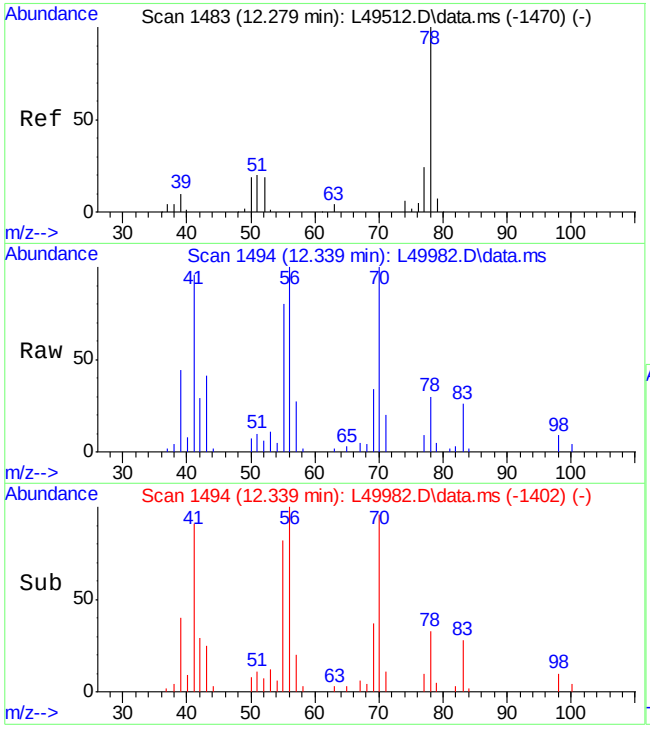





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

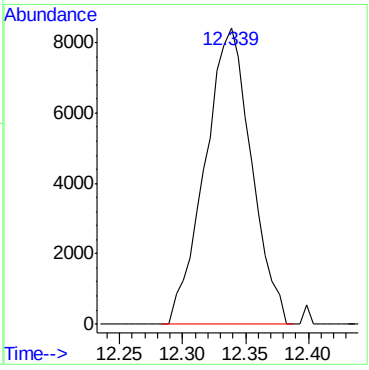
Tgt Ion:114 Resp: 2132511

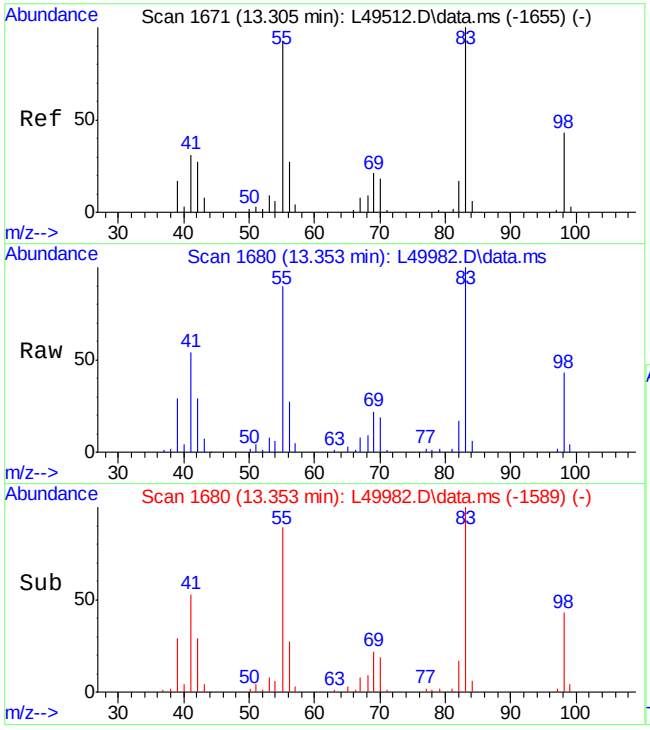



#45
Benzene
Concen: 1.35 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 78 Resp: 215132

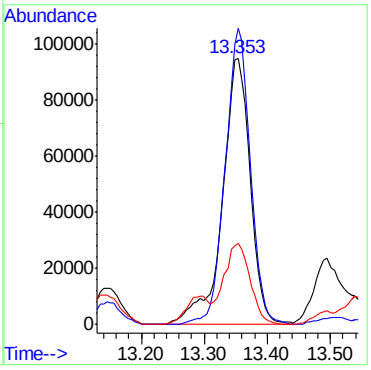


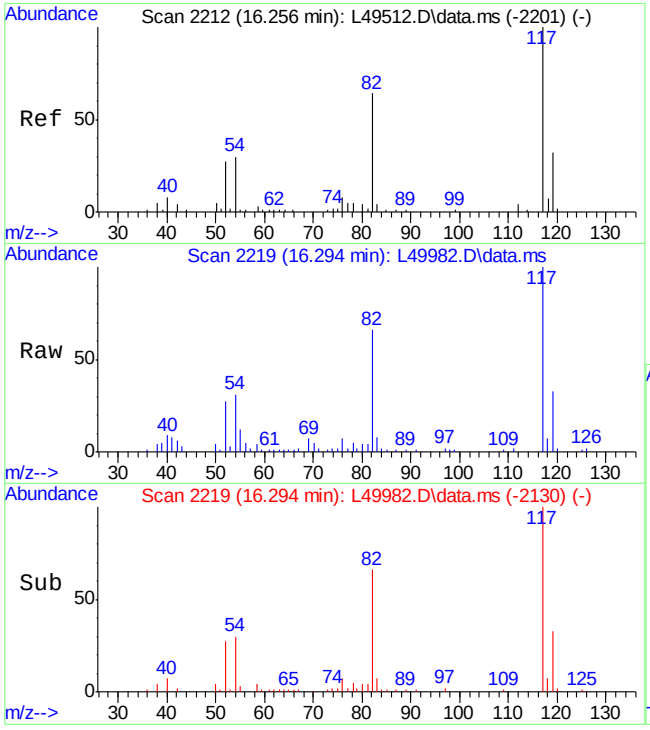



#48
Methylcyclohexane
Concen: 58.26 ug/Kg
RT: 13.353 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 55 Resp: 2909107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 100.6 | 80.6 | 120.6 |
| 56 | 29.0 | 11.5 | 51.5 |

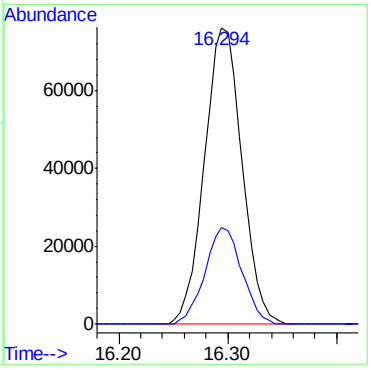


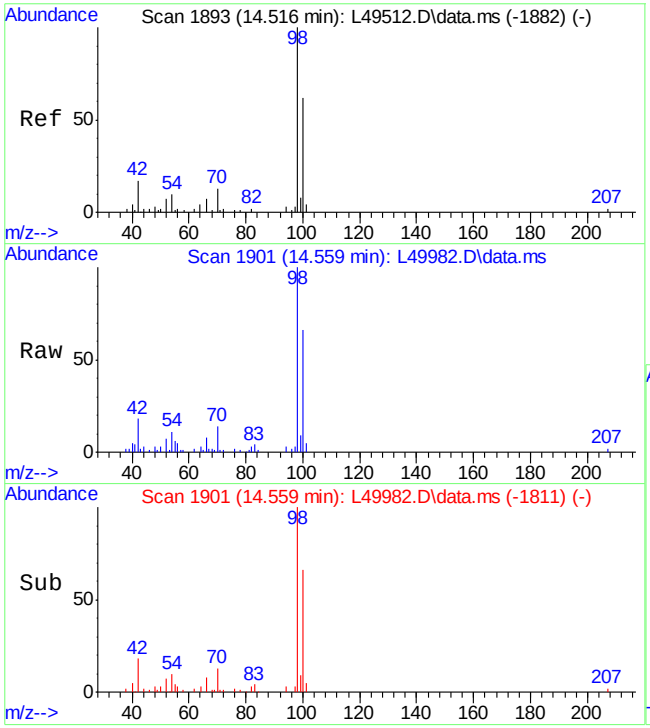




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.294 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:117 Resp: 1822657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.0 | 10.2 | 50.2 |

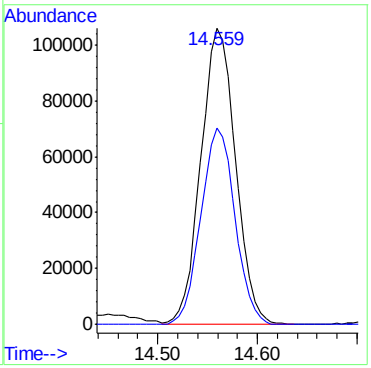


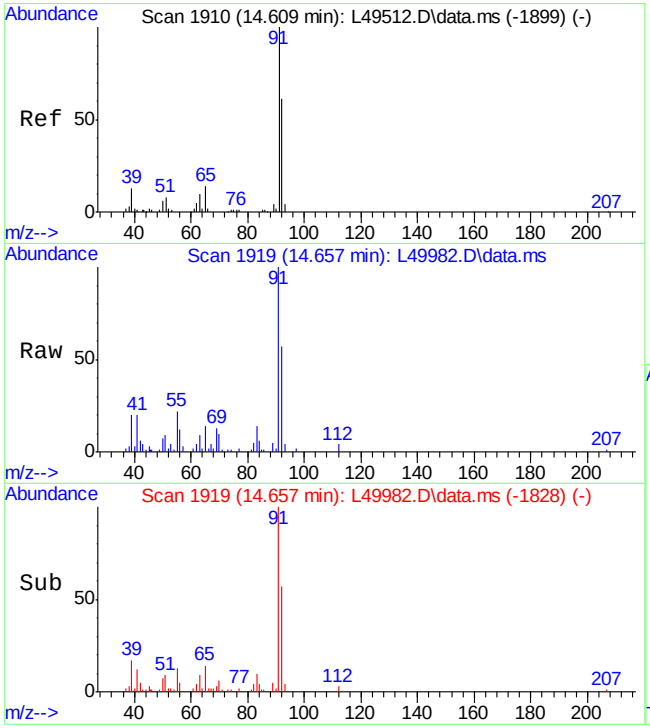



#56
Toluene-d8
Concen: 19.91 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 98 Resp: 2562816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 45.2 | 85.2 |

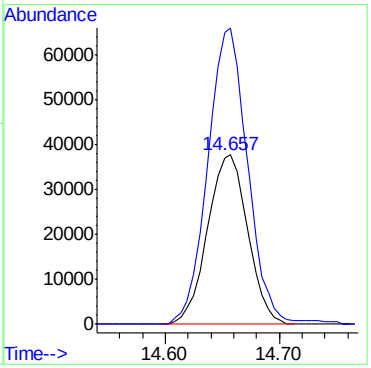


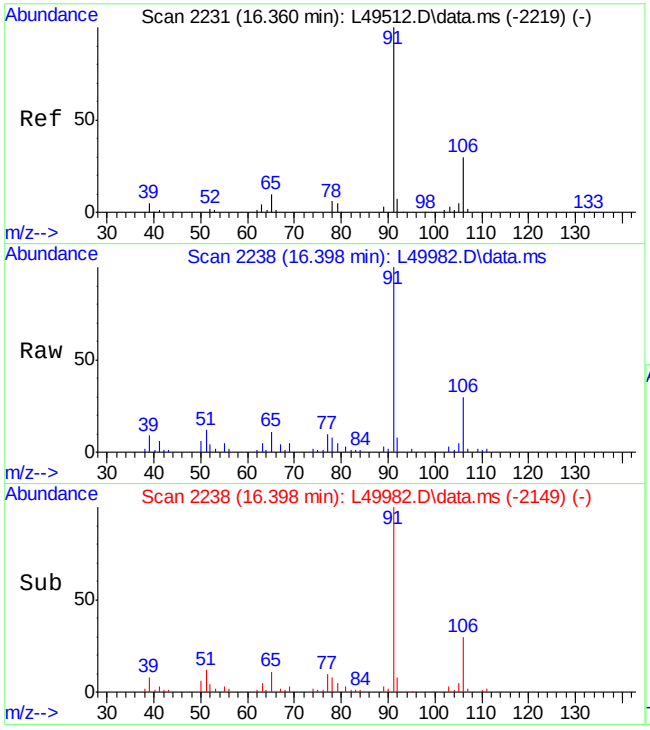




#57
Toluene
Concen: 10.17 ug/Kg
RT: 14.657 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 92 Resp: 918854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.3 | 149.2 | 189.2 |

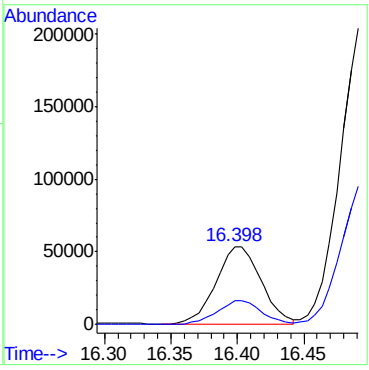


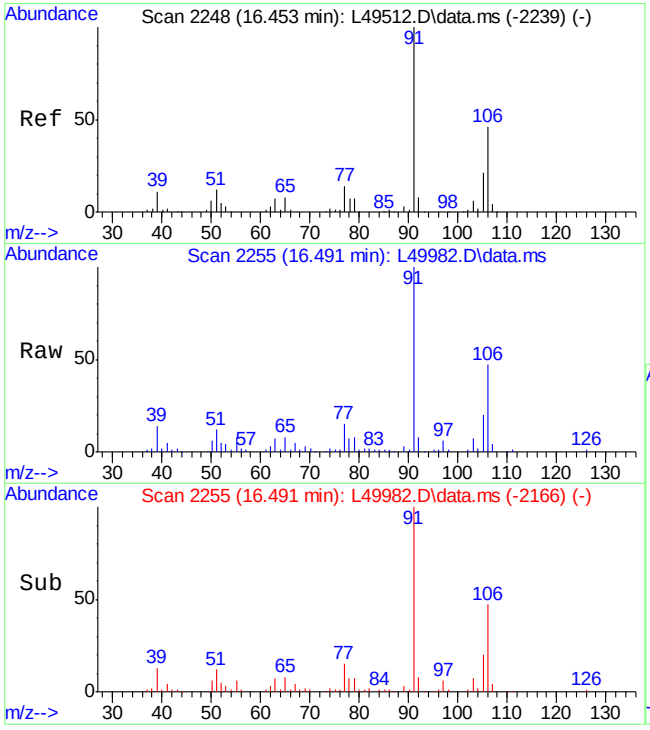



#67
Ethyl Benzene
Concen: 7.26 ug/Kg
RT: 16.398 min Scan# 2238
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 1278057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.2 | 8.6 | 48.6 |

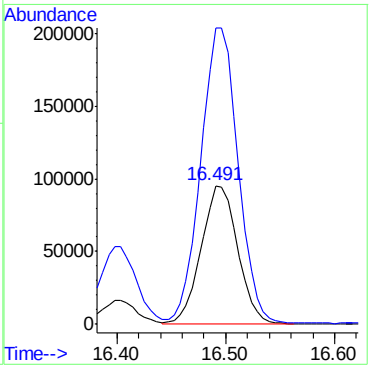


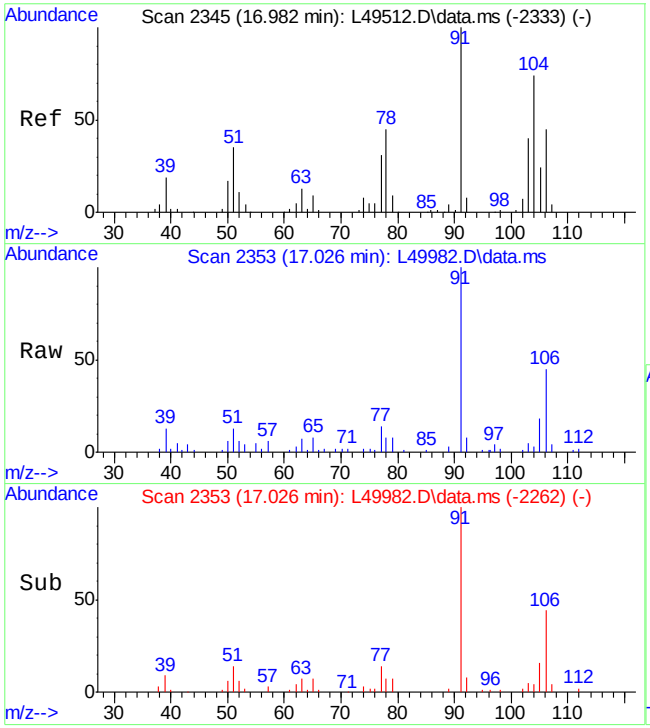




#68
Xylene, m+p
Concen: 35.57 ug/Kg
RT: 16.491 min Scan# 2255
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:106 Resp: 2221882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.5 | 202.1 | 242.1 |

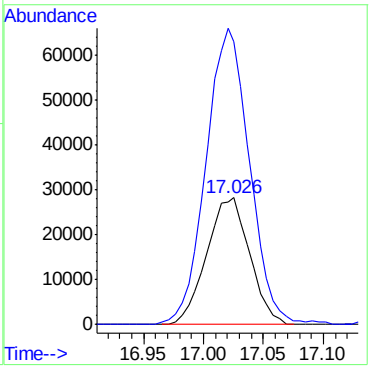


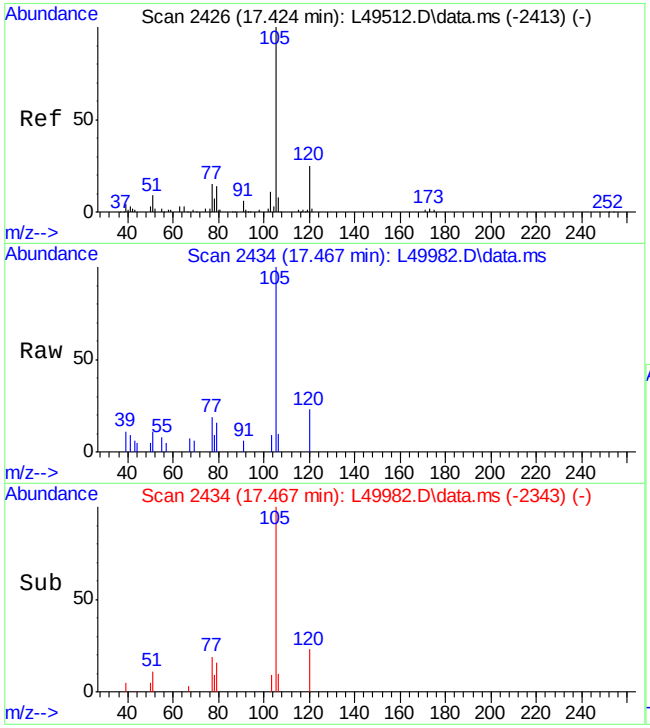



#69
Xylene, o
Concen: 11.00 ug/Kg
RT: 17.026 min Scan# 2353
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:106 Resp: 701772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 237.0 | 212.6 | 252.6 |

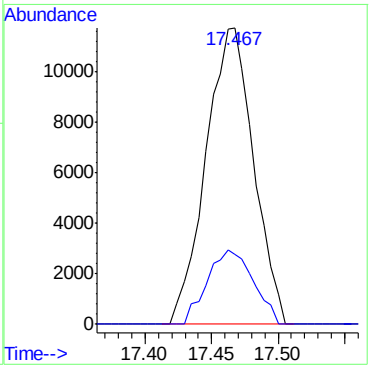


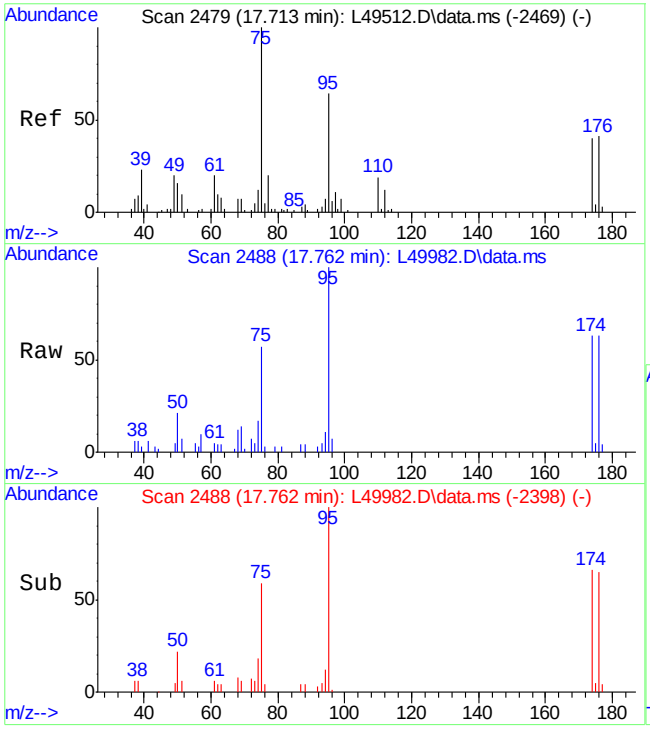




#73
Isopropylbenzene
Concen: 1.85 ug/Kg
RT: 17.467 min Scan# 2434
Delta R.T. -0.005 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 293635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.1 | 4.1 | 44.1 |

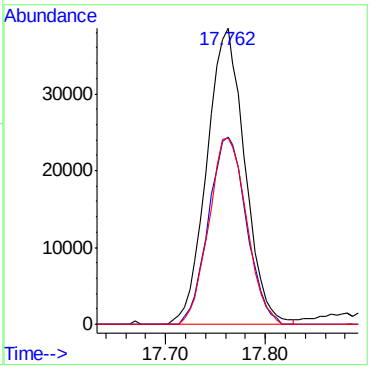


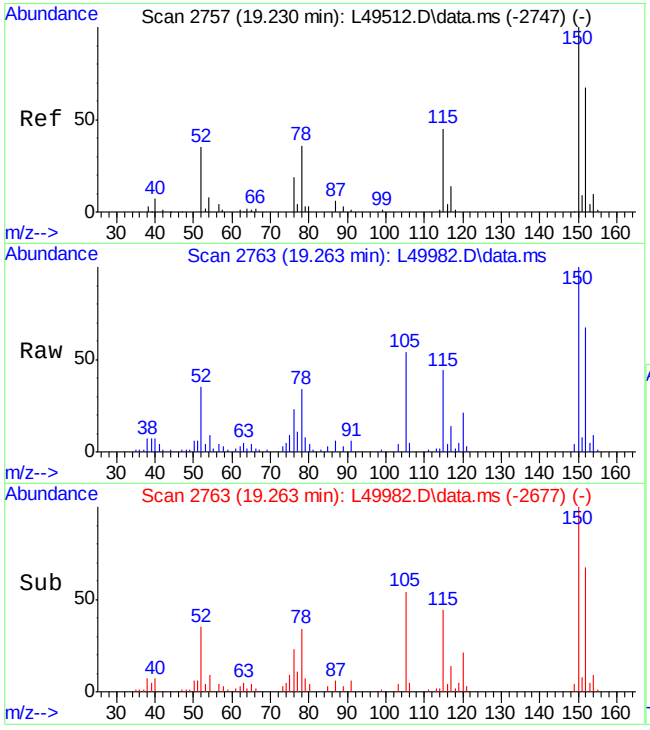



#74
4-Bromofluorobenzene
Concen: 19.06 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 95 Resp: 1019721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 63.2 | 41.6 | 81.6 |
| 176 | 62.3 | 39.6 | 79.6 |

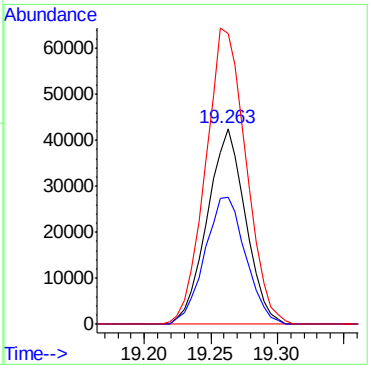


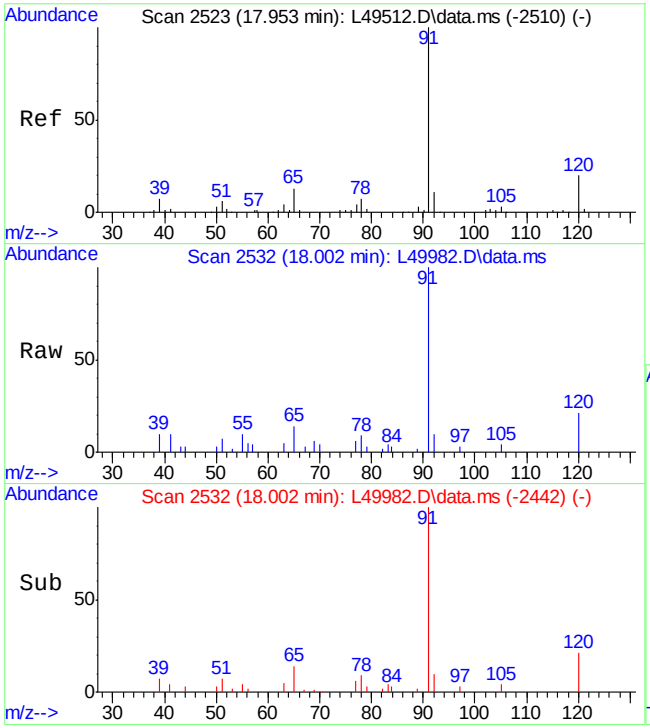




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:152 Resp: 855408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 69.2 | 48.8 | 88.8 |
| 150 | 159.7 | 174.3 | 214.3# |

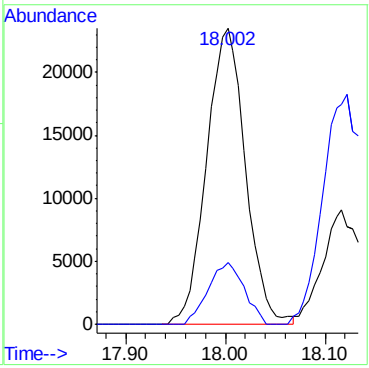


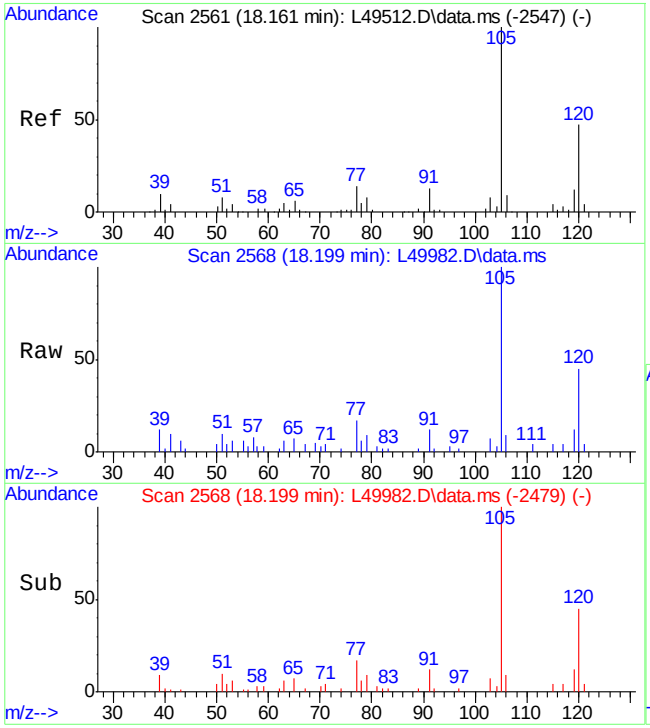



#79
n-Propylbenzene
Concen: 3.20 ug/Kg
RT: 18.002 min Scan# 2532
Delta R.T. -0.011 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 636675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 19.3 | 0.0 | 39.7 |

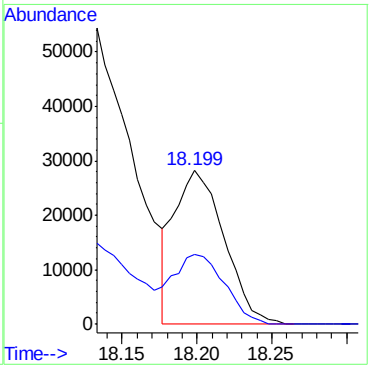


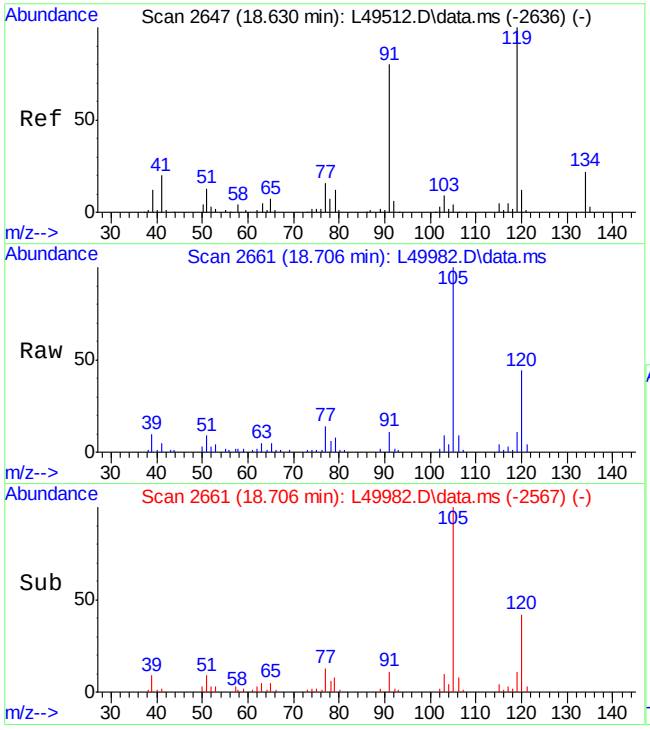




#81
1,3,5-Trimethylbenzene
Concen: 4.87 ug/Kg
RT: 18.199 min Scan# 2568
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 648114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.7 | 24.8 | 64.8 |

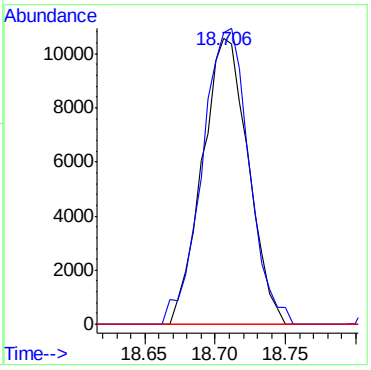


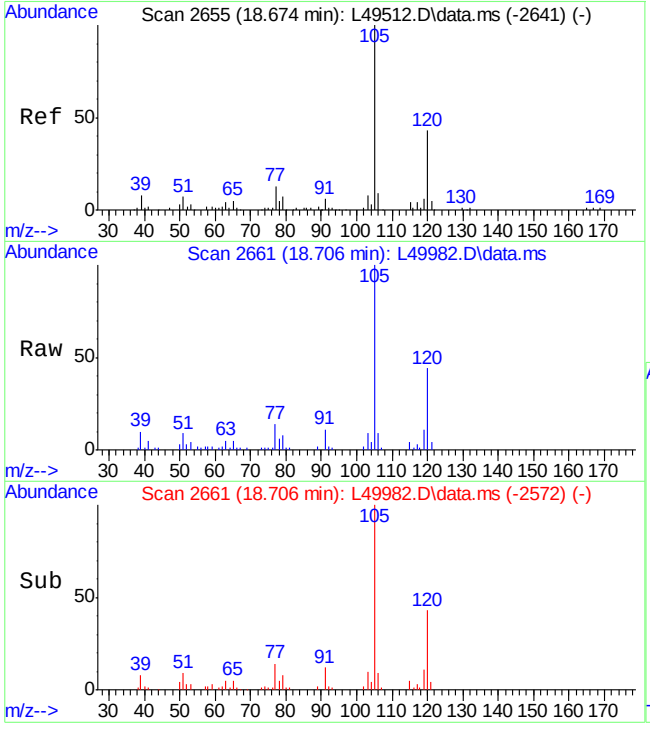



#84
tert-Butylbenzene
Concen: 1.87 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. 0.014 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:119 Resp: 239580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 105.4 | 64.0 | 104.0# |
| 134 | 0.0 | 0.0 | 38.8 |

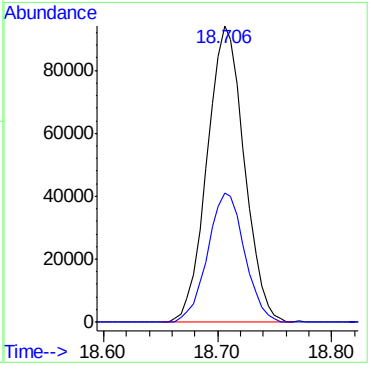


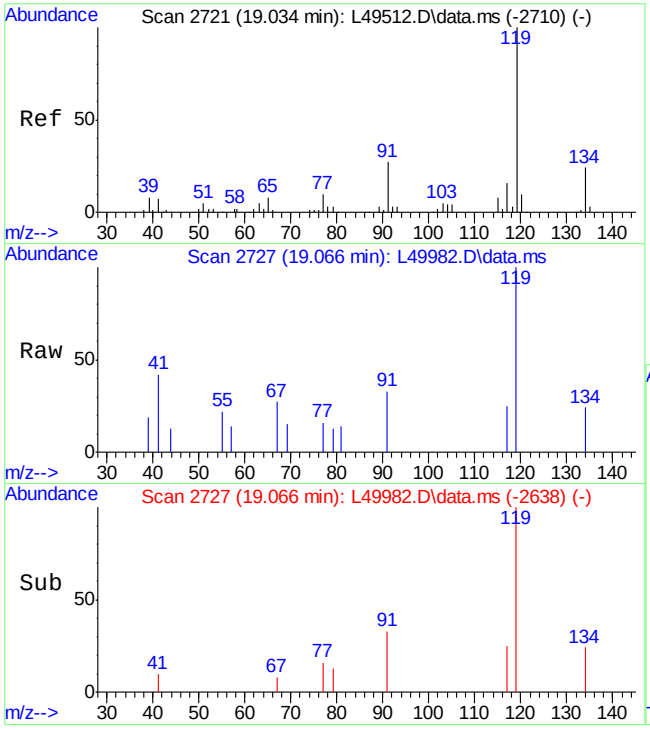




#86
1,2,4-Trimethylbenzene
Concen: 15.00 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:105 Resp: 2129390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.3 | 29.7 | 69.7 |

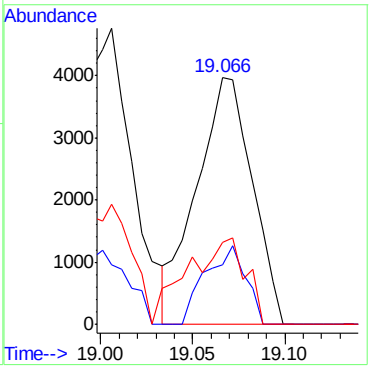


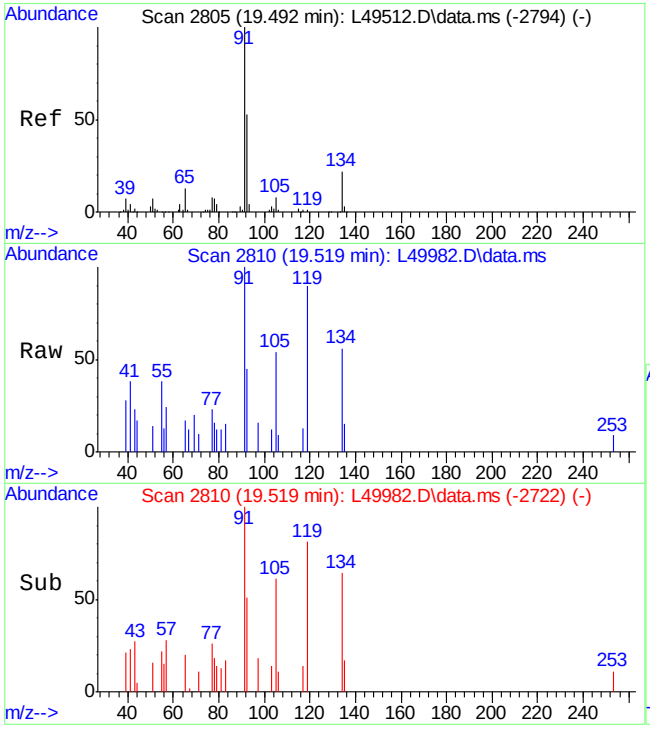



#88
p-Isopropyltoluene
Concen: 0.61 ug/Kg
RT: 19.066 min Scan# 2727
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:119 Resp: 83362

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 23.0 | 3.9 | 43.9 |
| 91 | 36.5 | 8.5 | 48.5 |

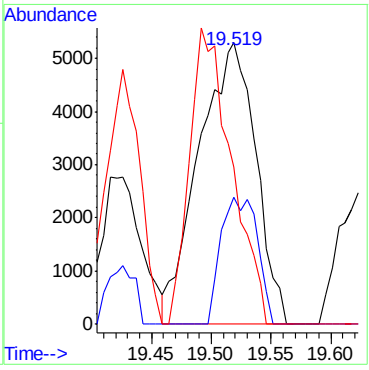


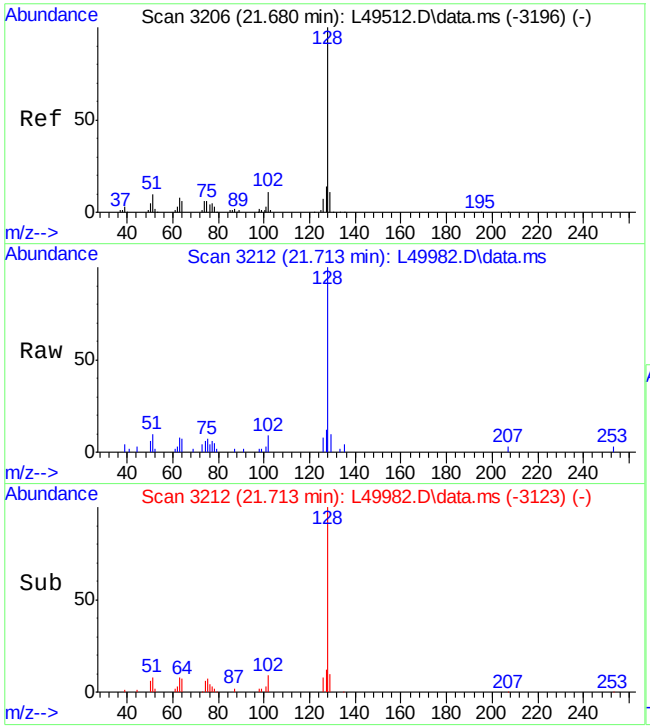




#92
n-Butylbenzene
Concen: 1.19 ug/Kg
RT: 19.519 min Scan# 2810
Delta R.T. -0.022 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion: 91 Resp: 175100

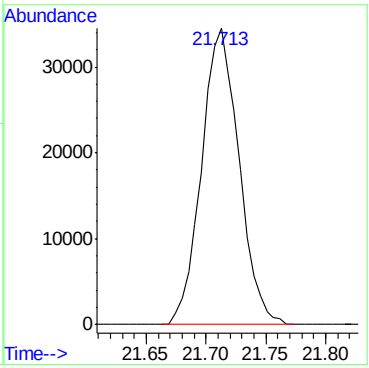
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 29.0 | 35.1 | 75.1# |
| 134 | 77.4 | 1.1 | 41.1# |

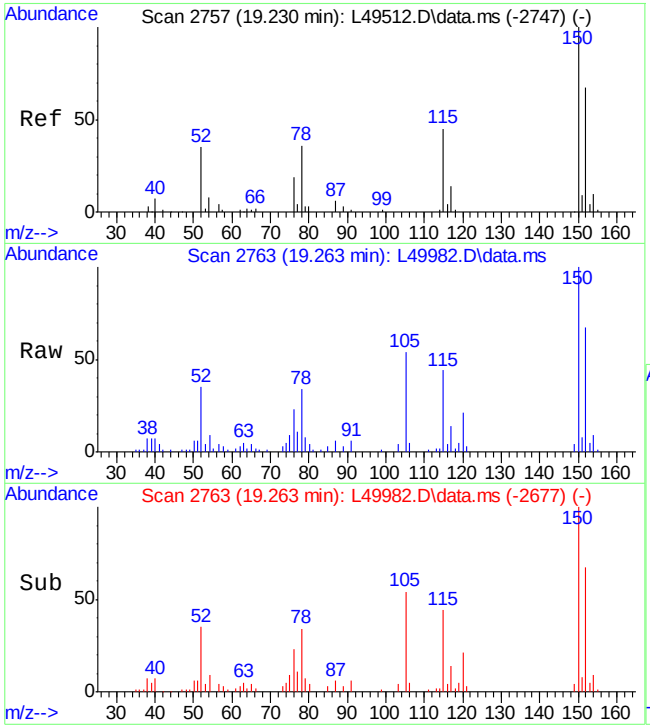





#97
Naphthalene
Concen: 5.75 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:128 Resp: 746443

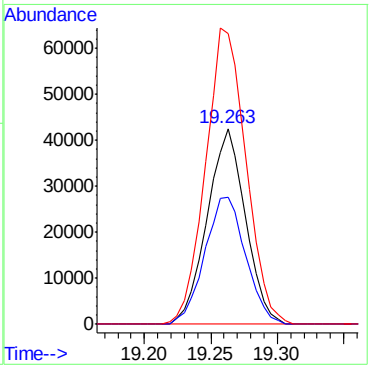


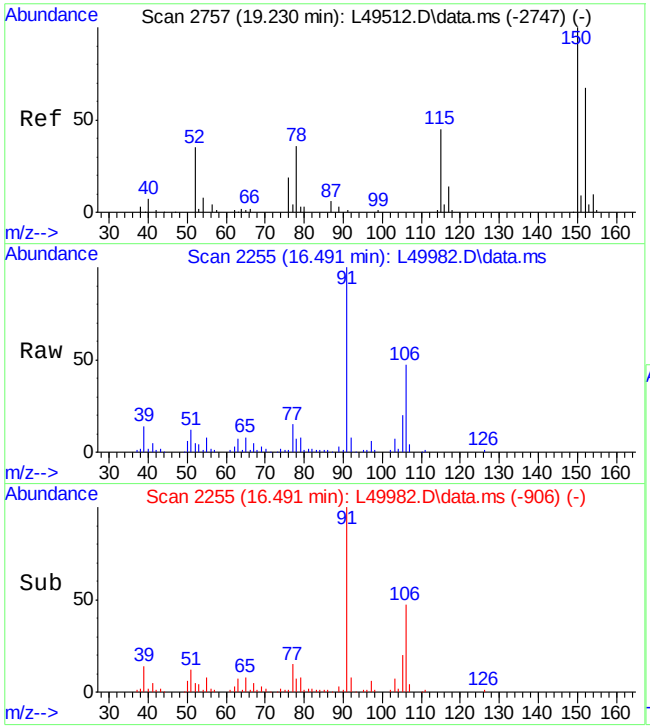




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:152 Resp: 855408

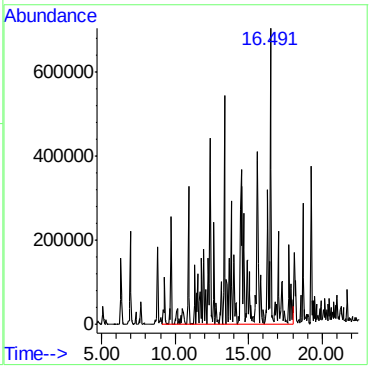
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 69.2 | 41.6 | 81.6 |
| 150 | 159.7 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 1290.51 ug/Kg m
RT: 16.491 min Scan# 2255
Delta R.T. 1.965 min
Lab File: L49982.D
Acq: 12 Jul 2016 5:42 pm

Tgt Ion:TIC Resp:302378278



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49983.D
Acq On : 12 Jul 2016 6:11 pm
Operator : johannat
Sample : C46435-12R
Misc : MS1912,VL1499,5.35,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 02 11:01:36 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

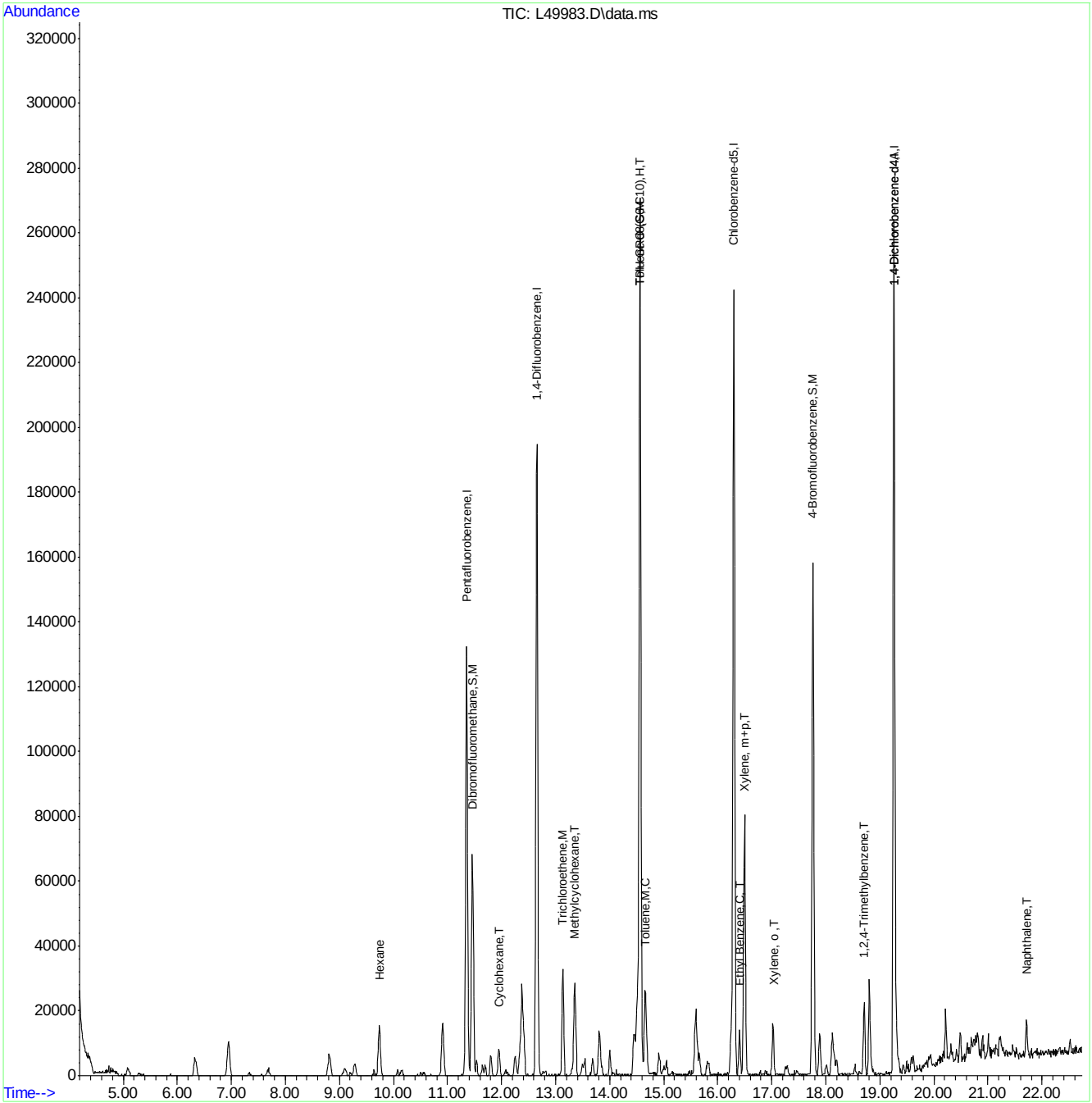
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.357 | 168 | 1181185 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2035239 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1768575 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 818266 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 818266 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 613623 | 17.35 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 86.75% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2416138 | 19.34 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.70% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 932625 | 17.97 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 89.85% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.736 | 57 | 116825 | 3.13 | ug/Kg | 99 |
| 38) Cyclohexane | 11.957 | 56 | 67657 | 1.27 | ug/Kg | 93 |
| 46) Trichloroethene | 13.135 | 95 | 147783 | 3.92 | ug/Kg | 91 |
| 48) Methylcyclohexane | 13.354 | 55 | 163817 | 3.44 | ug/Kg | 97 |
| 57) Toluene | 14.652 | 92 | 141265 | 1.61 | ug/Kg | 96 |
| 67) Ethyl Benzene | 16.404 | 91 | 164853 | 0.96 | ug/Kg | 98 |
| 68) Xylene, m+p | 16.502 | 106 | 296265 | 4.89 | ug/Kg | 99 |
| 69) Xylene, o | 17.031 | 106 | 66900 | 1.08 | ug/Kg# | 86 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 199897 | 1.47 | ug/Kg | 90 |
| 97) Naphthalene | 21.713 | 128 | 149259 | 1.20 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 14.565 | TIC | 39474797m | 111.45 | ug/Kg | |

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

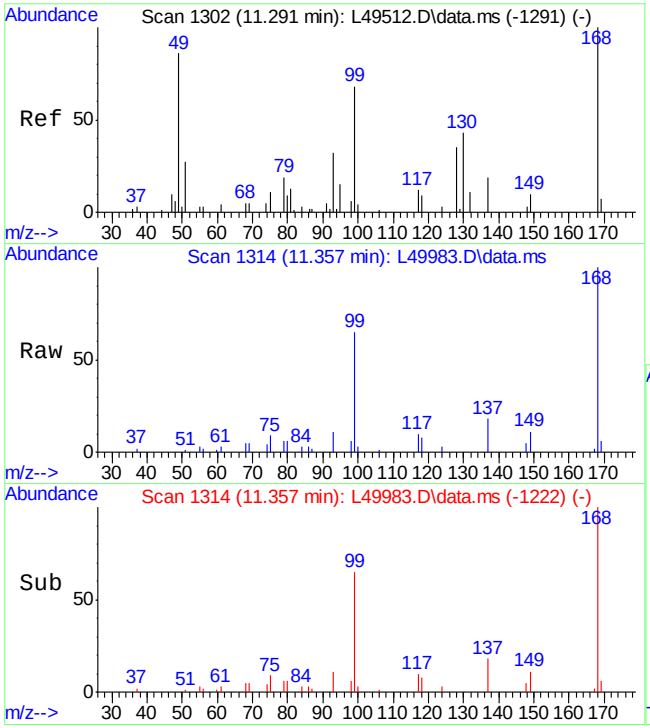
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49983.D
Acq On : 12 Jul 2016 6:11 pm
Operator : johannat
Sample : C46435-12R
Misc : MS1912,VL1499,5.35,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 02 11:01:36 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

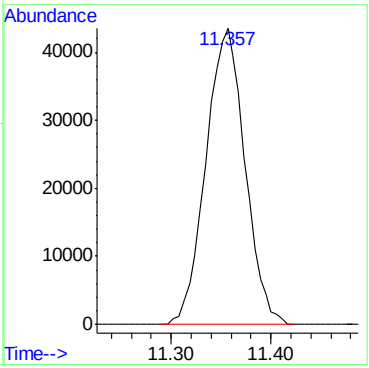


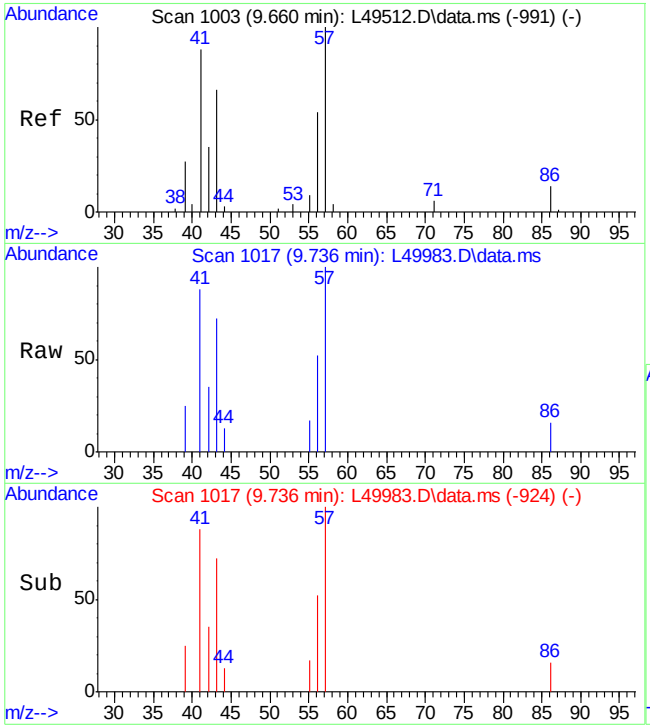

VL1485S.M Tue Aug 02 11:02:39 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.357 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:168 Resp: 1181185

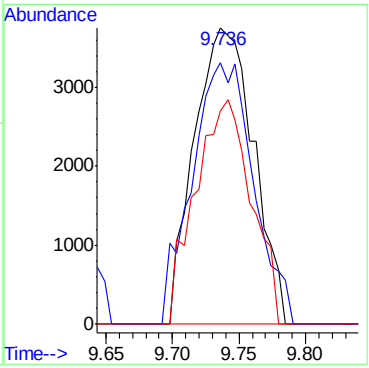


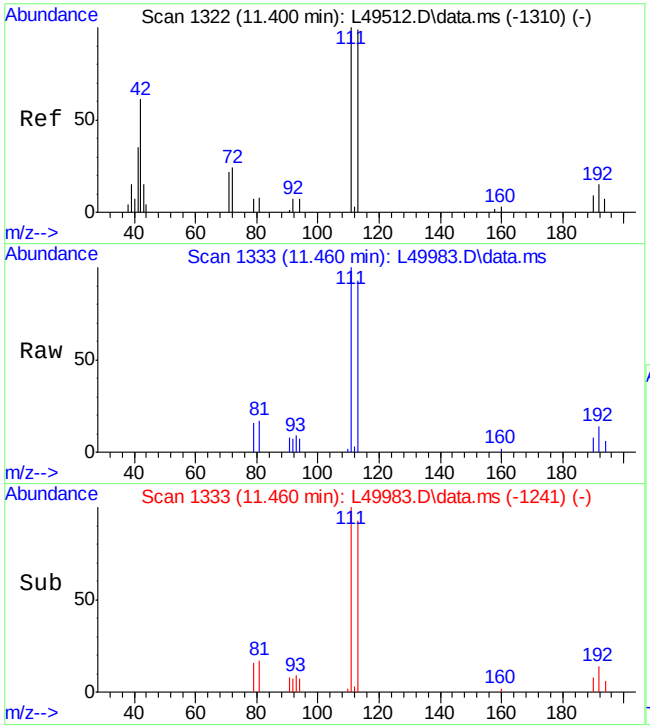




#24
Hexane
Concen: 3.13 ug/Kg
RT: 9.736 min Scan# 1017
Delta R.T. 0.006 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 57 Resp: 116825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 91.5 | 73.8 | 110.8 |
| 43 | 71.4 | 56.6 | 84.8 |

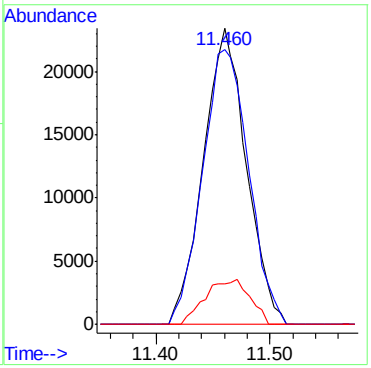


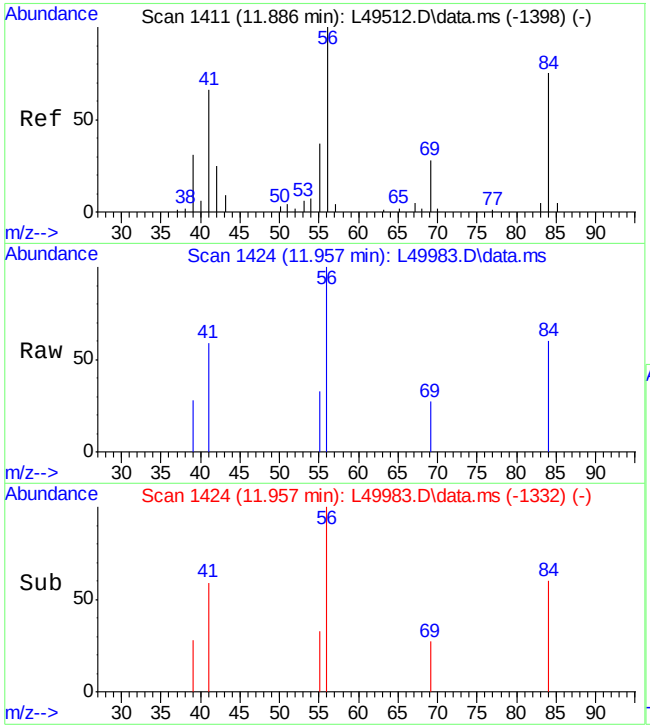



#36
Dibromofluoromethane
Concen: 17.35 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:111 Resp: 613623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.4 | 78.6 | 118.6 |
| 192 | 15.7 | 0.0 | 34.1 |

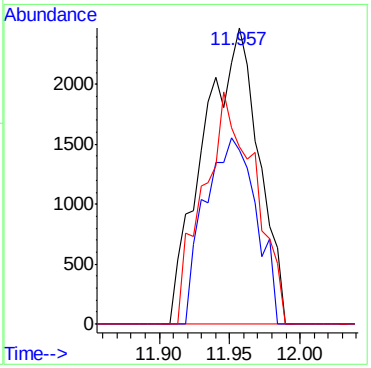


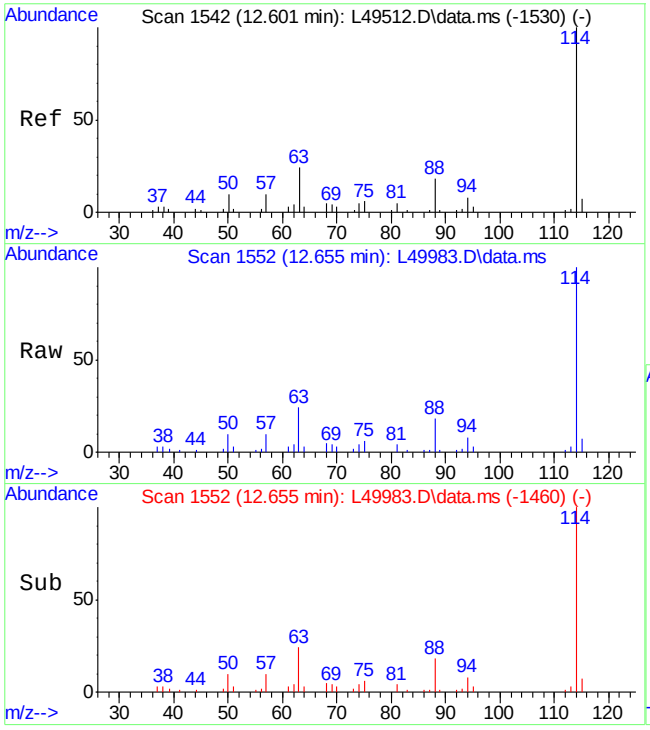




#38
Cyclohexane
Concen: 1.27 ug/Kg
RT: 11.957 min Scan# 1424
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 56 Resp: 67657

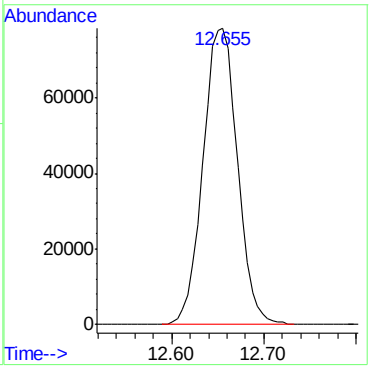
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.2 | 53.7 | 80.5 |
| 84 | 72.6 | 60.5 | 90.7 |

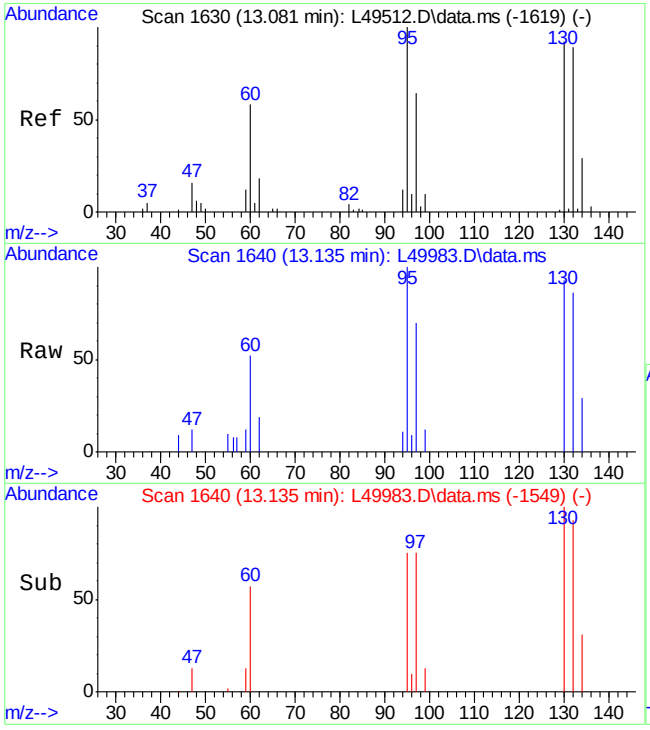





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:114 Resp: 2035239

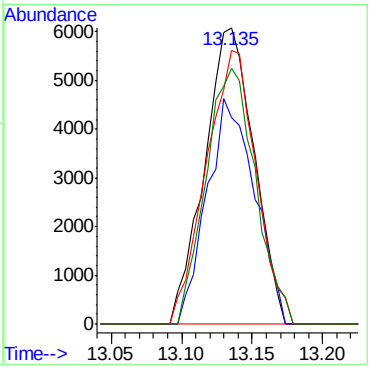


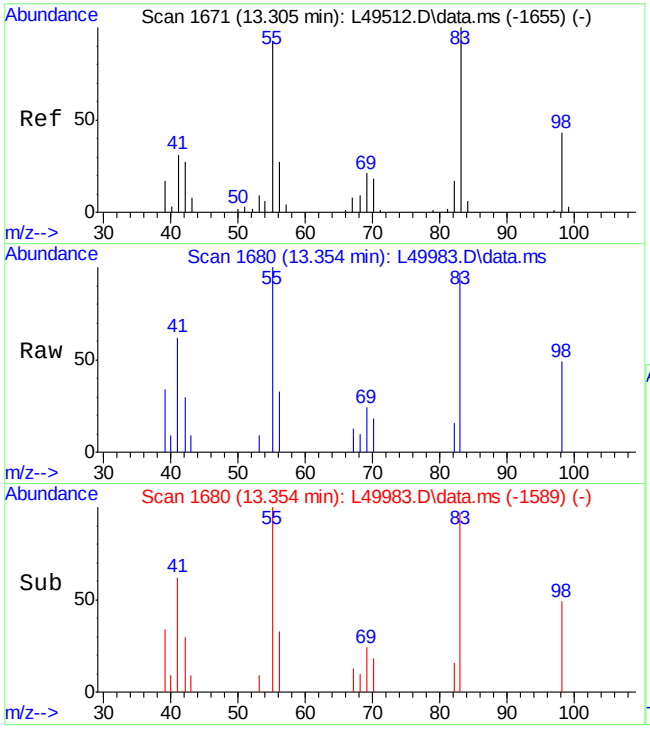




#46
Trichloroethene
Concen: 3.92 ug/Kg
RT: 13.135 min Scan# 1640
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 95 Resp: 147783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 73.8 | 43.5 | 83.5 |
| 130 | 93.7 | 65.1 | 105.1 |
| 132 | 86.8 | 62.0 | 102.0 |

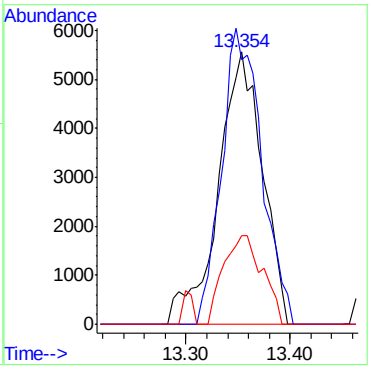


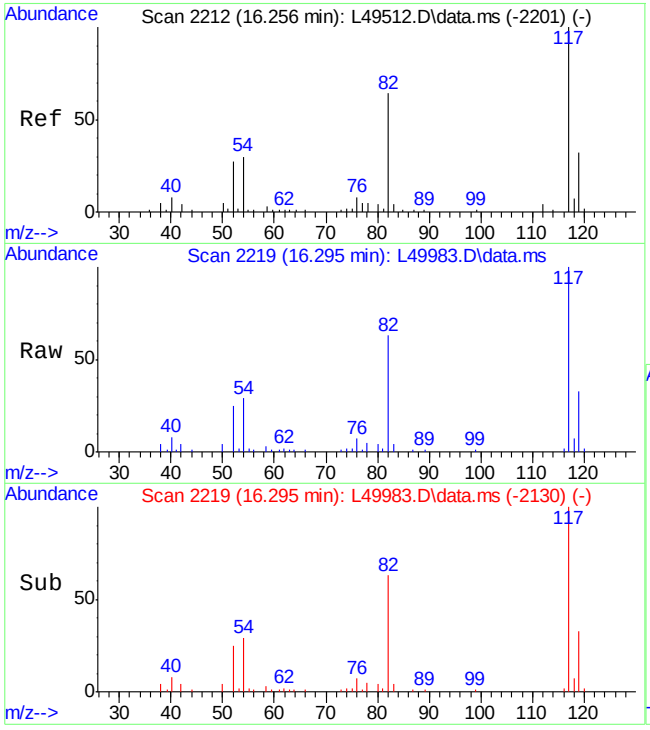



#48
Methylcyclohexane
Concen: 3.44 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 55 Resp: 163817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 98.3 | 80.6 | 120.6 |
| 56 | 28.9 | 11.5 | 51.5 |

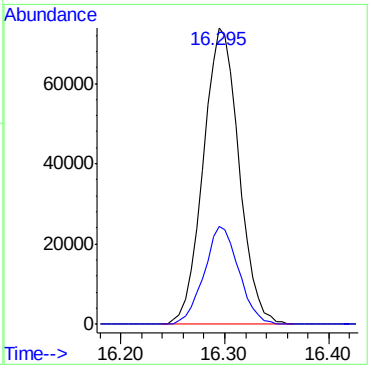


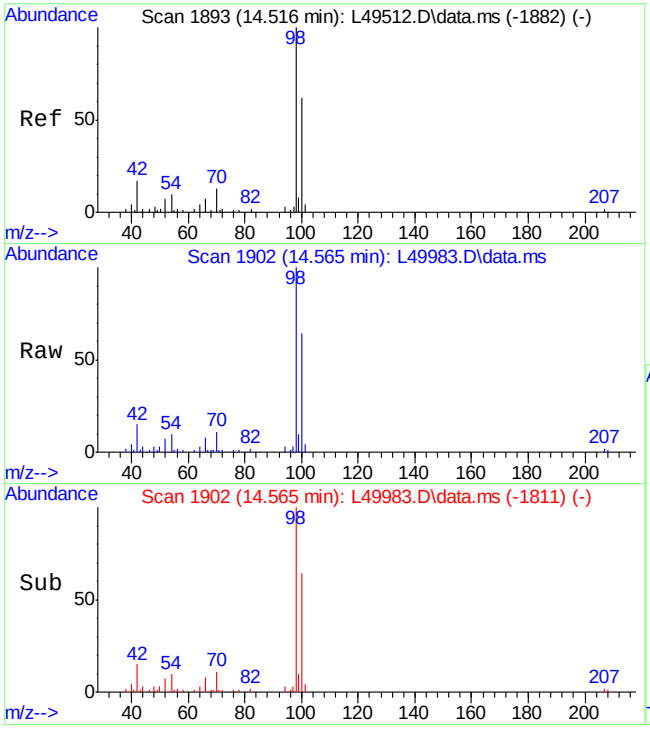




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:117 Resp: 1768575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.9 | 10.2 | 50.2 |

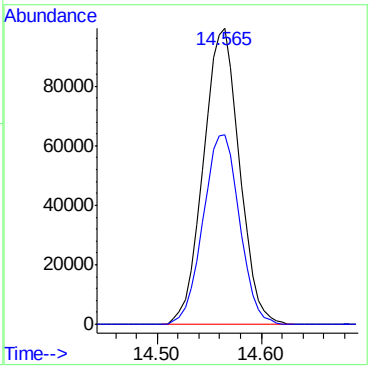


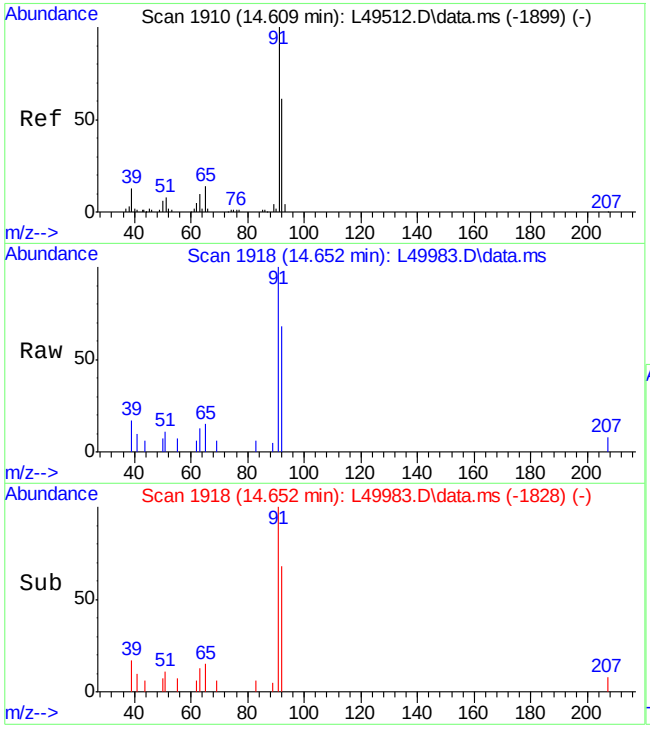



#56
Toluene-d8
Concen: 19.34 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 98 Resp: 2416138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.7 | 45.2 | 85.2 |

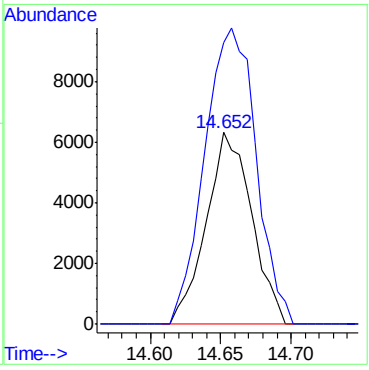


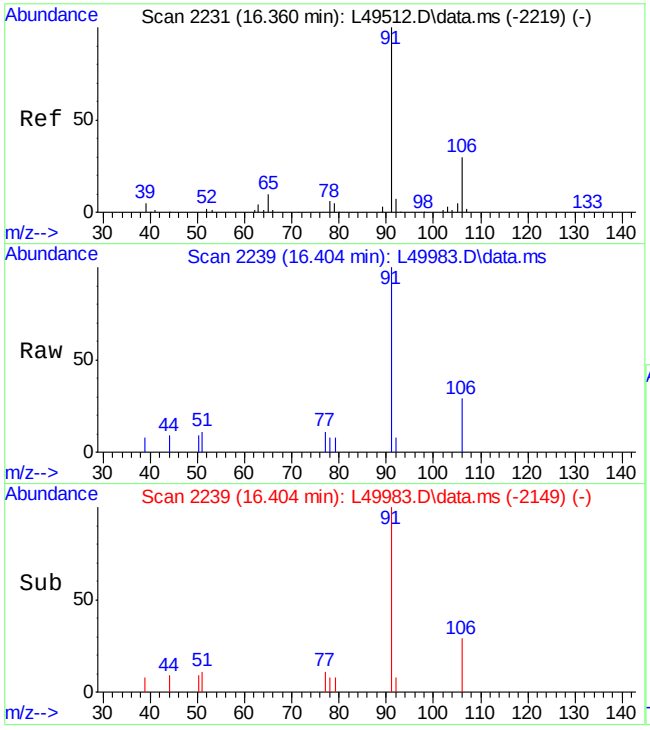




#57
Toluene
Concen: 1.61 ug/Kg
RT: 14.652 min Scan# 1918
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 92 Resp: 141265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.9 | 149.2 | 189.2 |

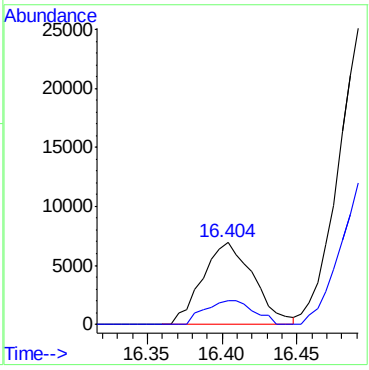


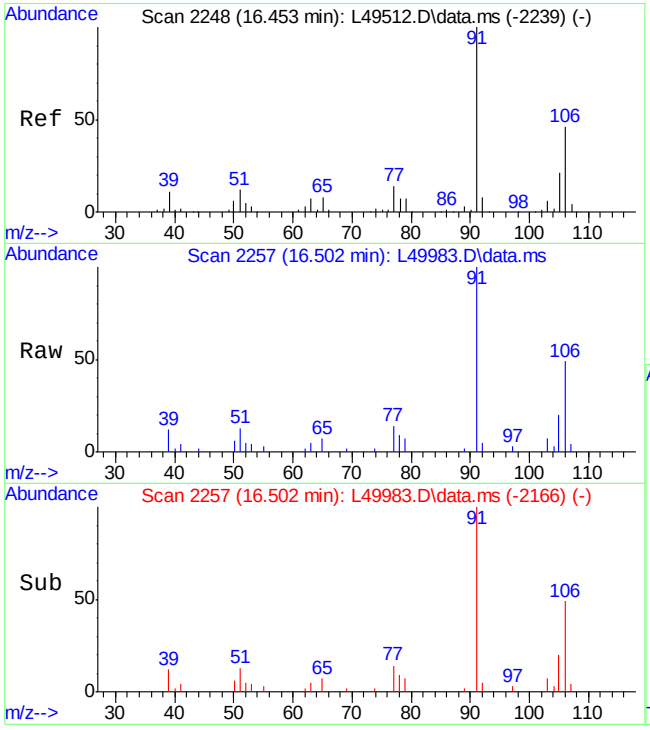



#67
Ethyl Benzene
Concen: 0.96 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 91 Resp: 164853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 27.5 | 8.6 | 48.6 |

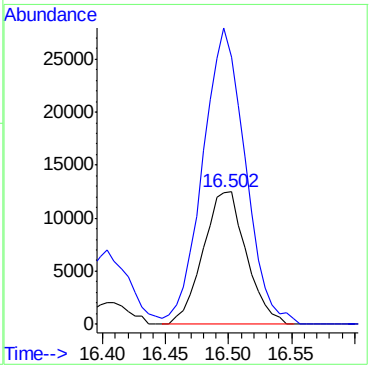


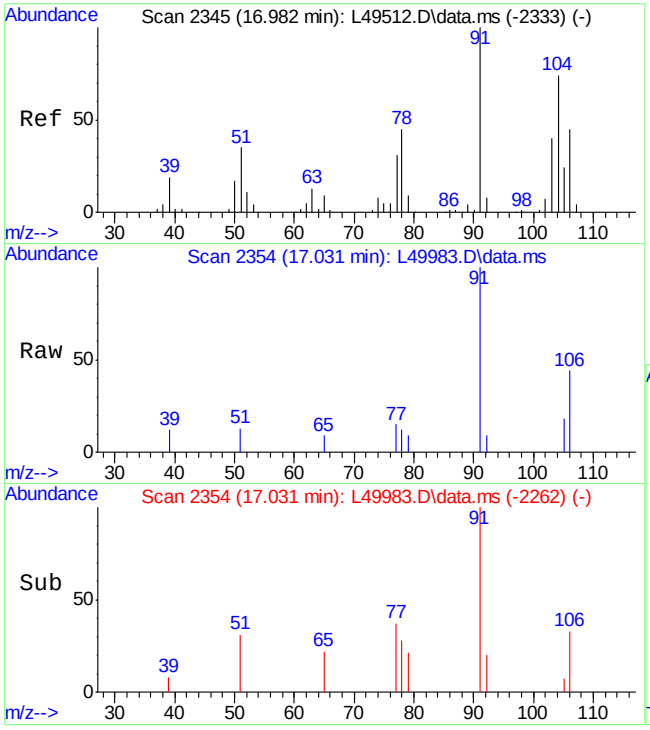




#68
Xylene, m+p
Concen: 4.89 ug/Kg
RT: 16.502 min Scan# 2257
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:106 Resp: 296265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 220.7 | 202.1 | 242.1 |

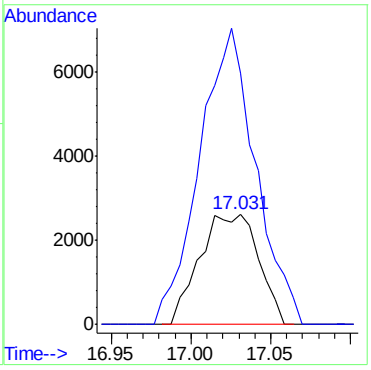


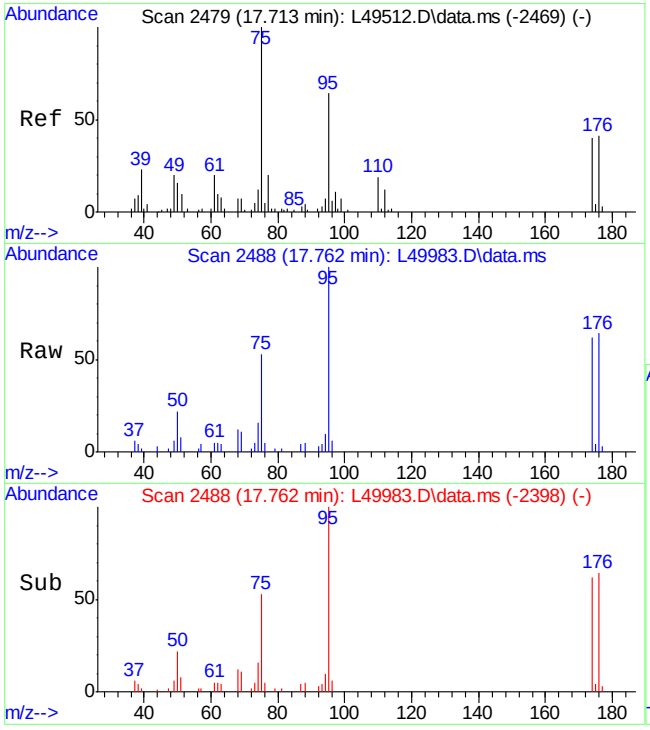



#69
Xylene, o
Concen: 1.08 ug/Kg
RT: 17.031 min Scan# 2354
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:106 Resp: 66900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 256.5 | 212.6 | 252.6# |

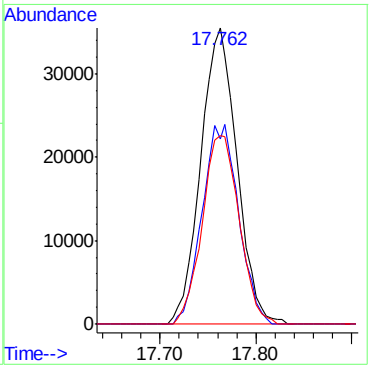


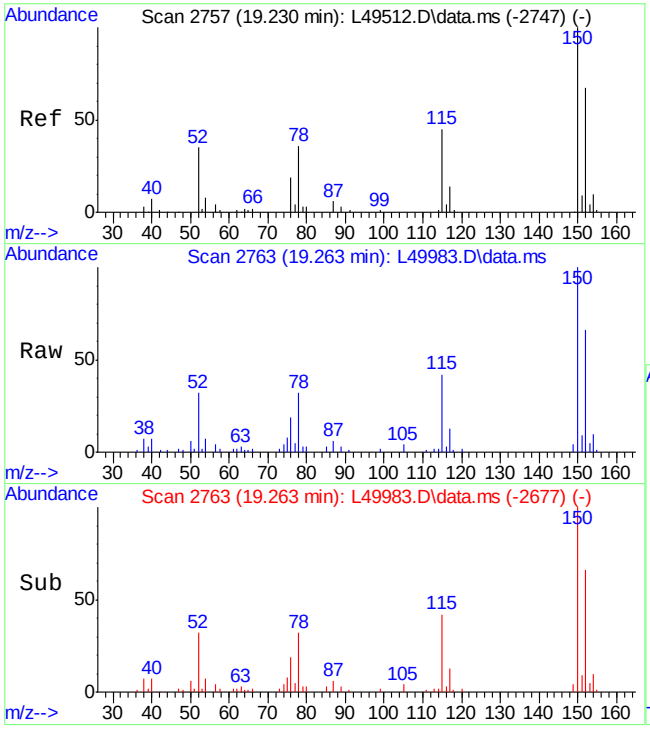




#74
4-Bromofluorobenzene
Concen: 17.97 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 95 Resp: 932625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 67.8 | 41.6 | 81.6 |
| 176 | 64.8 | 39.6 | 79.6 |

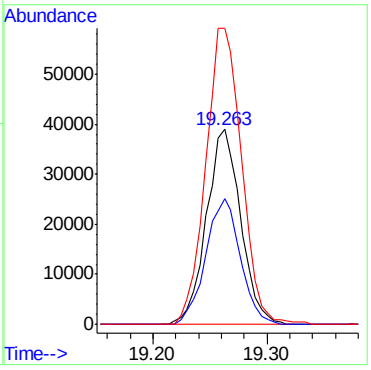


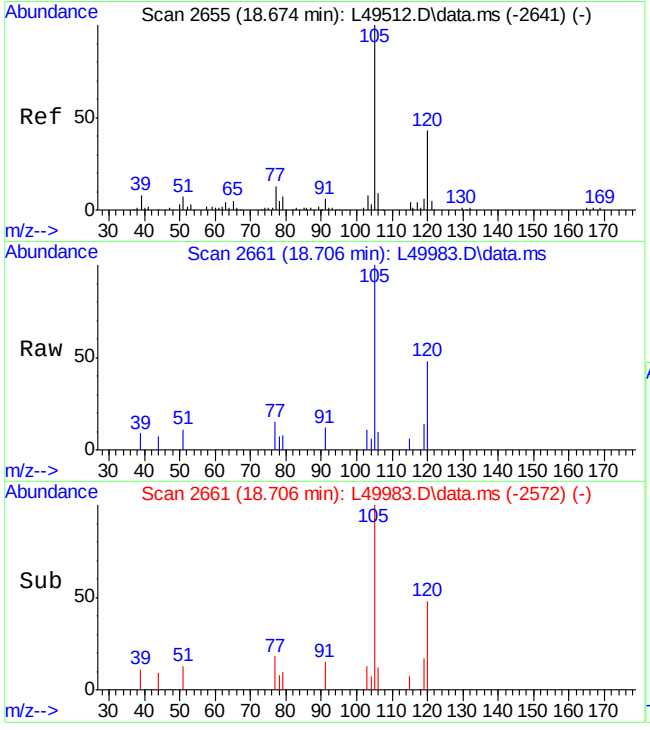



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:152 Resp: 818266

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 48.8 | 88.8 |
| 150 | 159.0 | 174.3 | 214.3# |

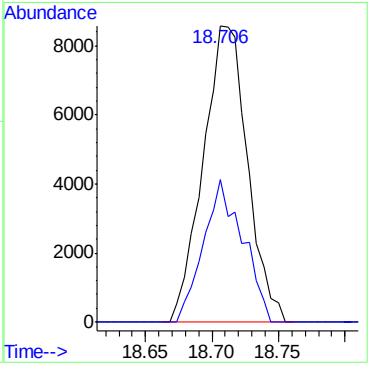


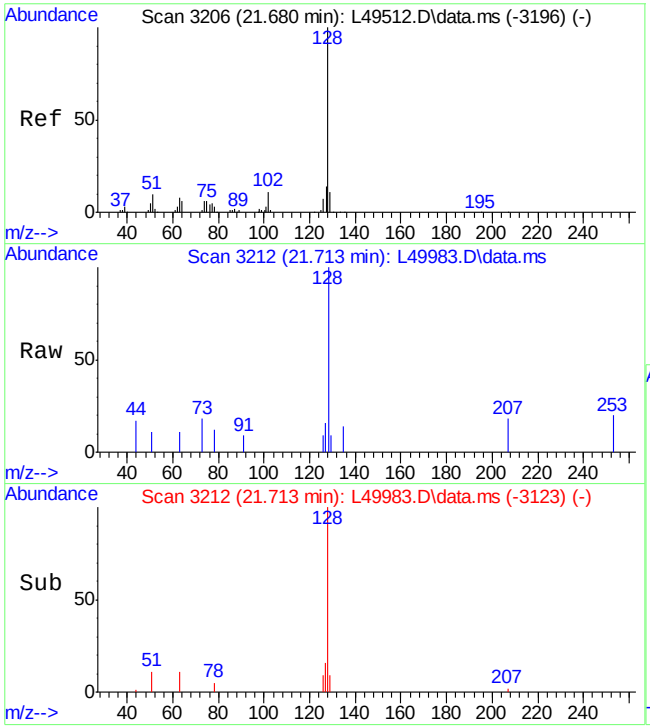




#86
1,2,4-Trimethylbenzene
Concen: 1.47 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:105 Resp: 199897

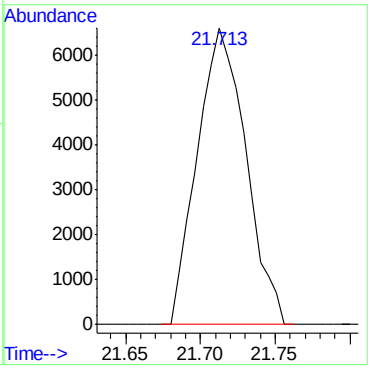
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.6 | 29.7 | 69.7 |

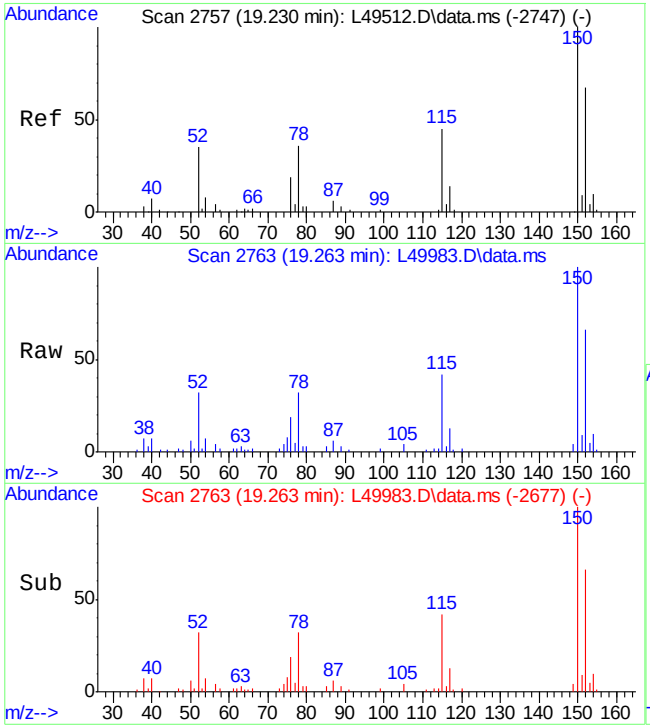





#97
Naphthalene
Concen: 1.20 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:128 Resp: 149259

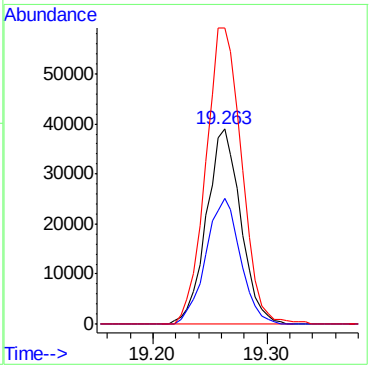


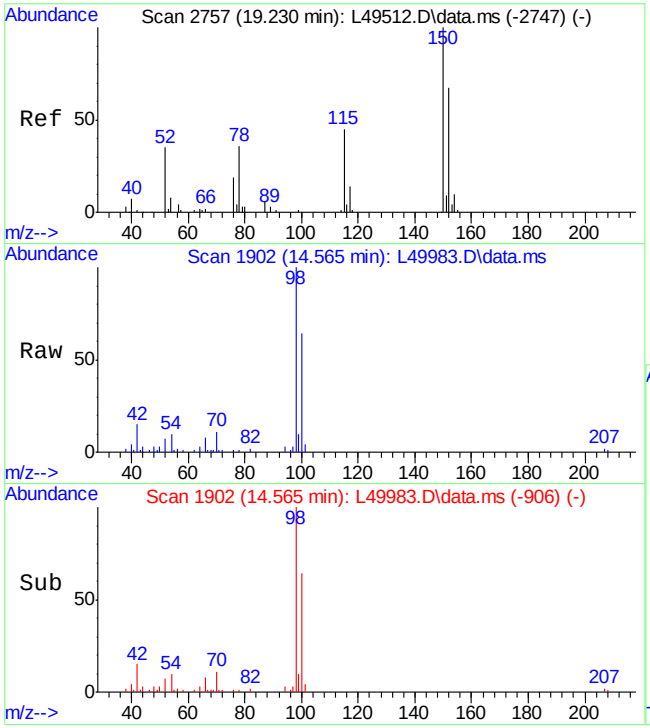




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:152 Resp: 818266

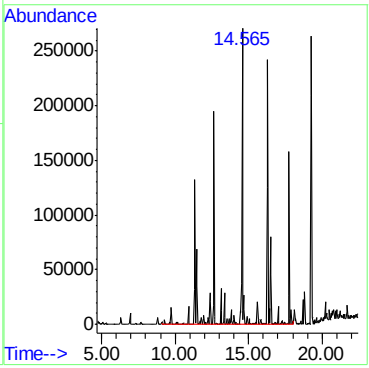
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 41.6 | 81.6 |
| 150 | 159.0 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 111.45 ug/Kg m
RT: 14.565 min Scan# 1902
Delta R.T. 0.039 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:TIC Resp:39474797



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49983.D
Acq On : 12 Jul 2016 6:11 pm
Operator : johannat
Sample : C46435-12R
Misc : MS1912,VL1499,5.35,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 02 11:01:36 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

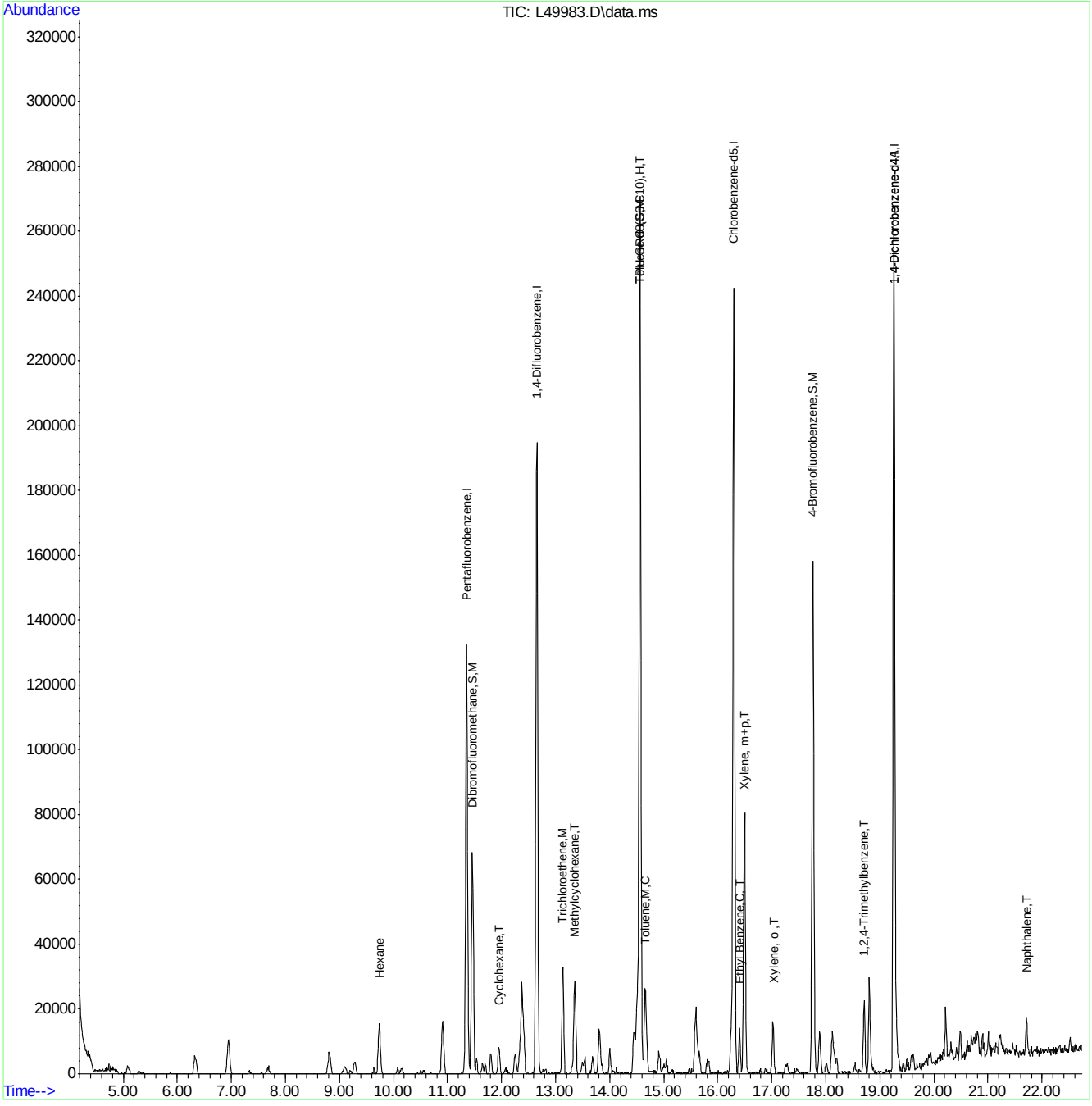
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.357 | 168 | 1181185 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2035239 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1768575 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 818266 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 818266 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 613623 | 17.35 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 86.75% | | | |
| 56) Toluene-d8 | 14.565 | 98 | 2416138 | 19.34 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 96.70% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 932625 | 17.97 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 89.85% | | | |
| Target Compounds | | | | | | Qvalue |
| 24) Hexane | 9.736 | 57 | 116825 | 3.13 | ug/Kg | 99 |
| 38) Cyclohexane | 11.957 | 56 | 67657 | 1.27 | ug/Kg | 93 |
| 46) Trichloroethene | 13.135 | 95 | 147783 | 3.92 | ug/Kg | 91 |
| 48) Methylcyclohexane | 13.354 | 55 | 163817 | 3.44 | ug/Kg | 97 |
| 57) Toluene | 14.652 | 92 | 141265 | 1.61 | ug/Kg | 96 |
| 67) Ethyl Benzene | 16.404 | 91 | 164853 | 0.96 | ug/Kg | 98 |
| 68) Xylene, m+p | 16.502 | 106 | 296265 | 4.89 | ug/Kg | 99 |
| 69) Xylene, o | 17.031 | 106 | 66900 | 1.08 | ug/Kg# | 86 |
| 86) 1,2,4-Trimethylbenzene | 18.706 | 105 | 199897 | 1.47 | ug/Kg | 90 |
| 97) Naphthalene | 21.713 | 128 | 149259 | 1.20 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 14.565 | TIC | 39474797m | 111.45 | ug/Kg | |

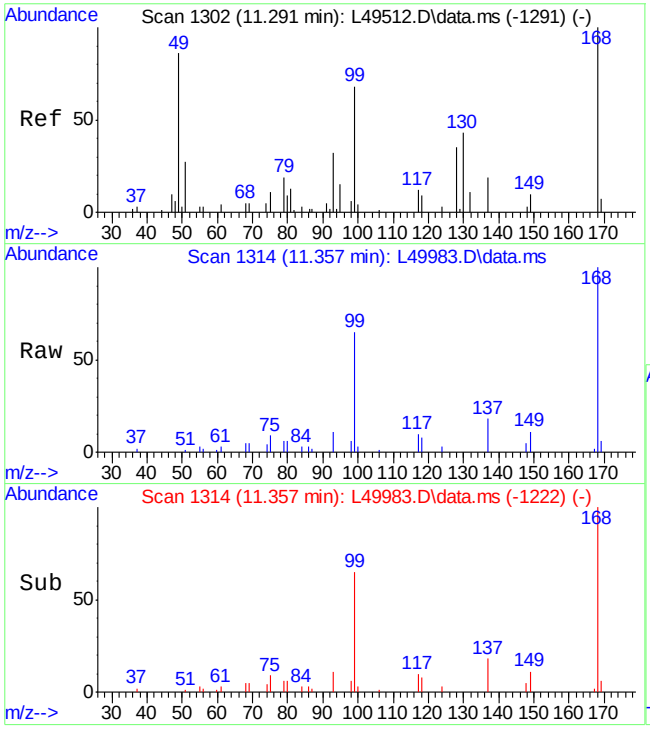
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49983.D
Acq On : 12 Jul 2016 6:11 pm
Operator : johannat
Sample : C46435-12R
Misc : MS1912,VL1499,5.35,,,,1
ALS Vial : 16 Sample Multiplier: 1

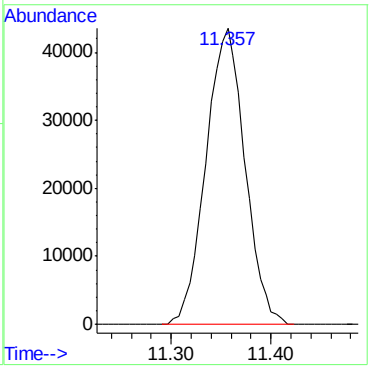
Quant Time: Aug 02 11:01:36 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

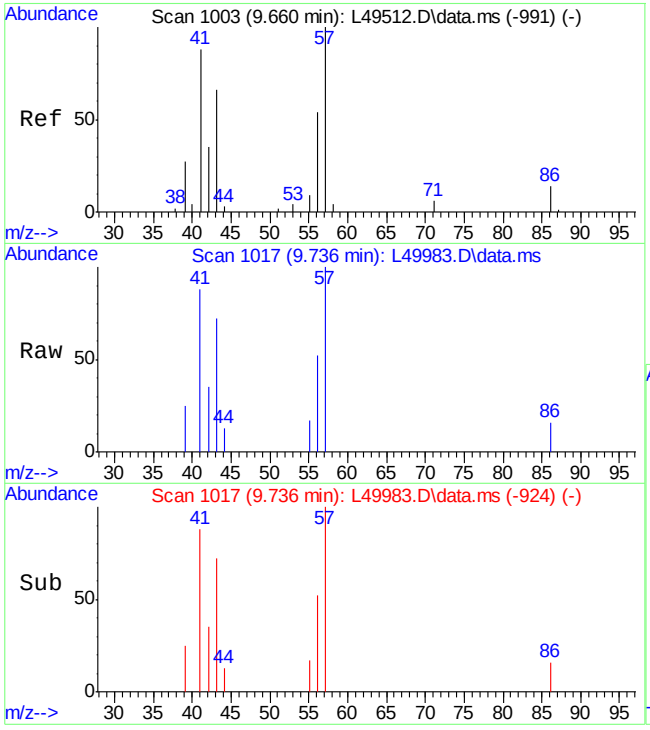





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.357 min Scan# 1314
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:168 Resp: 1181185

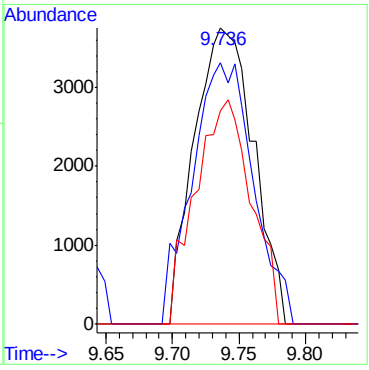


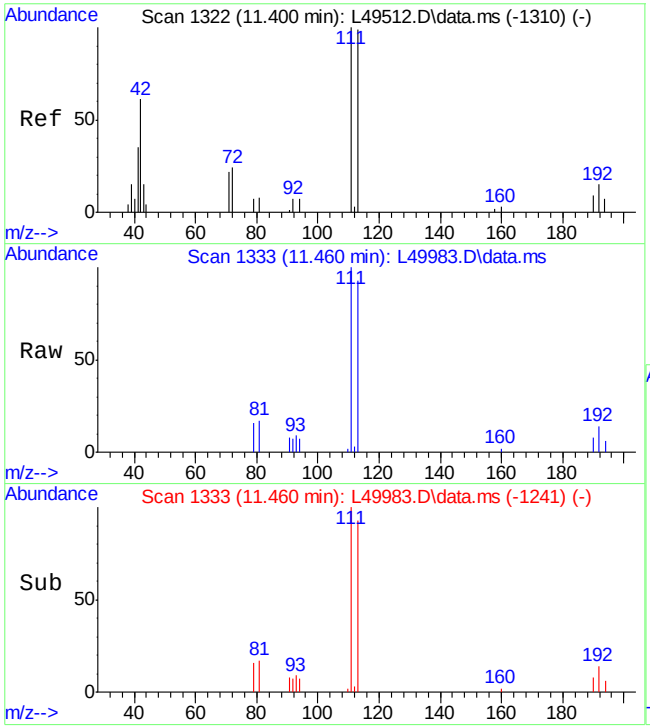




#24
Hexane
Concen: 3.13 ug/Kg
RT: 9.736 min Scan# 1017
Delta R.T. 0.006 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 57 Resp: 116825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 91.5 | 73.8 | 110.8 |
| 43 | 71.4 | 56.6 | 84.8 |

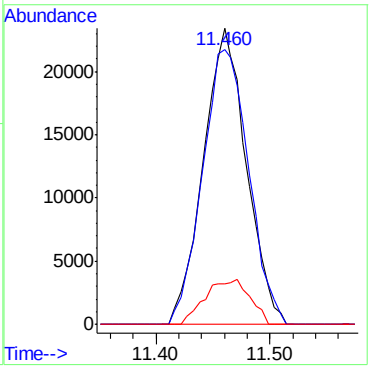


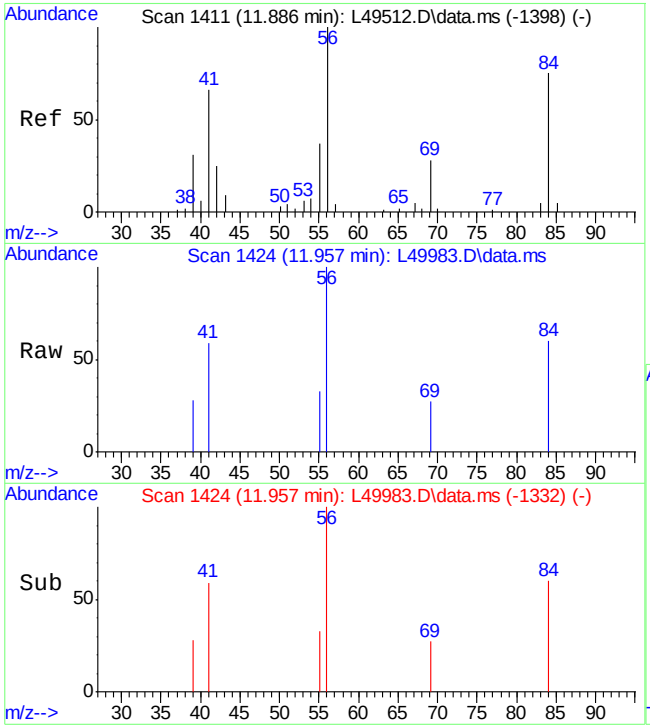



#36
Dibromofluoromethane
Concen: 17.35 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:111 Resp: 613623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.4 | 78.6 | 118.6 |
| 192 | 15.7 | 0.0 | 34.1 |

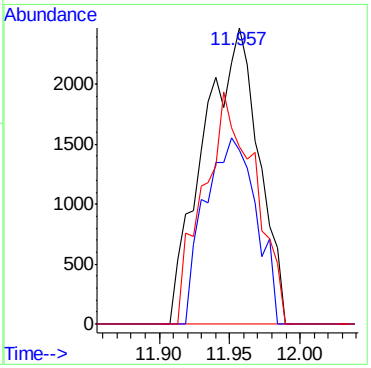


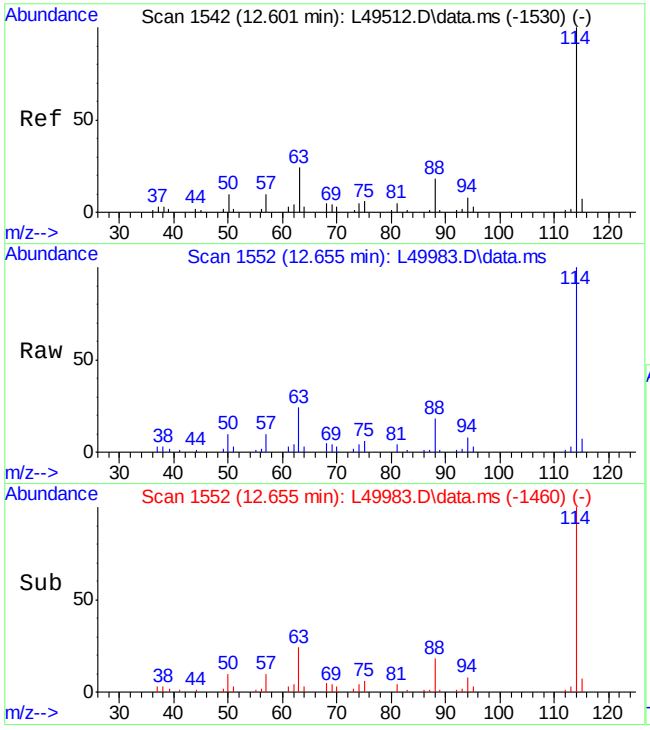




#38
Cyclohexane
Concen: 1.27 ug/Kg
RT: 11.957 min Scan# 1424
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 56 Resp: 67657

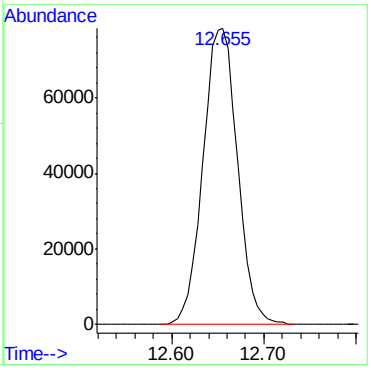
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.2 | 53.7 | 80.5 |
| 84 | 72.6 | 60.5 | 90.7 |

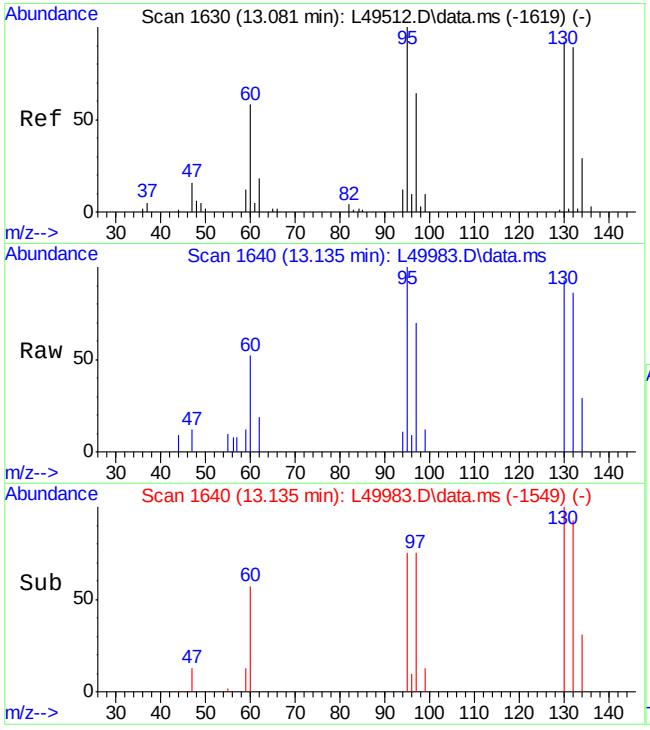





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:114 Resp: 2035239

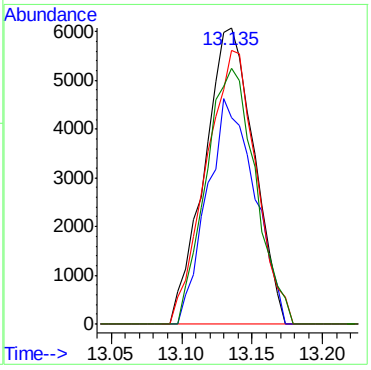


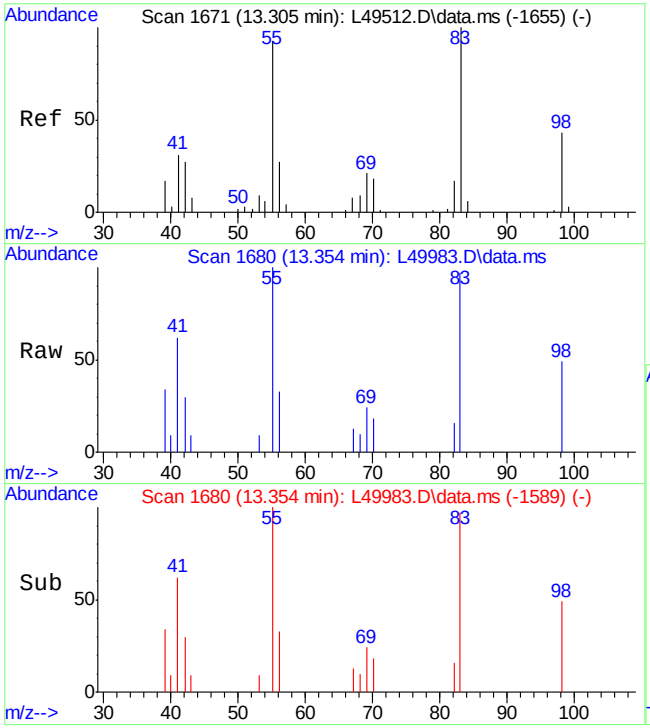




#46
Trichloroethene
Concen: 3.92 ug/Kg
RT: 13.135 min Scan# 1640
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 95 Resp: 147783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 97 | 73.8 | 43.5 | 83.5 |
| 130 | 93.7 | 65.1 | 105.1 |
| 132 | 86.8 | 62.0 | 102.0 |

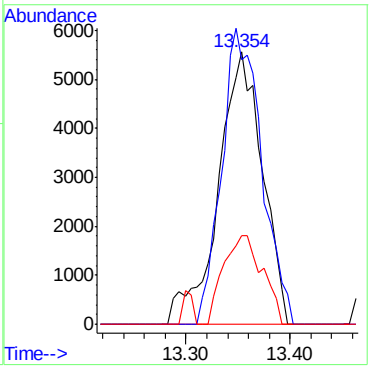


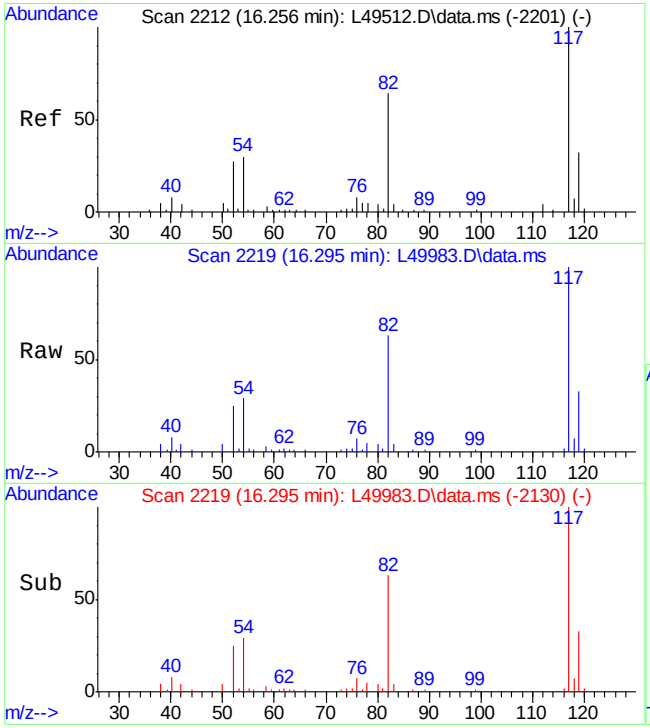



#48
Methylcyclohexane
Concen: 3.44 ug/Kg
RT: 13.354 min Scan# 1680
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 55 Resp: 163817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 98.3 | 80.6 | 120.6 |
| 56 | 28.9 | 11.5 | 51.5 |

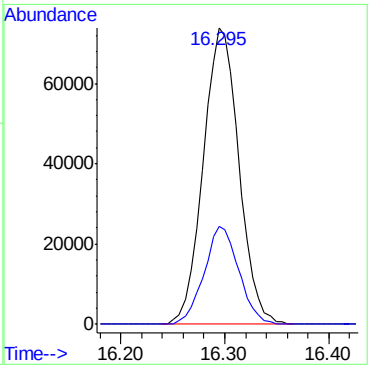


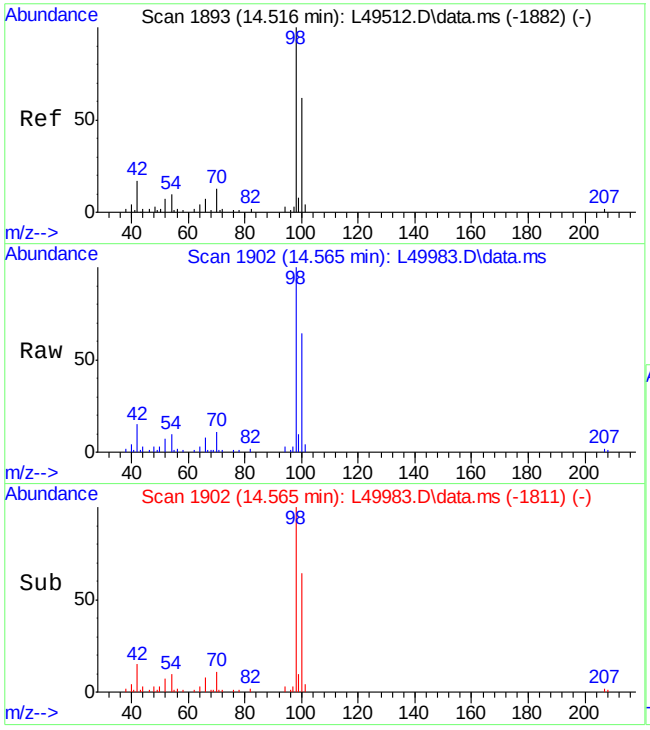




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:117 Resp: 1768575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.9 | 10.2 | 50.2 |

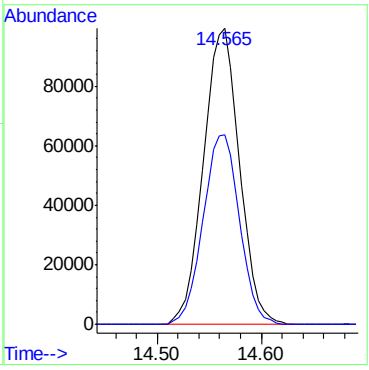


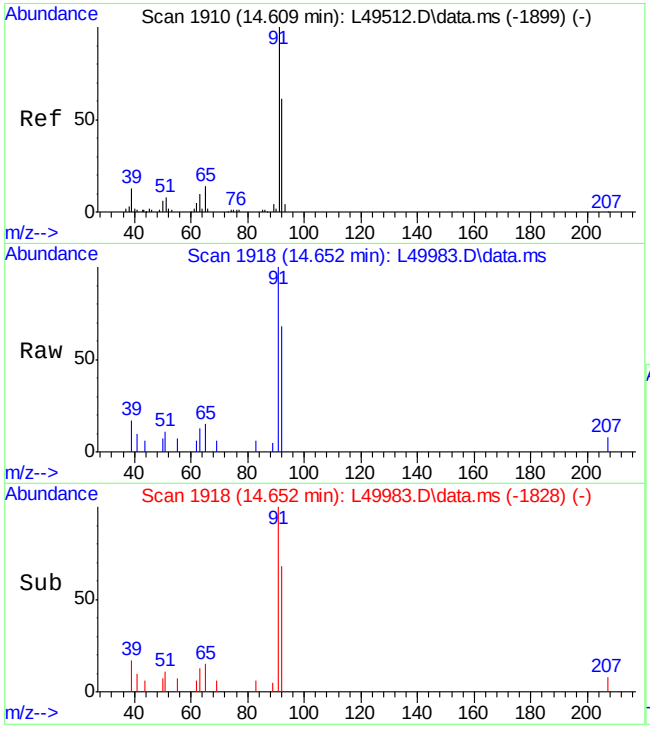



#56
Toluene-d8
Concen: 19.34 ug/Kg
RT: 14.565 min Scan# 1902
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 98 Resp: 2416138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.7 | 45.2 | 85.2 |

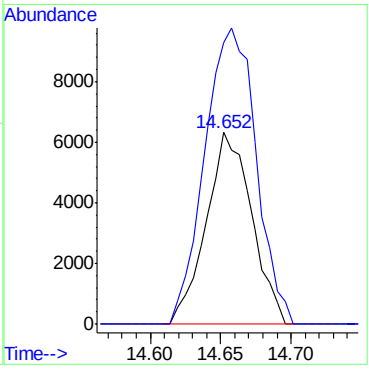


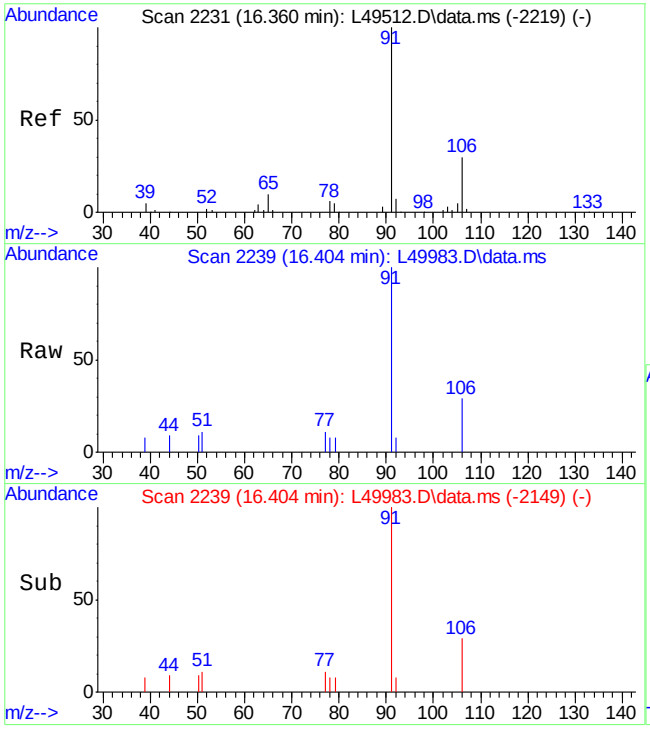




#57
Toluene
Concen: 1.61 ug/Kg
RT: 14.652 min Scan# 1918
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 92 Resp: 141265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 174.9 | 149.2 | 189.2 |

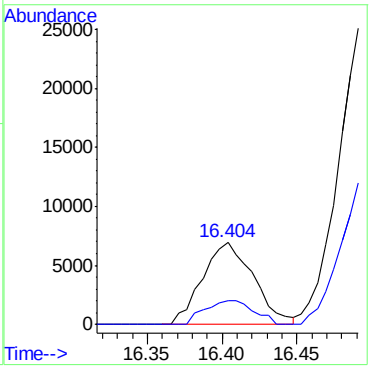


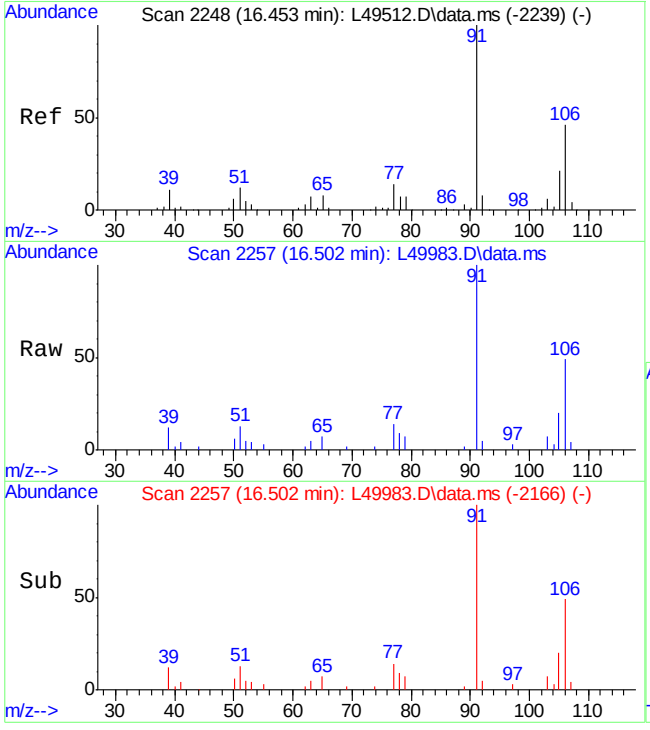



#67
Ethyl Benzene
Concen: 0.96 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 91 Resp: 164853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 27.5 | 8.6 | 48.6 |

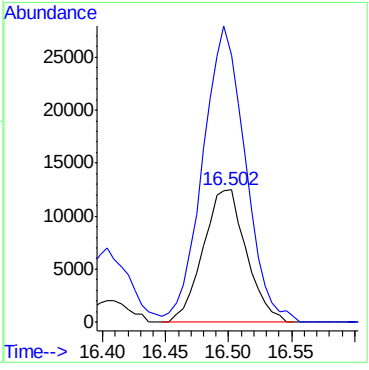


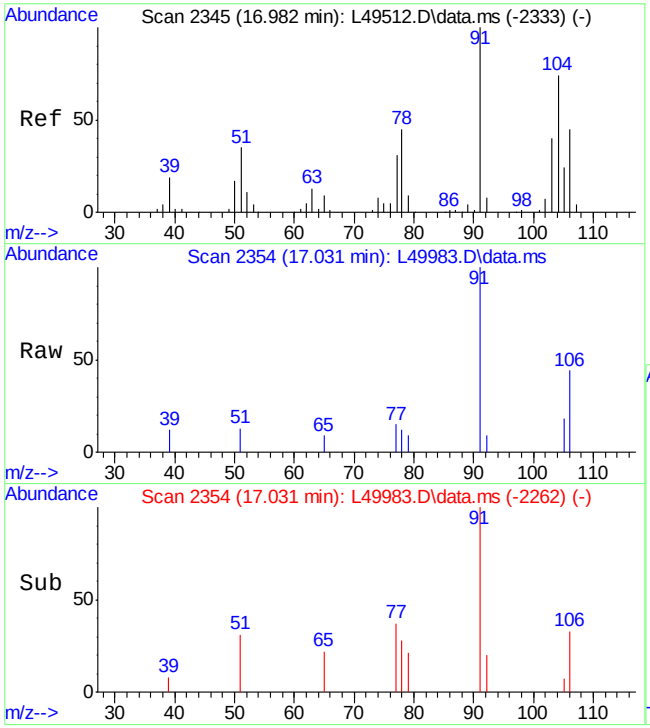




#68
Xylene, m+p
Concen: 4.89 ug/Kg
RT: 16.502 min Scan# 2257
Delta R.T. -0.005 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:106 Resp: 296265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 220.7 | 202.1 | 242.1 |

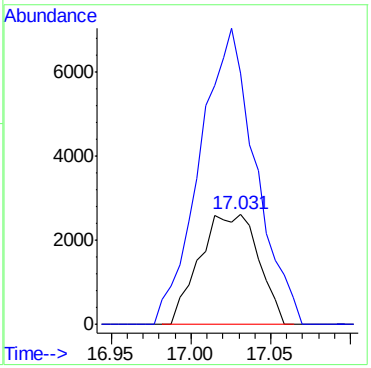


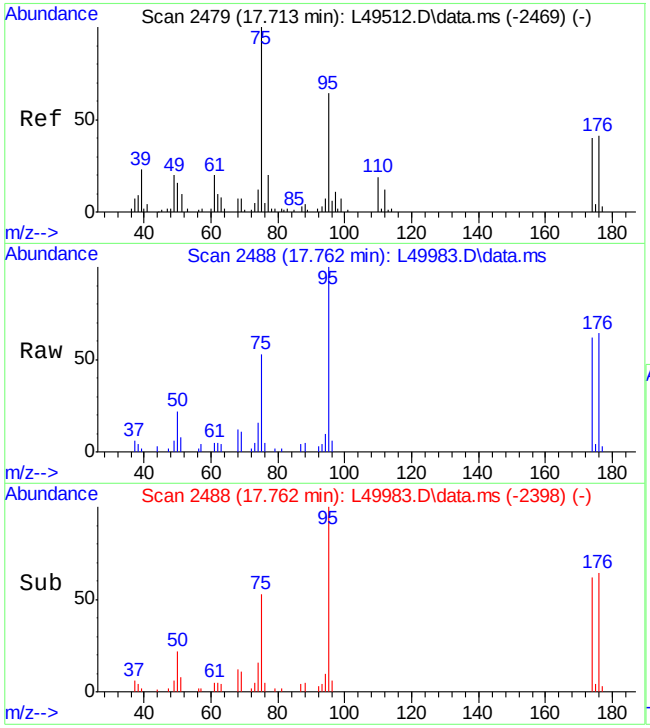



#69
Xylene, o
Concen: 1.08 ug/Kg
RT: 17.031 min Scan# 2354
Delta R.T. 0.000 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:106 Resp: 66900

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 256.5 | 212.6 | 252.6# |

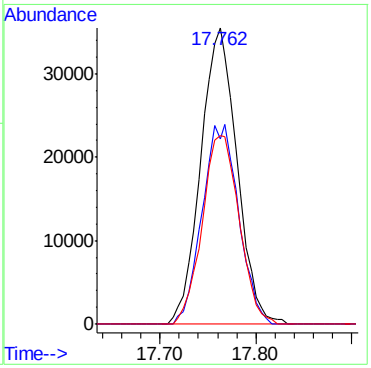


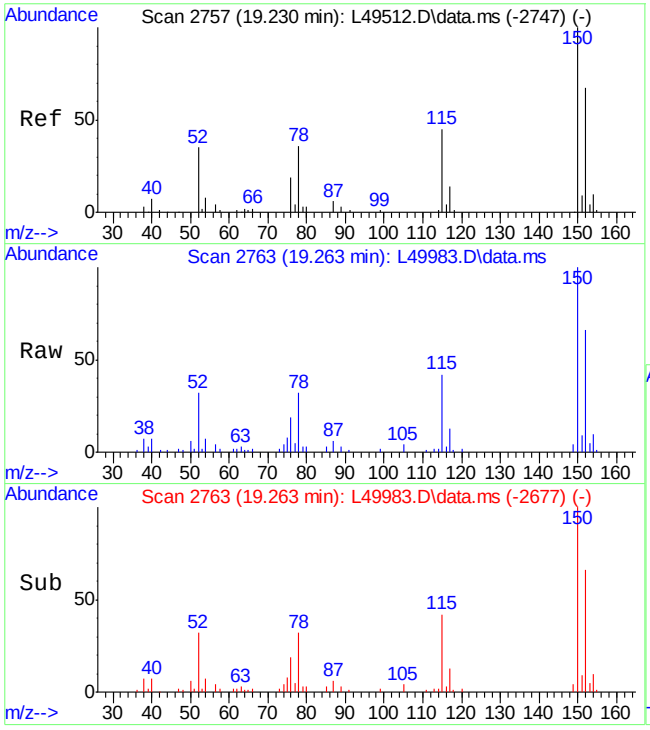




#74
4-Bromofluorobenzene
Concen: 17.97 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion: 95 Resp: 932625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 67.8 | 41.6 | 81.6 |
| 176 | 64.8 | 39.6 | 79.6 |

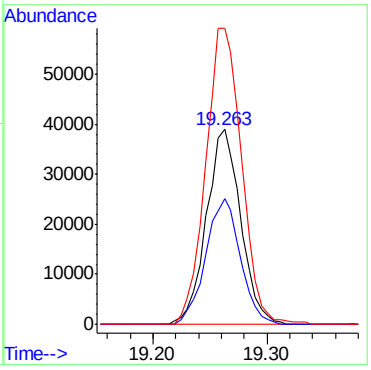


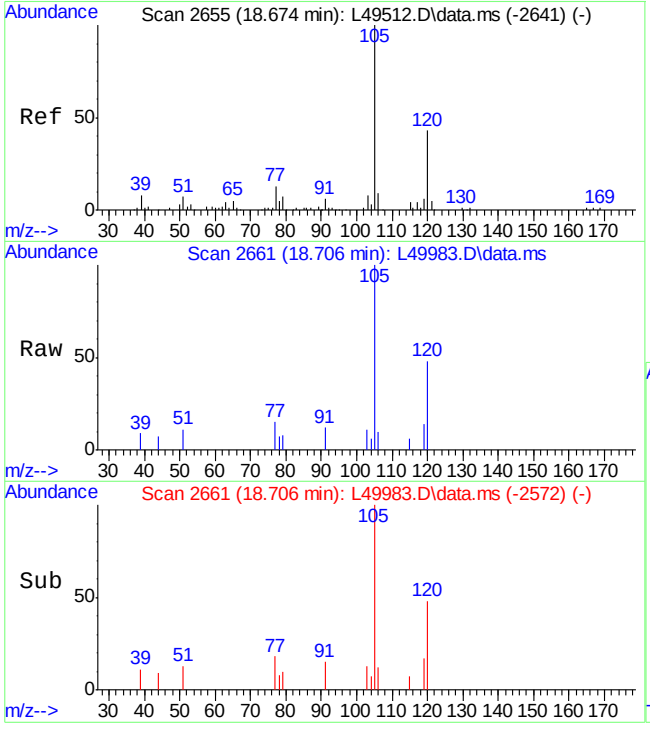



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:152 Resp: 818266

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 48.8 | 88.8 |
| 150 | 159.0 | 174.3 | 214.3# |

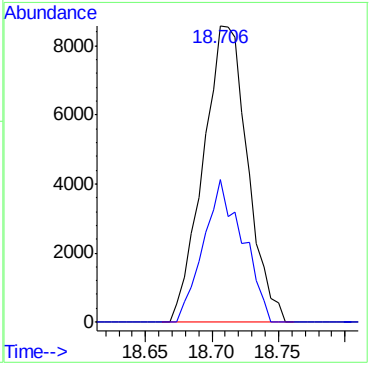


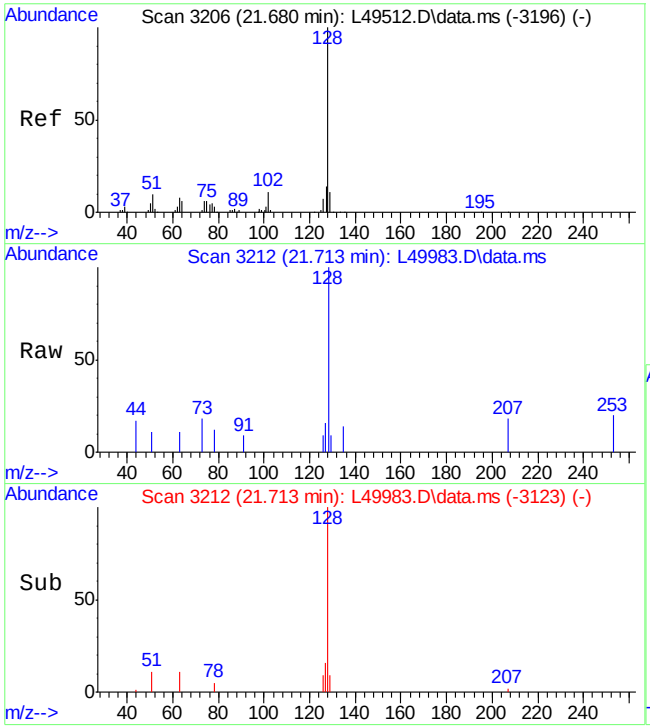




#86
1,2,4-Trimethylbenzene
Concen: 1.47 ug/Kg
RT: 18.706 min Scan# 2661
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:105 Resp: 199897

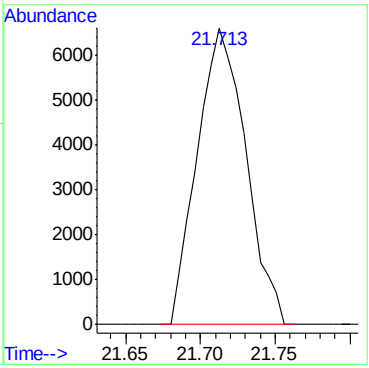
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.6 | 29.7 | 69.7 |

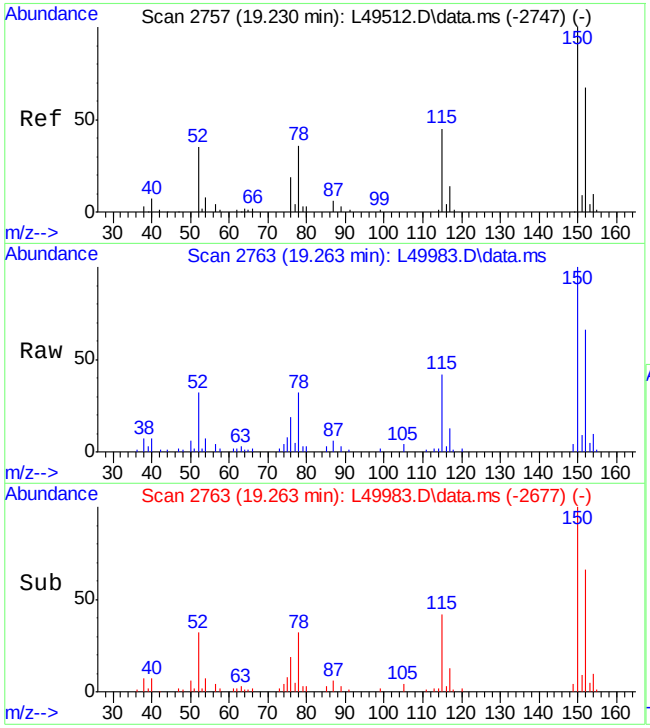





#97
Naphthalene
Concen: 1.20 ug/Kg
RT: 21.713 min Scan# 3212
Delta R.T. -0.016 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:128 Resp: 149259

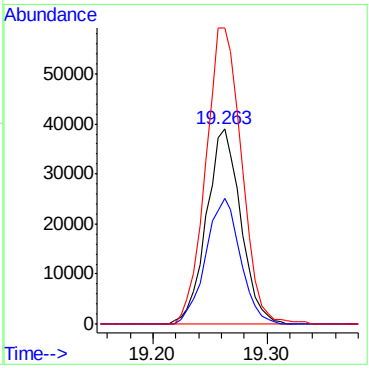


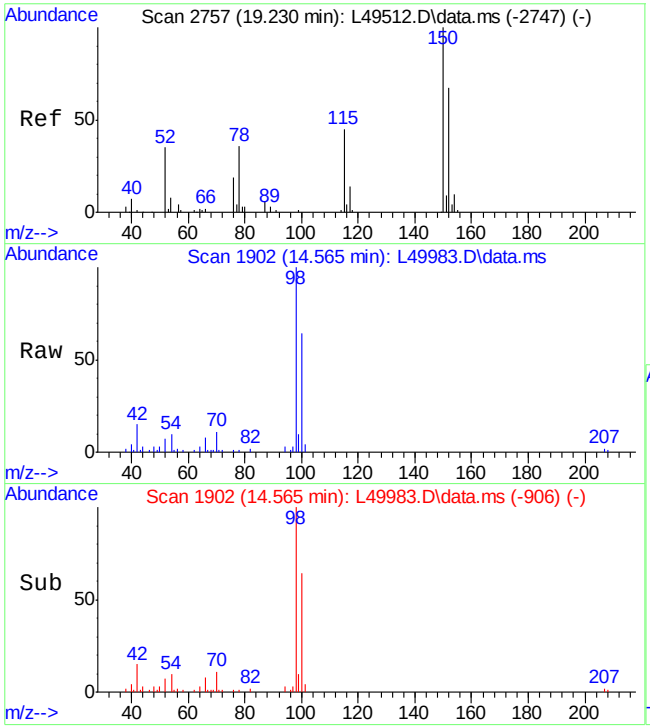




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:152 Resp: 818266

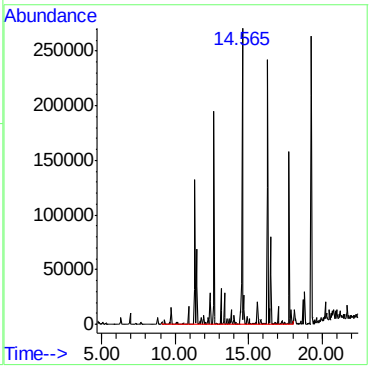
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 41.6 | 81.6 |
| 150 | 159.0 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 111.45 ug/Kg m
RT: 14.565 min Scan# 1902
Delta R.T. 0.039 min
Lab File: L49983.D
Acq: 12 Jul 2016 6:11 pm

Tgt Ion:TIC Resp:39474797



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61843.D
Acq On : 13 Jul 2016 6:30 pm
Operator : johannat
Sample : C46435-13R
Misc : MS1912,VM1859,5.43,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 02 10:11:09 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

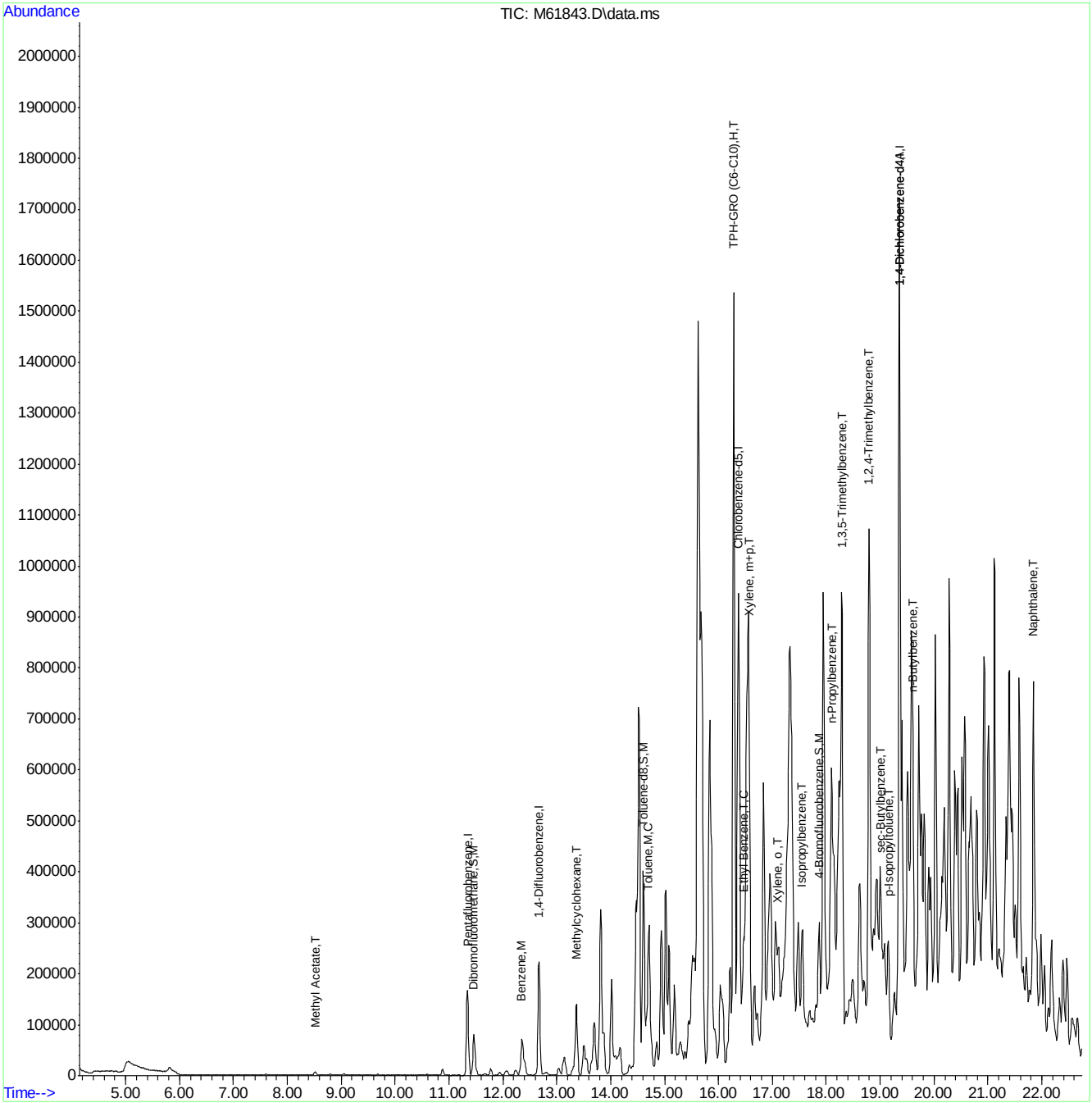
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 160027 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 241186 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 225989 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 134462 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 134462 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 75034 | 18.49 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 92.45% | | | | |
| 56) Toluene-d8 | 14.603 | 98 | 284549 | 19.29 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.45% | | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 125378 | 21.62 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 108.10% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 15) Methyl Acetate | 8.514 | 43 | 16381 | 3.33 | ppb | # | 90 |
| 45) Benzene | 12.345 | 78 | 16789 | 0.80 | ppb | | 100 |
| 48) Methylcyclohexane | 13.368 | 55 | 76361 | 8.61 | ppb | | 98 |
| 57) Toluene | 14.698 | 92 | 7714 | 0.62 | ppb | # | 63 |
| 67) Ethyl Benzene | 16.471 | 91 | 146860 | 6.27 | ppb | | 99 |
| 68) Xylene, m+p | 16.566 | 106 | 103770 | 12.12 | ppb | | 99 |
| 69) Xylene, o | 17.104 | 106 | 16902 | 1.96 | ppb | | 99 |
| 73) Isopropylbenzene | 17.547 | 105 | 206147 | 9.43 | ppb | | 100 |
| 79) n-Propylbenzene | 18.096 | 91 | 476261 | 15.01 | ppb | | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.286 | 105 | 323055 | 15.36 | ppb | | 89 |
| 86) 1,2,4-Trimethylbenzene | 18.792 | 105 | 711276 | 32.57 | ppb | | 90 |
| 87) sec-Butylbenzene | 19.014 | 105 | 64866 | 2.36 | ppb | | 98 |
| 88) p-Isopropyltoluene | 19.151 | 119 | 89174 | 3.96 | ppb | | 97 |
| 92) n-Butylbenzene | 19.605 | 91 | 175436 | 7.66 | ppb | # | 43 |
| 97) Naphthalene | 21.842 | 128 | 645712 | 36.54 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 16.281 | TIC | 62591631m | 1763.73 | ppb | | |

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

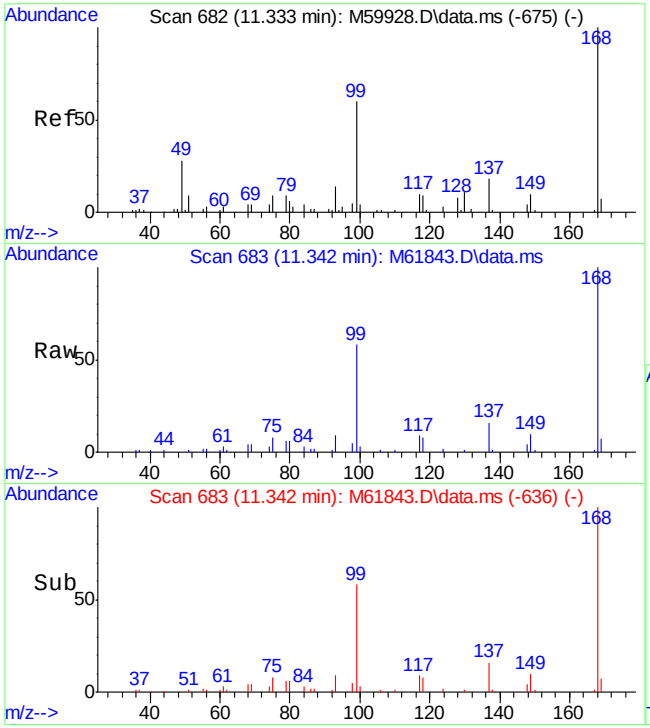
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61843.D
Acq On : 13 Jul 2016 6:30 pm
Operator : johannat
Sample : C46435-13R
Misc : MS1912,VM1859,5.43,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 02 10:11:09 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

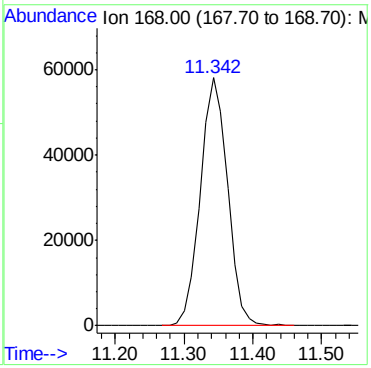


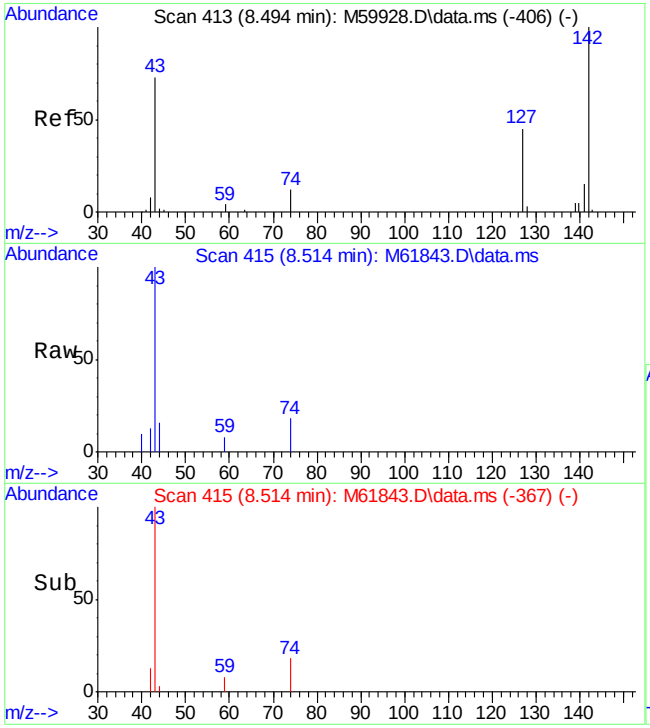

VM1848S.M Tue Aug 02 11:53:04 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:168 Resp: 160027

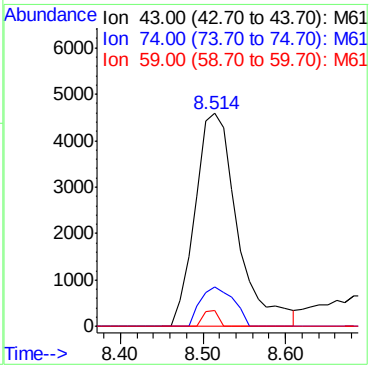


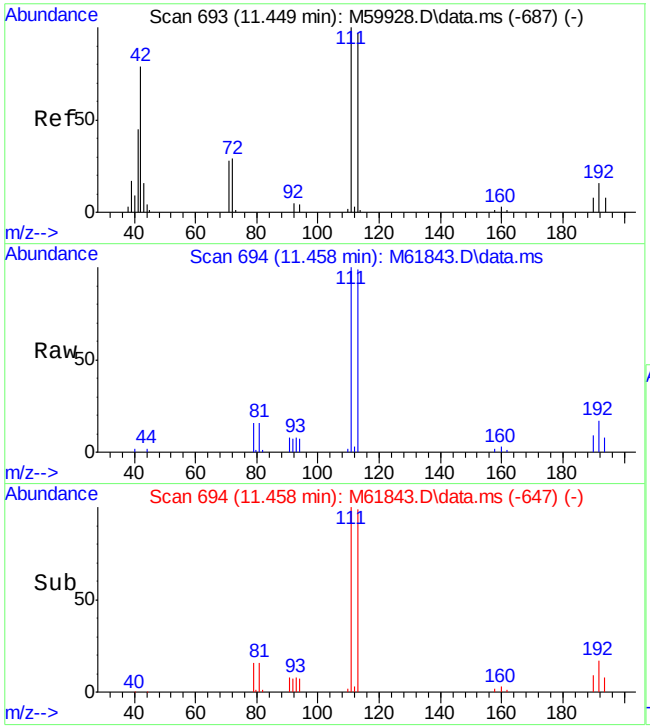




#15
Methyl Acetate
Concen: 3.33 ppb
RT: 8.514 min Scan# 415
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 43 Resp: 16381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 14.7 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

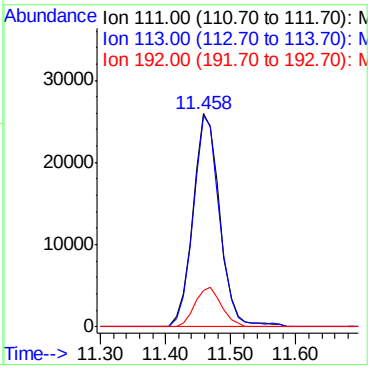


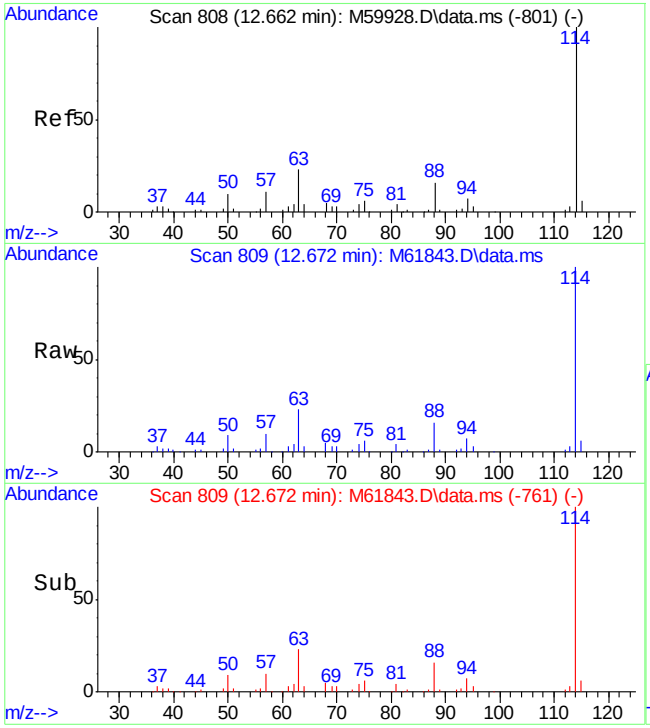



#36
Dibromofluoromethane
Concen: 18.49 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:111 Resp: 75034

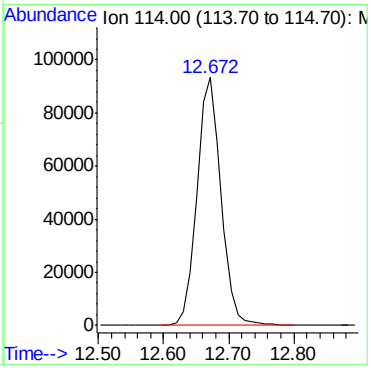
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.4 | 77.7 | 117.7 |
| 192 | 18.2 | 0.0 | 36.3 |

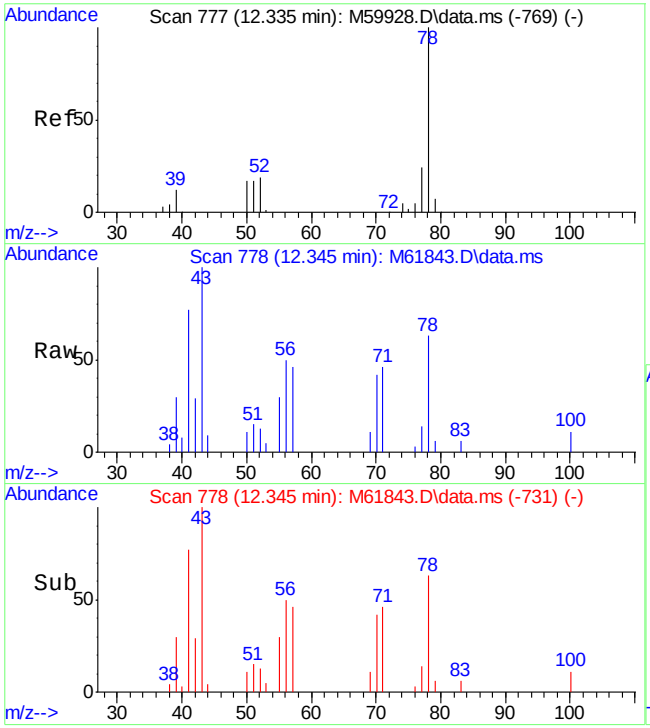



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

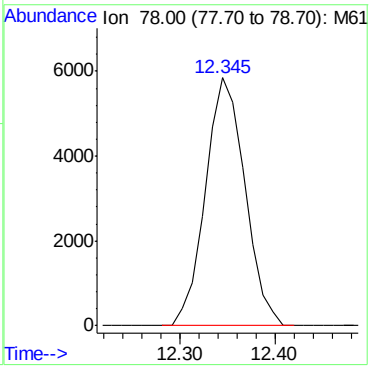
Tgt Ion:114 Resp: 241186

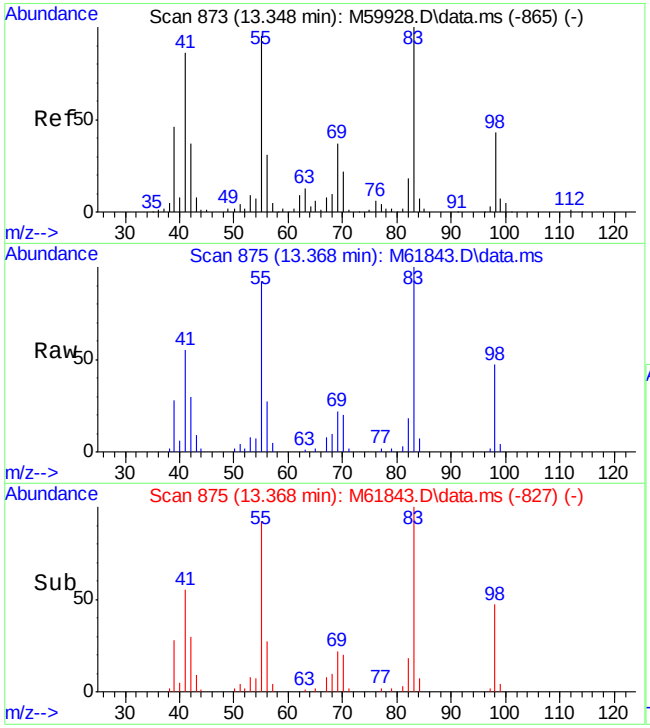





#45
Benzene
Concen: 0.80 ppb
RT: 12.345 min Scan# 778
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 78 Resp: 16789

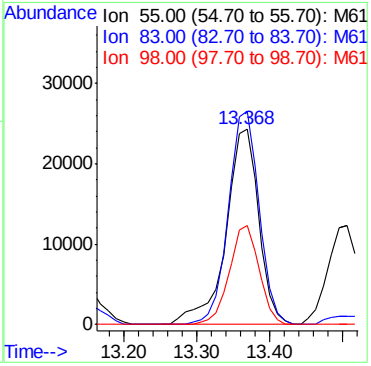


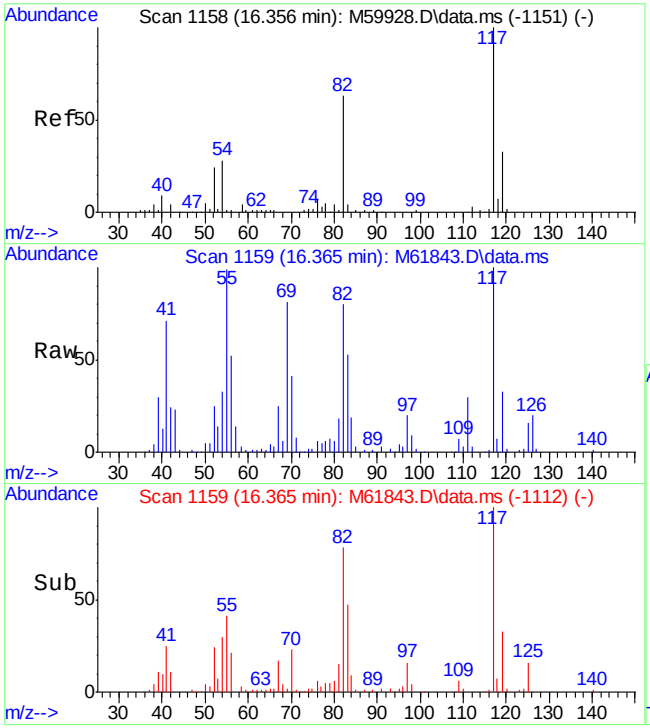




#48
Methylcyclohexane
Concen: 8.61 ppb
RT: 13.368 min Scan# 875
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 55 Resp: 76361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 101.9 | 84.5 | 124.5 |
| 98 | 45.9 | 27.0 | 67.0 |

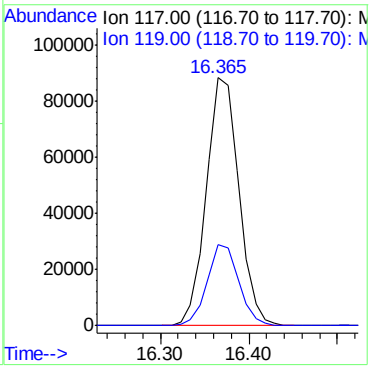


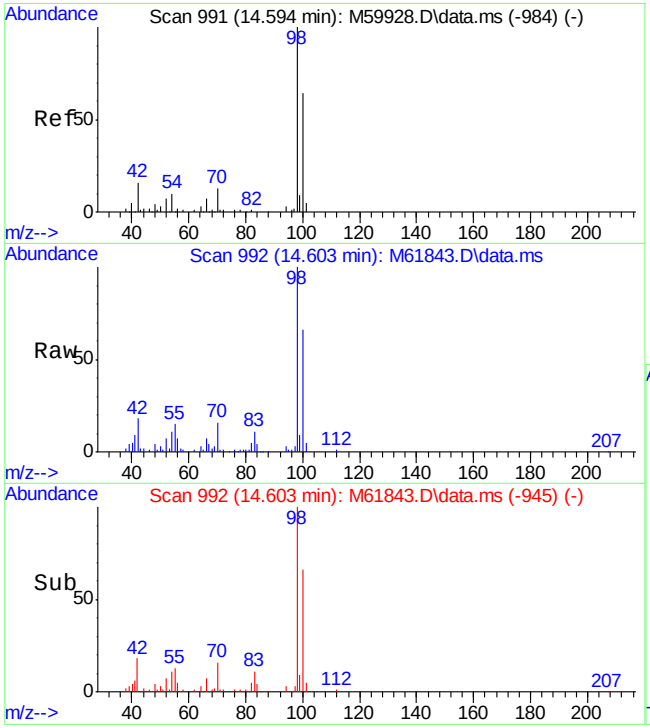



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:117 Resp: 225989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

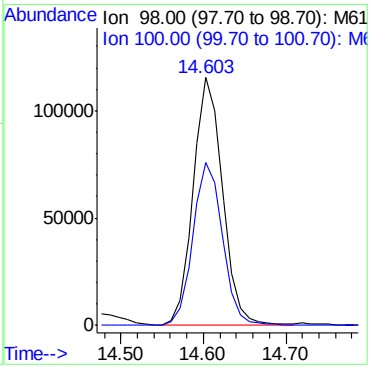


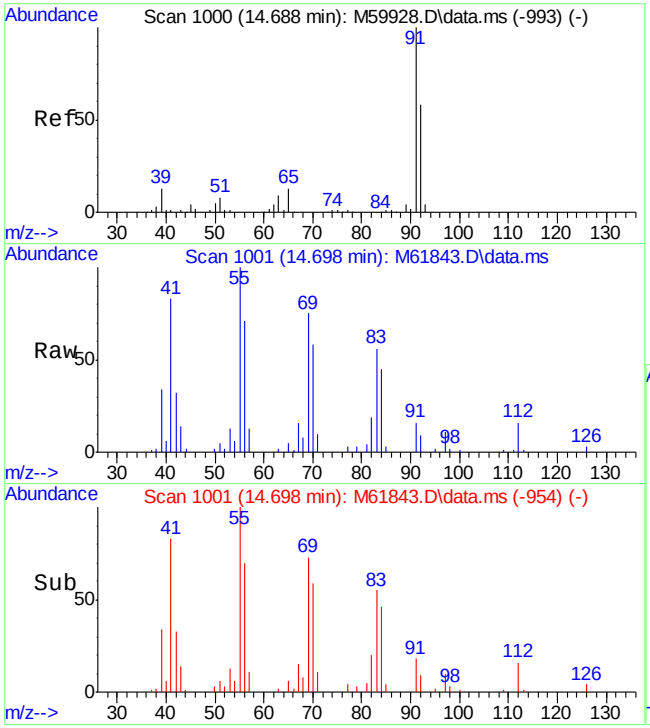




#56
Toluene-d8
Concen: 19.29 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 98 Resp: 284549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.4 | 44.3 | 84.3 |

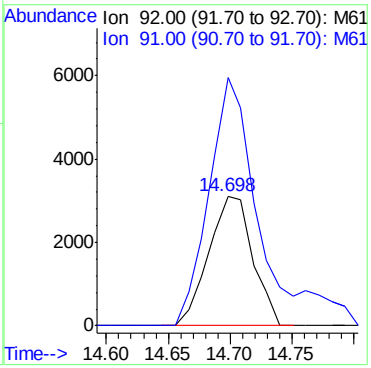


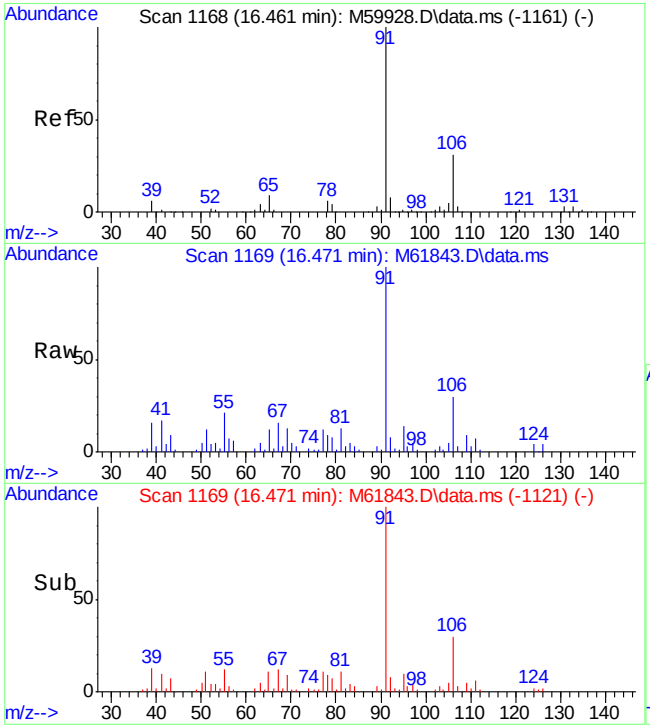



#57
Toluene
Concen: 0.62 ppb
RT: 14.698 min Scan# 1001
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 92 Resp: 7714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 221.1 | 150.5 | 190.5# |

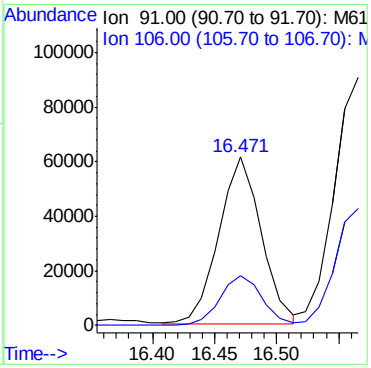


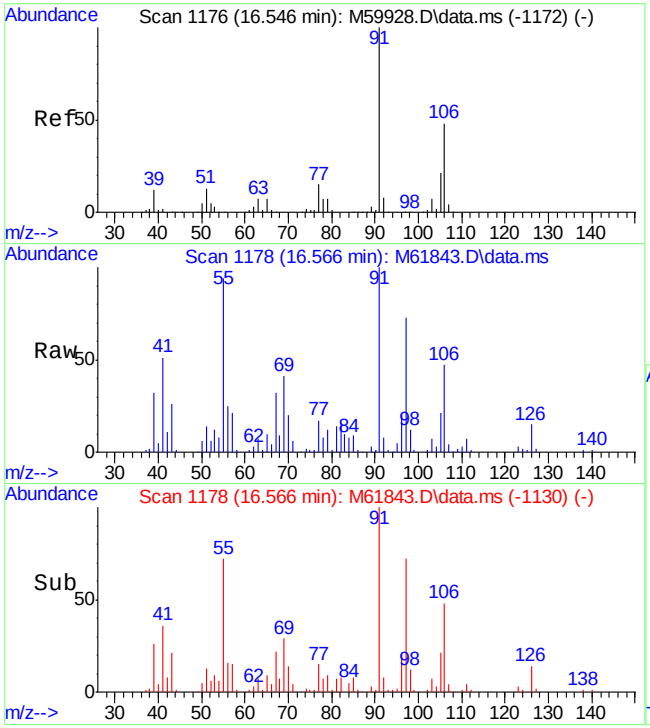




#67
Ethyl Benzene
Concen: 6.27 ppb
RT: 16.471 min Scan# 1169
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 146860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.5 | 10.2 | 50.2 |

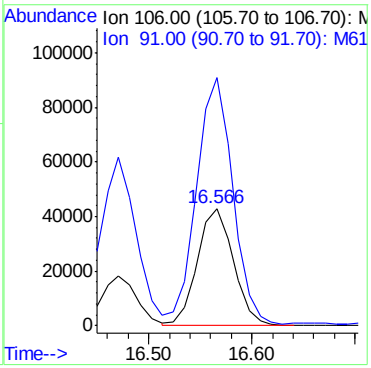


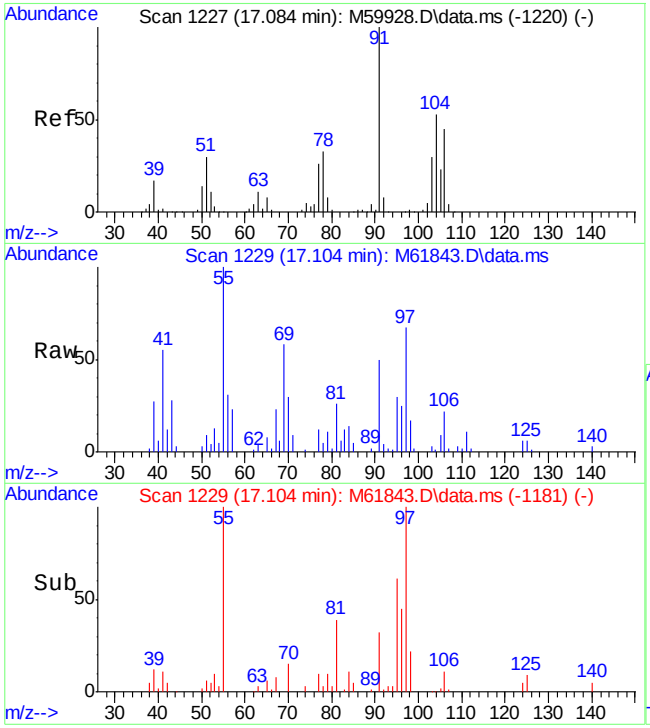



#68
Xylene, m+p
Concen: 12.12 ppb
RT: 16.566 min Scan# 1178
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:106 Resp: 103770

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.2 | 191.5 | 231.5 |

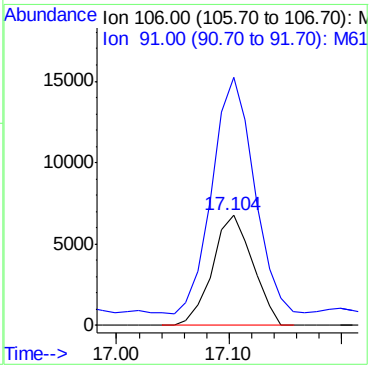


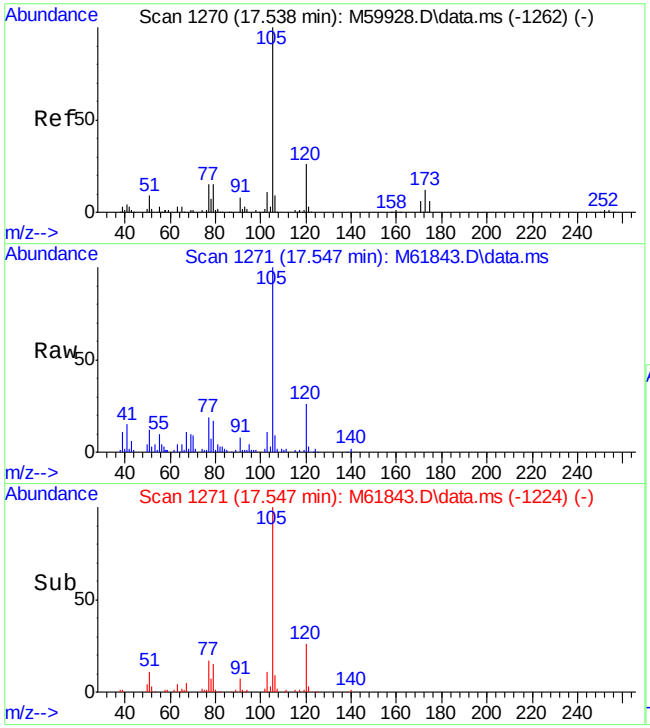




#69
Xylene, o
Concen: 1.96 ppb
RT: 17.104 min Scan# 1229
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:106 Resp: 16902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.6 | 203.2 | 243.2 |

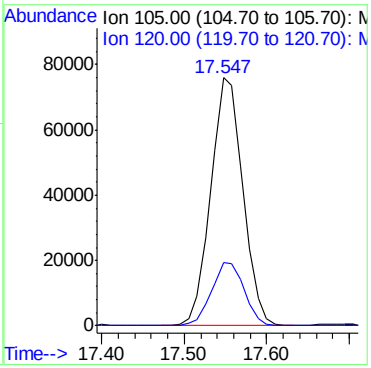


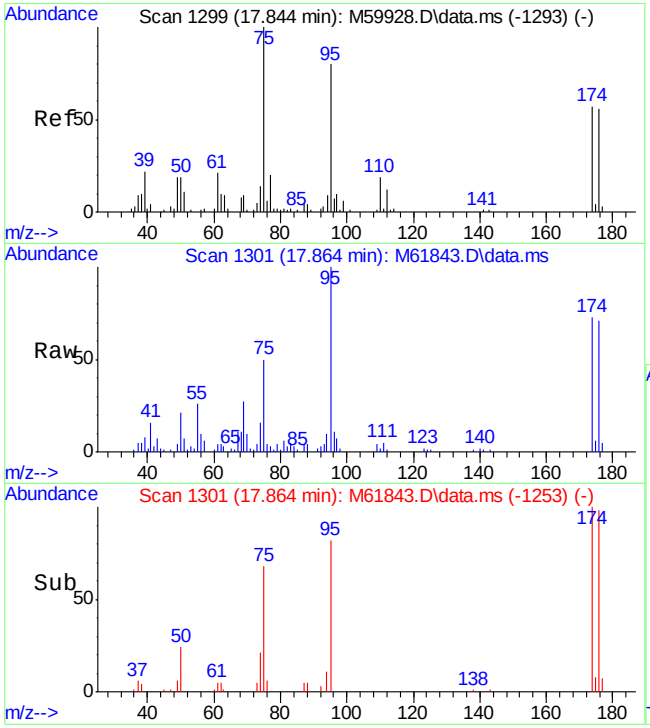



#73
Isopropylbenzene
Concen: 9.43 ppb
RT: 17.547 min Scan# 1271
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 206147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 5.7 | 45.7 |

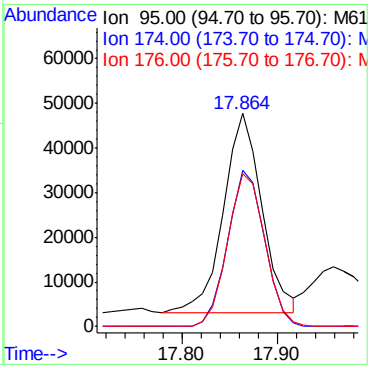


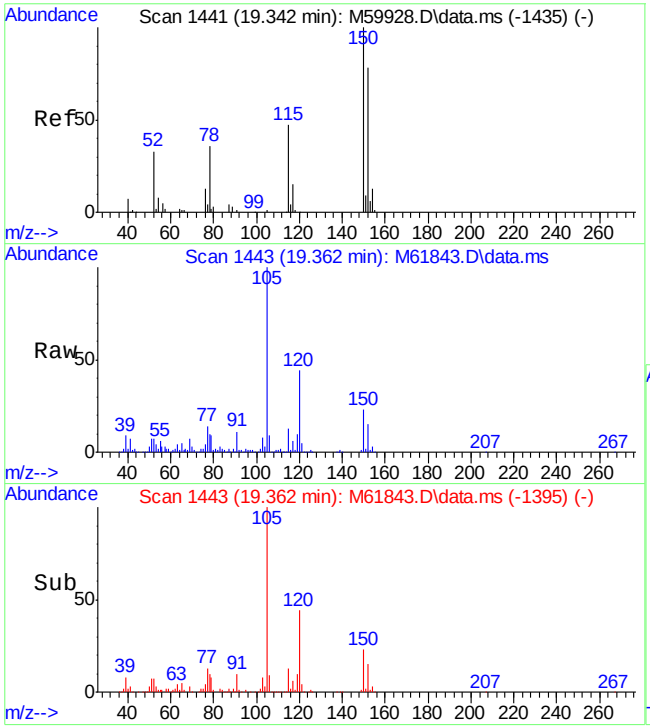




#74
4-Bromofluorobenzene
Concen: 21.62 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 95 Resp: 125378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.6 | 54.3 | 94.3 |
| 176 | 73.9 | 51.5 | 91.5 |

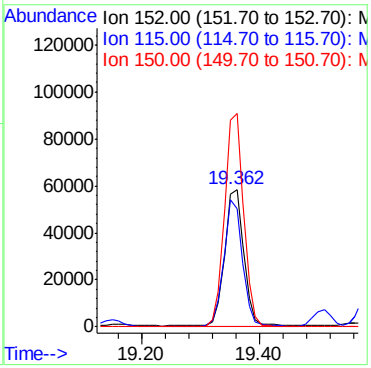


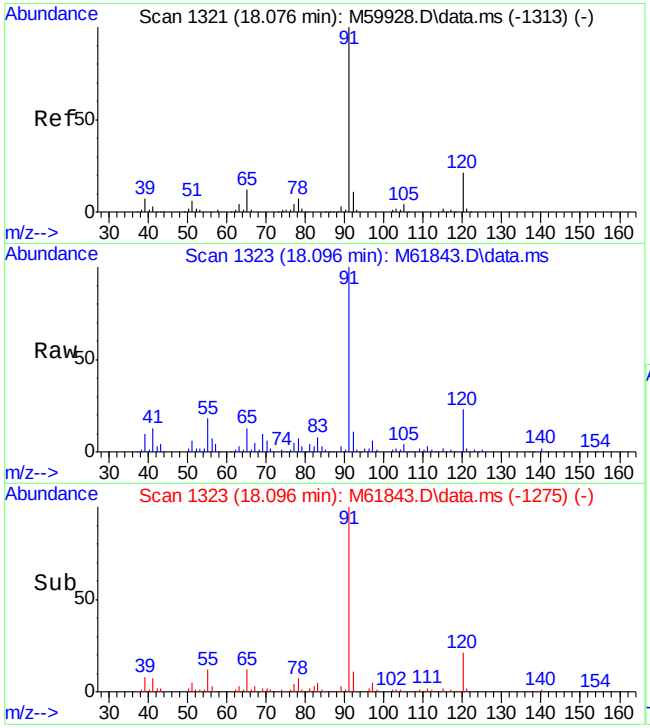



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:152 Resp: 134462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 90.2 | 40.9 | 80.9# |
| 150 | 153.1 | 178.6 | 218.6# |

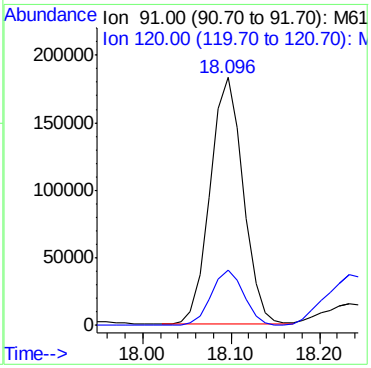


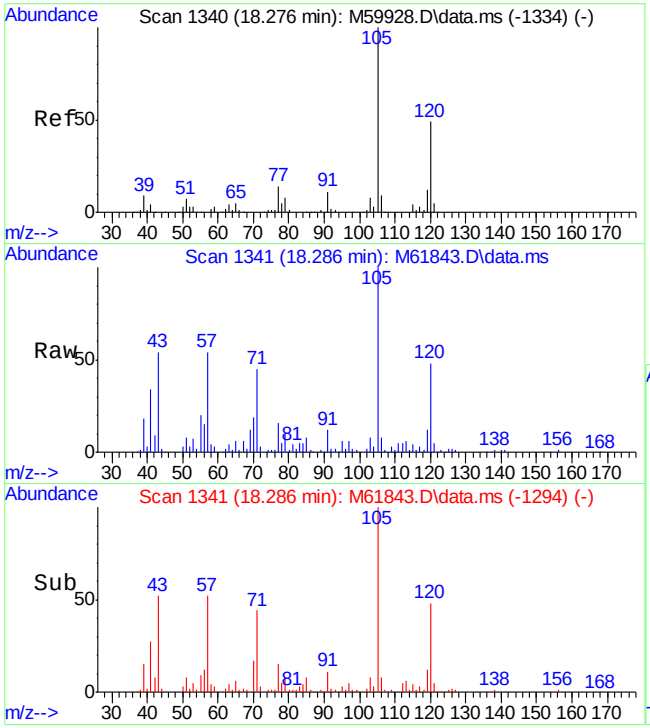




#79
n-Propylbenzene
Concen: 15.01 ppb
RT: 18.096 min Scan# 1323
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 476261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 1.3 | 41.3 |

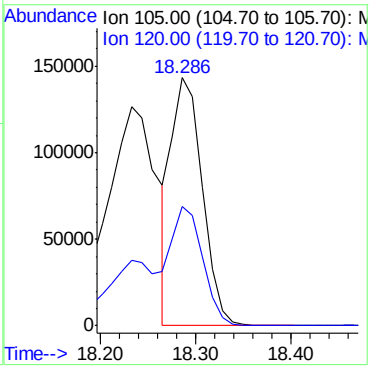


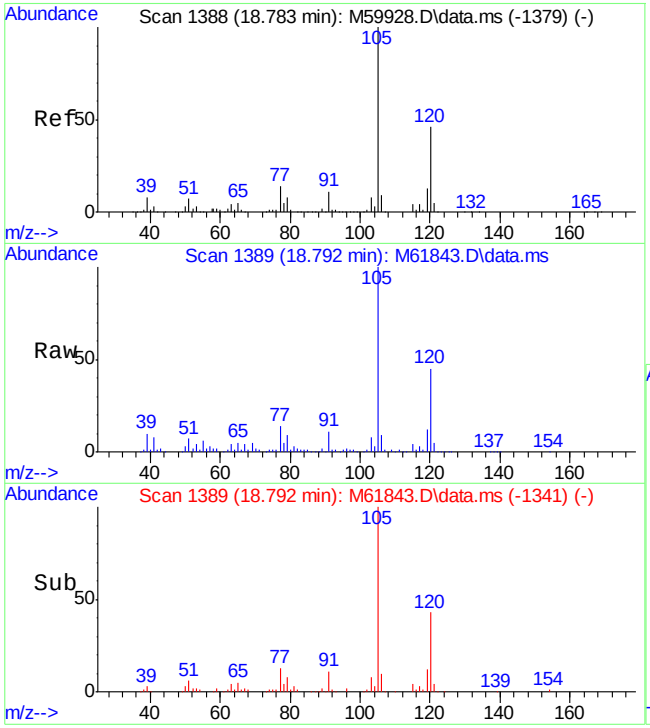



#81
1,3,5-Trimethylbenzene
Concen: 15.36 ppb
RT: 18.286 min Scan# 1341
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 323055

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 54.0 | 26.6 | 66.6 |

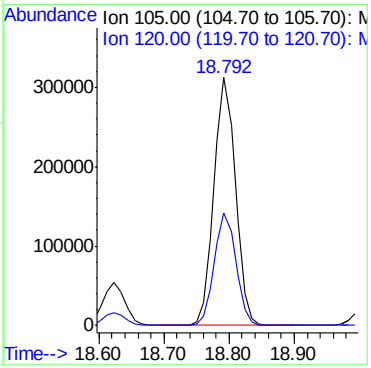


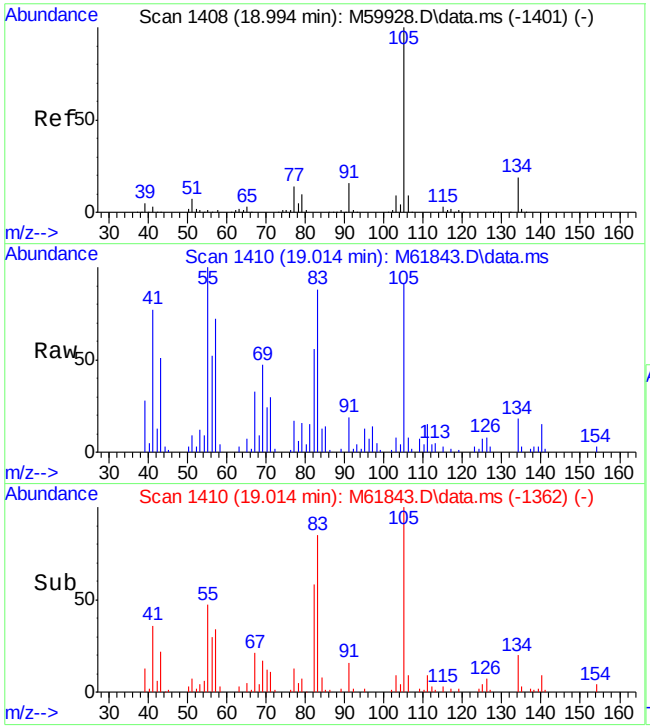




#86
1,2,4-Trimethylbenzene
Concen: 32.57 ppb
RT: 18.792 min Scan# 1389
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 711276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.3 | 32.4 | 72.4 |

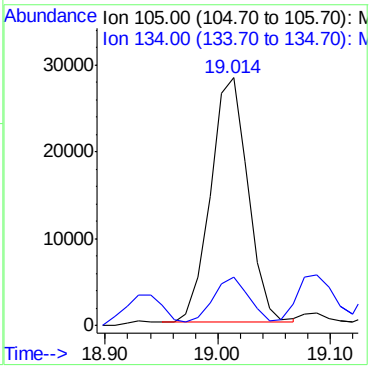


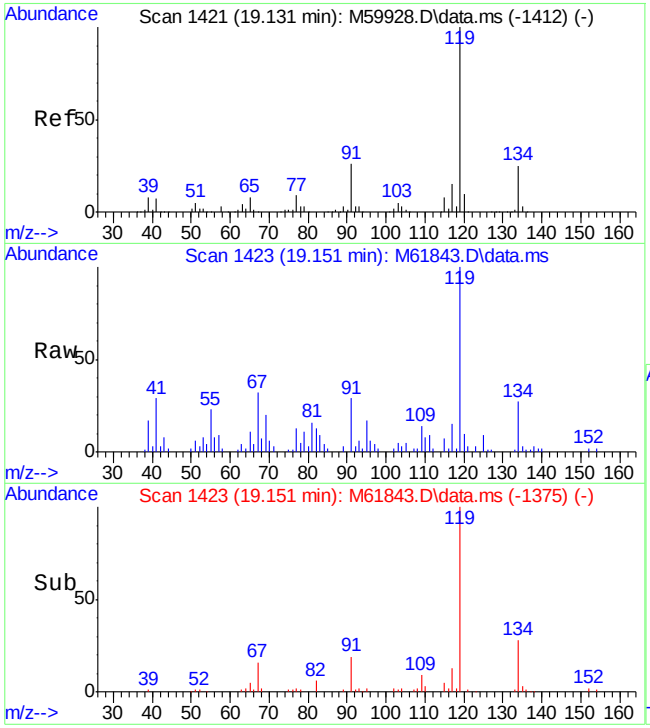



#87
sec-Butylbenzene
Concen: 2.36 ppb
RT: 19.014 min Scan# 1410
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 64866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.8 | 0.0 | 38.7 |

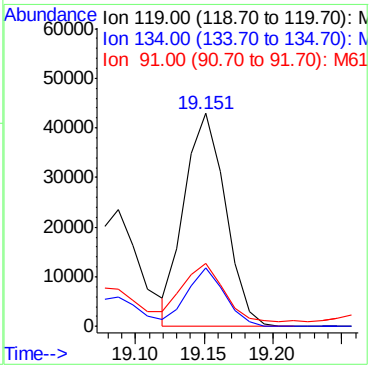


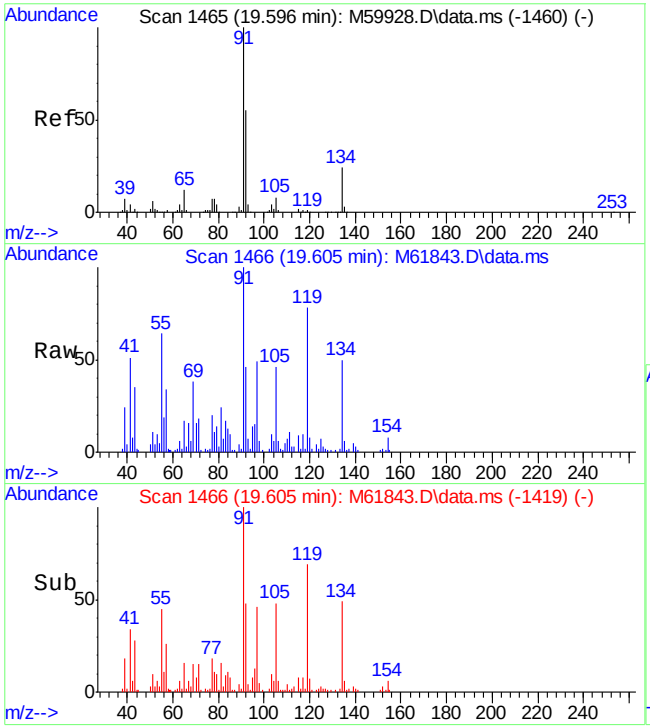




#88
p-Isopropyltoluene
Concen: 3.96 ppb
RT: 19.151 min Scan# 1423
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:119 Resp: 89174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 6.0 | 46.0 |
| 91 | 28.1 | 6.0 | 46.0 |

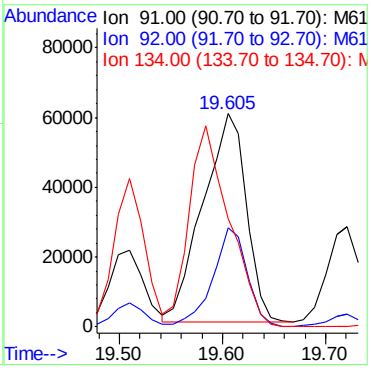


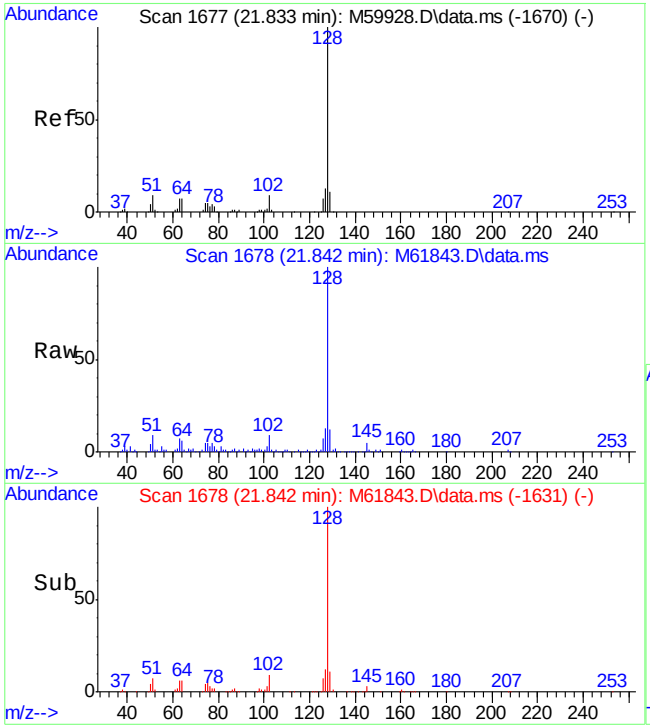



#92
n-Butylbenzene
Concen: 7.66 ppb
RT: 19.605 min Scan# 1466
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 175436

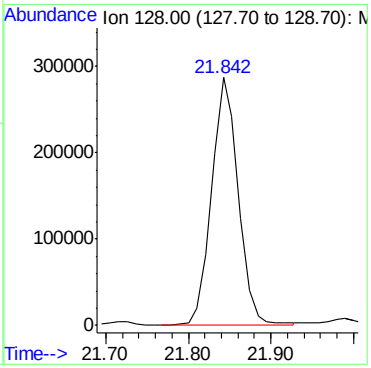
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 37.8 | 35.3 | 75.3 |
| 134 | 88.9 | 3.6 | 43.6# |

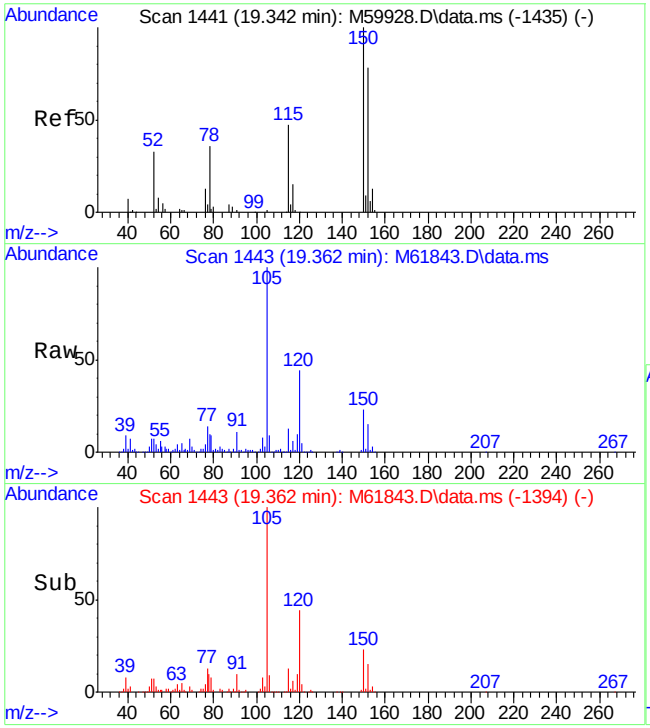



#97
Naphthalene
Concen: 36.54 ppb
RT: 21.842 min Scan# 1678
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:128 Resp: 645712

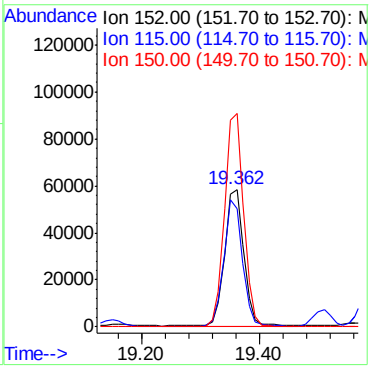


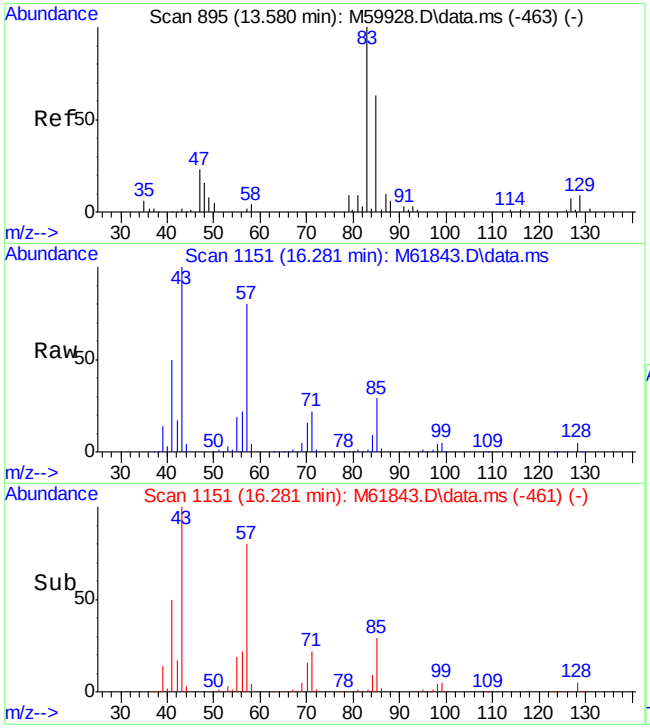



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:152 Resp: 134462

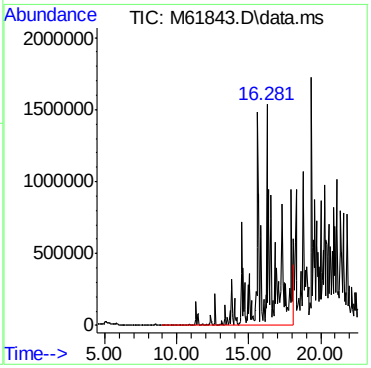
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 90.2 | 37.3 | 77.3# |
| 150 | 153.1 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 1763.73 ppb m
RT: 16.281 min Scan# 1151
Delta R.T. 2.731 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:TIC Resp:62591631



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61843.D
Acq On : 13 Jul 2016 6:30 pm
Operator : johannat
Sample : C46435-13R
Misc : MS1912,VM1859,5.43,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 02 10:11:09 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

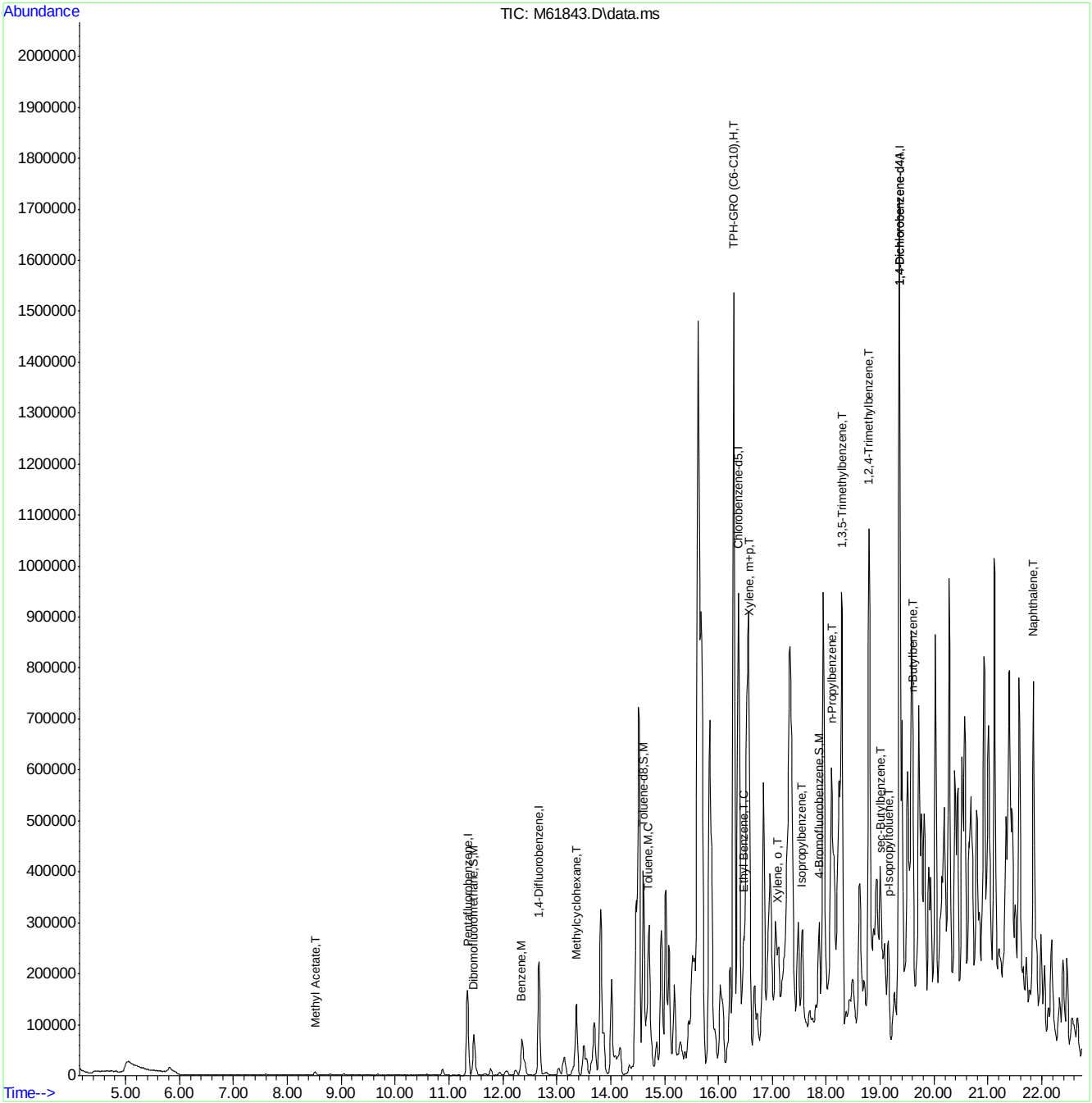
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 160027 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 241186 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 225989 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 134462 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 134462 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 75034 | 18.49 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 92.45% | | | | |
| 56) Toluene-d8 | 14.603 | 98 | 284549 | 19.29 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.45% | | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 125378 | 21.62 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 108.10% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 15) Methyl Acetate | 8.514 | 43 | 16381 | 3.33 | ppb | # | 90 |
| 45) Benzene | 12.345 | 78 | 16789 | 0.80 | ppb | | 100 |
| 48) Methylcyclohexane | 13.368 | 55 | 76361 | 8.61 | ppb | | 98 |
| 57) Toluene | 14.698 | 92 | 7714 | 0.62 | ppb | # | 63 |
| 67) Ethyl Benzene | 16.471 | 91 | 146860 | 6.27 | ppb | | 99 |
| 68) Xylene, m+p | 16.566 | 106 | 103770 | 12.12 | ppb | | 99 |
| 69) Xylene, o | 17.104 | 106 | 16902 | 1.96 | ppb | | 99 |
| 73) Isopropylbenzene | 17.547 | 105 | 206147 | 9.43 | ppb | | 100 |
| 79) n-Propylbenzene | 18.096 | 91 | 476261 | 15.01 | ppb | | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.286 | 105 | 323055 | 15.36 | ppb | | 89 |
| 86) 1,2,4-Trimethylbenzene | 18.792 | 105 | 711276 | 32.57 | ppb | | 90 |
| 87) sec-Butylbenzene | 19.014 | 105 | 64866 | 2.36 | ppb | | 98 |
| 88) p-Isopropyltoluene | 19.151 | 119 | 89174 | 3.96 | ppb | | 97 |
| 92) n-Butylbenzene | 19.605 | 91 | 175436 | 7.66 | ppb | # | 43 |
| 97) Naphthalene | 21.842 | 128 | 645712 | 36.54 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 16.281 | TIC | 62591631m | 1763.73 | ppb | | |

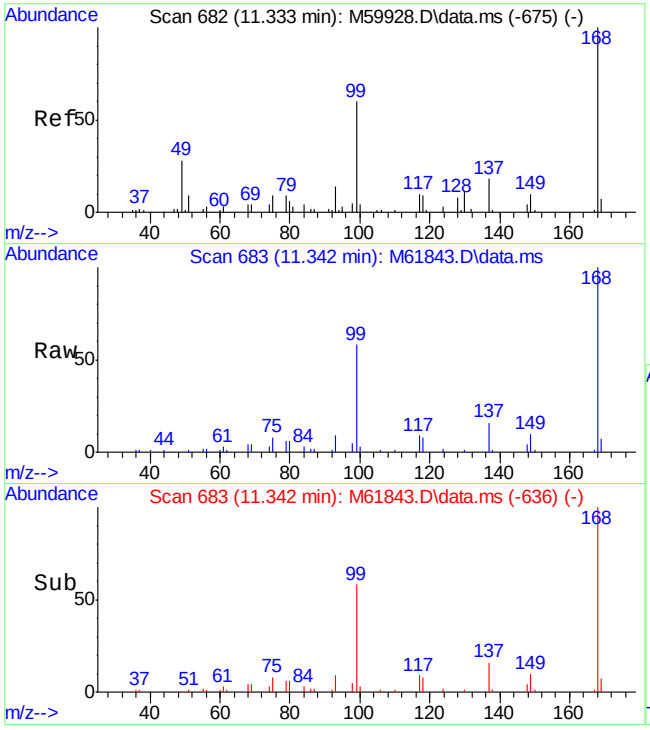
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61843.D
Acq On : 13 Jul 2016 6:30 pm
Operator : johannat
Sample : C46435-13R
Misc : MS1912,VM1859,5.43,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

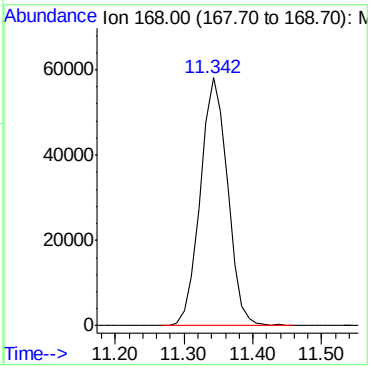
Quant Time: Aug 02 10:11:09 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

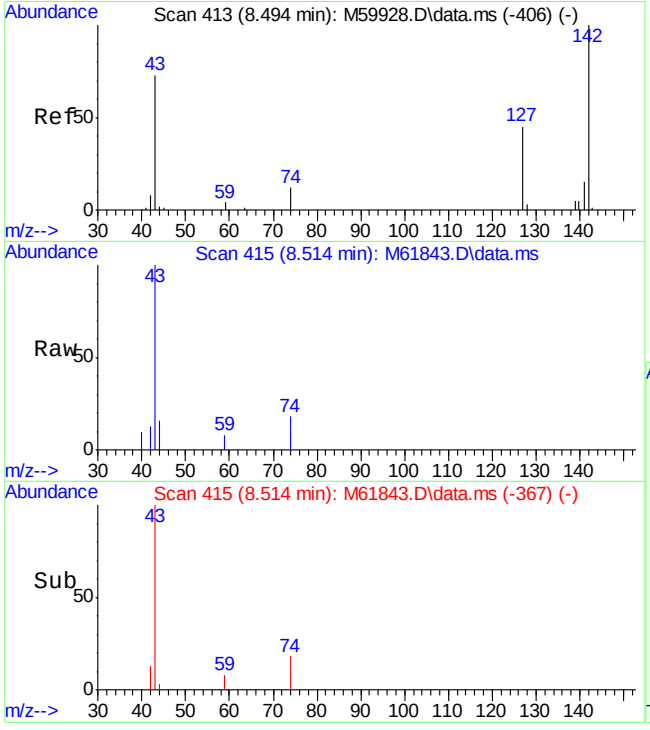





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:168 Resp: 160027

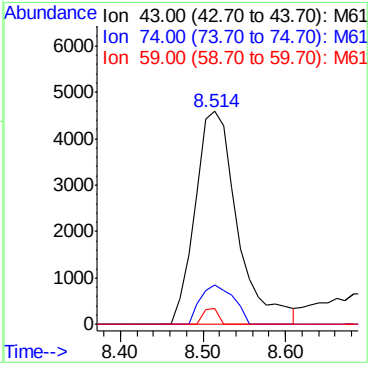


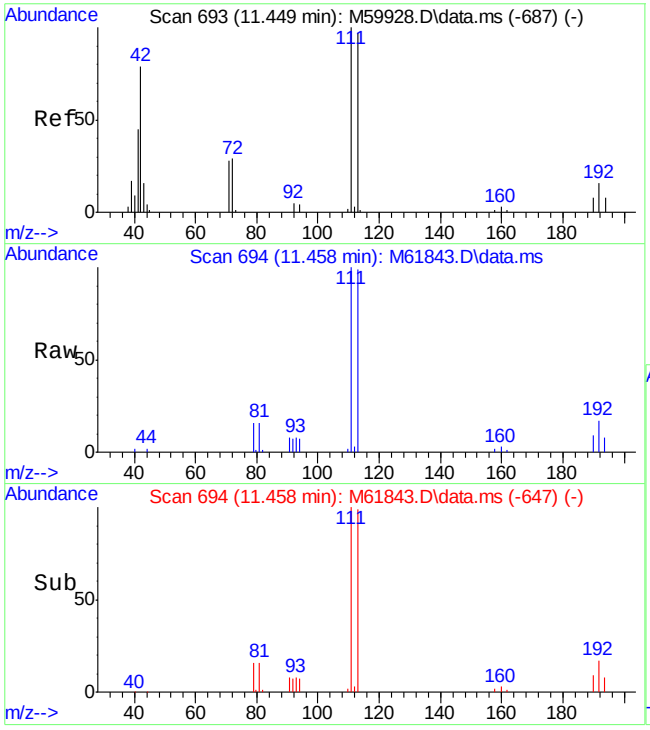




#15
Methyl Acetate
Concen: 3.33 ppb
RT: 8.514 min Scan# 415
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 43 Resp: 16381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 14.7 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

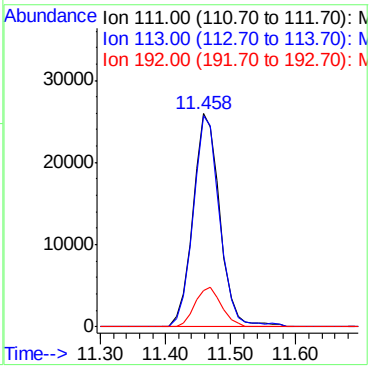


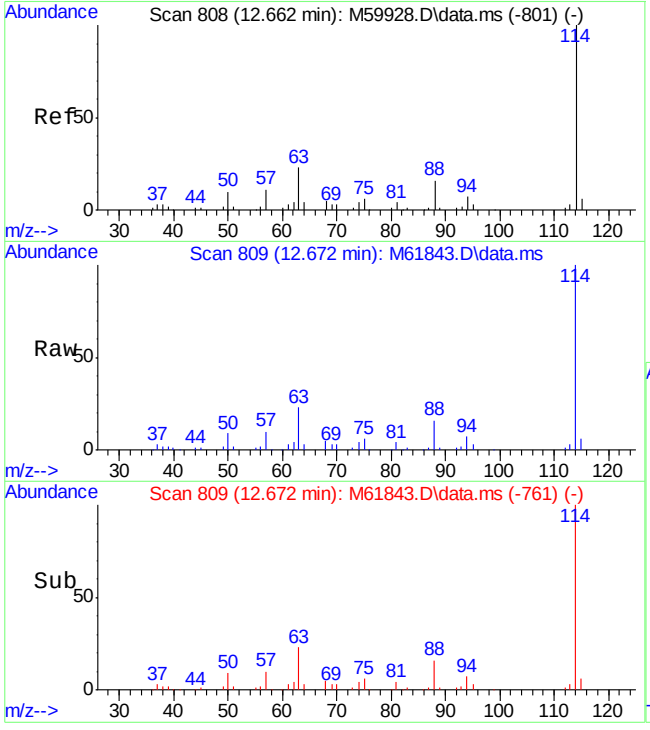



#36
Dibromofluoromethane
Concen: 18.49 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:111 Resp: 75034

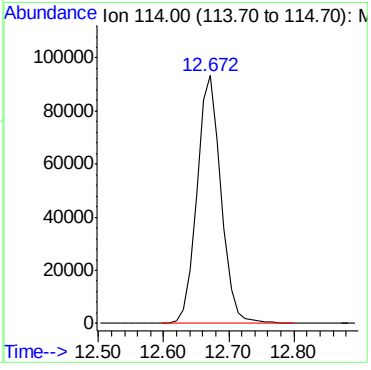
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.4 | 77.7 | 117.7 |
| 192 | 18.2 | 0.0 | 36.3 |

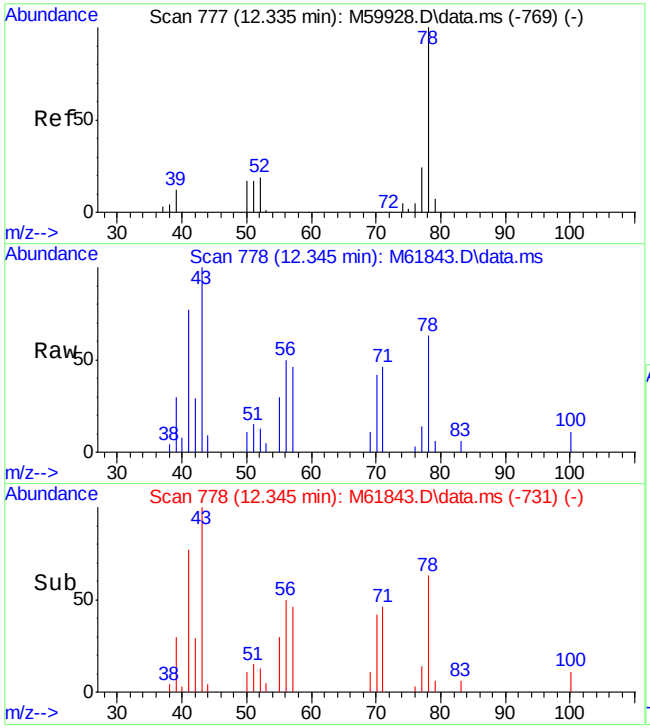



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

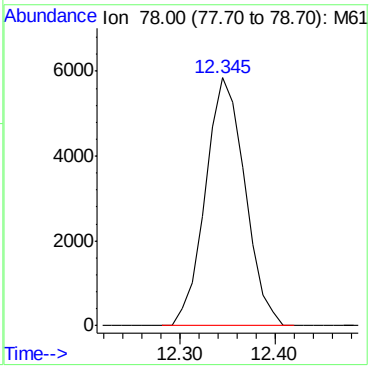
Tgt Ion:114 Resp: 241186

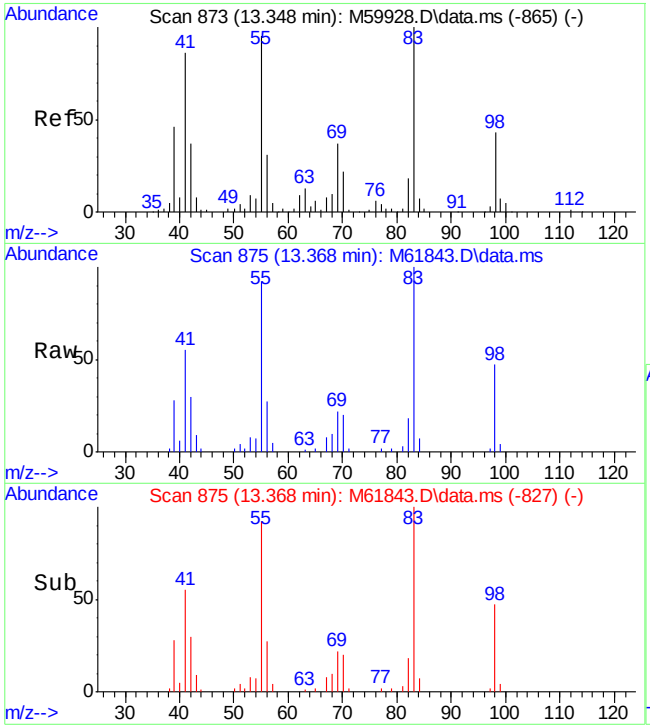





#45
Benzene
Concen: 0.80 ppb
RT: 12.345 min Scan# 778
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 78 Resp: 16789

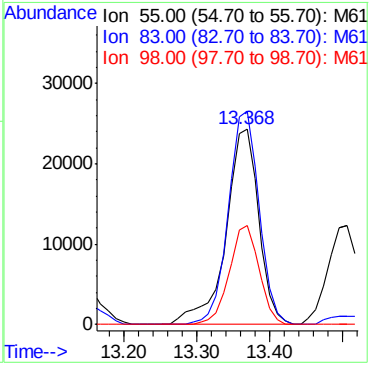


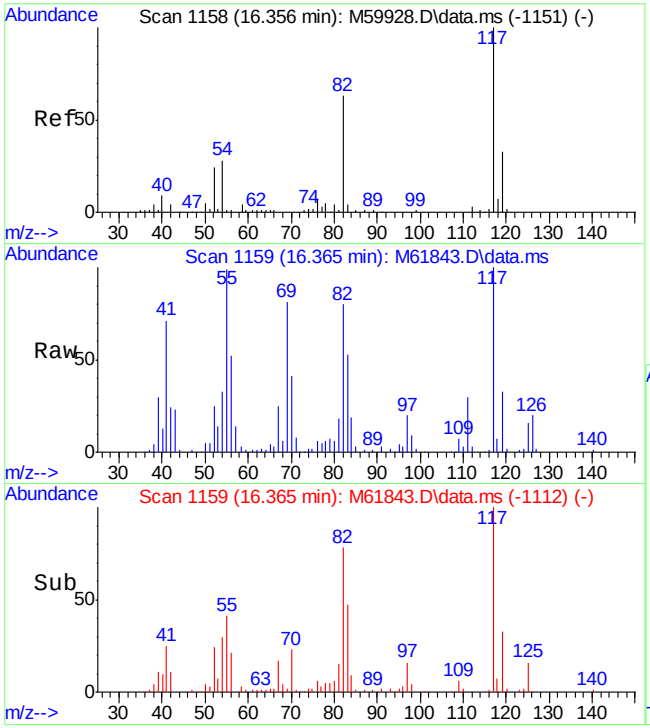




#48
Methylcyclohexane
Concen: 8.61 ppb
RT: 13.368 min Scan# 875
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 55 Resp: 76361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 101.9 | 84.5 | 124.5 |
| 98 | 45.9 | 27.0 | 67.0 |

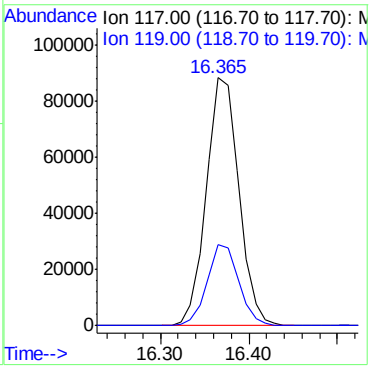


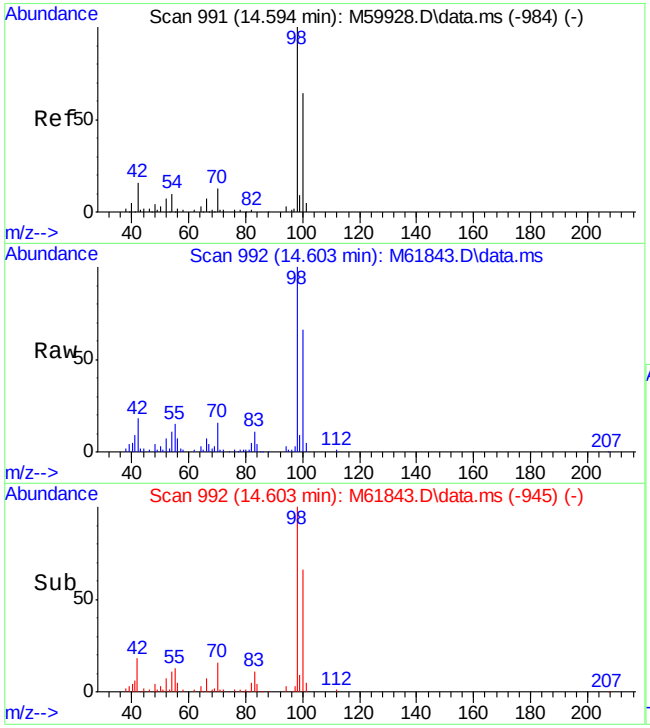



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:117 Resp: 225989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

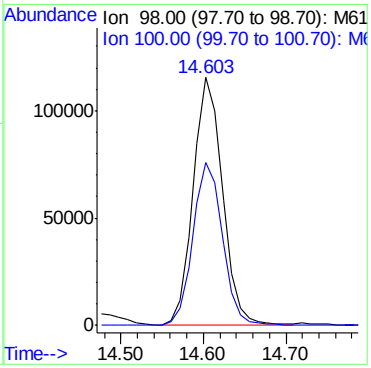


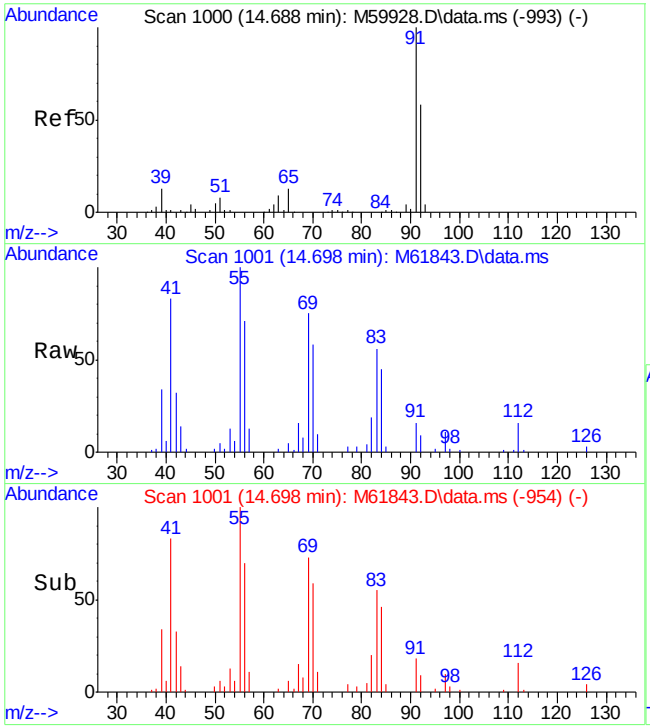




#56
Toluene-d8
Concen: 19.29 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 98 Resp: 284549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.4 | 44.3 | 84.3 |

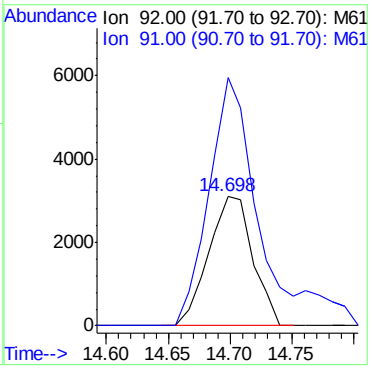


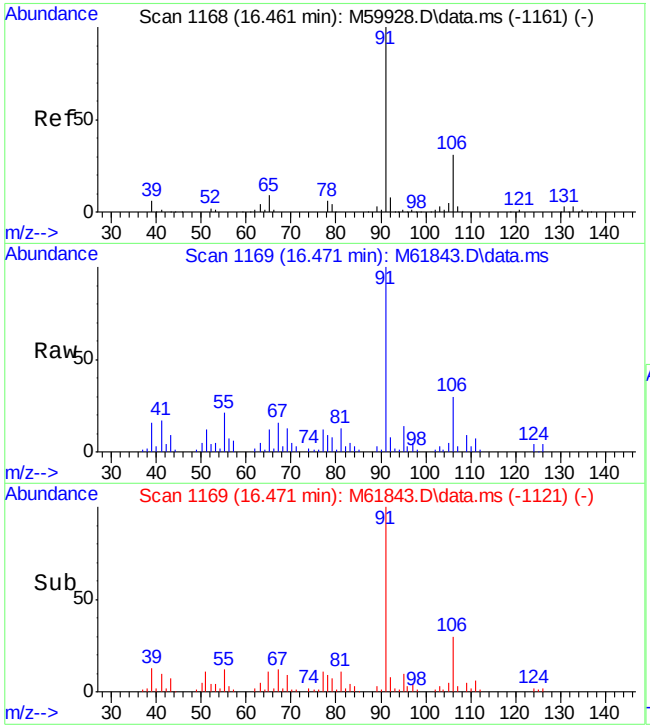



#57
Toluene
Concen: 0.62 ppb
RT: 14.698 min Scan# 1001
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 92 Resp: 7714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 221.1 | 150.5 | 190.5# |

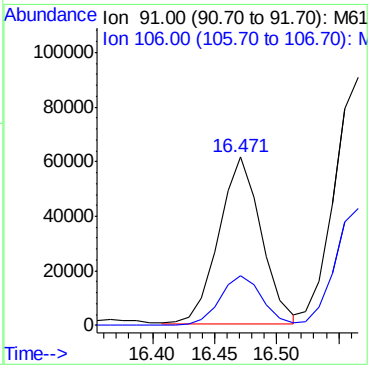


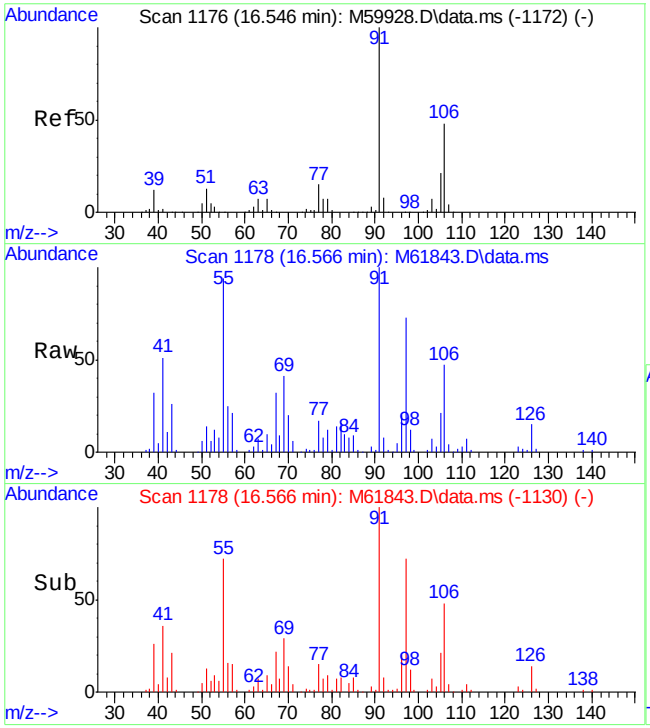




#67
Ethyl Benzene
Concen: 6.27 ppb
RT: 16.471 min Scan# 1169
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 146860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.5 | 10.2 | 50.2 |

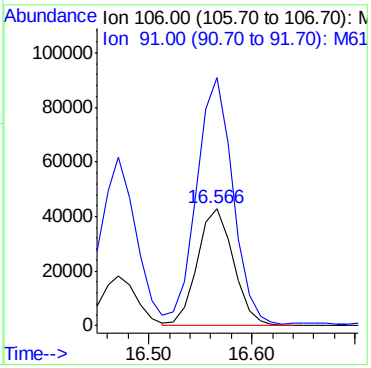


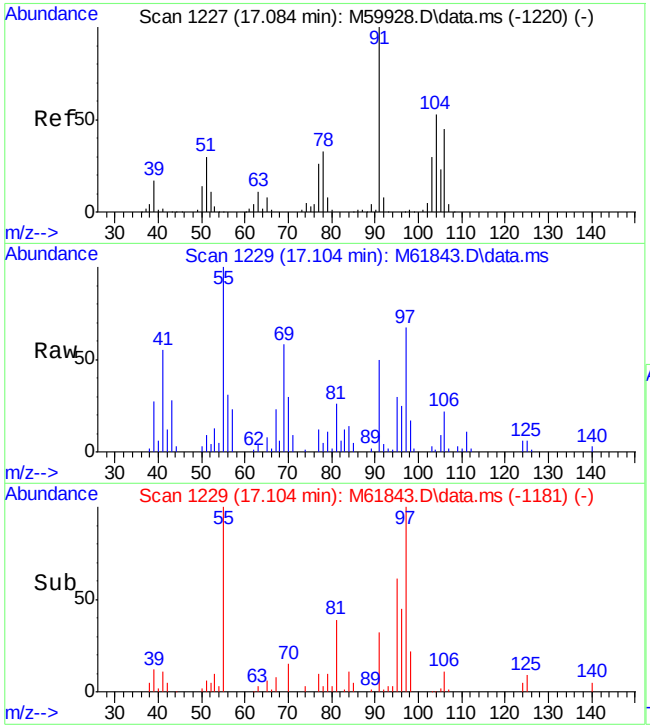



#68
Xylene, m+p
Concen: 12.12 ppb
RT: 16.566 min Scan# 1178
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:106 Resp: 103770

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.2 | 191.5 | 231.5 |

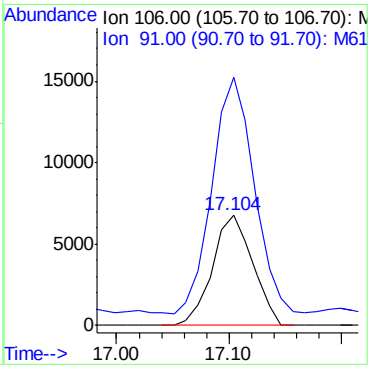


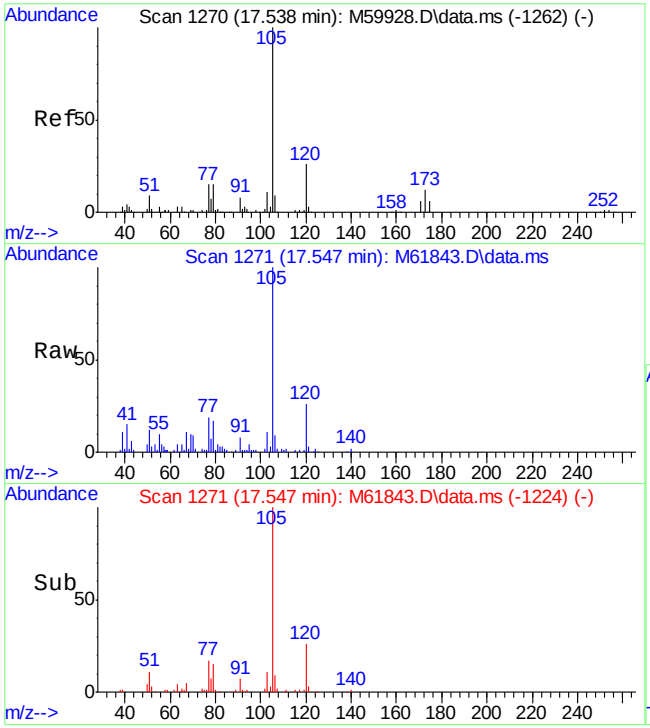




#69
Xylene, o
Concen: 1.96 ppb
RT: 17.104 min Scan# 1229
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:106 Resp: 16902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.6 | 203.2 | 243.2 |

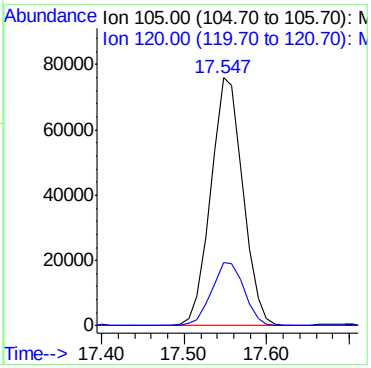


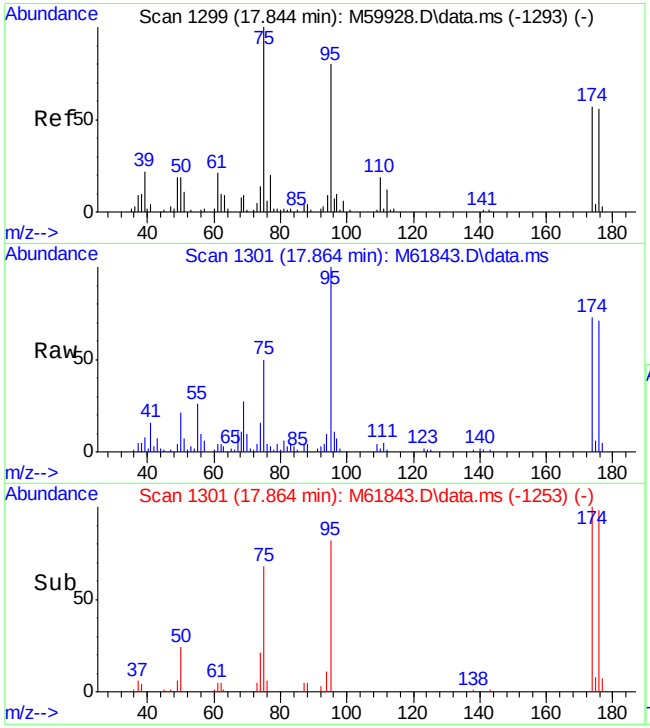



#73
Isopropylbenzene
Concen: 9.43 ppb
RT: 17.547 min Scan# 1271
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 206147

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 5.7 | 45.7 |

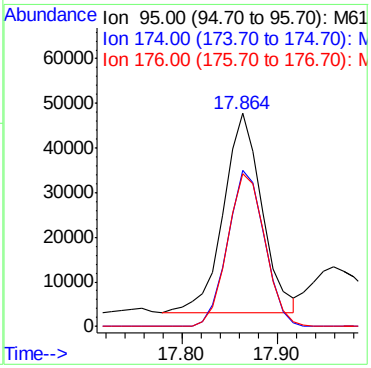


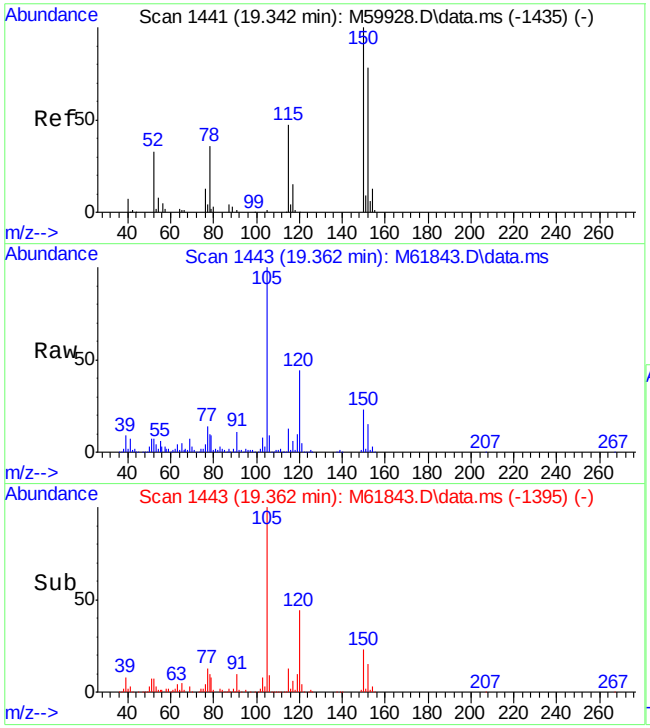




#74
4-Bromofluorobenzene
Concen: 21.62 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 95 Resp: 125378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.6 | 54.3 | 94.3 |
| 176 | 73.9 | 51.5 | 91.5 |

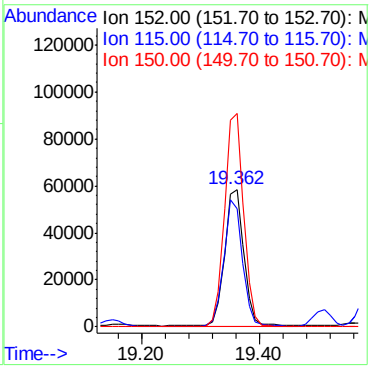


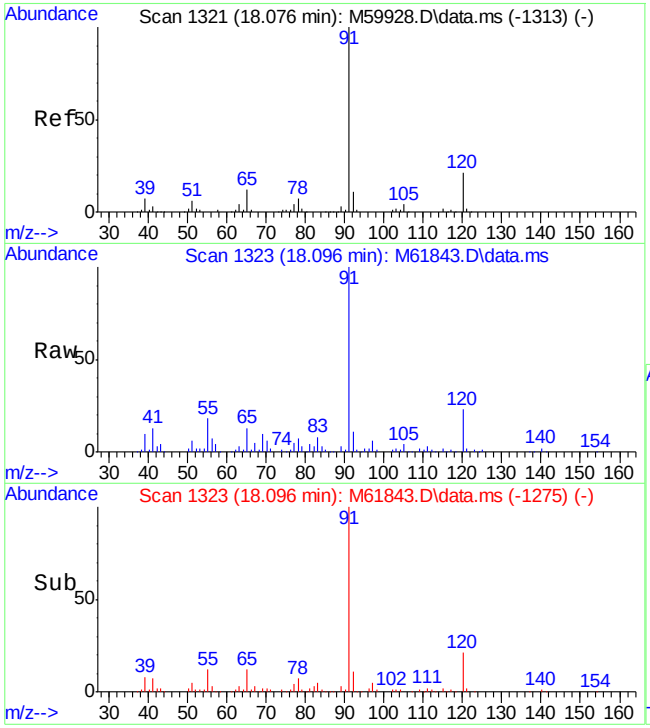



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:152 Resp: 134462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 90.2 | 40.9 | 80.9# |
| 150 | 153.1 | 178.6 | 218.6# |

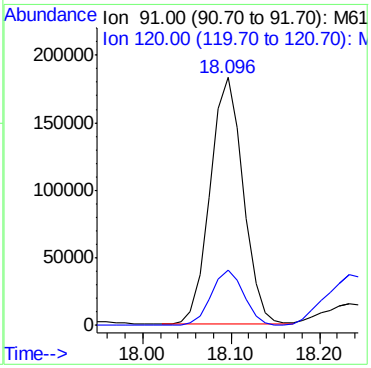


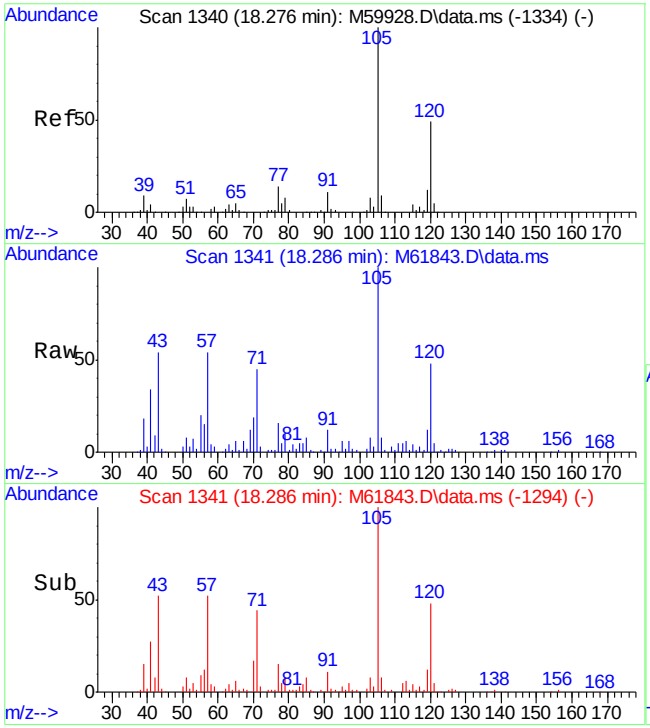




#79
n-Propylbenzene
Concen: 15.01 ppb
RT: 18.096 min Scan# 1323
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 476261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 1.3 | 41.3 |

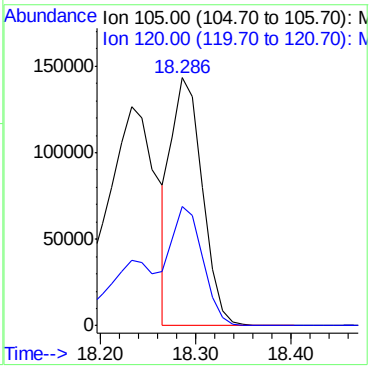


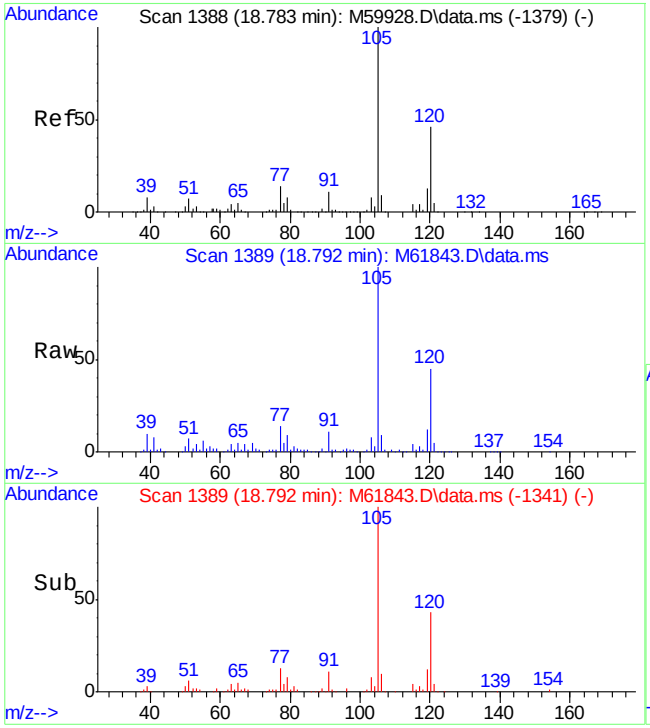



#81
1,3,5-Trimethylbenzene
Concen: 15.36 ppb
RT: 18.286 min Scan# 1341
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 323055

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 54.0 | 26.6 | 66.6 |

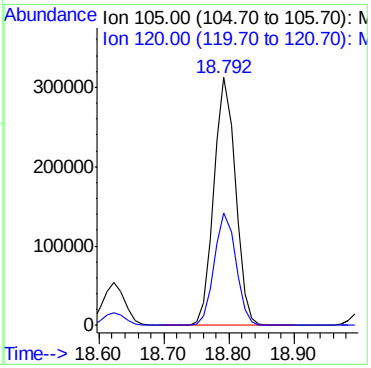


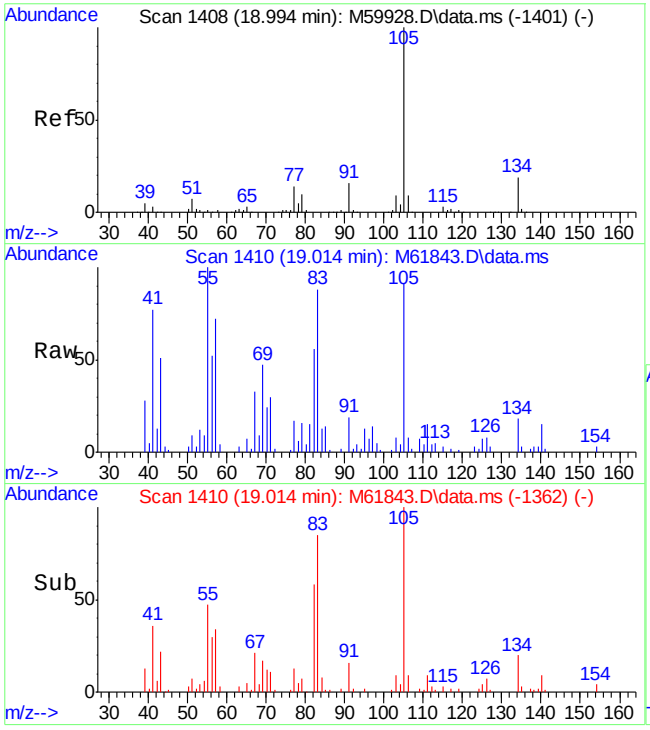




#86
1,2,4-Trimethylbenzene
Concen: 32.57 ppb
RT: 18.792 min Scan# 1389
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 711276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.3 | 32.4 | 72.4 |

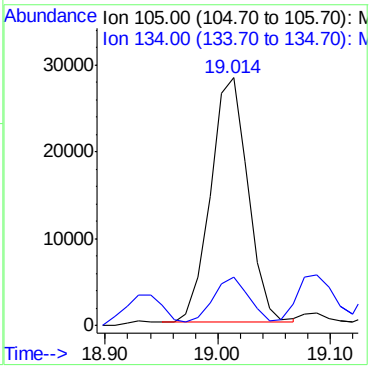


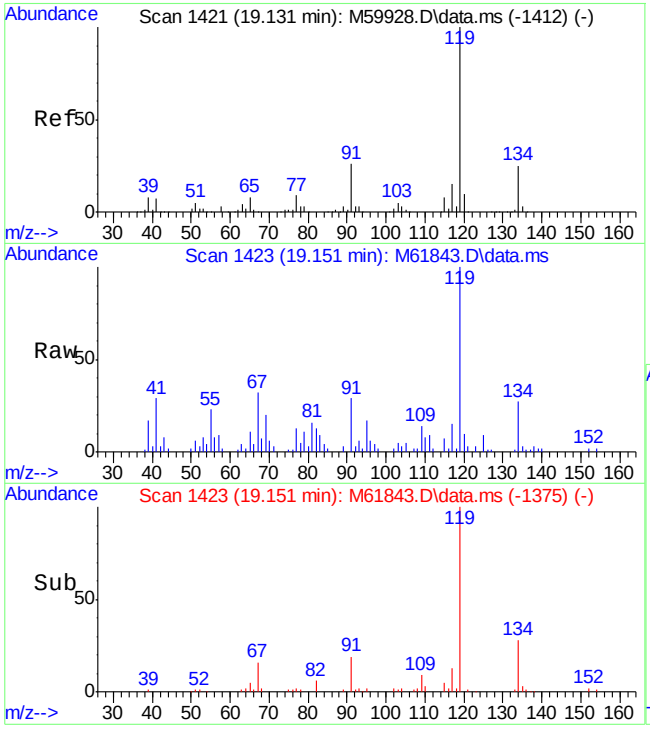



#87
sec-Butylbenzene
Concen: 2.36 ppb
RT: 19.014 min Scan# 1410
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:105 Resp: 64866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.8 | 0.0 | 38.7 |

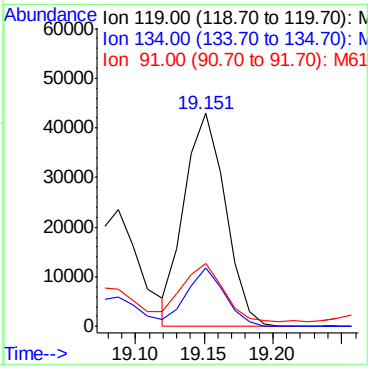


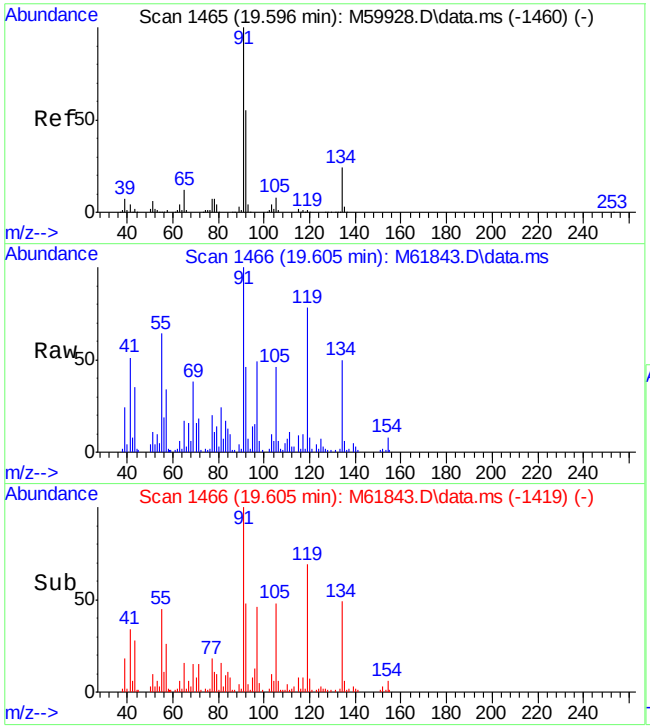




#88
p-Isopropyltoluene
Concen: 3.96 ppb
RT: 19.151 min Scan# 1423
Delta R.T. 0.009 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:119 Resp: 89174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 6.0 | 46.0 |
| 91 | 28.1 | 6.0 | 46.0 |

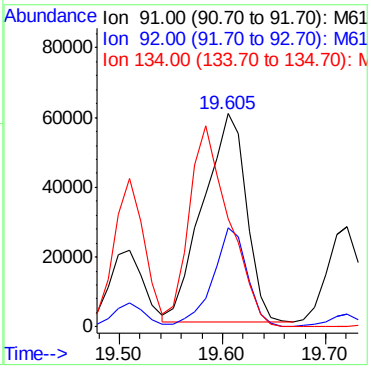


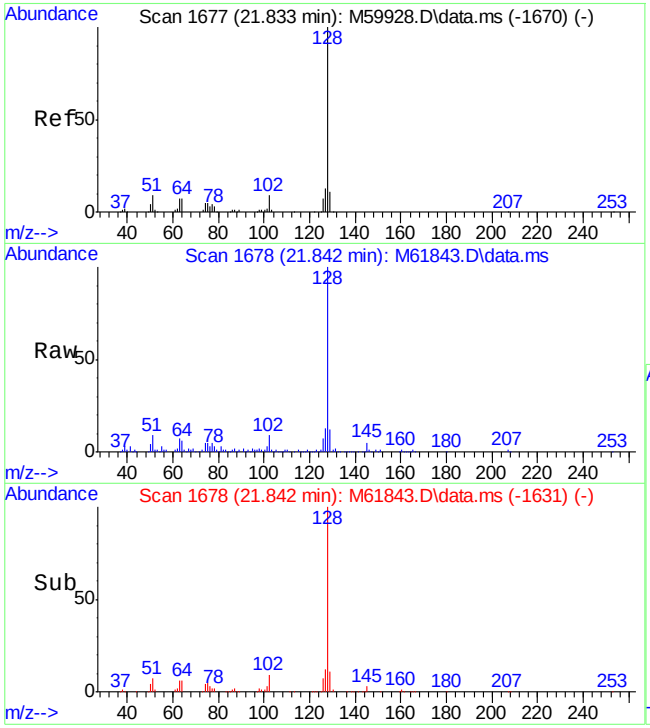



#92
n-Butylbenzene
Concen: 7.66 ppb
RT: 19.605 min Scan# 1466
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion: 91 Resp: 175436

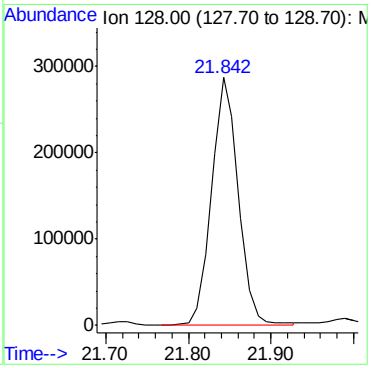
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 37.8 | 35.3 | 75.3 |
| 134 | 88.9 | 3.6 | 43.6# |

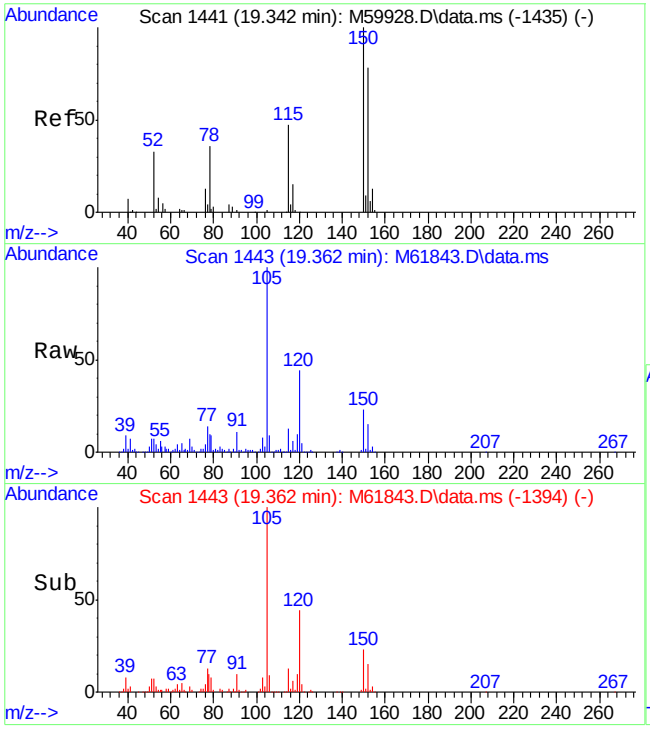



#97
Naphthalene
Concen: 36.54 ppb
RT: 21.842 min Scan# 1678
Delta R.T. -0.001 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:128 Resp: 645712

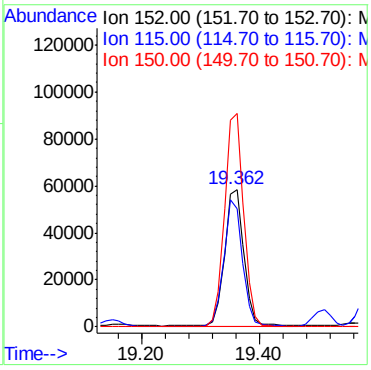


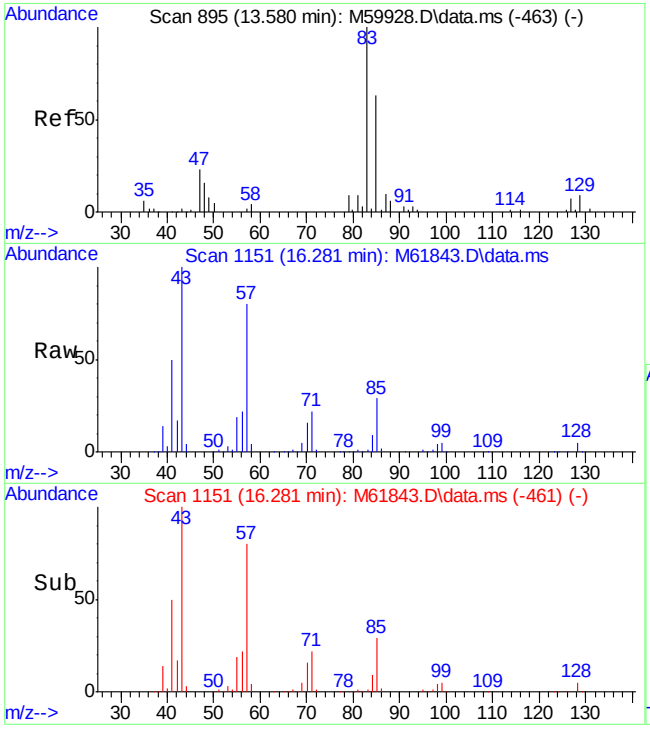



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:152 Resp: 134462

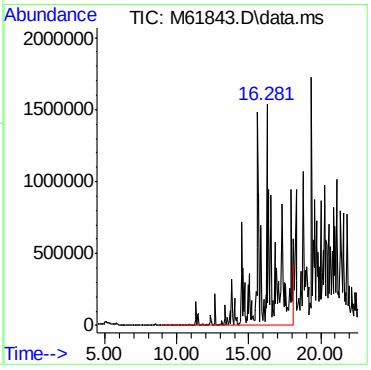
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 90.2 | 37.3 | 77.3# |
| 150 | 153.1 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 1763.73 ppb m
RT: 16.281 min Scan# 1151
Delta R.T. 2.731 min
Lab File: M61843.D
Acq: 13 Jul 2016 6:30 pm

Tgt Ion:TIC Resp:62591631



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61844.D
Acq On : 13 Jul 2016 6:59 pm
Operator : johannat
Sample : C46435-14R
Misc : MS1912,VM1859,5.31,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 02 10:11:21 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

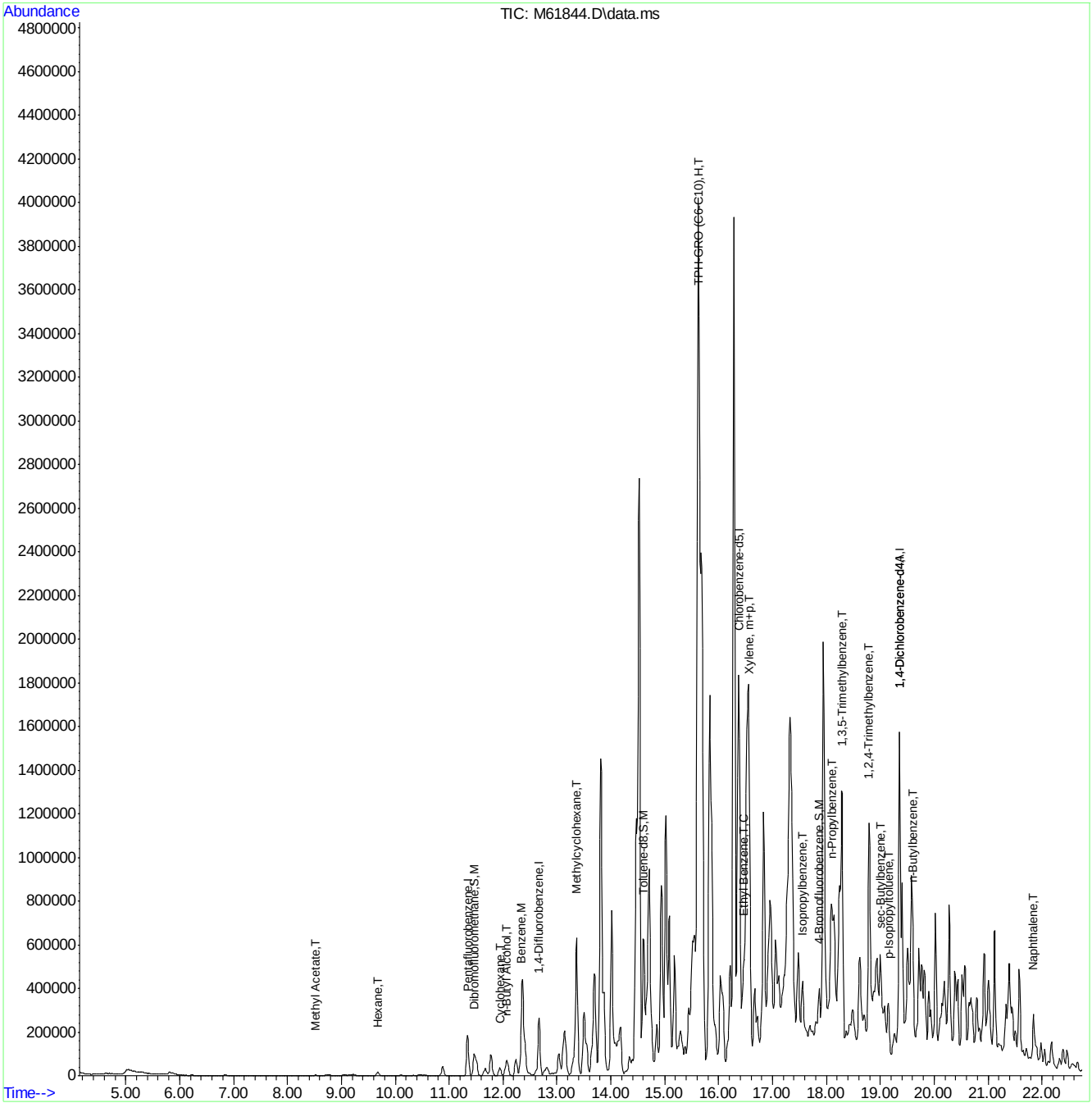
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 183542 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.669 | 114 | 272447 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.373 | 117 | 255969 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 154344 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 154344 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 83350 | 17.91 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 89.55% | | | | |
| 56) Toluene-d8 | 14.601 | 98 | 316151 | 18.92 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | | |
| 74) 4-Bromofluorobenzene | 17.861 | 95 | 150494 | 22.91 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 114.55% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 15) Methyl Acetate | 8.522 | 43 | 5068 | 0.90 | ppb | # | 66 |
| 24) Hexane | 9.683 | 57 | 12889 | 1.34 | ppb | | 99 |
| 38) Cyclohexane | 11.941 | 56 | 26725 | 2.23 | ppb | | 97 |
| 42) n-Butyl Alcohol | 12.068 | 56 | 41068 | 311.24 | ppb | | 91 |
| 45) Benzene | 12.342 | 78 | 19369 | 0.81 | ppb | | 100 |
| 48) Methylcyclohexane | 13.366 | 55 | 334561 | 33.41 | ppb | | 97 |
| 67) Ethyl Benzene | 16.468 | 91 | 245675 | 9.25 | ppb | | 98 |
| 68) Xylene, m+p | 16.563 | 106 | 140390 | 14.48 | ppb | | 97 |
| 73) Isopropylbenzene | 17.555 | 105 | 256295 | 10.35 | ppb | | 98 |
| 79) n-Propylbenzene | 18.094 | 91 | 504969 | 13.86 | ppb | | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.283 | 105 | 392213 | 16.25 | ppb | | 98 |
| 86) 1,2,4-Trimethylbenzene | 18.790 | 105 | 715137 | 28.53 | ppb | | 91 |
| 87) sec-Butylbenzene | 19.012 | 105 | 73443 | 2.33 | ppb | | 98 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 104571 | 4.05 | ppb | | 98 |
| 92) n-Butylbenzene | 19.603 | 91 | 170021 | 6.47 | ppb | # | 38 |
| 97) Naphthalene | 21.840 | 128 | 209254 | 10.32 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 15.624 | TIC | 157024264m | 3993.56 | ppb | | |

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

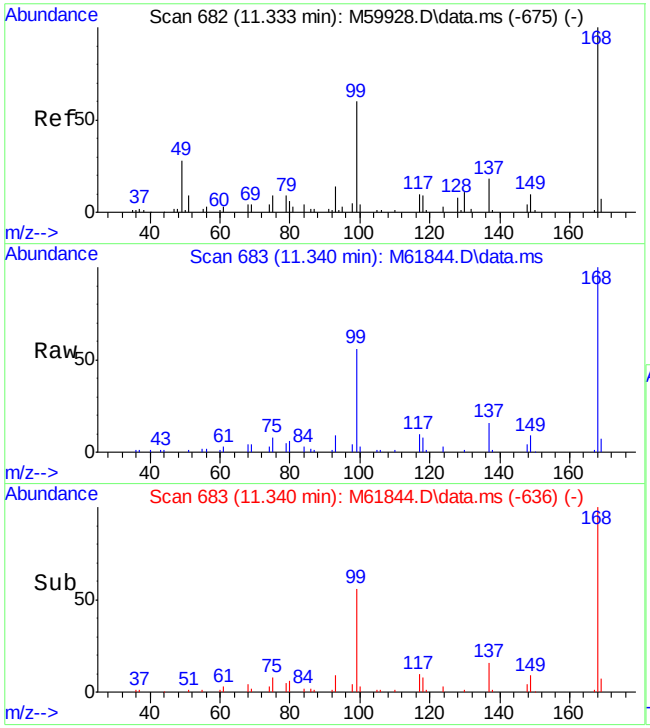
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61844.D
Acq On : 13 Jul 2016 6:59 pm
Operator : johannat
Sample : C46435-14R
Misc : MS1912,VM1859,5.31,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 02 10:11:21 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

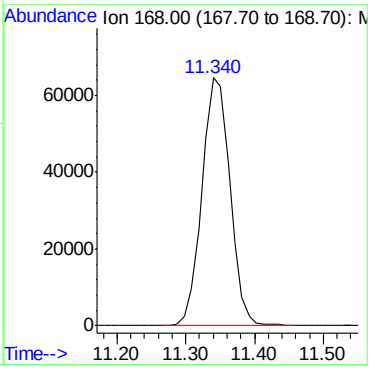


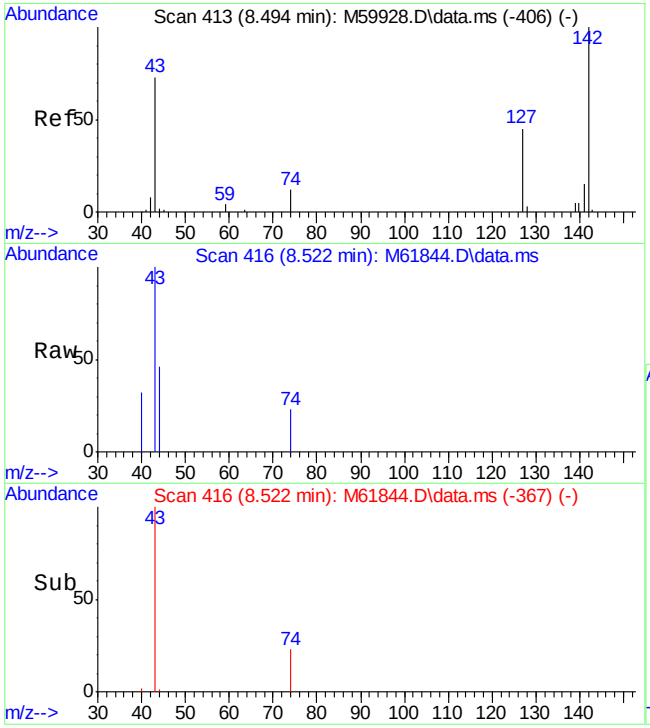

VM1848S.M Tue Aug 02 11:53:07 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:168 Resp: 183542

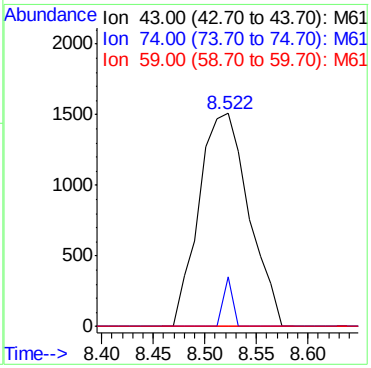


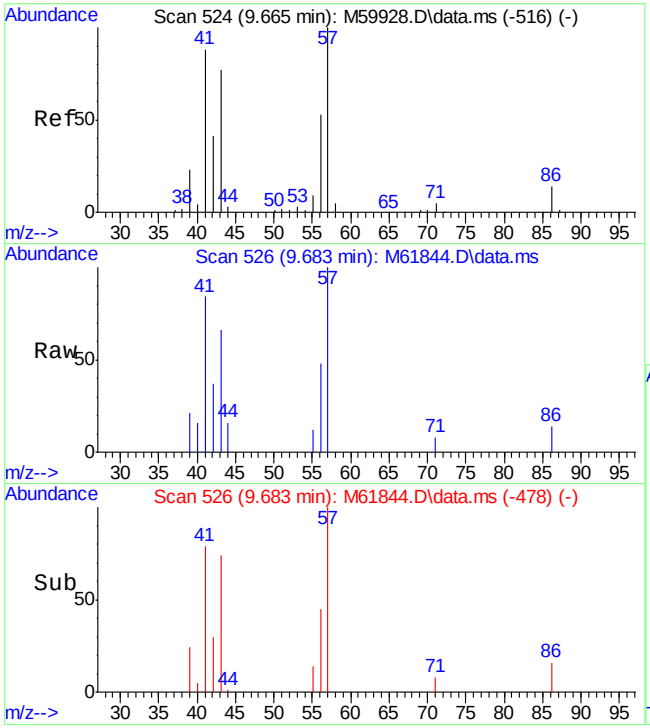




#15
Methyl Acetate
Concen: 0.90 ppb
RT: 8.522 min Scan# 416
Delta R.T. 0.018 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 43 Resp: 5068

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 0.0 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

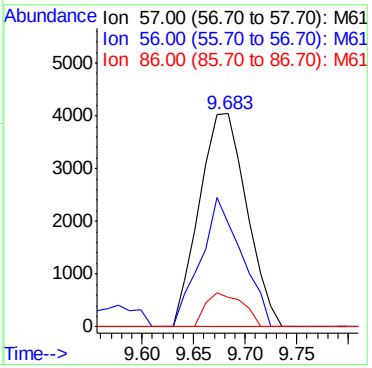


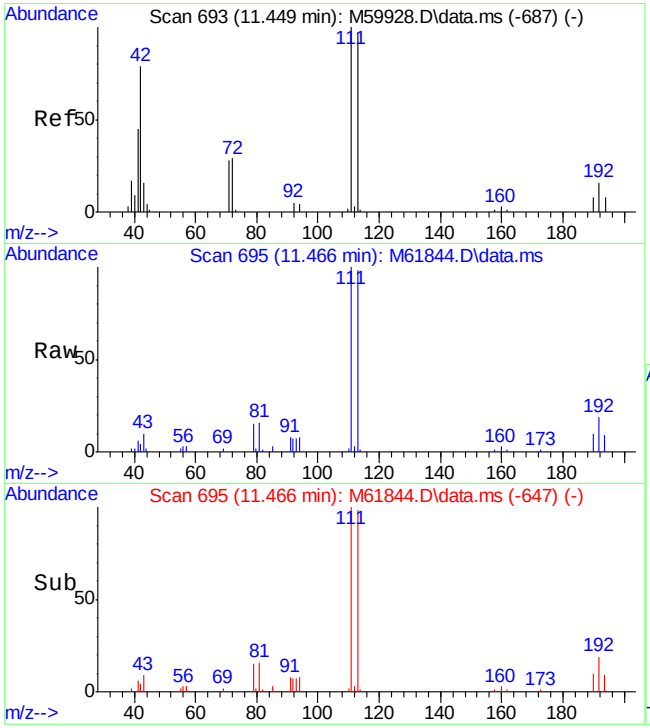



#24
Hexane
Concen: 1.34 ppb
RT: 9.683 min Scan# 526
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 57 Resp: 12889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.6 | 32.9 | 72.9 |
| 86 | 12.4 | 0.0 | 34.1 |

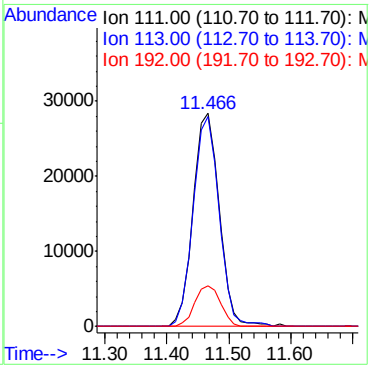


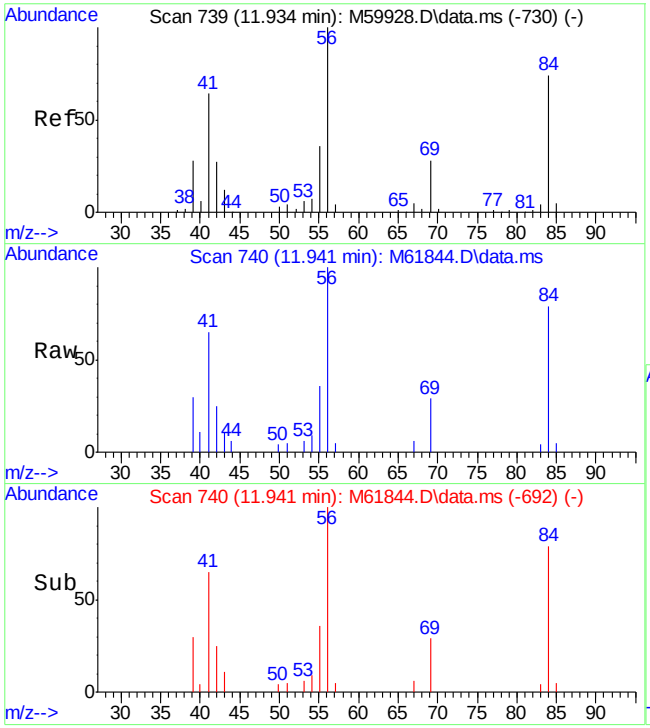




#36
Dibromofluoromethane
Concen: 17.91 ppb
RT: 11.466 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:111 Resp: 83350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.4 | 77.7 | 117.7 |
| 192 | 18.8 | 0.0 | 36.3 |

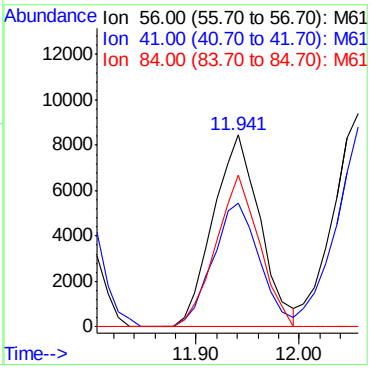


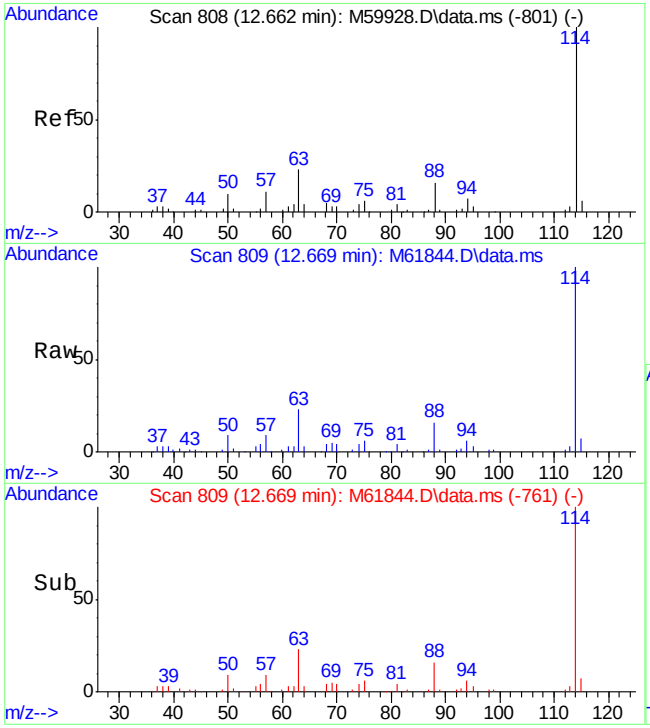



#38
Cyclohexane
Concen: 2.23 ppb
RT: 11.941 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 56 Resp: 26725

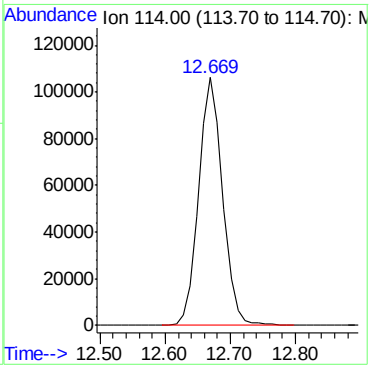
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 64.4 | 46.3 | 86.3 |
| 84 | 73.2 | 56.0 | 96.0 |

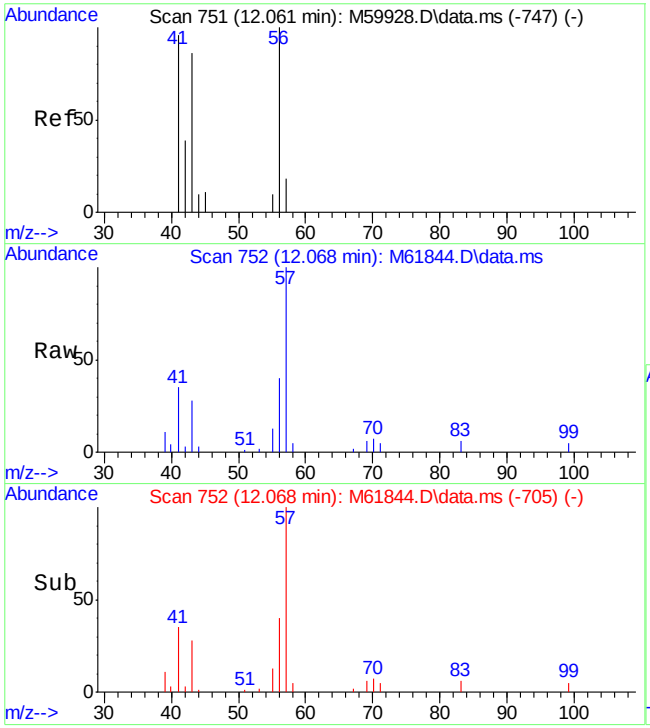



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.669 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:114 Resp: 272447

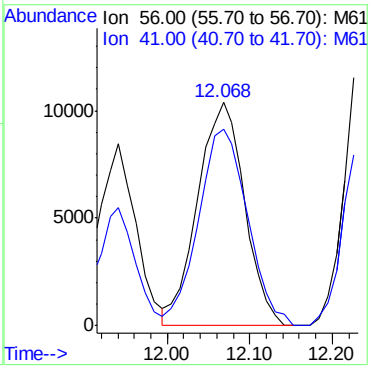


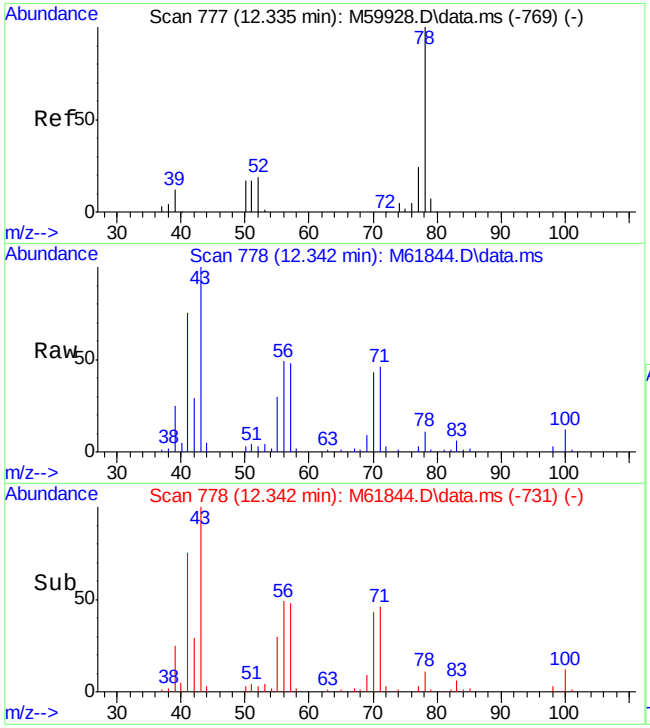



#42
n-Butyl Alcohol
Concen: 311.24 ppb
RT: 12.068 min Scan# 752
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 56 Resp: 41068

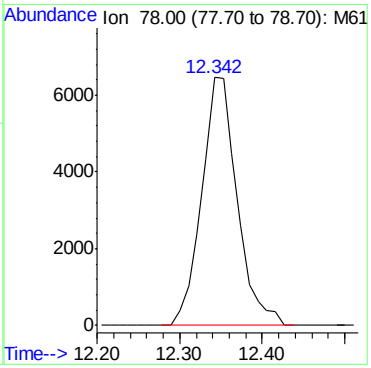
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 91.9 | 63.5 | 103.5 |

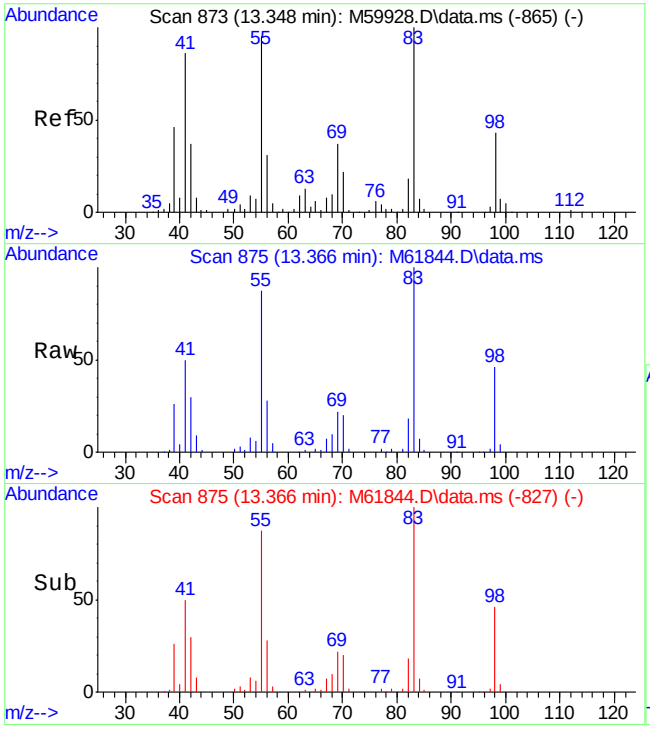



#45
Benzene
Concen: 0.81 ppb
RT: 12.342 min Scan# 778
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 78 Resp: 19369

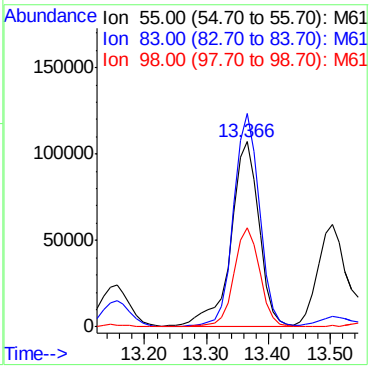


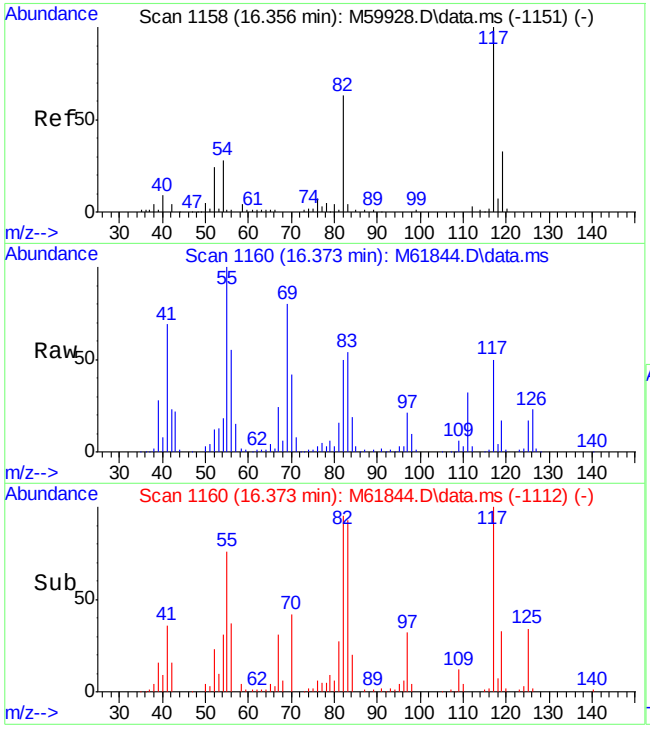



#48
Methylcyclohexane
Concen: 33.41 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 55 Resp: 334561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 107.6 | 84.5 | 124.5 |
| 98 | 49.6 | 27.0 | 67.0 |

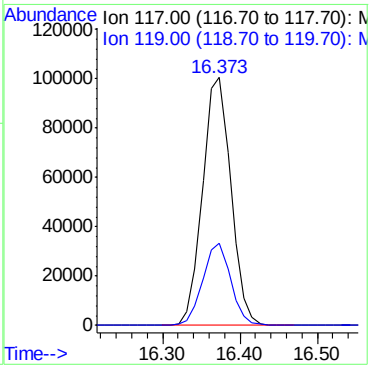


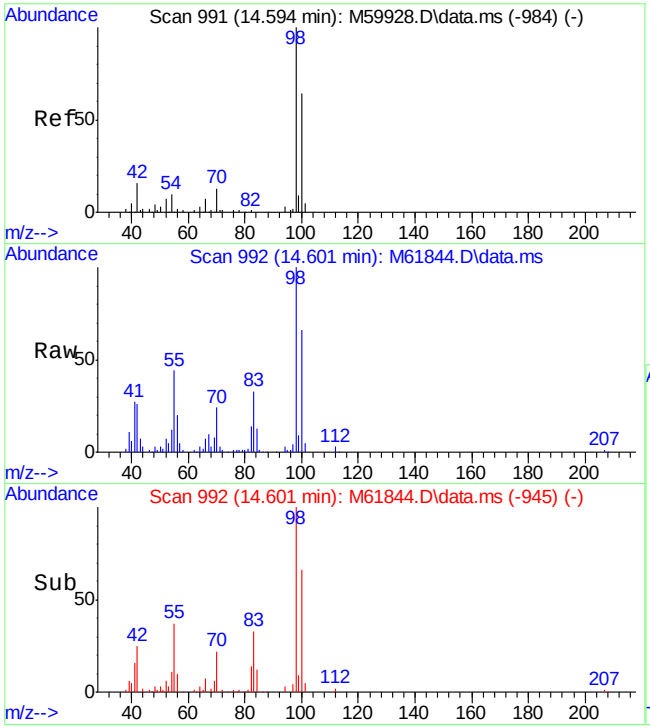




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.373 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:117 Resp: 255969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.5 | 11.2 | 51.2 |

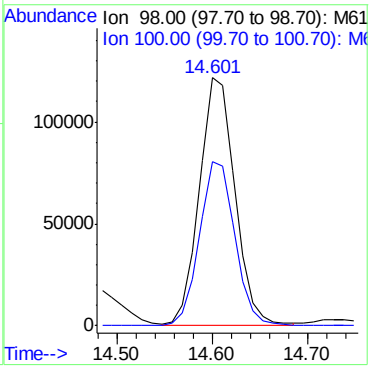


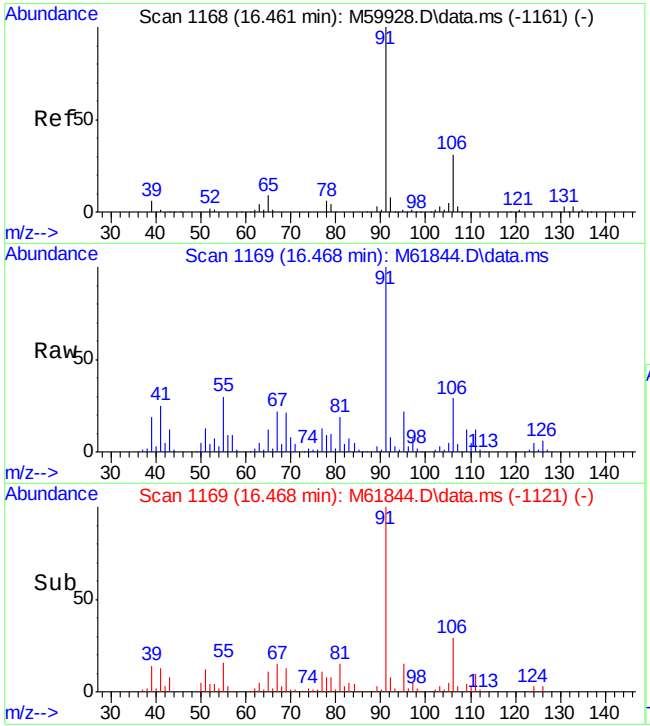



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 98 Resp: 316151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

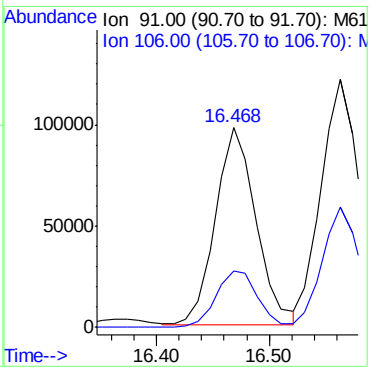


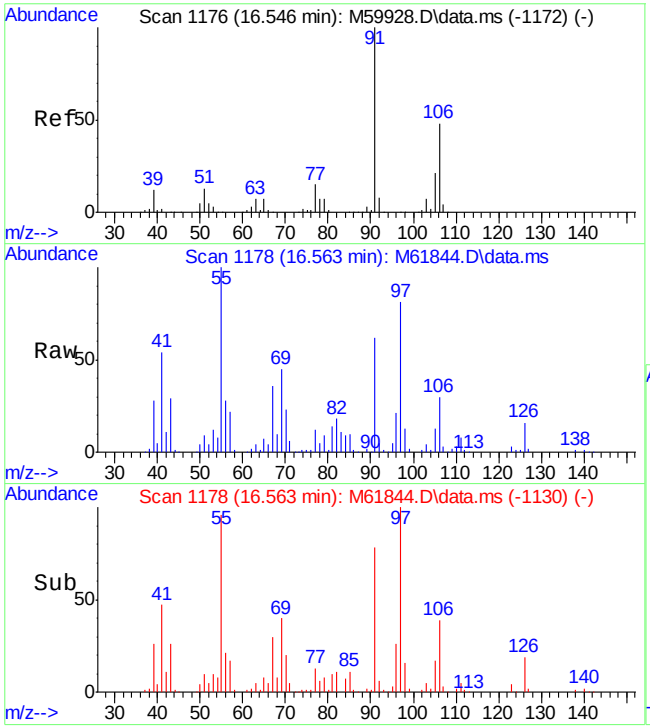




#67
Ethyl Benzene
Concen: 9.25 ppb
RT: 16.468 min Scan# 1169
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 245675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.1 | 10.2 | 50.2 |

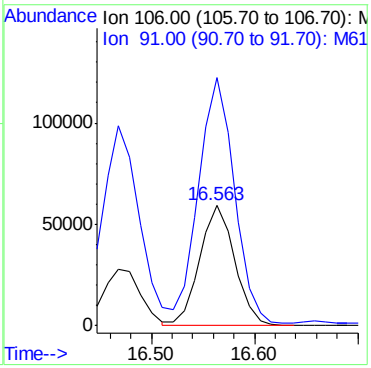


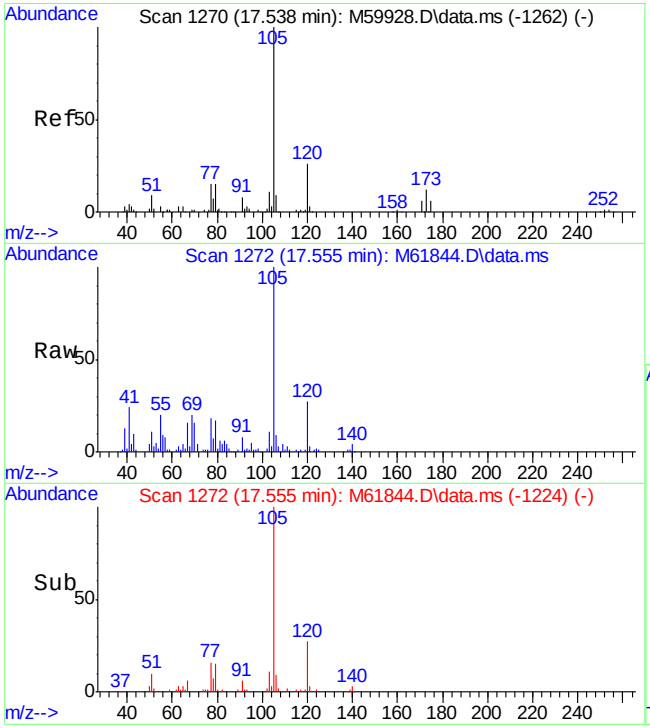



#68
Xylene, m+p
Concen: 14.48 ppb
RT: 16.563 min Scan# 1178
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:106 Resp: 140390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 206.2 | 191.5 | 231.5 |

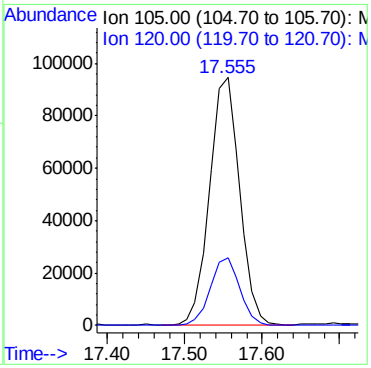


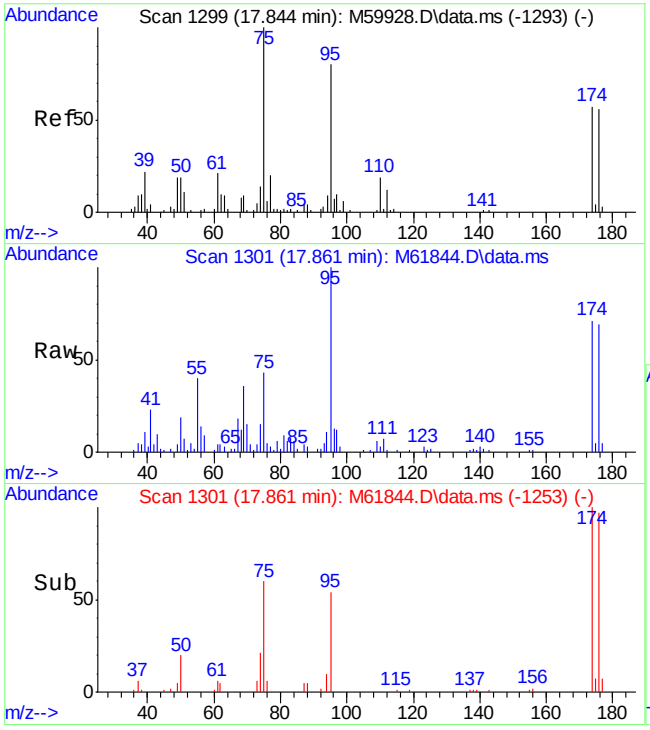




#73
Isopropylbenzene
Concen: 10.35 ppb
RT: 17.555 min Scan# 1272
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 256295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.7 | 5.7 | 45.7 |

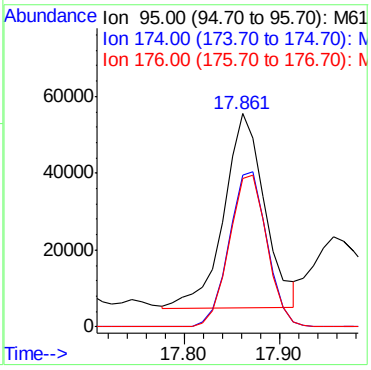


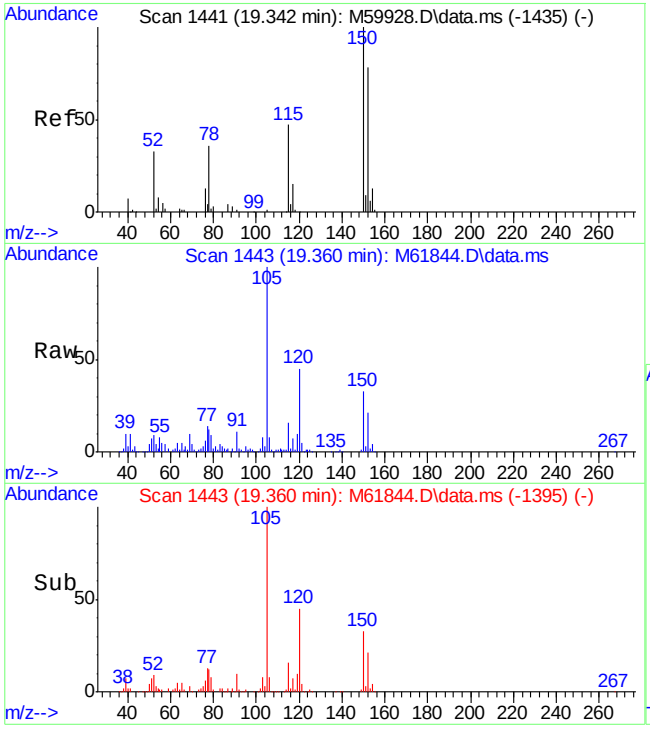



#74
4-Bromofluorobenzene
Concen: 22.91 ppb
RT: 17.861 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 95 Resp: 150494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.9 | 54.3 | 94.3 |
| 176 | 71.8 | 51.5 | 91.5 |

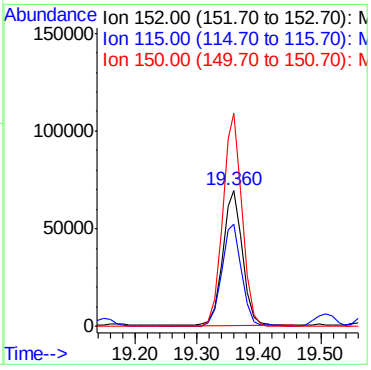


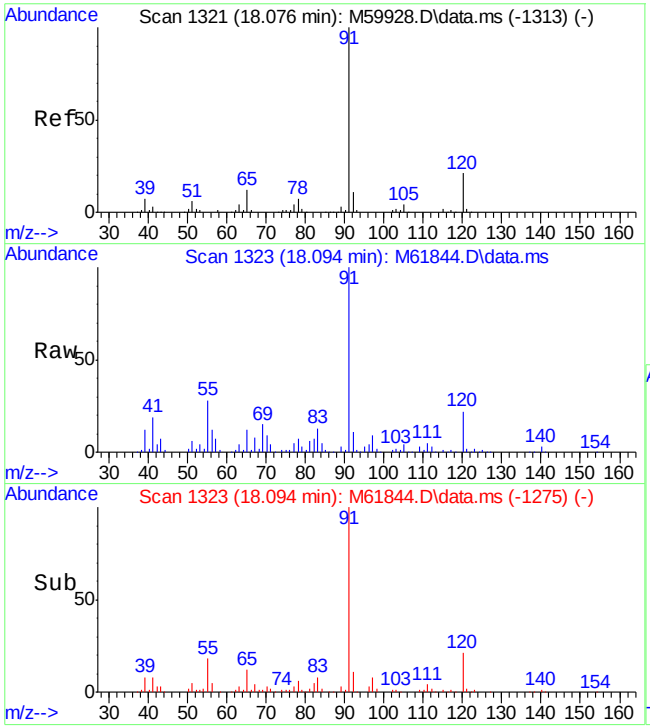




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:152 Resp: 154344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 78.3 | 40.9 | 80.9 |
| 150 | 153.8 | 178.6 | 218.6# |

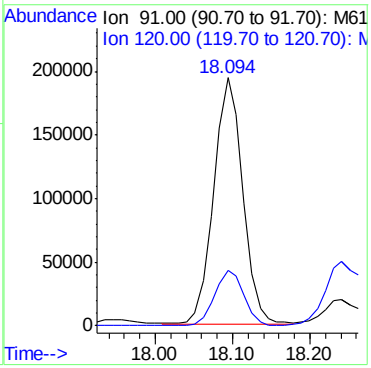


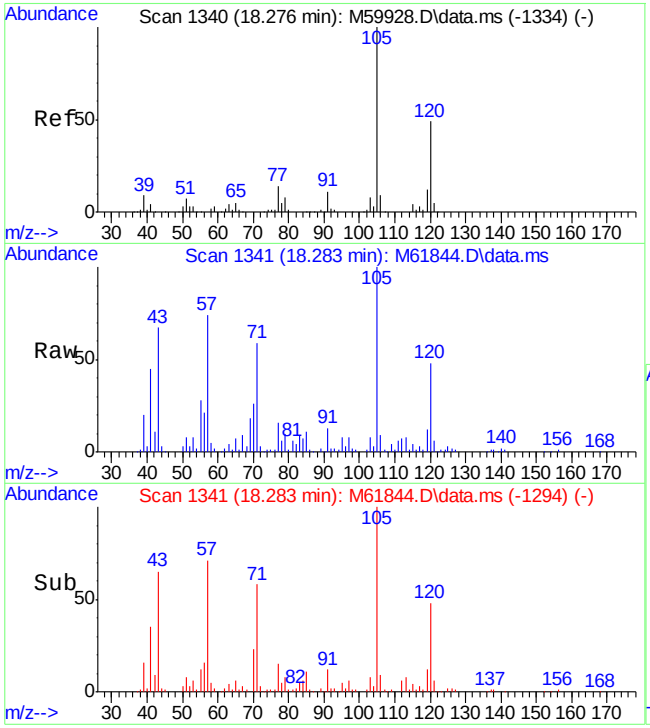



#79
n-Propylbenzene
Concen: 13.86 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 504969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 1.3 | 41.3 |

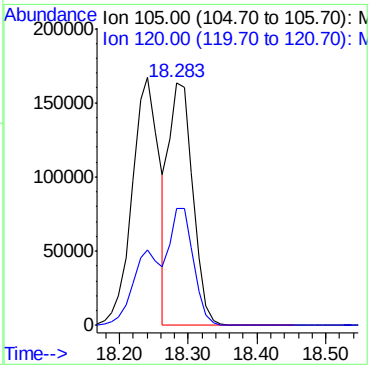


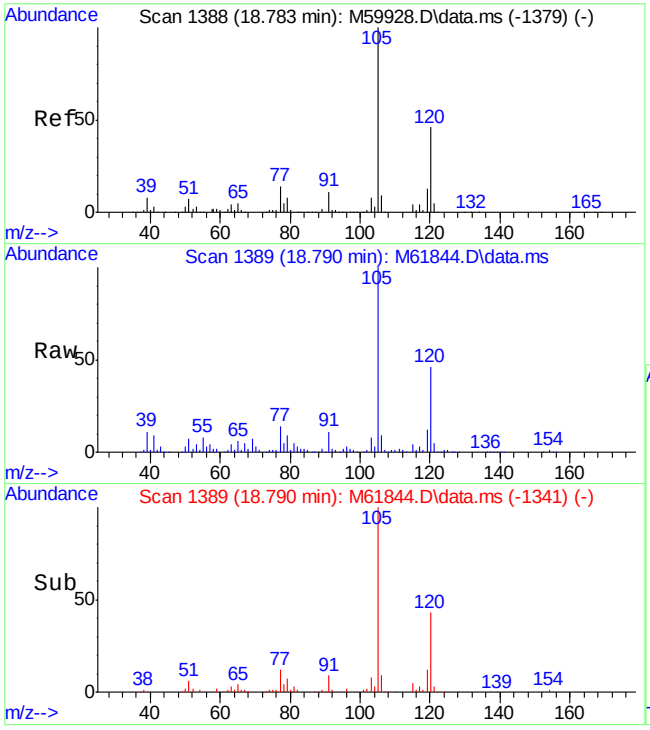




#81
1,3,5-Trimethylbenzene
Concen: 16.25 ppb
RT: 18.283 min Scan# 1341
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 392213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.0 | 26.6 | 66.6 |

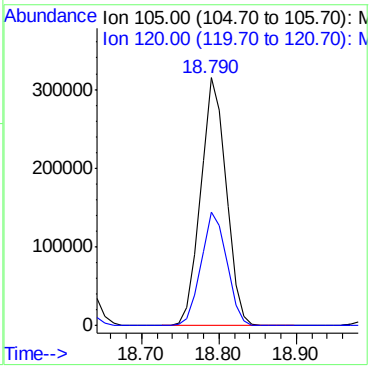


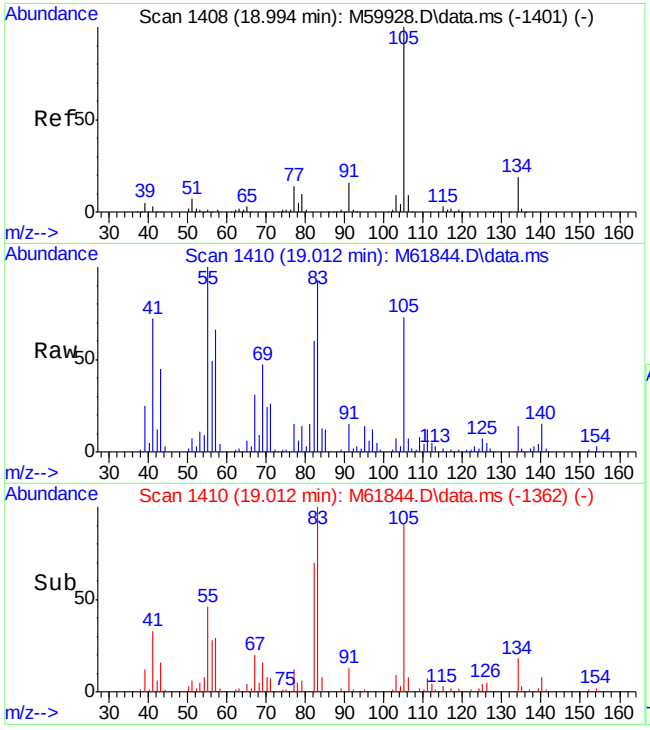



#86
1,2,4-Trimethylbenzene
Concen: 28.53 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 715137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.4 | 32.4 | 72.4 |

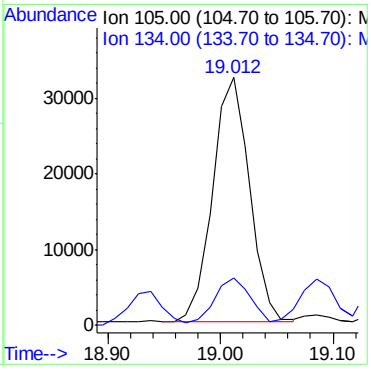


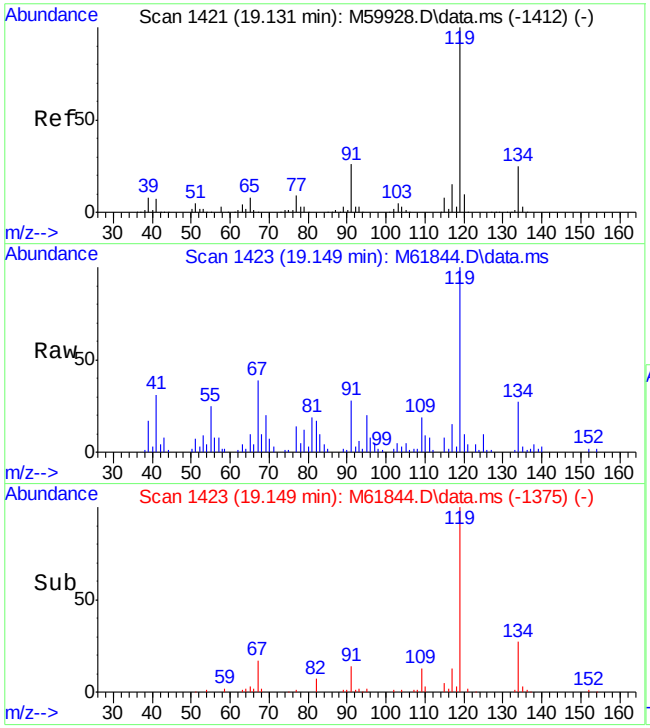




#87
sec-Butylbenzene
Concen: 2.33 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 73443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 0.0 | 38.7 |

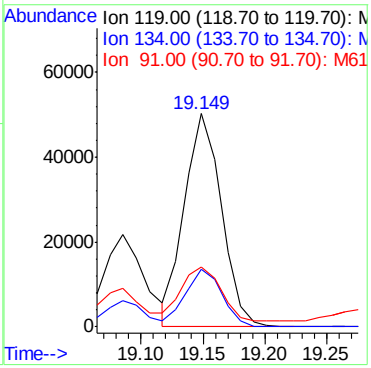


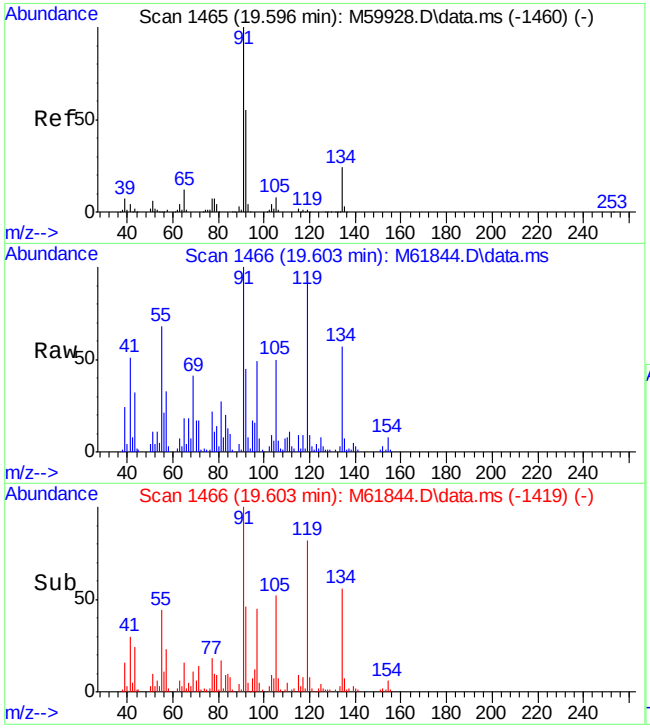



#88
p-Isopropyltoluene
Concen: 4.05 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:119 Resp: 104571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.6 | 6.0 | 46.0 |
| 91 | 27.0 | 6.0 | 46.0 |

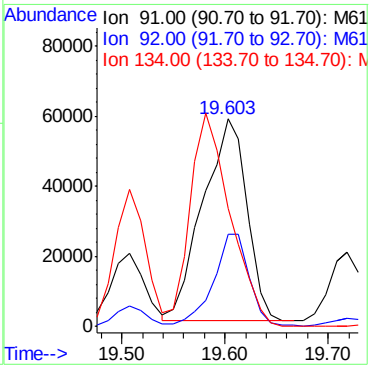


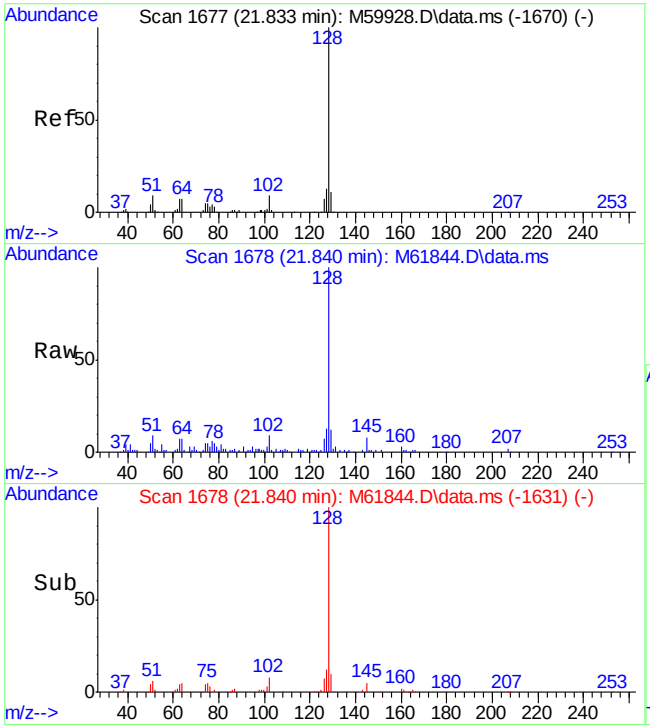




#92
n-Butylbenzene
Concen: 6.47 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 170021

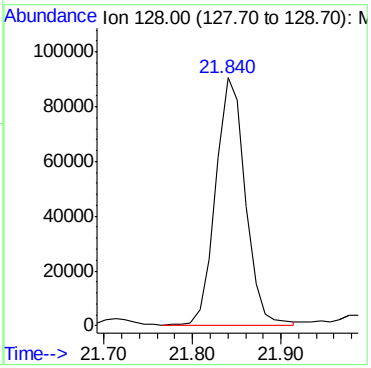
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 37.6 | 35.3 | 75.3 |
| 134 | 96.5 | 3.6 | 43.6# |

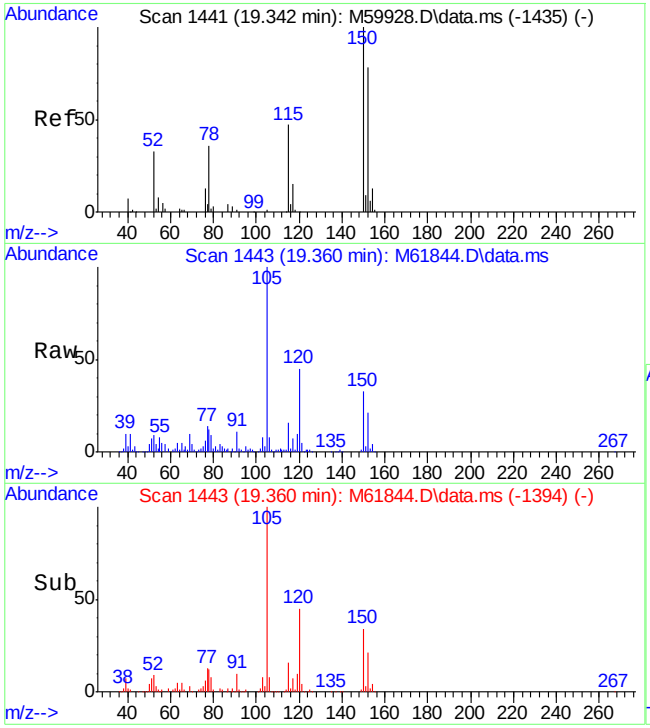





#97
Naphthalene
Concen: 10.32 ppb
RT: 21.840 min Scan# 1678
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:128 Resp: 209254

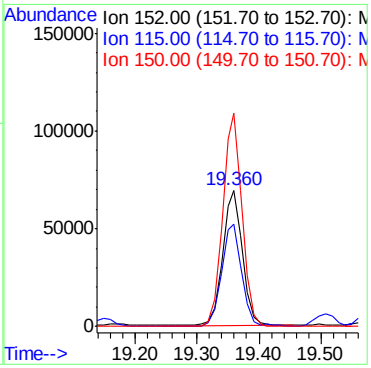


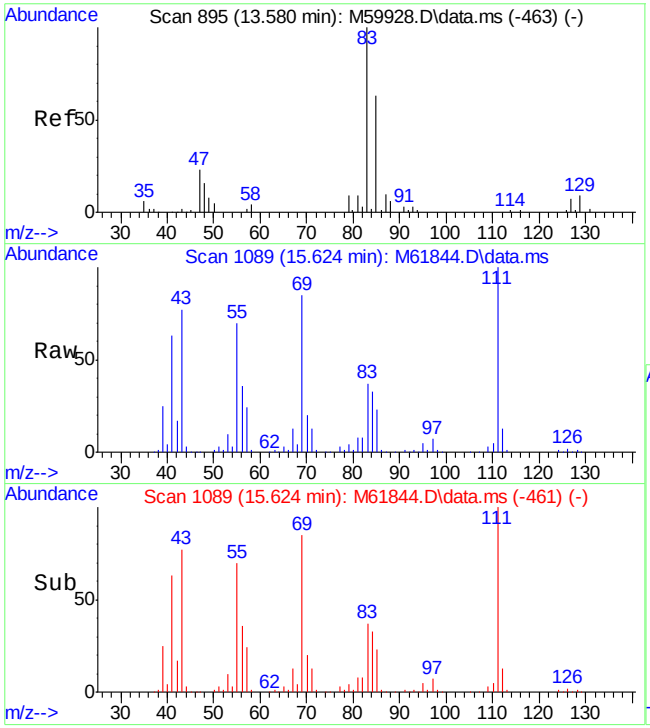




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:152 Resp: 154344

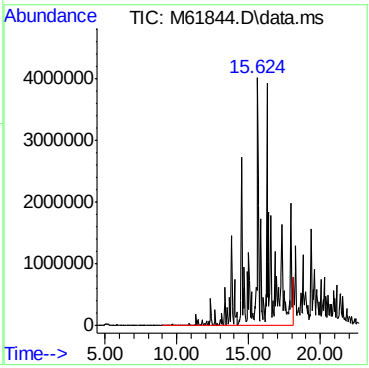
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 78.3 | 37.3 | 77.3# |
| 150 | 153.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 3993.56 ppb m
RT: 15.624 min Scan# 1089
Delta R.T. 2.074 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:TIC Resp:157024264



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61844.D
Acq On : 13 Jul 2016 6:59 pm
Operator : johannat
Sample : C46435-14R
Misc : MS1912,VM1859,5.31,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 02 10:11:21 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

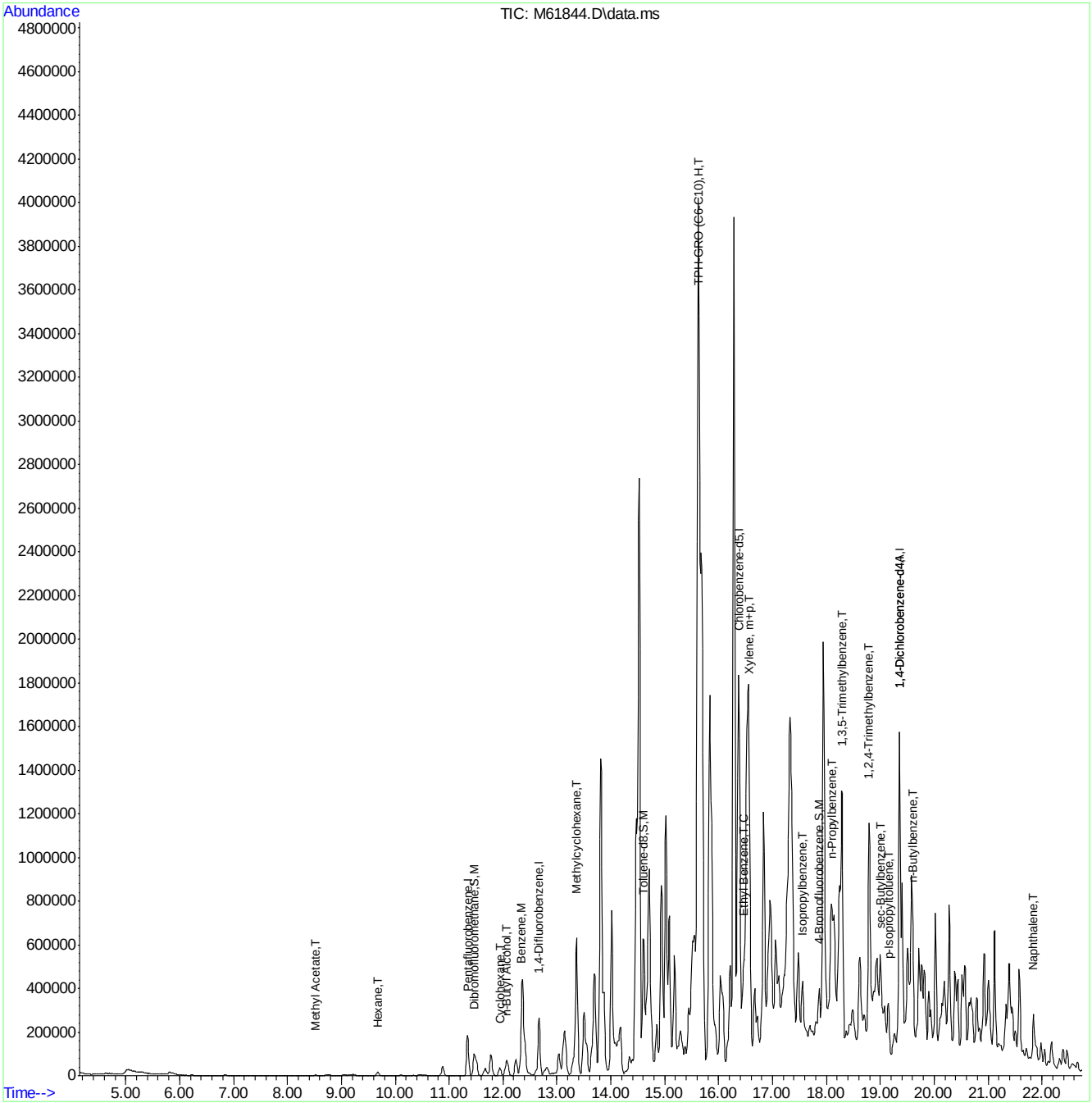
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 183542 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.669 | 114 | 272447 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.373 | 117 | 255969 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 154344 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 154344 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 83350 | 17.91 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 89.55% | | | | |
| 56) Toluene-d8 | 14.601 | 98 | 316151 | 18.92 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | | |
| 74) 4-Bromofluorobenzene | 17.861 | 95 | 150494 | 22.91 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 114.55% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 15) Methyl Acetate | 8.522 | 43 | 5068 | 0.90 | ppb | # | 66 |
| 24) Hexane | 9.683 | 57 | 12889 | 1.34 | ppb | | 99 |
| 38) Cyclohexane | 11.941 | 56 | 26725 | 2.23 | ppb | | 97 |
| 42) n-Butyl Alcohol | 12.068 | 56 | 41068 | 311.24 | ppb | | 91 |
| 45) Benzene | 12.342 | 78 | 19369 | 0.81 | ppb | | 100 |
| 48) Methylcyclohexane | 13.366 | 55 | 334561 | 33.41 | ppb | | 97 |
| 67) Ethyl Benzene | 16.468 | 91 | 245675 | 9.25 | ppb | | 98 |
| 68) Xylene, m+p | 16.563 | 106 | 140390 | 14.48 | ppb | | 97 |
| 73) Isopropylbenzene | 17.555 | 105 | 256295 | 10.35 | ppb | | 98 |
| 79) n-Propylbenzene | 18.094 | 91 | 504969 | 13.86 | ppb | | 98 |
| 81) 1,3,5-Trimethylbenzene | 18.283 | 105 | 392213 | 16.25 | ppb | | 98 |
| 86) 1,2,4-Trimethylbenzene | 18.790 | 105 | 715137 | 28.53 | ppb | | 91 |
| 87) sec-Butylbenzene | 19.012 | 105 | 73443 | 2.33 | ppb | | 98 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 104571 | 4.05 | ppb | | 98 |
| 92) n-Butylbenzene | 19.603 | 91 | 170021 | 6.47 | ppb | # | 38 |
| 97) Naphthalene | 21.840 | 128 | 209254 | 10.32 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 15.624 | TIC | 157024264m | 3993.56 | ppb | | |

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

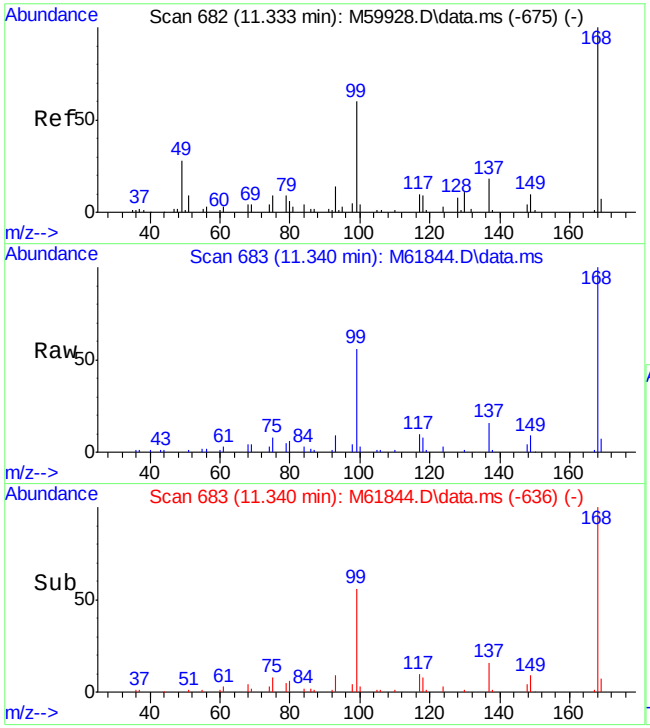
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61844.D
Acq On : 13 Jul 2016 6:59 pm
Operator : johannat
Sample : C46435-14R
Misc : MS1912,VM1859,5.31,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 02 10:11:21 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

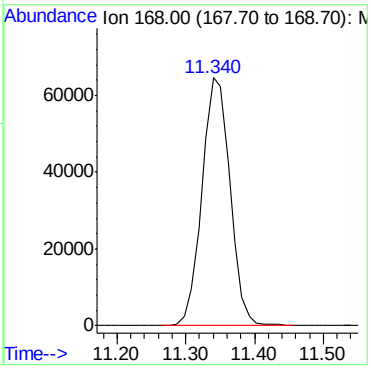


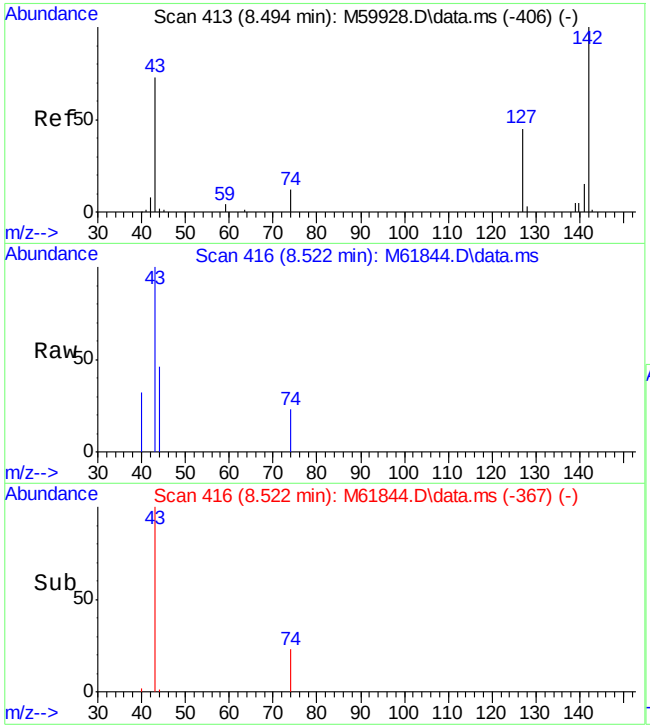

VM1848S.M Tue Aug 02 11:53:07 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:168 Resp: 183542

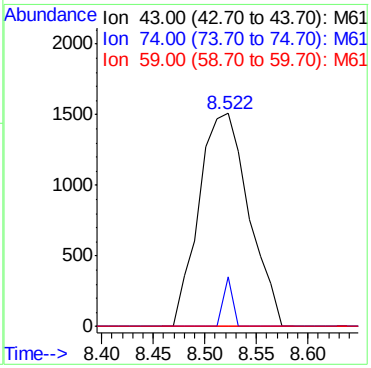


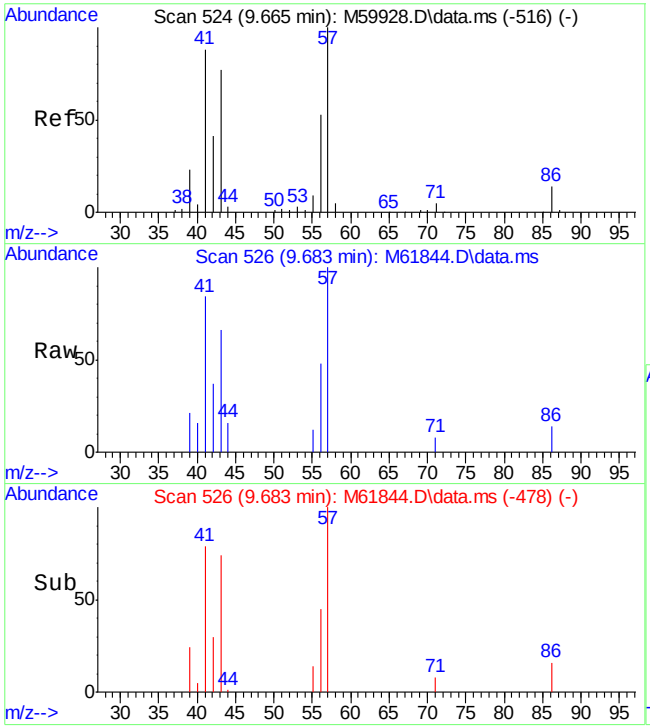




#15
Methyl Acetate
Concen: 0.90 ppb
RT: 8.522 min Scan# 416
Delta R.T. 0.018 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 43 Resp: 5068

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 0.0 | 0.0 | 37.1 |
| 59 | 0.0 | 0.0 | 27.1 |

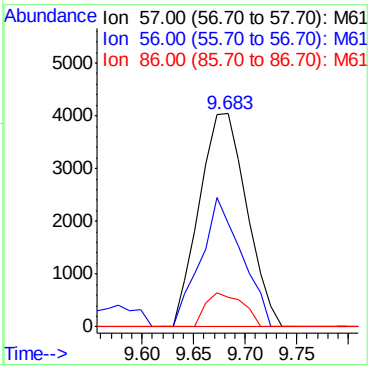


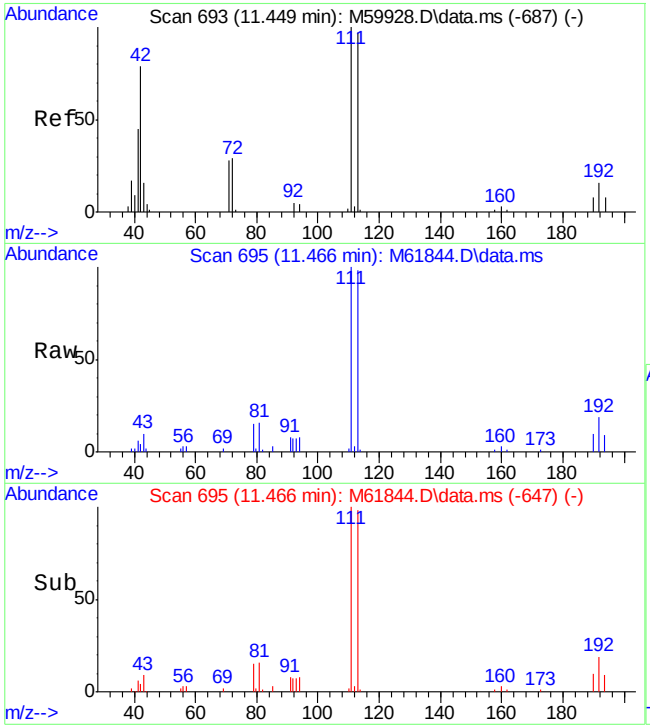



#24
Hexane
Concen: 1.34 ppb
RT: 9.683 min Scan# 526
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 57 Resp: 12889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.6 | 32.9 | 72.9 |
| 86 | 12.4 | 0.0 | 34.1 |

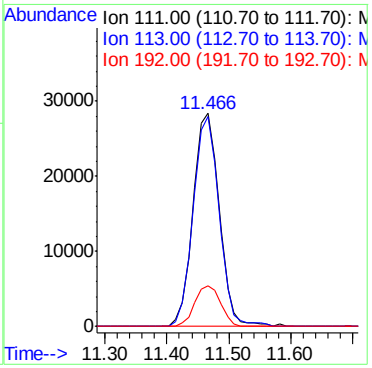


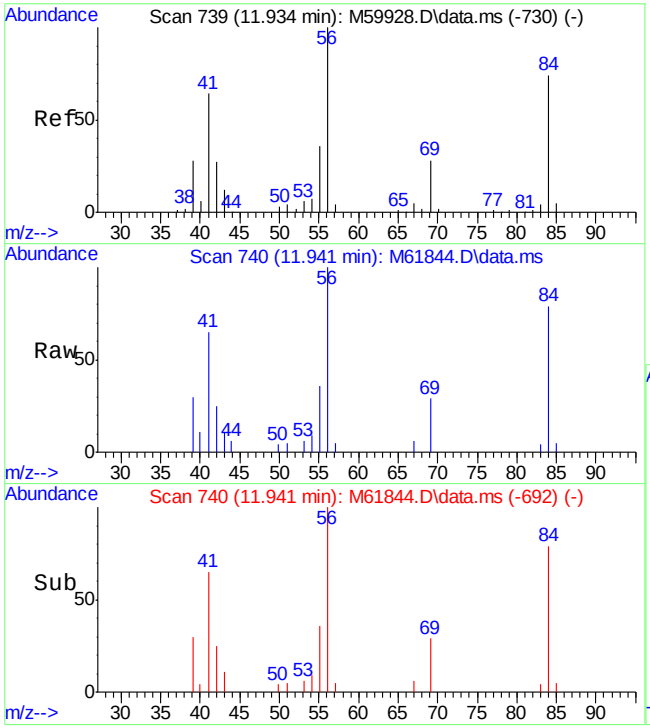




#36
Dibromofluoromethane
Concen: 17.91 ppb
RT: 11.466 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:111 Resp: 83350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.4 | 77.7 | 117.7 |
| 192 | 18.8 | 0.0 | 36.3 |

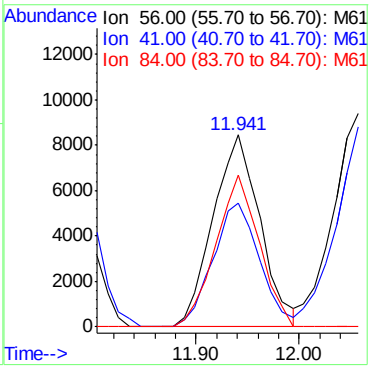


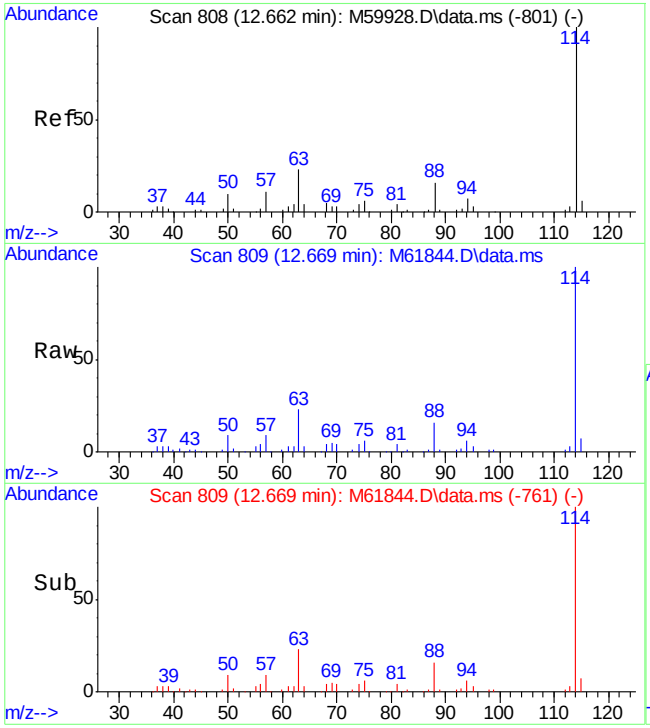



#38
Cyclohexane
Concen: 2.23 ppb
RT: 11.941 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 56 Resp: 26725

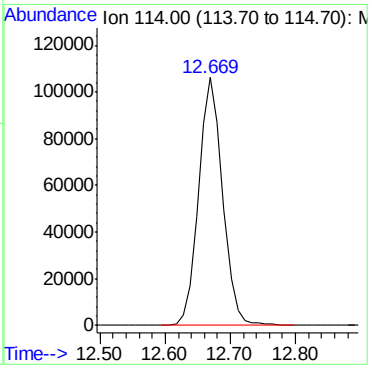
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 64.4 | 46.3 | 86.3 |
| 84 | 73.2 | 56.0 | 96.0 |

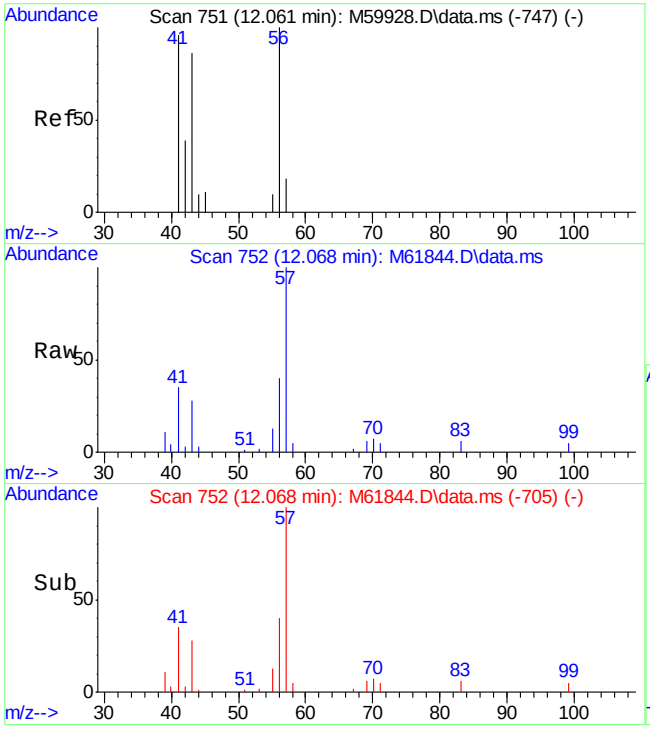



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.669 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:114 Resp: 272447

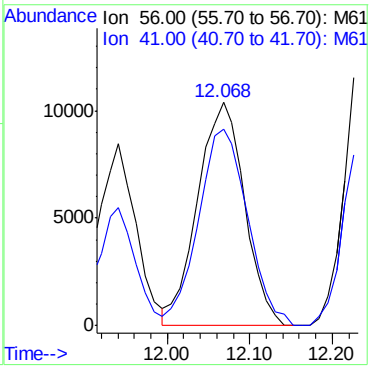


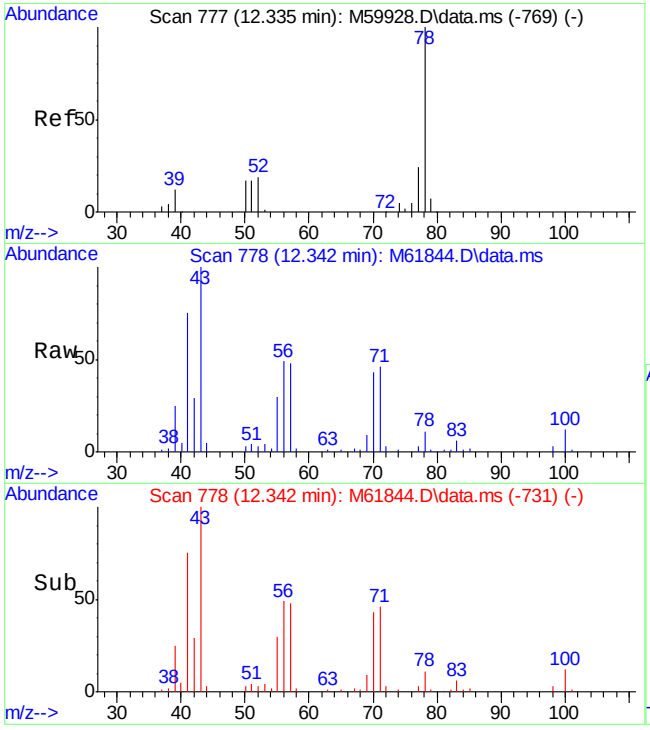



#42
n-Butyl Alcohol
Concen: 311.24 ppb
RT: 12.068 min Scan# 752
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 56 Resp: 41068

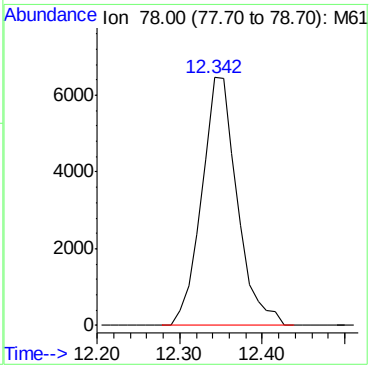
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 91.9 | 63.5 | 103.5 |

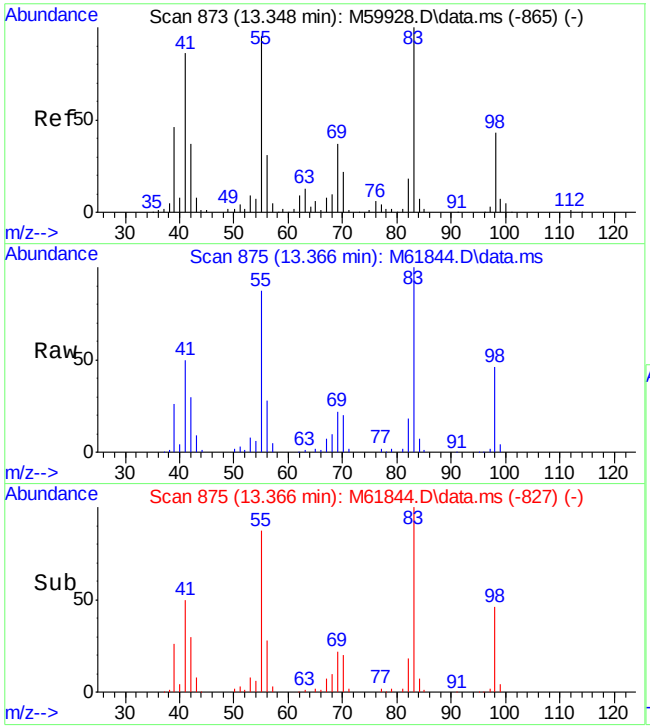



#45
Benzene
Concen: 0.81 ppb
RT: 12.342 min Scan# 778
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 78 Resp: 19369

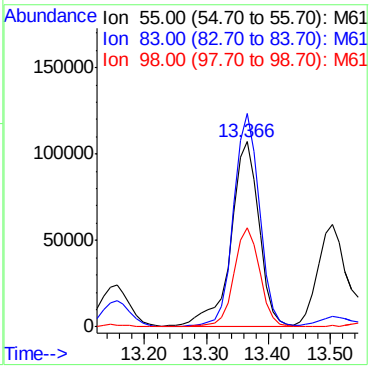


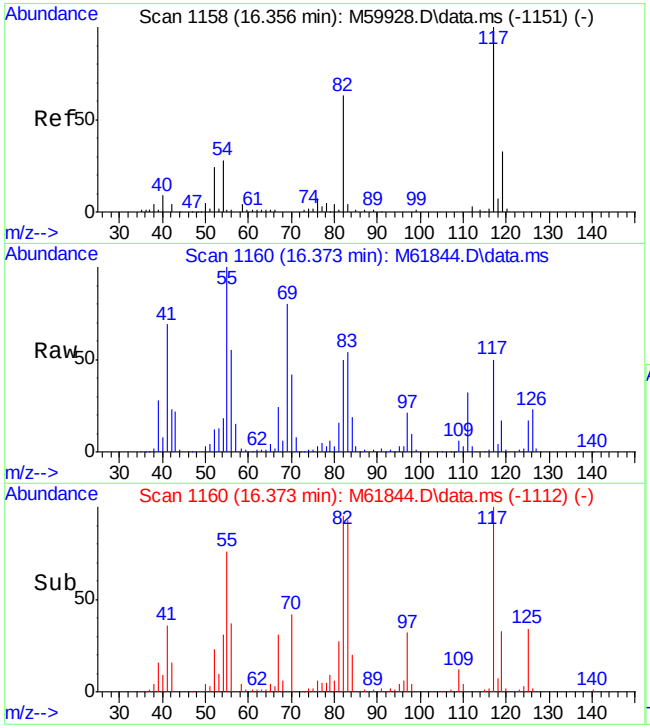



#48
Methylcyclohexane
Concen: 33.41 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 55 Resp: 334561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 107.6 | 84.5 | 124.5 |
| 98 | 49.6 | 27.0 | 67.0 |

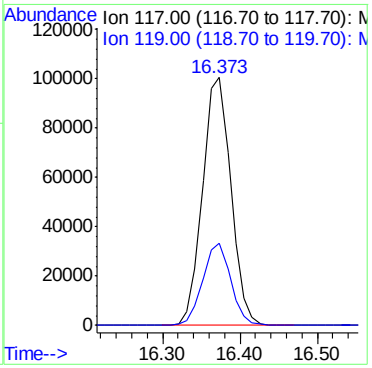


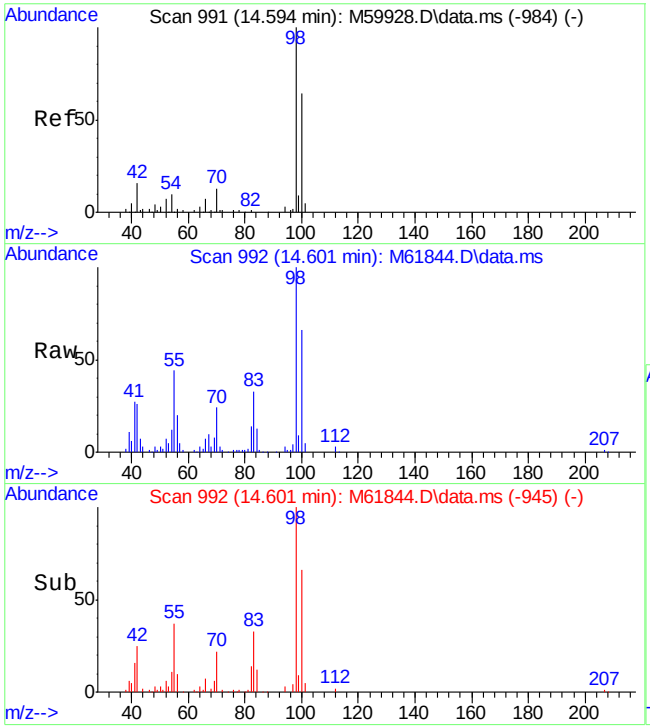




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.373 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:117 Resp: 255969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.5 | 11.2 | 51.2 |

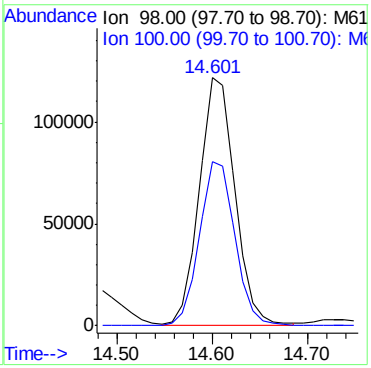


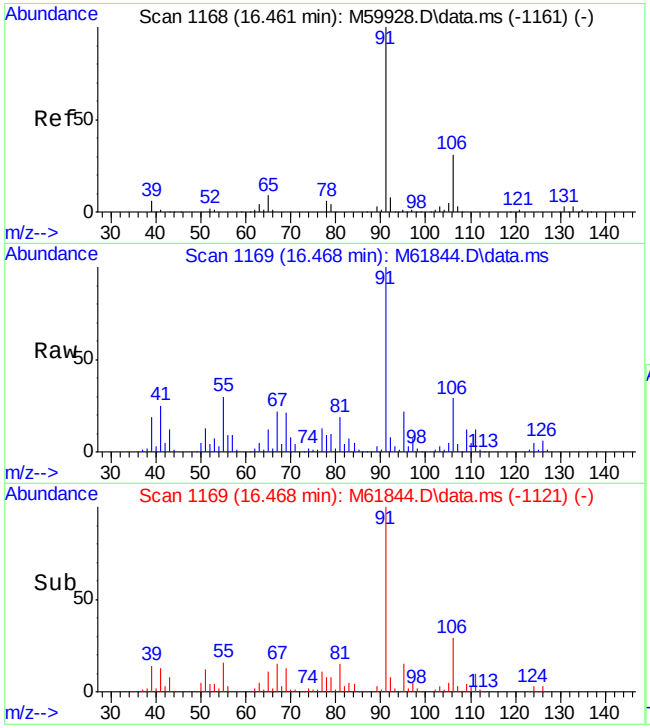



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 98 Resp: 316151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

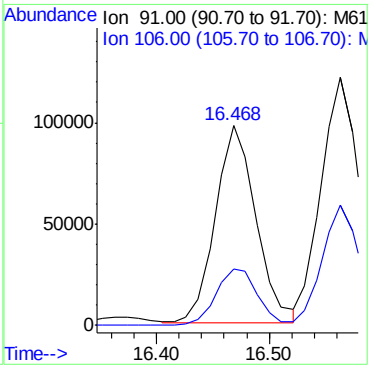


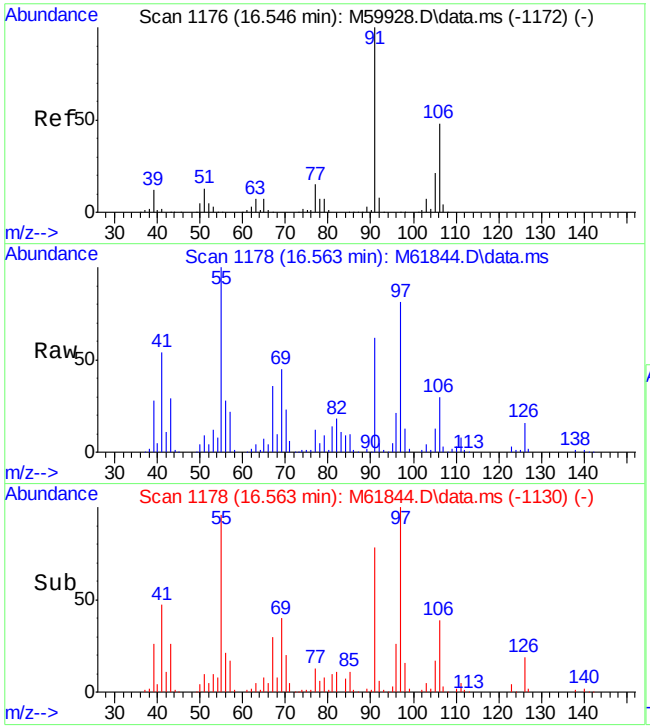




#67
Ethyl Benzene
Concen: 9.25 ppb
RT: 16.468 min Scan# 1169
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 245675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.1 | 10.2 | 50.2 |

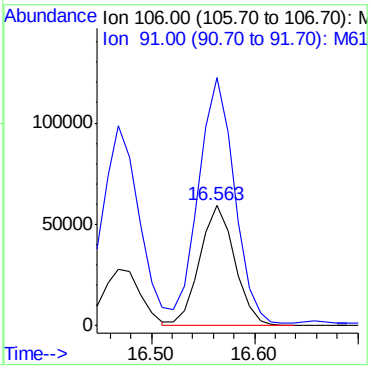


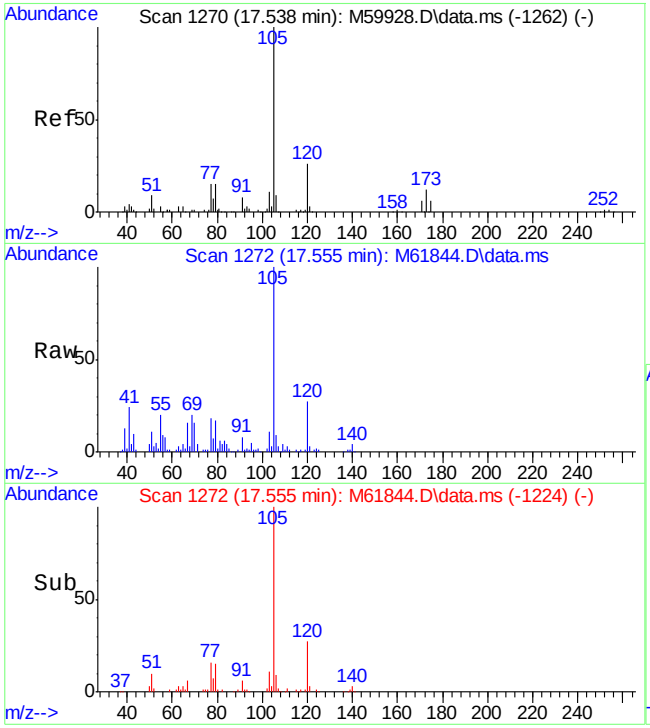



#68
Xylene, m+p
Concen: 14.48 ppb
RT: 16.563 min Scan# 1178
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:106 Resp: 140390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 206.2 | 191.5 | 231.5 |

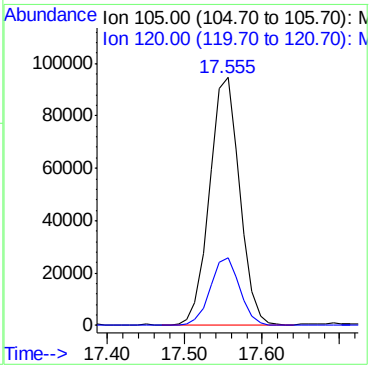


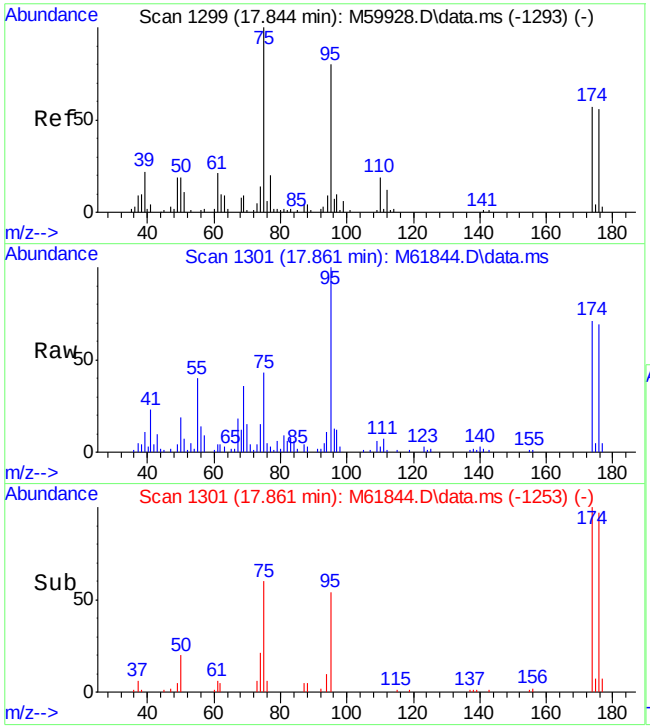




#73
Isopropylbenzene
Concen: 10.35 ppb
RT: 17.555 min Scan# 1272
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 256295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.7 | 5.7 | 45.7 |

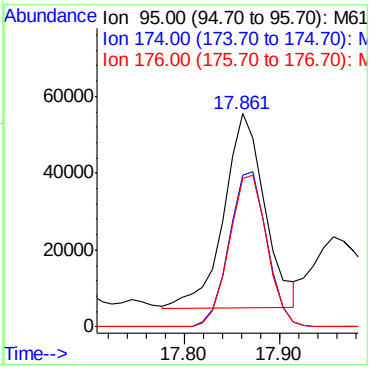


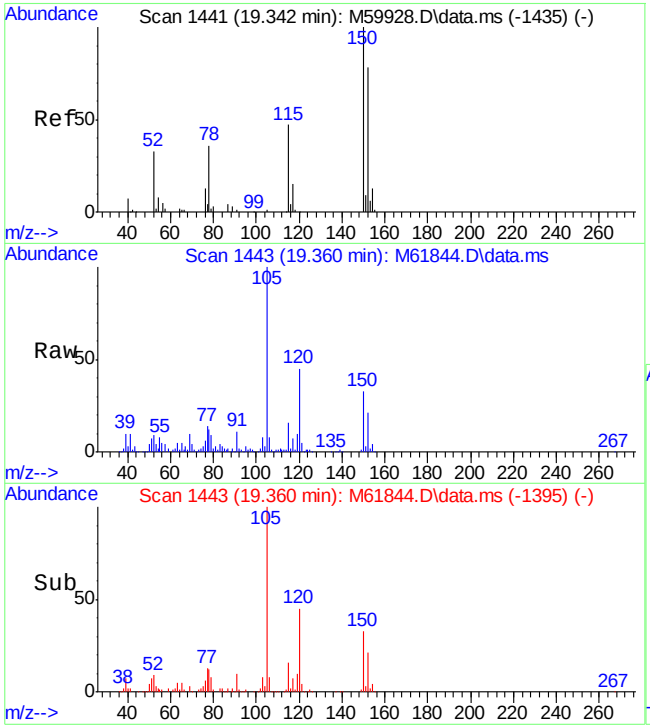



#74
4-Bromofluorobenzene
Concen: 22.91 ppb
RT: 17.861 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 95 Resp: 150494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.9 | 54.3 | 94.3 |
| 176 | 71.8 | 51.5 | 91.5 |

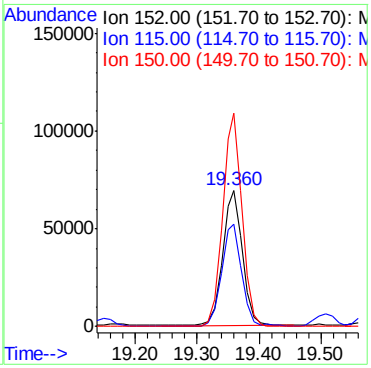


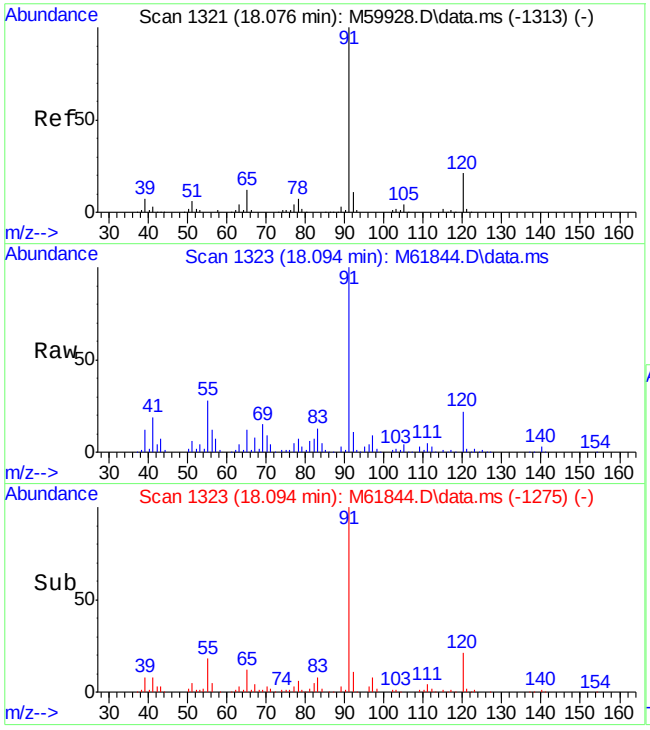




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:152 Resp: 154344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 78.3 | 40.9 | 80.9 |
| 150 | 153.8 | 178.6 | 218.6# |

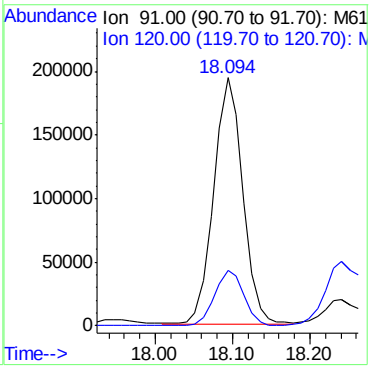


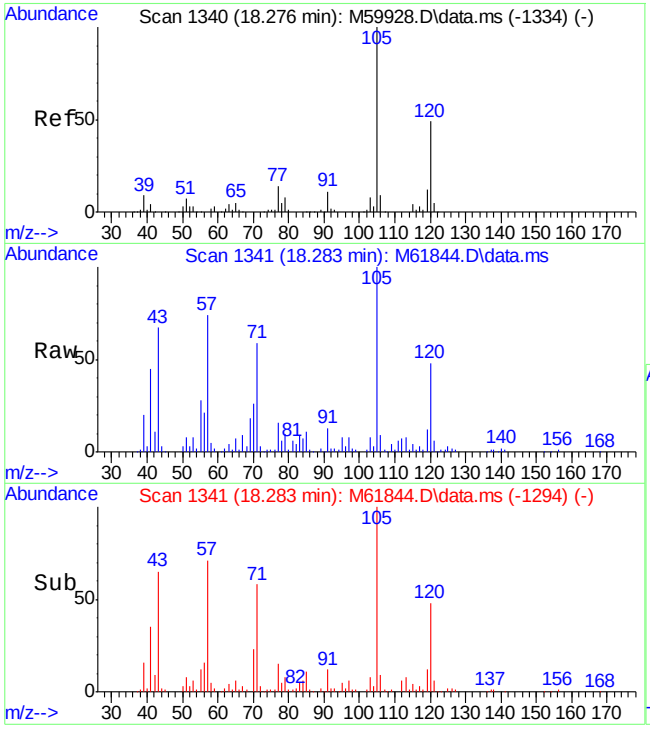



#79
n-Propylbenzene
Concen: 13.86 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 504969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 1.3 | 41.3 |

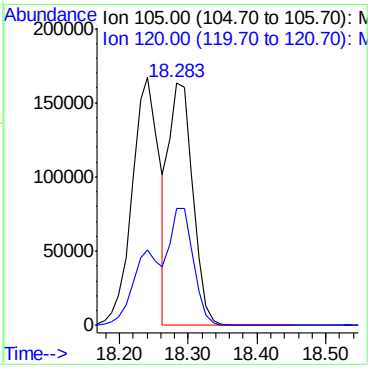


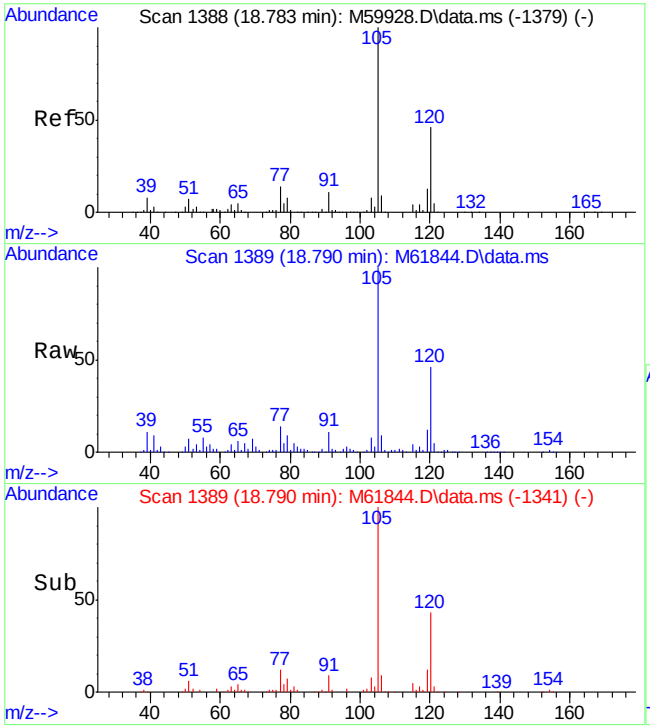




#81
1,3,5-Trimethylbenzene
Concen: 16.25 ppb
RT: 18.283 min Scan# 1341
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 392213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 48.0 | 26.6 | 66.6 |

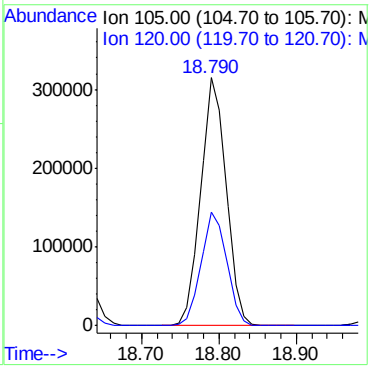


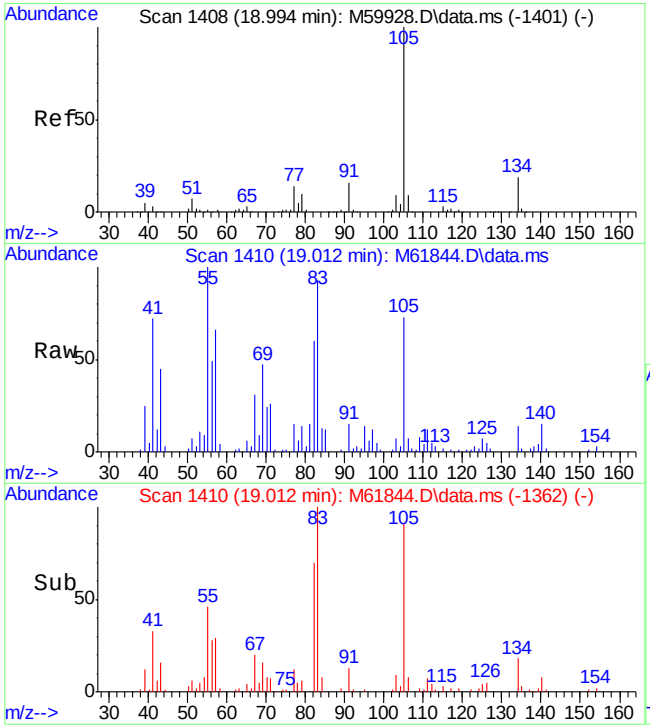



#86
1,2,4-Trimethylbenzene
Concen: 28.53 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 715137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.4 | 32.4 | 72.4 |

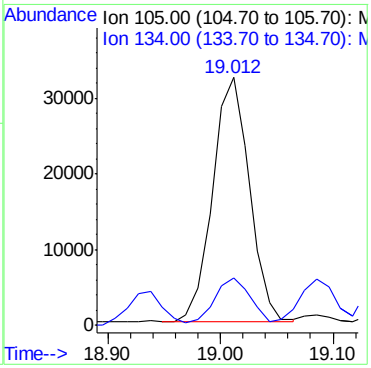


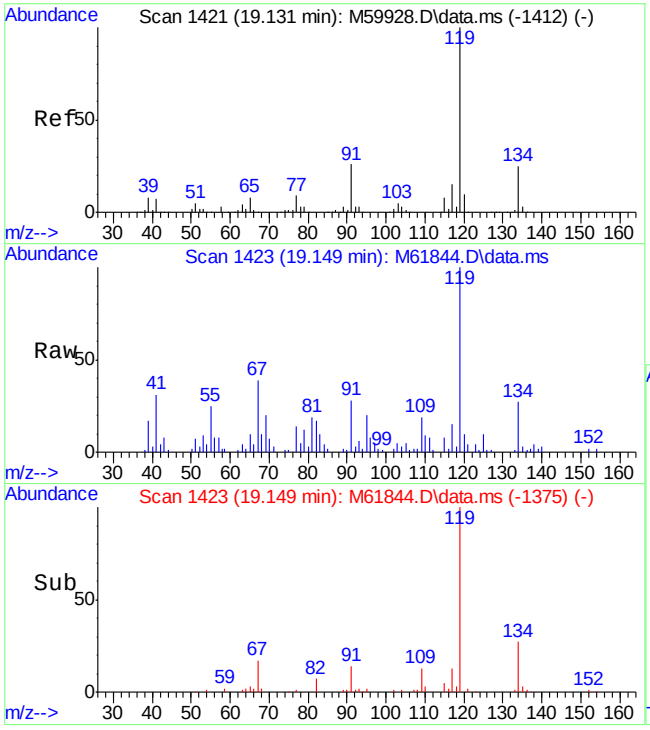




#87
sec-Butylbenzene
Concen: 2.33 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:105 Resp: 73443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 0.0 | 38.7 |

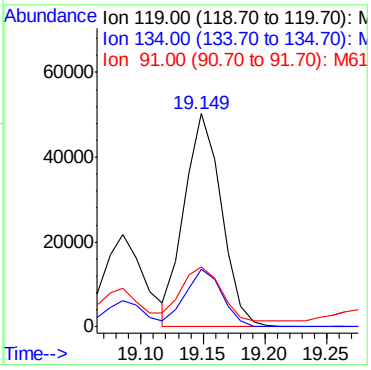


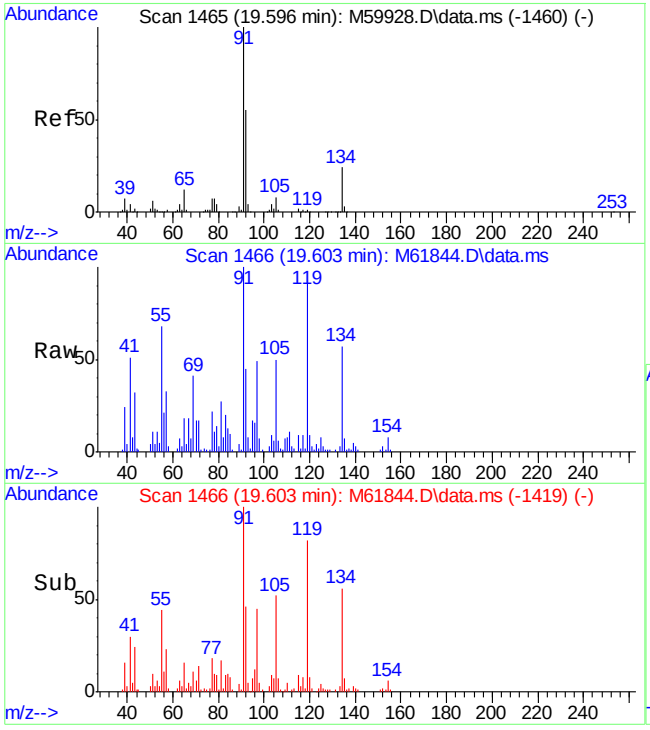



#88
p-Isopropyltoluene
Concen: 4.05 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:119 Resp: 104571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.6 | 6.0 | 46.0 |
| 91 | 27.0 | 6.0 | 46.0 |

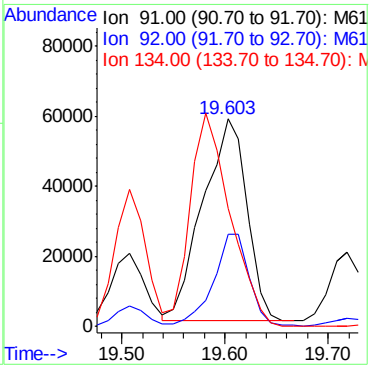


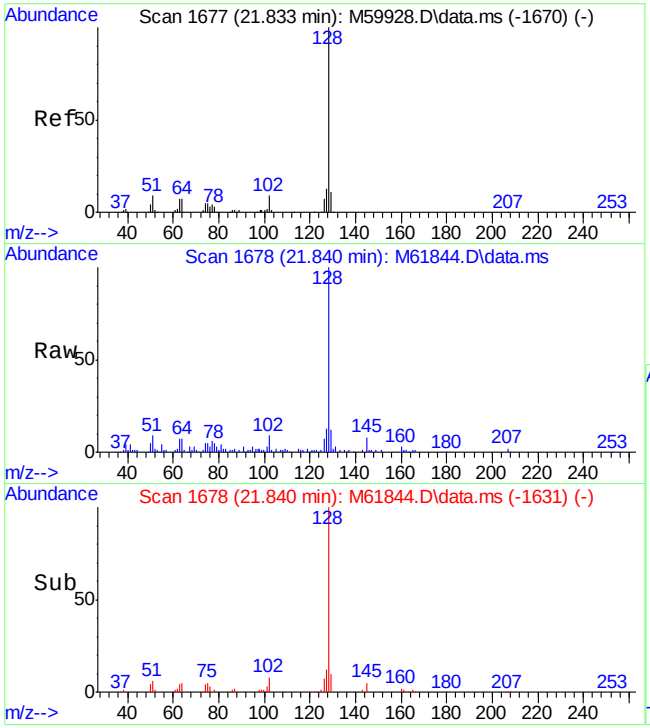




#92
n-Butylbenzene
Concen: 6.47 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion: 91 Resp: 170021

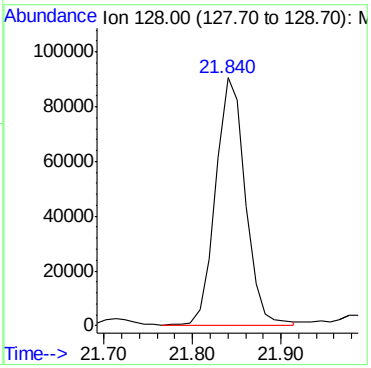
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 37.6 | 35.3 | 75.3 |
| 134 | 96.5 | 3.6 | 43.6# |

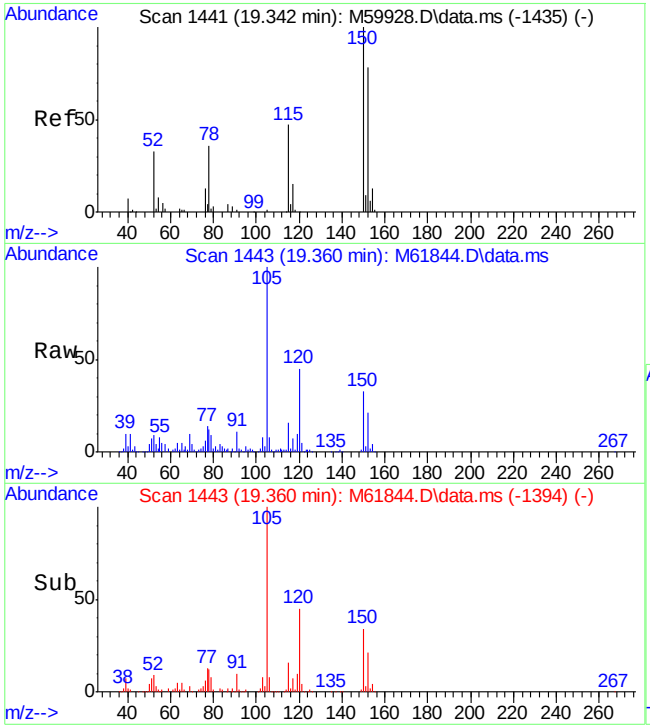





#97
Naphthalene
Concen: 10.32 ppb
RT: 21.840 min Scan# 1678
Delta R.T. -0.004 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:128 Resp: 209254

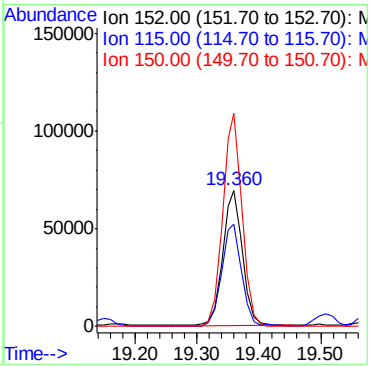


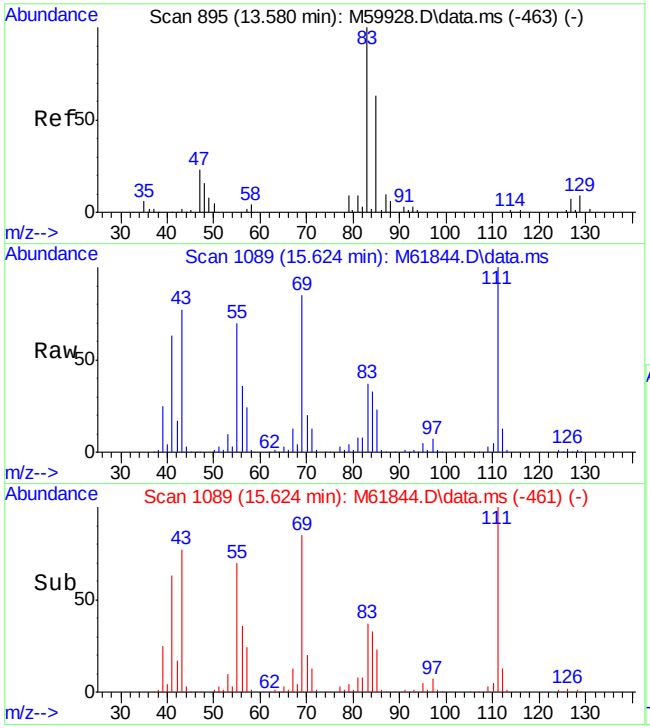




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:152 Resp: 154344

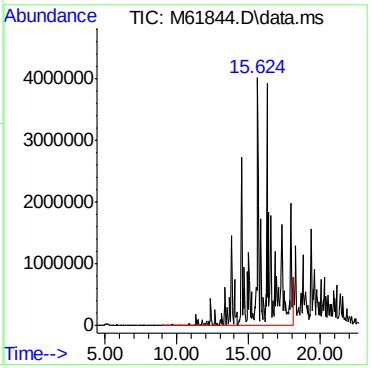
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 78.3 | 37.3 | 77.3# |
| 150 | 153.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 3993.56 ppb m
RT: 15.624 min Scan# 1089
Delta R.T. 2.074 min
Lab File: M61844.D
Acq: 13 Jul 2016 6:59 pm

Tgt Ion:TIC Resp:157024264



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61919.D
Acq On : 18 Jul 2016 7:47 pm
Operator : johannat
Sample : C46435-15R
Misc : MS1912,VM1861,5.63,,40,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 02 10:12:40 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

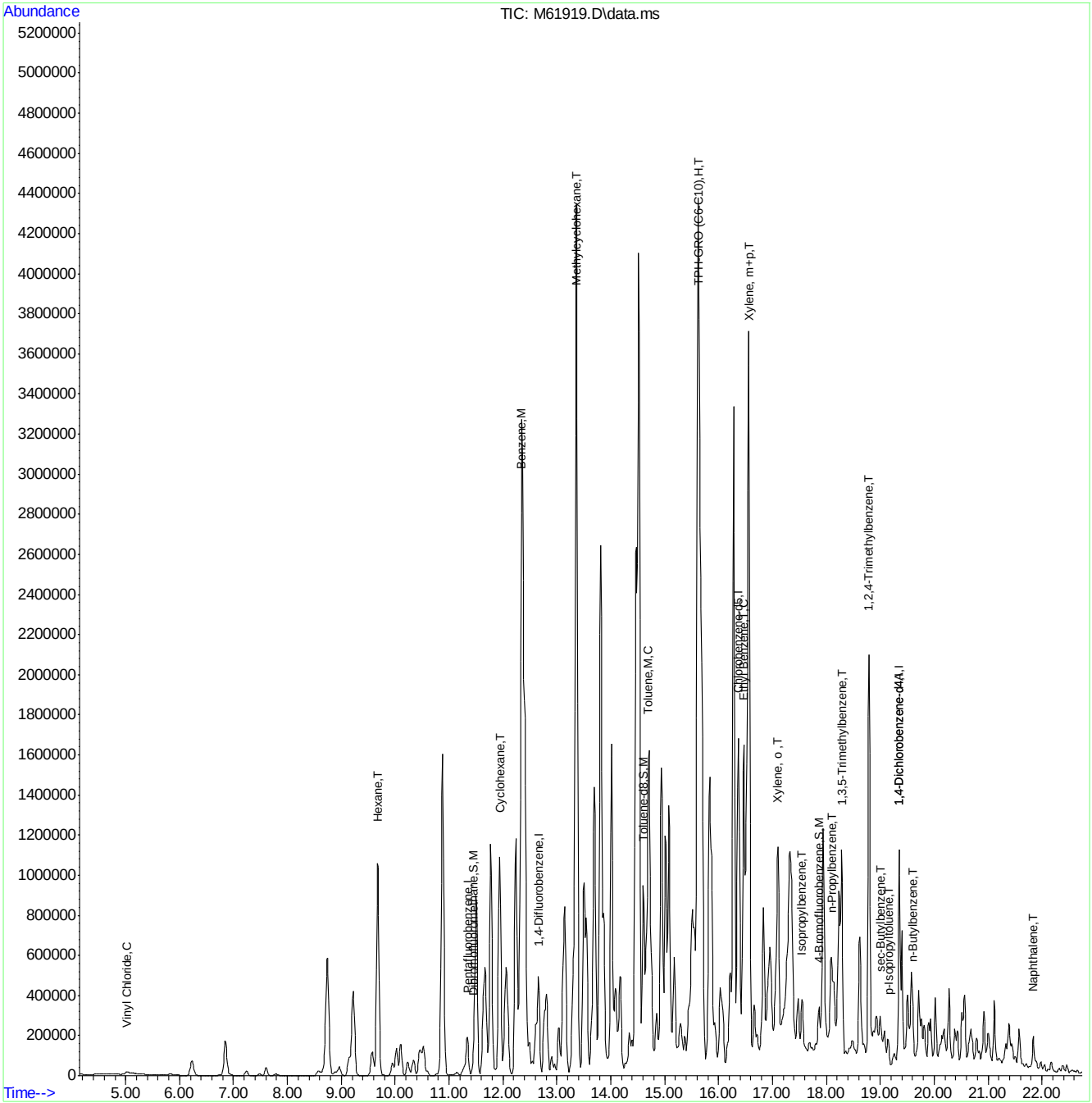
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 168733 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 248567 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 248911 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.350 | 152 | 156154 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.350 | 152 | 156154 | 20.00 | ppb | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 73968 | 18.47 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 92.35% | | | | |
| 56) Toluene-d8 | 14.602 | 98 | 299163 | 19.72 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 98.60% | | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 140710 | 22.32 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 111.60% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 4) Vinyl Chloride | 5.020 | 62 | 1534 | 0.32 | ppb | # | 43 |
| 24) Hexane | 9.684 | 57 | 836678 | 111.49 | ppb | | 99 |
| 38) Cyclohexane | 11.942 | 56 | 819367 | 88.28 | ppb | | 94 |
| 45) Benzene | 12.343 | 78 | 158479 | 7.96 | ppb | | 100 |
| 48) Methylcyclohexane | 13.356 | 55 | 2390755 | 298.44 | ppb | | 95 |
| 57) Toluene | 14.696 | 92 | 45789 | 3.81 | ppb | # | 75 |
| 67) Ethyl Benzene | 16.469 | 91 | 1397207 | 61.78 | ppb | | 98 |
| 68) Xylene, m+p | 16.564 | 106 | 1109881 | 129.85 | ppb | | 92 |
| 69) Xylene, o | 17.103 | 106 | 348896 | 40.23 | ppb | | 95 |
| 73) Isopropylbenzene | 17.546 | 105 | 269991 | 12.36 | ppb | | 99 |
| 79) n-Propylbenzene | 18.094 | 91 | 459082 | 15.23 | ppb | | 97 |
| 81) 1,3,5-Trimethylbenzene | 18.284 | 105 | 437307 | 21.44 | ppb | | 96 |
| 86) 1,2,4-Trimethylbenzene | 18.791 | 105 | 1556562 | 73.23 | ppb | | 92 |
| 87) sec-Butylbenzene | 19.002 | 105 | 43547 | 1.64 | ppb | | 97 |
| 88) p-Isopropyltoluene | 19.150 | 119 | 59146 | 2.68 | ppb | | 98 |
| 92) n-Butylbenzene | 19.604 | 91 | 96220 | 4.50 | ppb | # | 34 |
| 97) Naphthalene | 21.841 | 128 | 169399 | 9.01 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 15.625 | TIC | 255502601m | 7780.40 | ppb | | |

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

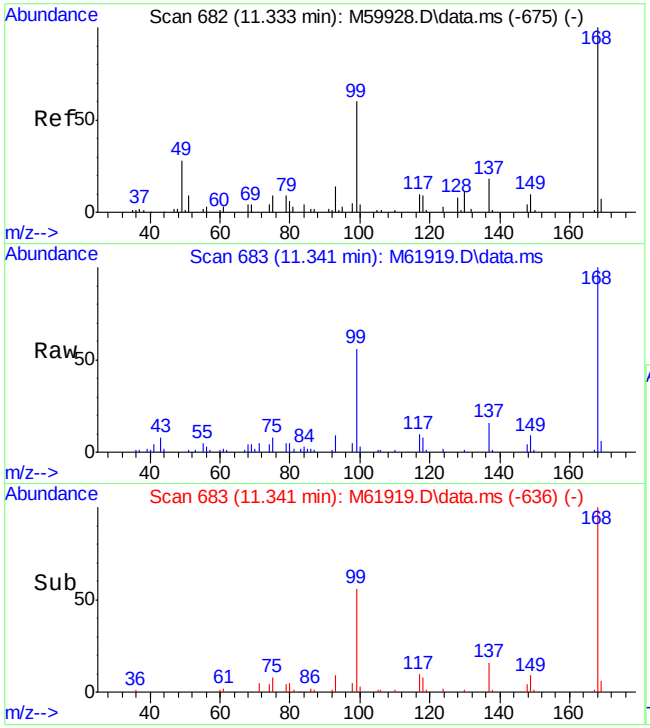
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61919.D
Acq On : 18 Jul 2016 7:47 pm
Operator : johannat
Sample : C46435-15R
Misc : MS1912,VM1861,5.63,,40,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 02 10:12:40 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

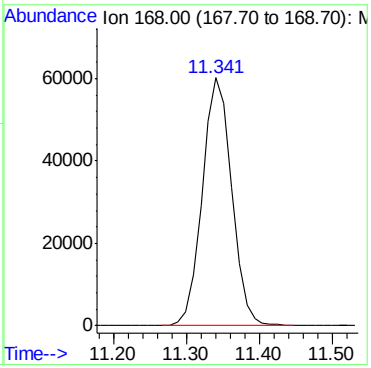


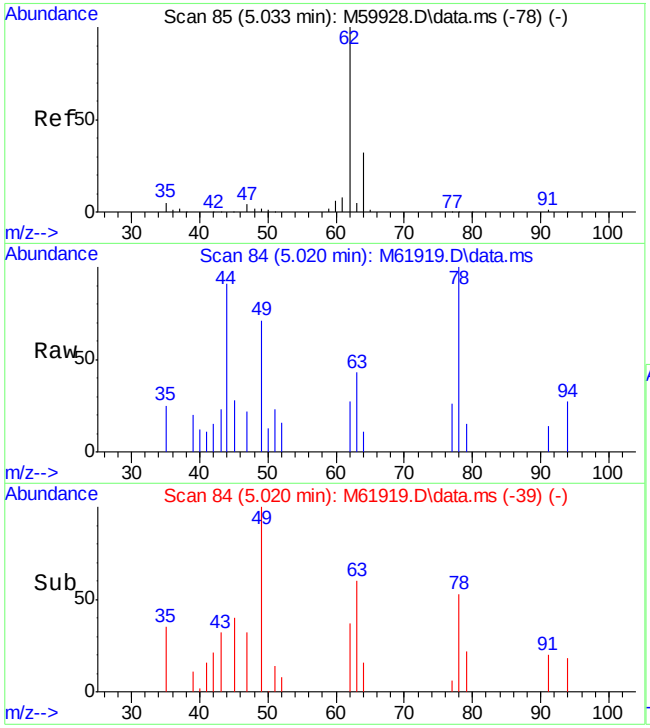

VM1860S.M Tue Aug 02 11:53:49 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:168 Resp: 168733

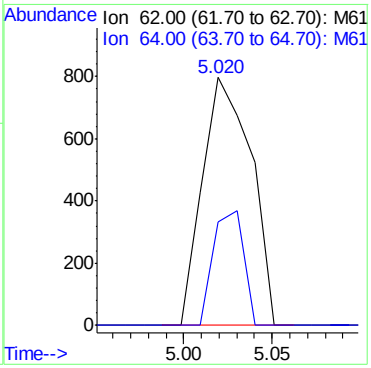


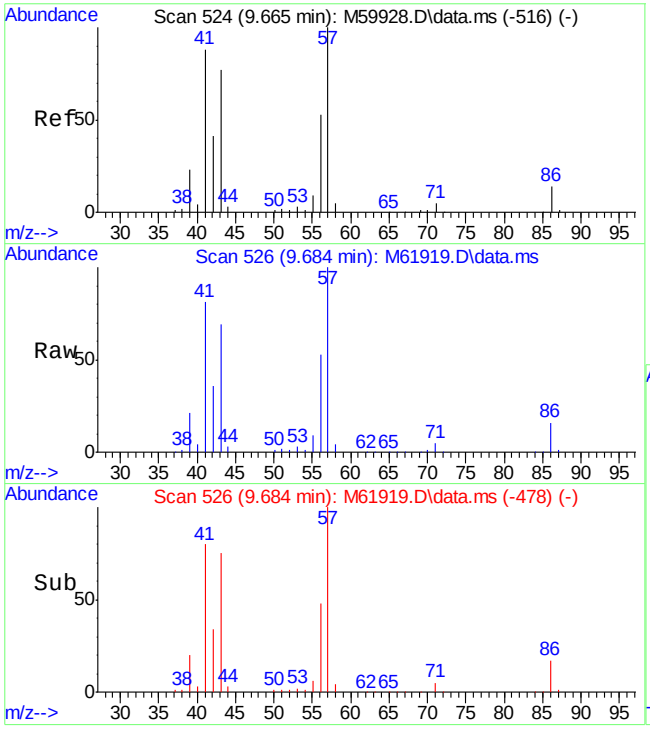




#4
Vinyl Chloride
Concen: 0.32 ppb
RT: 5.020 min Scan# 84
Delta R.T. -0.024 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 62 Resp: 1534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 0.0 | 11.8 | 51.8# |

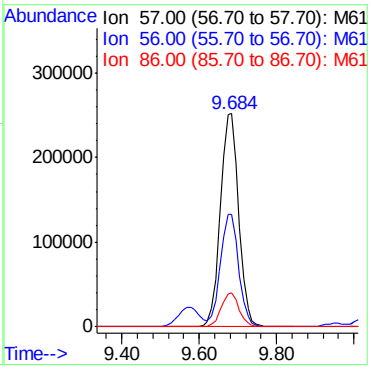


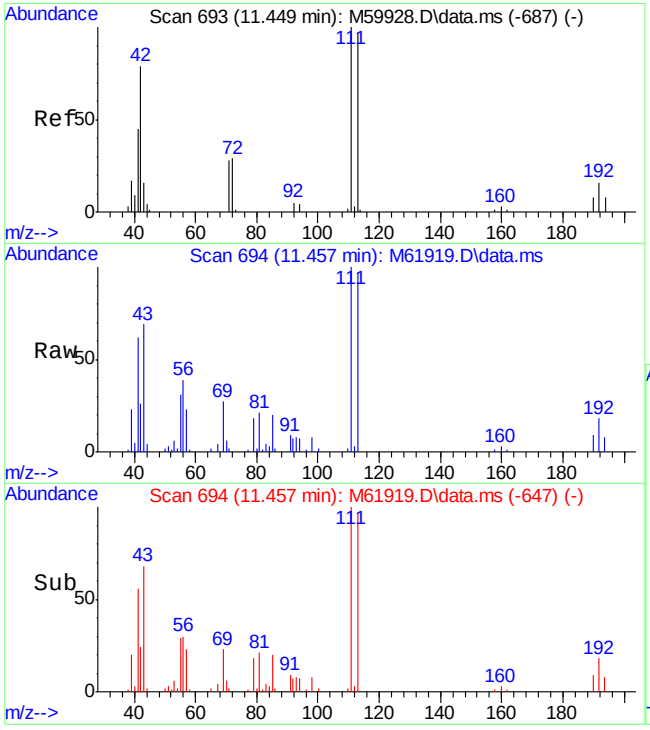



#24
Hexane
Concen: 111.49 ppb
RT: 9.684 min Scan# 526
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 57 Resp: 836678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.4 | 32.9 | 72.9 |
| 86 | 15.3 | 0.0 | 34.1 |

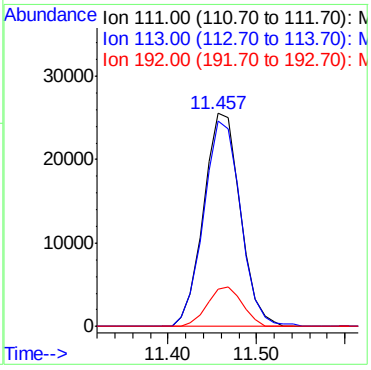


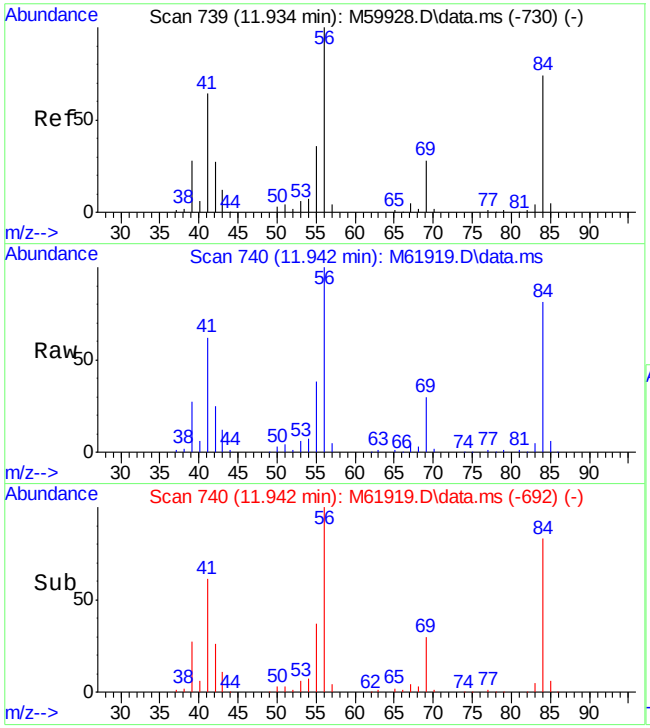




#36
Dibromofluoromethane
Concen: 18.47 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:111 Resp: 73968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.9 | 77.7 | 117.7 |
| 192 | 17.7 | 0.0 | 36.3 |

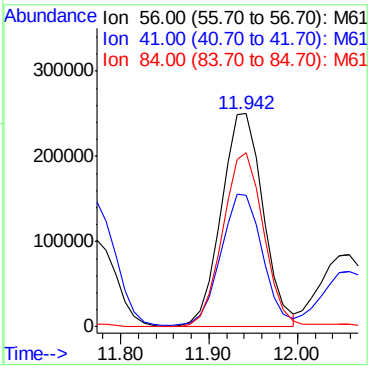


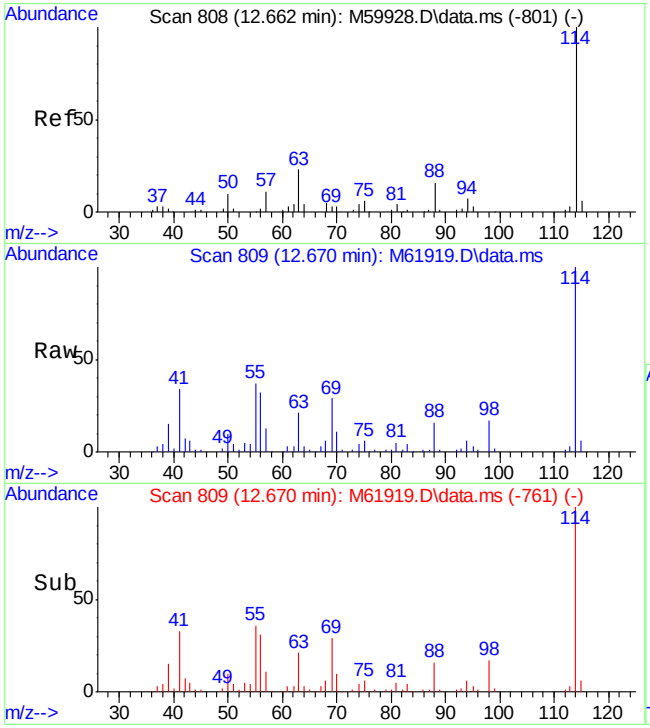



#38
Cyclohexane
Concen: 88.28 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 56 Resp: 819367

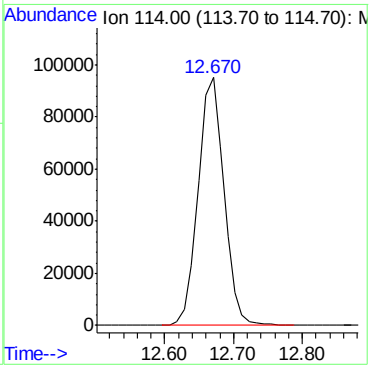
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 60.6 | 46.3 | 86.3 |
| 84 | 80.5 | 56.0 | 96.0 |

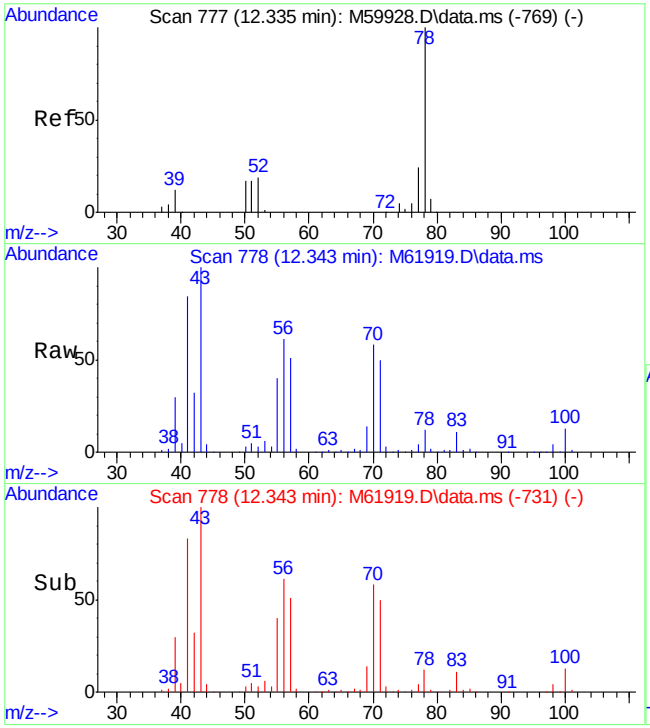



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

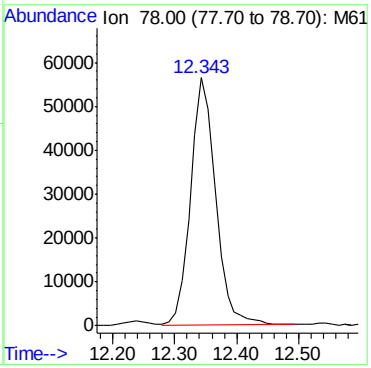
Tgt Ion:114 Resp: 248567

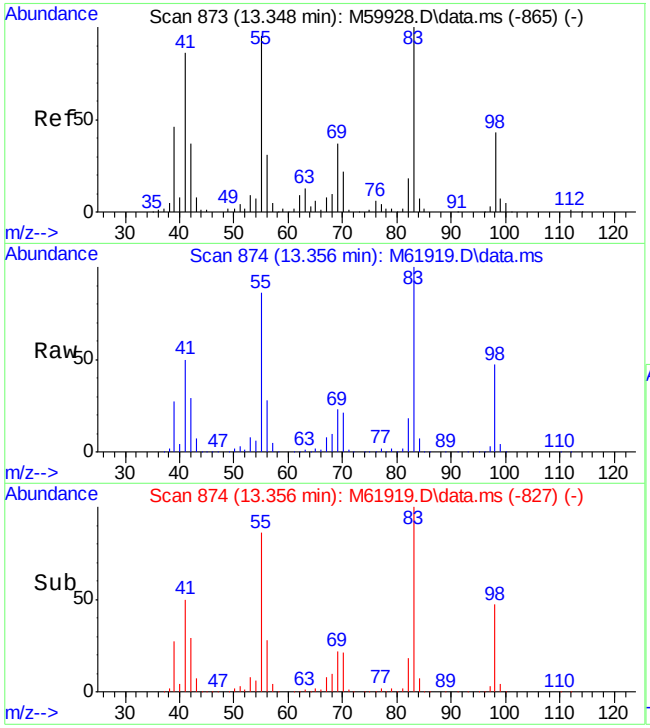





#45
Benzene
Concen: 7.96 ppb
RT: 12.343 min Scan# 778
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 78 Resp: 158479

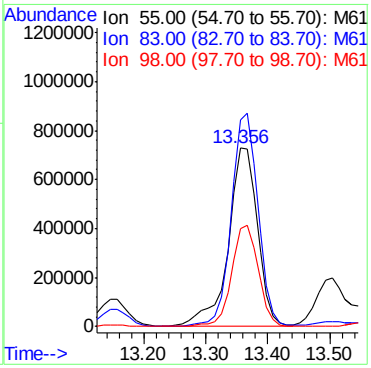


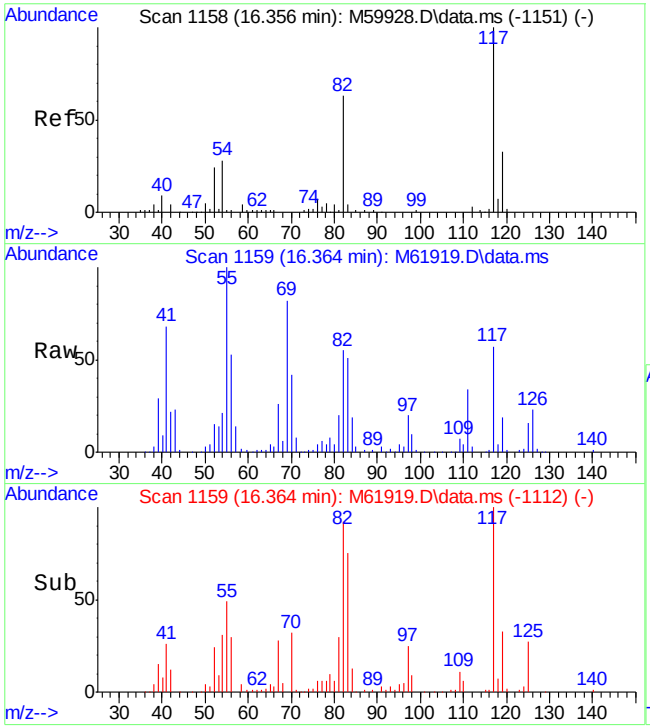




#48
Methylcyclohexane
Concen: 298.44 ppb
RT: 13.356 min Scan# 874
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 55 Resp: 2390755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 109.2 | 84.5 | 124.5 |
| 98 | 51.9 | 27.0 | 67.0 |

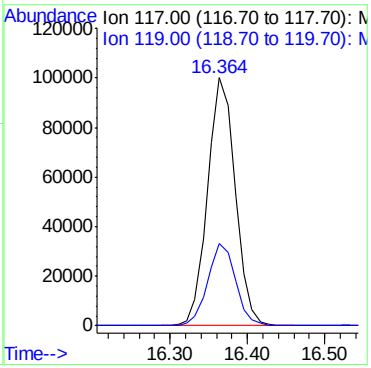


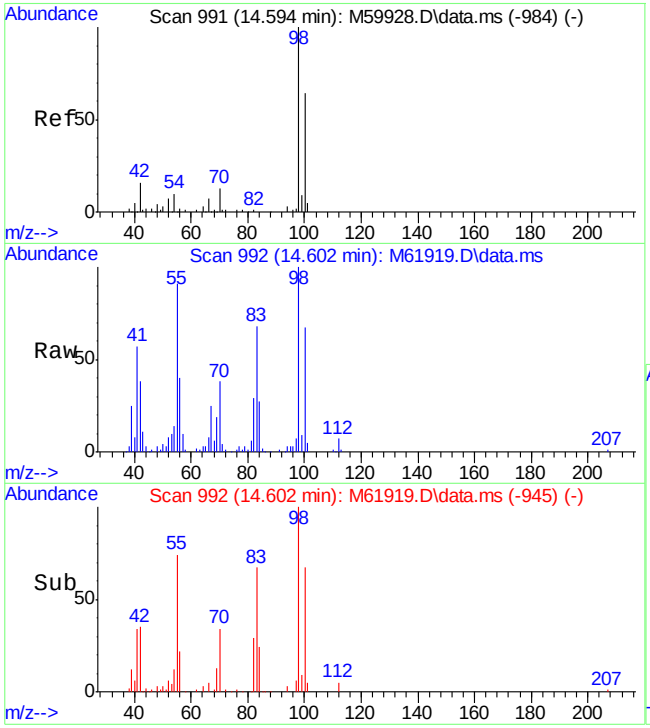



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:117 Resp: 248911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 33.8 | 11.2 | 51.2 |

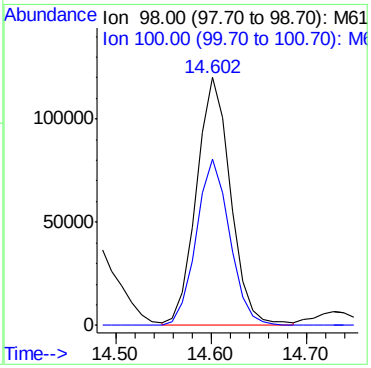


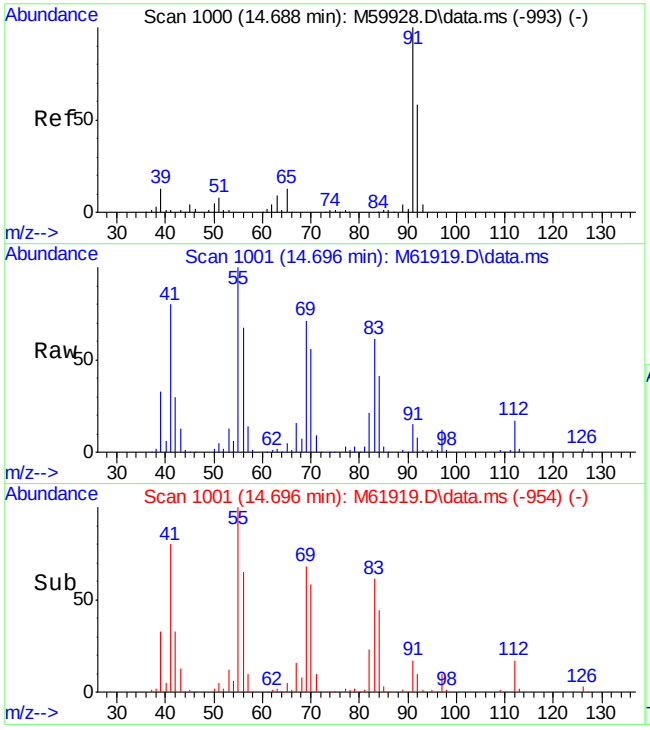




#56
Toluene-d8
Concen: 19.72 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 98 Resp: 299163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 44.3 | 84.3 |

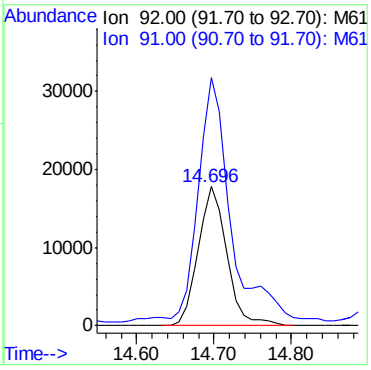


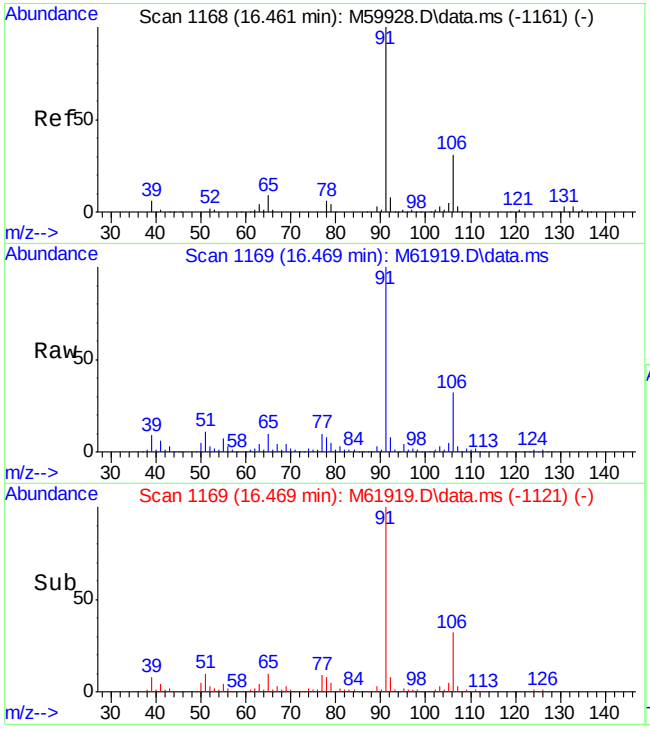



#57
Toluene
Concen: 3.81 ppb
RT: 14.696 min Scan# 1001
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 92 Resp: 45789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 204.5 | 150.5 | 190.5# |

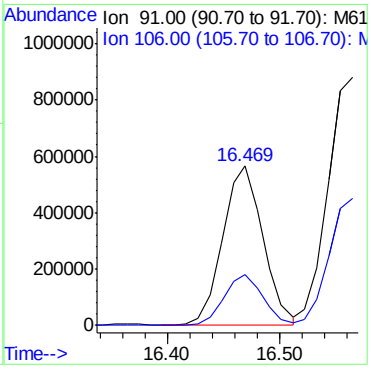


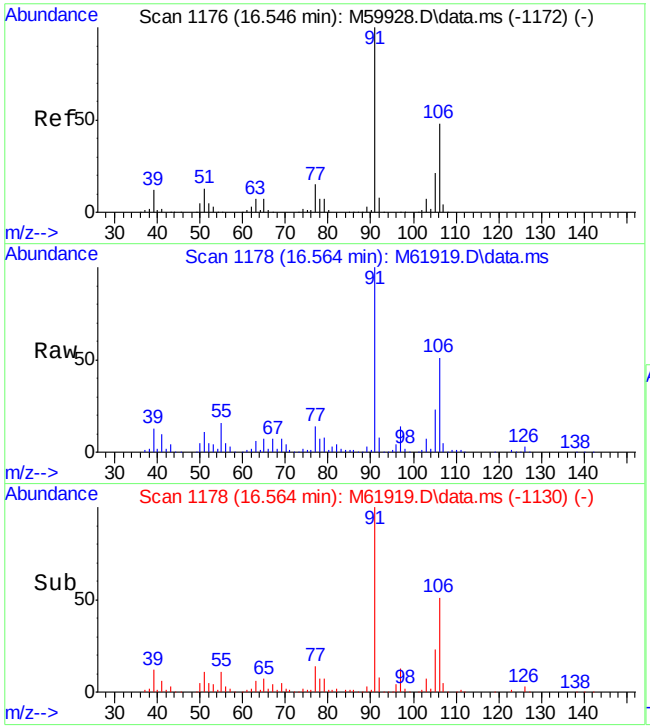




#67
Ethyl Benzene
Concen: 61.78 ppb
RT: 16.469 min Scan# 1169
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 1397207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.4 | 10.2 | 50.2 |

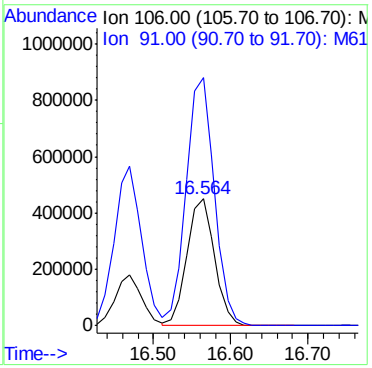


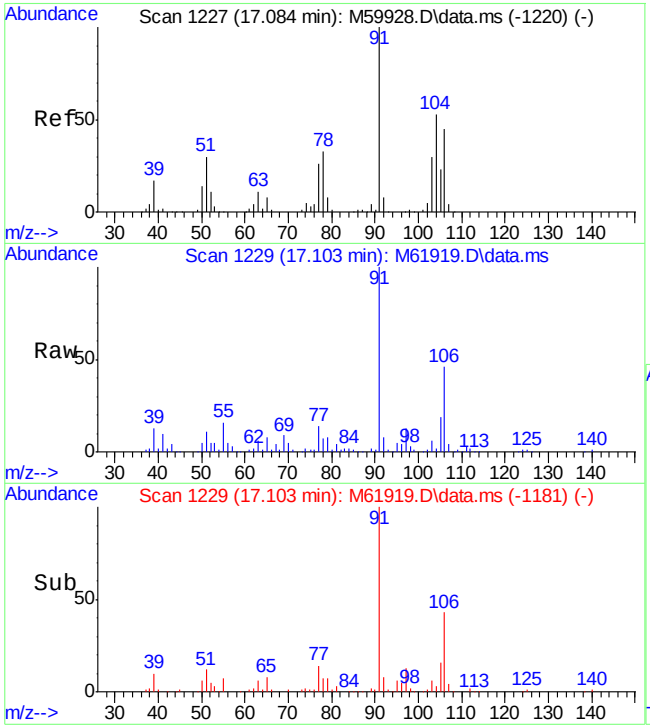



#68
Xylene, m+p
Concen: 129.85 ppb
RT: 16.564 min Scan# 1178
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:106 Resp: 1109881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.5 | 191.5 | 231.5 |

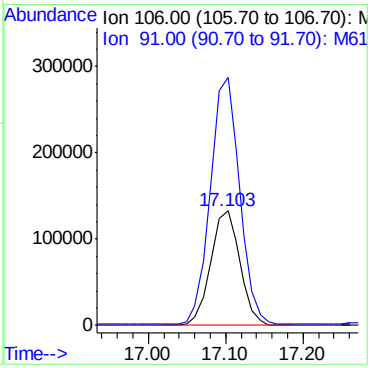


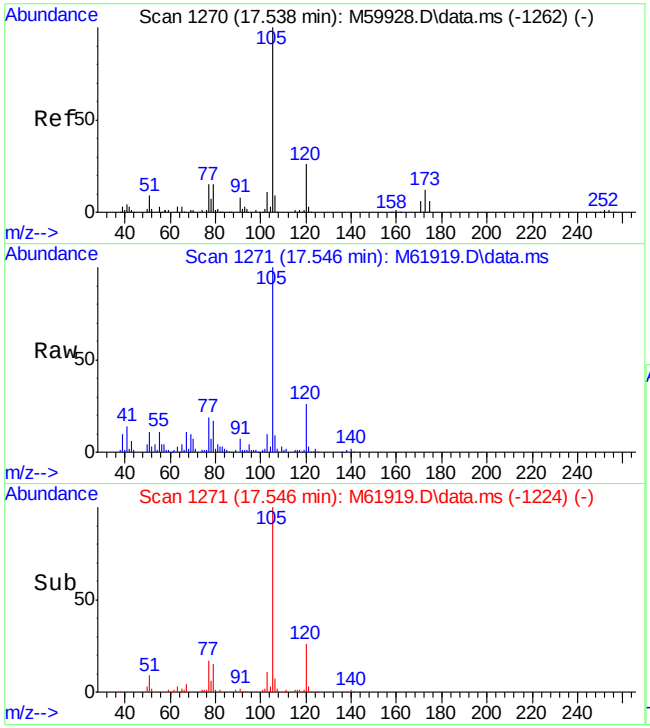




#69
Xylene, o
Concen: 40.23 ppb
RT: 17.103 min Scan# 1229
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:106 Resp: 348896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.3 | 203.2 | 243.2 |

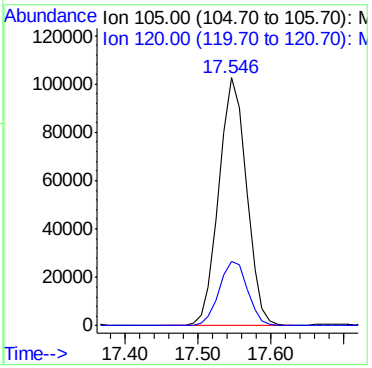


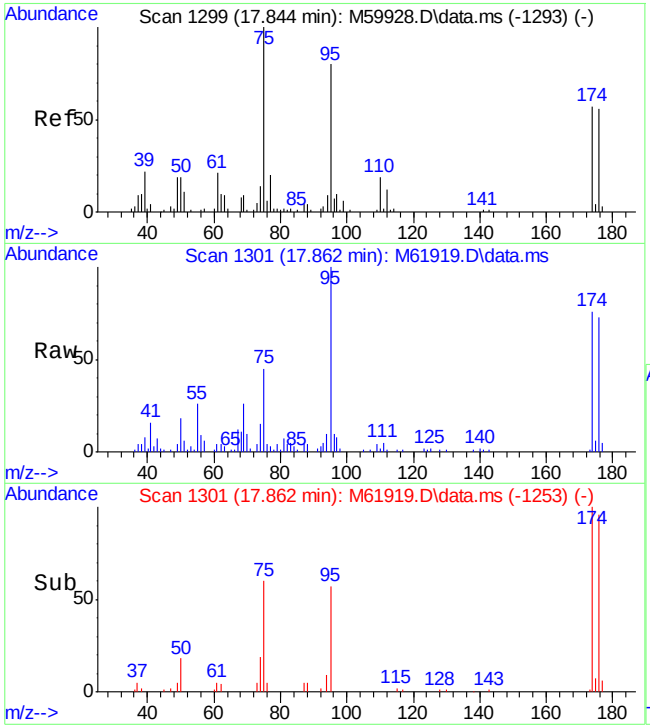



#73
Isopropylbenzene
Concen: 12.36 ppb
RT: 17.546 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 269991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 5.7 | 45.7 |

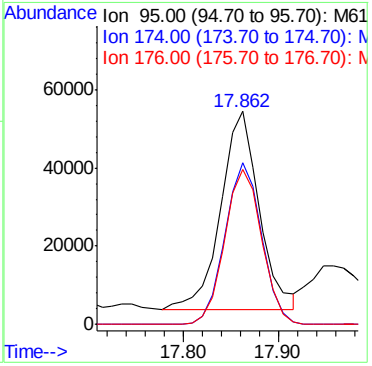


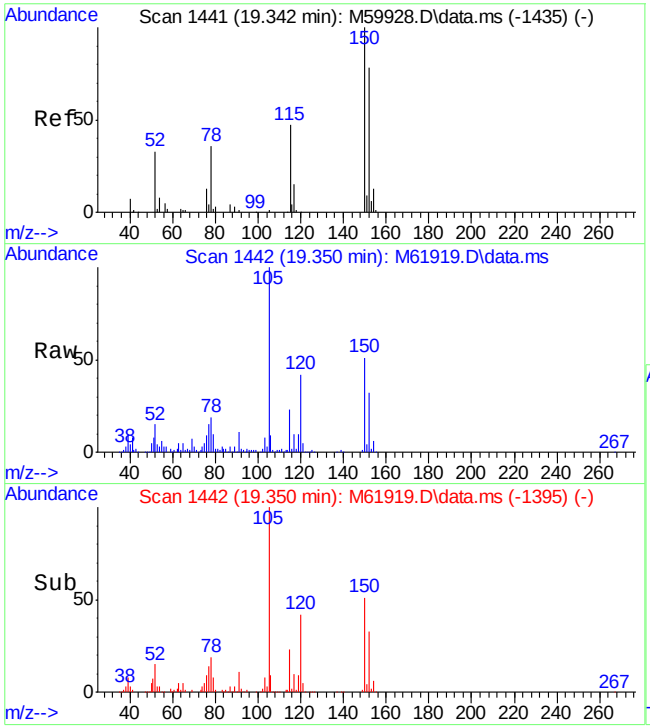




#74
4-Bromofluorobenzene
Concen: 22.32 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 95 Resp: 140710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 78.1 | 54.3 | 94.3 |
| 176 | 75.6 | 51.5 | 91.5 |

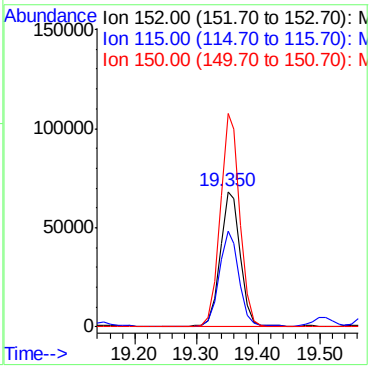


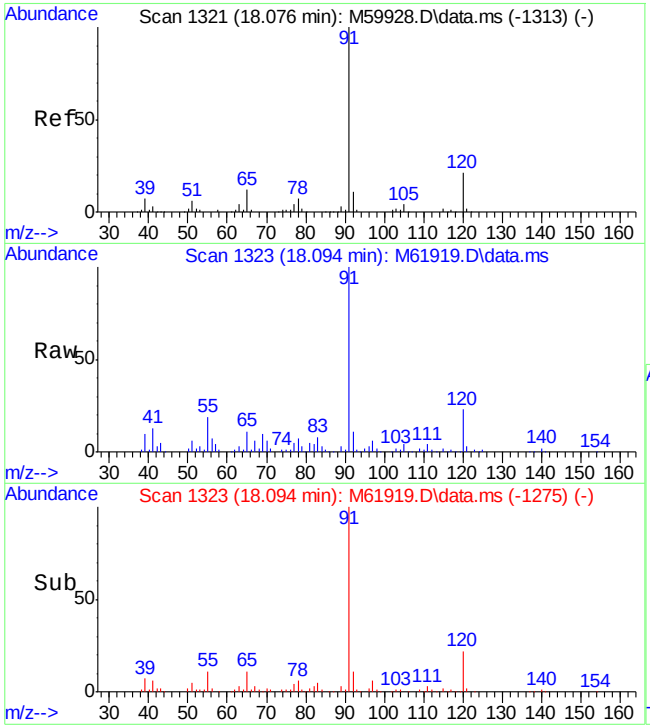



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:152 Resp: 156154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.5 | 40.9 | 80.9 |
| 150 | 151.6 | 178.6 | 218.6# |

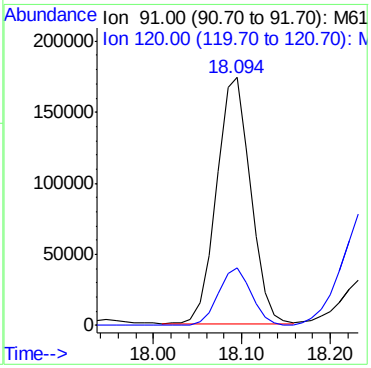


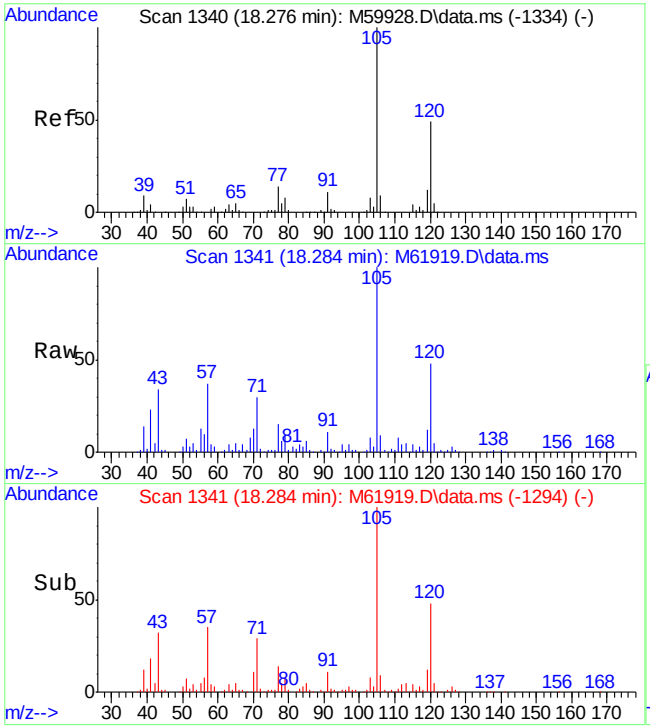




#79
n-Propylbenzene
Concen: 15.23 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 459082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.8 | 1.3 | 41.3 |

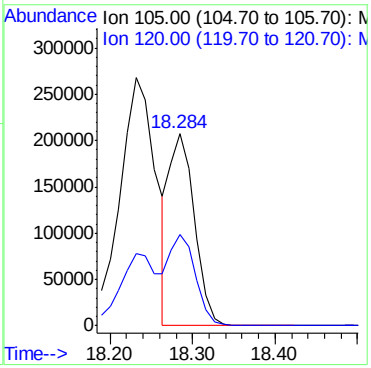


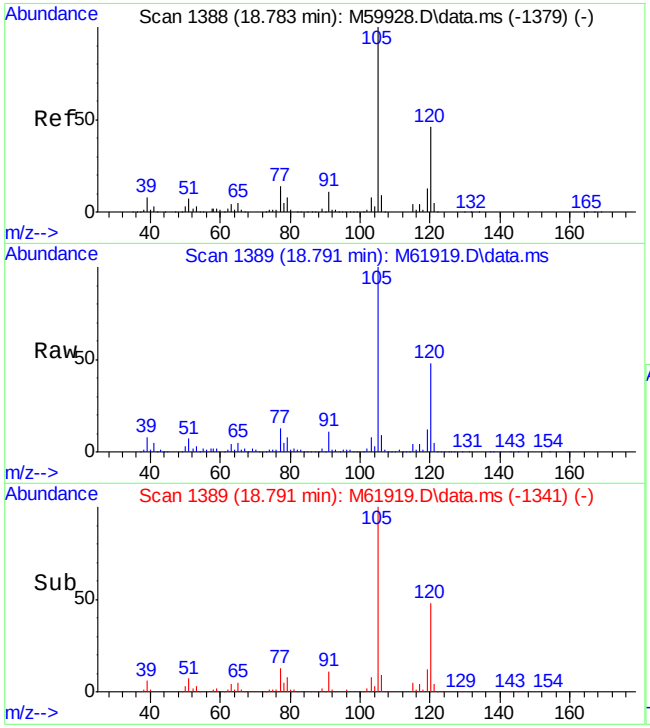



#81
1,3,5-Trimethylbenzene
Concen: 21.44 ppb
RT: 18.284 min Scan# 1341
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 437307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.0 | 26.6 | 66.6 |

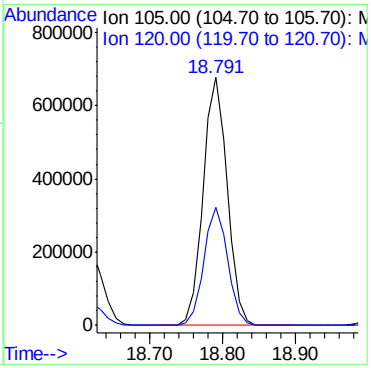


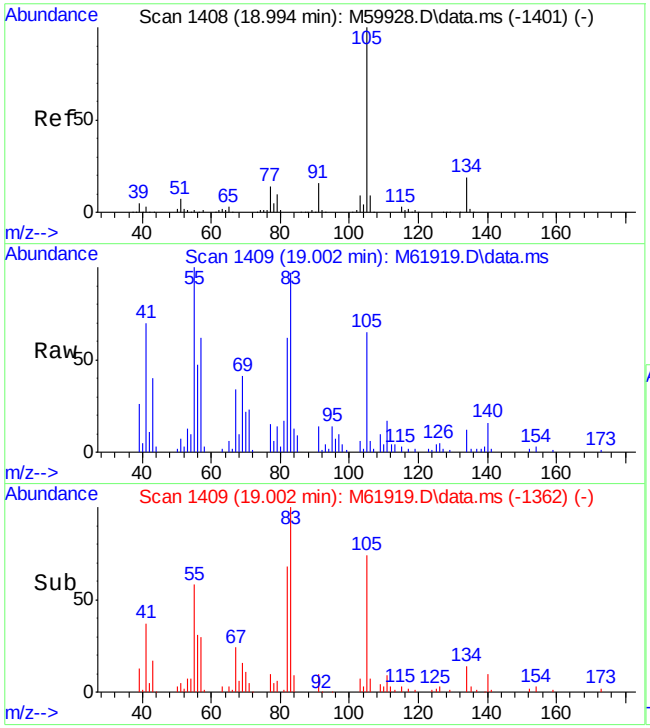




#86
1,2,4-Trimethylbenzene
Concen: 73.23 ppb
RT: 18.791 min Scan# 1389
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 1556562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.0 | 32.4 | 72.4 |

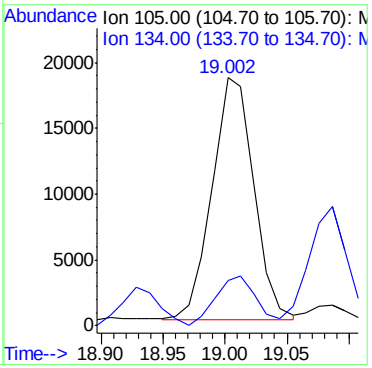


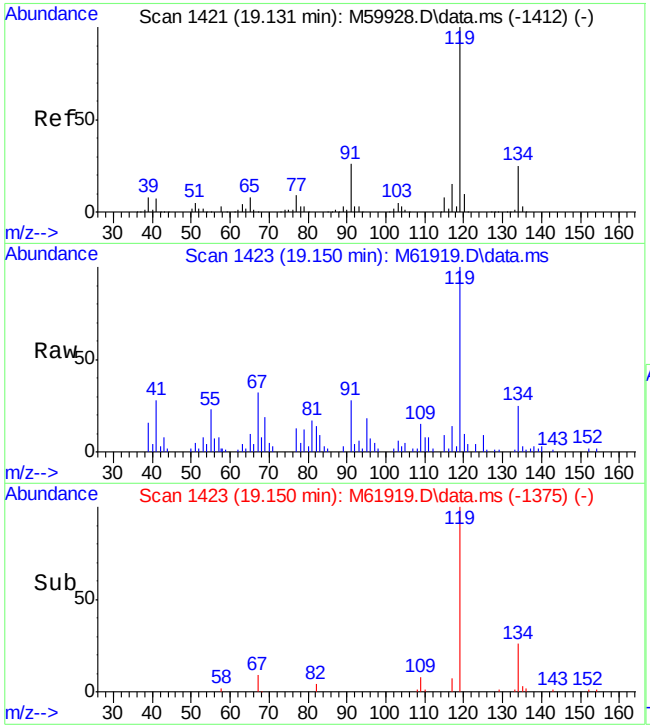



#87
sec-Butylbenzene
Concen: 1.64 ppb
RT: 19.002 min Scan# 1409
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 43547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.1 | 0.0 | 38.7 |

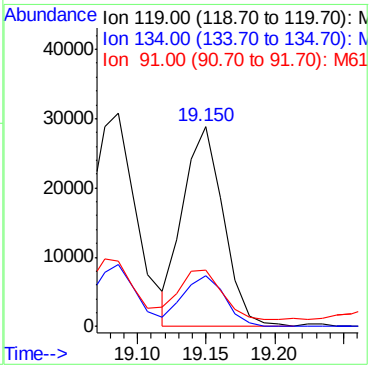


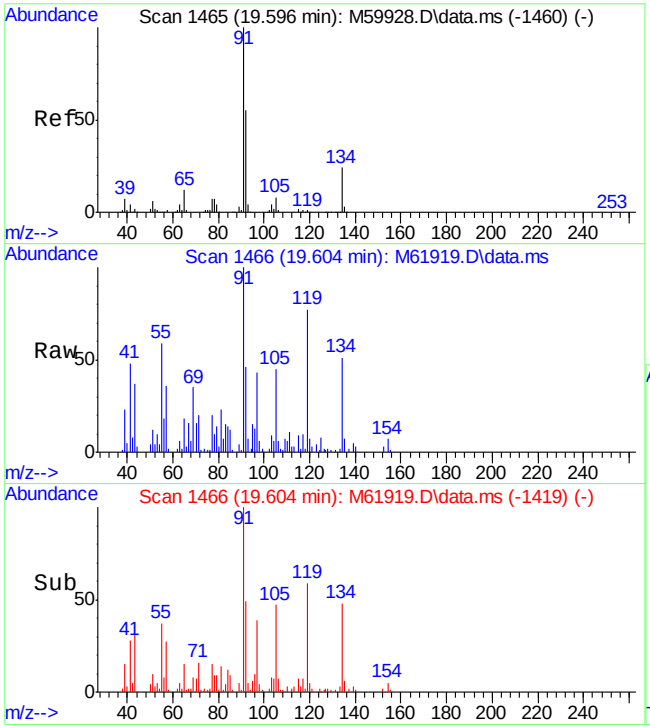




#88
p-Isopropyltoluene
Concen: 2.68 ppb
RT: 19.150 min Scan# 1423
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:119 Resp: 59146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.3 | 6.0 | 46.0 |
| 91 | 27.4 | 6.0 | 46.0 |

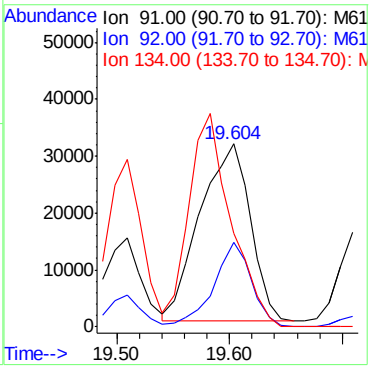


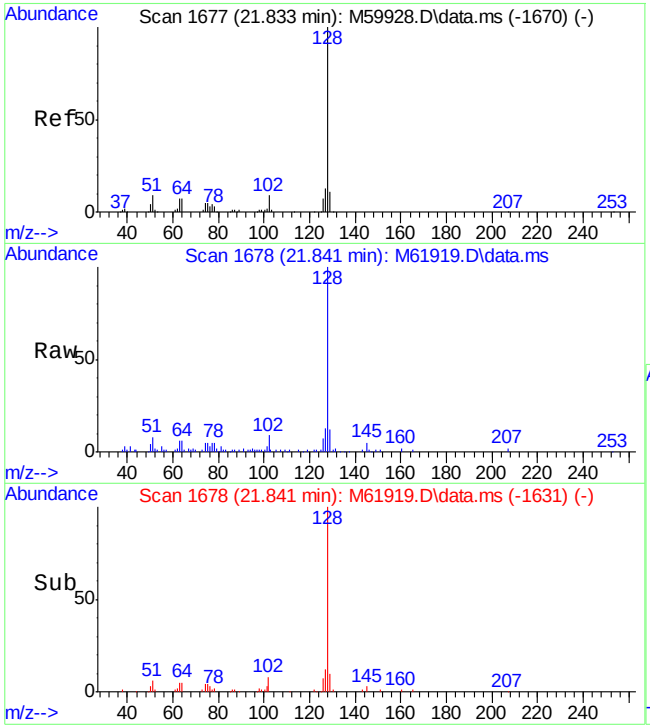



#92
n-Butylbenzene
Concen: 4.50 ppb
RT: 19.604 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 96220

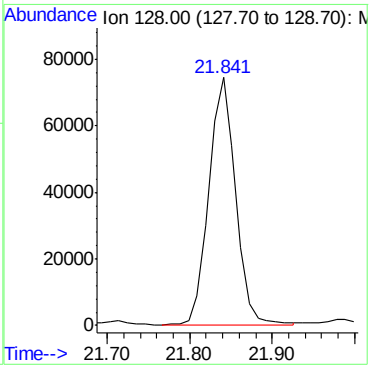
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 35.9 | 35.3 | 75.3 |
| 134 | 101.0 | 3.6 | 43.6# |

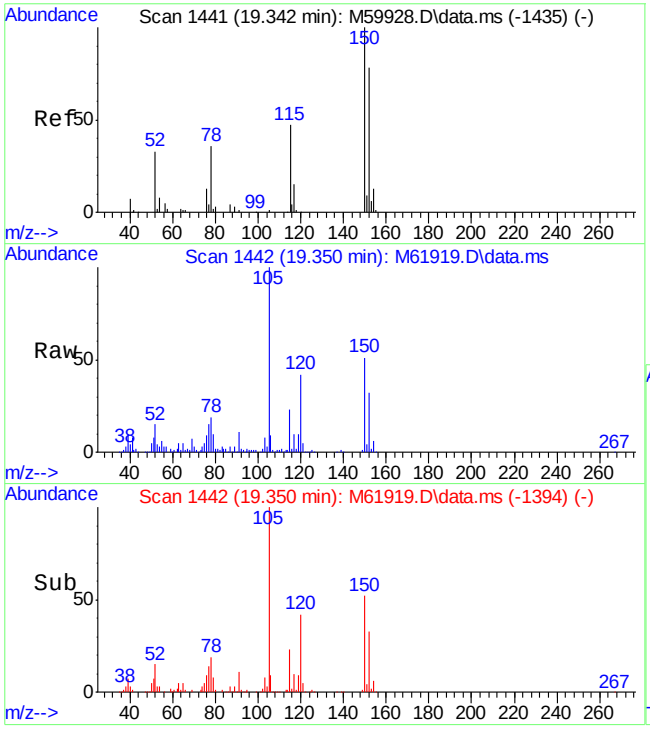



#97
Naphthalene
Concen: 9.01 ppb
RT: 21.841 min Scan# 1678
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:128 Resp: 169399

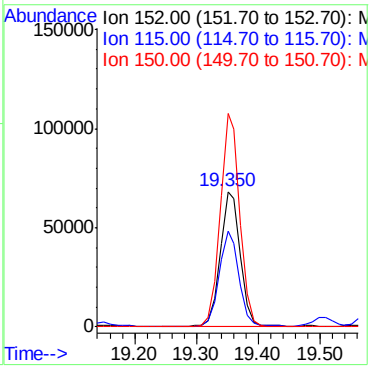


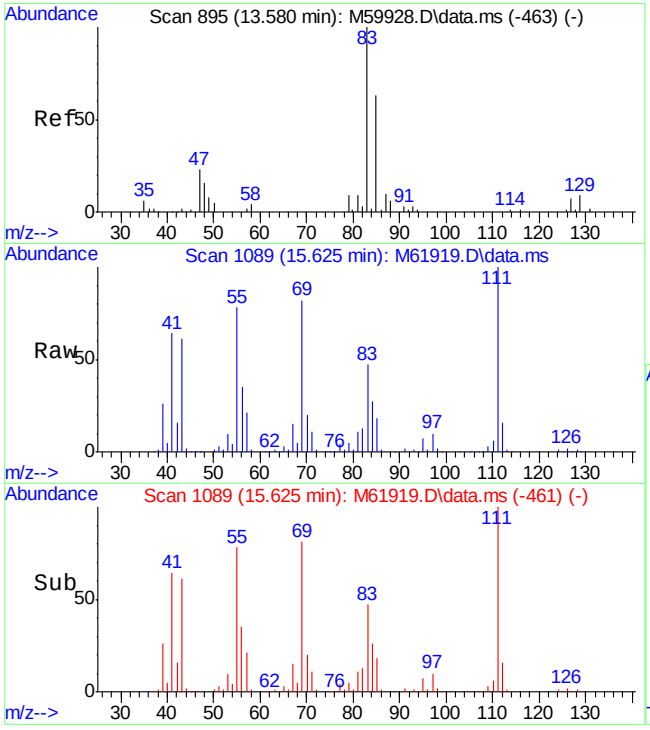



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:152 Resp: 156154

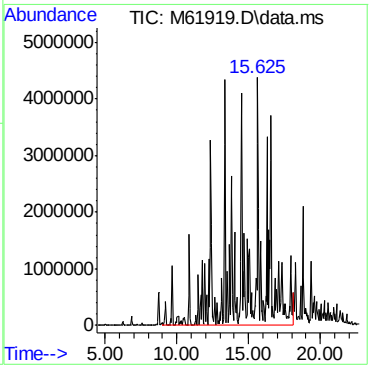
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.5 | 37.3 | 77.3 |
| 150 | 151.6 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 7780.40 ppb m
RT: 15.625 min Scan# 1089
Delta R.T. 2.075 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:TIC Resp:255502601



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61919.D
Acq On : 18 Jul 2016 7:47 pm
Operator : johannat
Sample : C46435-15R
Misc : MS1912,VM1861,5.63,,40,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 02 10:12:40 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

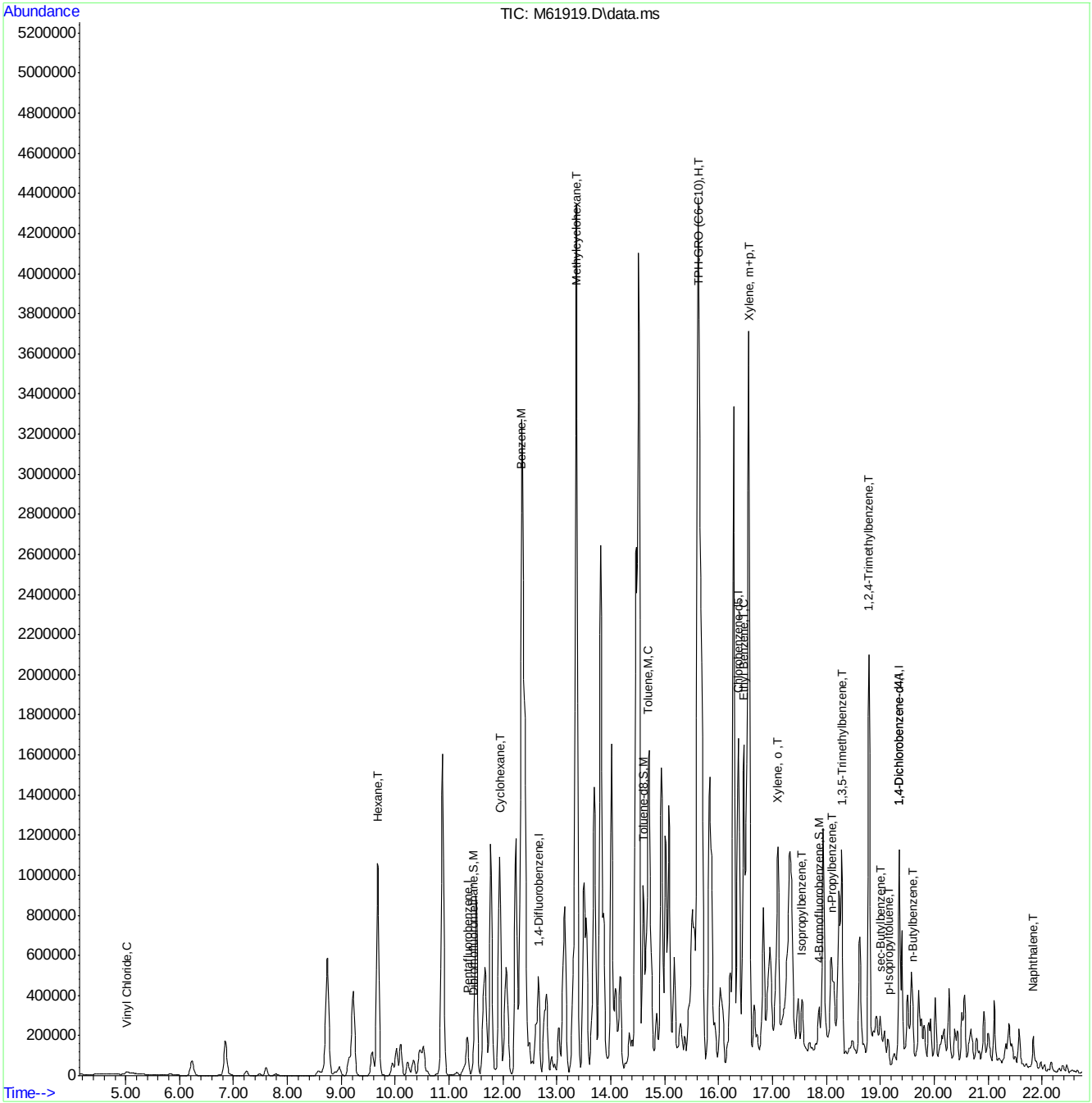
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 168733 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 248567 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 248911 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.350 | 152 | 156154 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.350 | 152 | 156154 | 20.00 | ppb | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 73968 | 18.47 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 92.35% | | | | |
| 56) Toluene-d8 | 14.602 | 98 | 299163 | 19.72 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 98.60% | | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 140710 | 22.32 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 111.60% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 4) Vinyl Chloride | 5.020 | 62 | 1534 | 0.32 | ppb | # | 43 |
| 24) Hexane | 9.684 | 57 | 836678 | 111.49 | ppb | | 99 |
| 38) Cyclohexane | 11.942 | 56 | 819367 | 88.28 | ppb | | 94 |
| 45) Benzene | 12.343 | 78 | 158479 | 7.96 | ppb | | 100 |
| 48) Methylcyclohexane | 13.356 | 55 | 2390755 | 298.44 | ppb | | 95 |
| 57) Toluene | 14.696 | 92 | 45789 | 3.81 | ppb | # | 75 |
| 67) Ethyl Benzene | 16.469 | 91 | 1397207 | 61.78 | ppb | | 98 |
| 68) Xylene, m+p | 16.564 | 106 | 1109881 | 129.85 | ppb | | 92 |
| 69) Xylene, o | 17.103 | 106 | 348896 | 40.23 | ppb | | 95 |
| 73) Isopropylbenzene | 17.546 | 105 | 269991 | 12.36 | ppb | | 99 |
| 79) n-Propylbenzene | 18.094 | 91 | 459082 | 15.23 | ppb | | 97 |
| 81) 1,3,5-Trimethylbenzene | 18.284 | 105 | 437307 | 21.44 | ppb | | 96 |
| 86) 1,2,4-Trimethylbenzene | 18.791 | 105 | 1556562 | 73.23 | ppb | | 92 |
| 87) sec-Butylbenzene | 19.002 | 105 | 43547 | 1.64 | ppb | | 97 |
| 88) p-Isopropyltoluene | 19.150 | 119 | 59146 | 2.68 | ppb | | 98 |
| 92) n-Butylbenzene | 19.604 | 91 | 96220 | 4.50 | ppb | # | 34 |
| 97) Naphthalene | 21.841 | 128 | 169399 | 9.01 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 15.625 | TIC | 255502601m | 7780.40 | ppb | | |

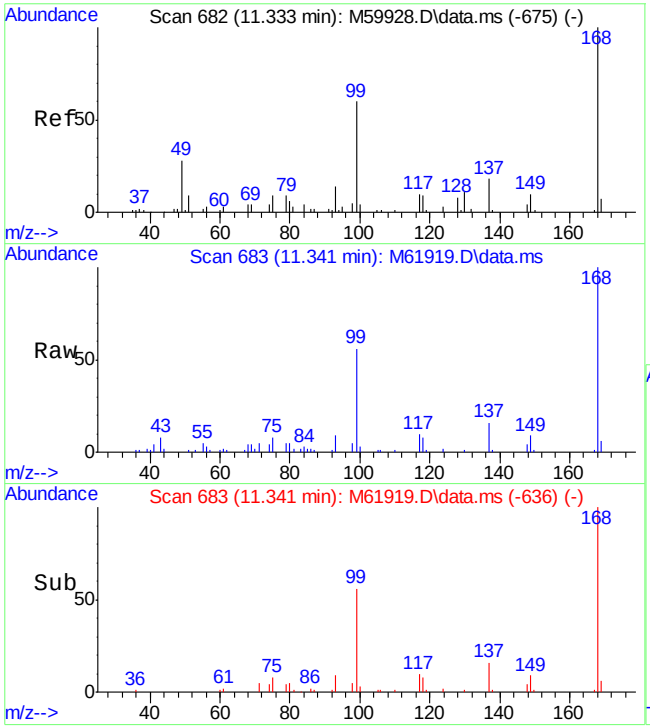
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61919.D
Acq On : 18 Jul 2016 7:47 pm
Operator : johannat
Sample : C46435-15R
Misc : MS1912,VM1861,5.63,,40,5,1
ALS Vial : 13 Sample Multiplier: 1

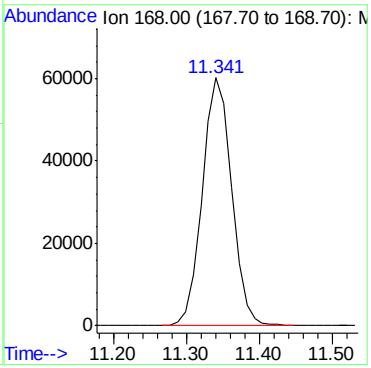
Quant Time: Aug 02 10:12:40 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

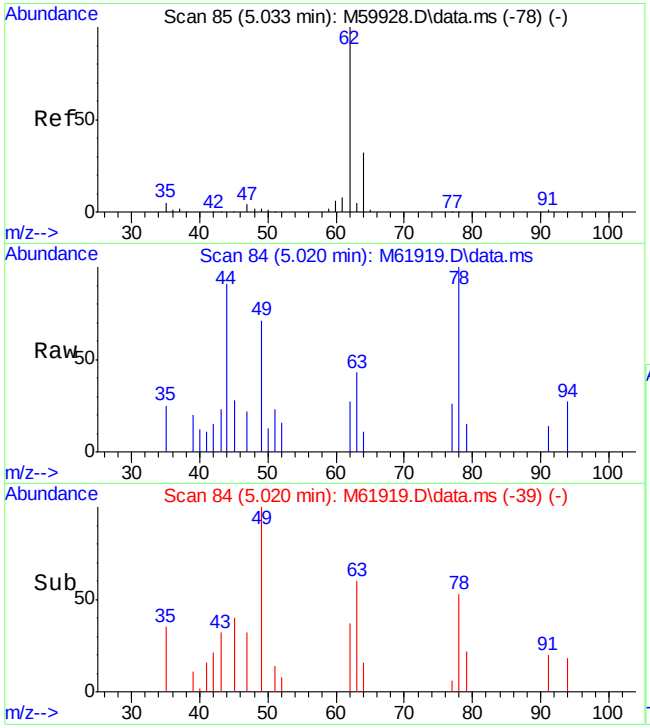





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:168 Resp: 168733

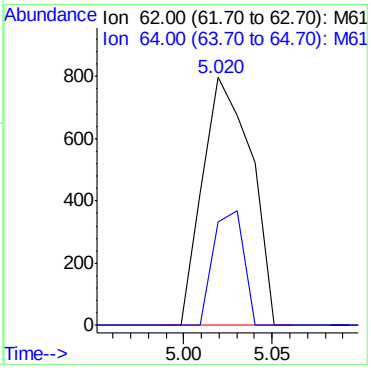


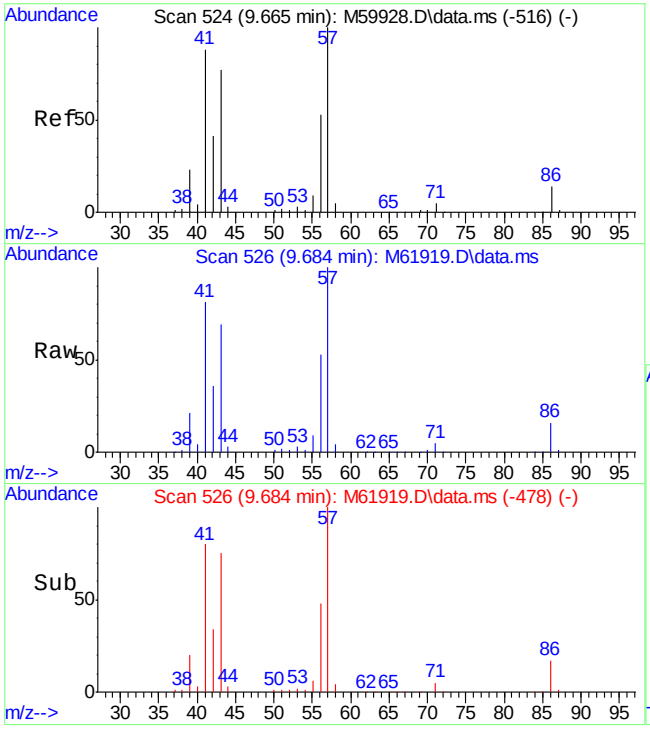




#4
Vinyl Chloride
Concen: 0.32 ppb
RT: 5.020 min Scan# 84
Delta R.T. -0.024 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 62 Resp: 1534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 0.0 | 11.8 | 51.8# |

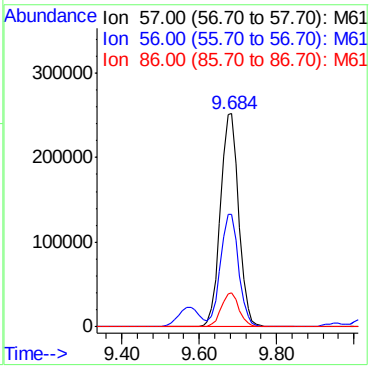


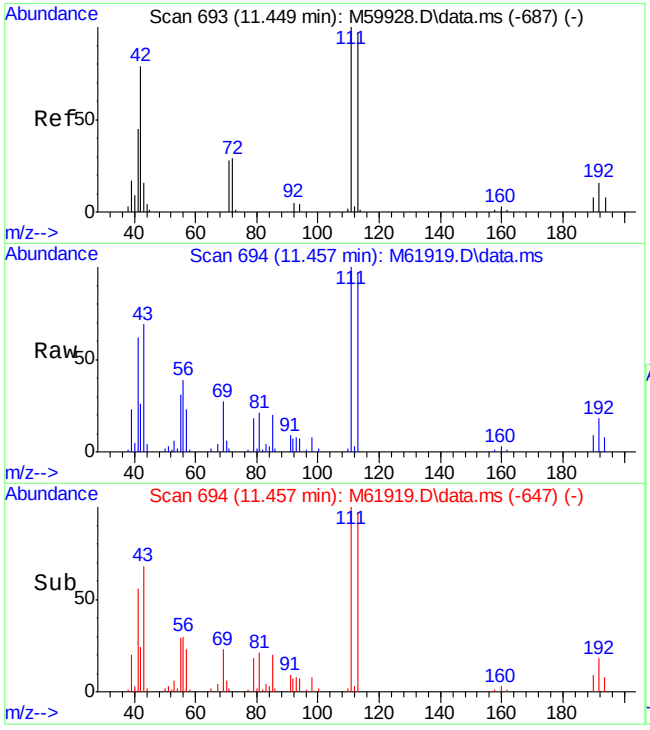



#24
Hexane
Concen: 111.49 ppb
RT: 9.684 min Scan# 526
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 57 Resp: 836678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.4 | 32.9 | 72.9 |
| 86 | 15.3 | 0.0 | 34.1 |

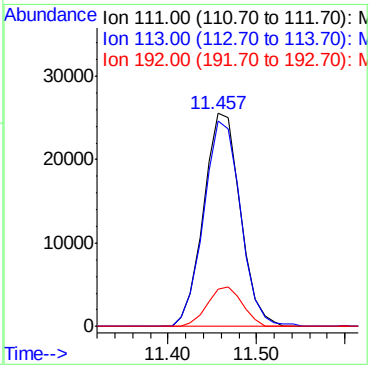


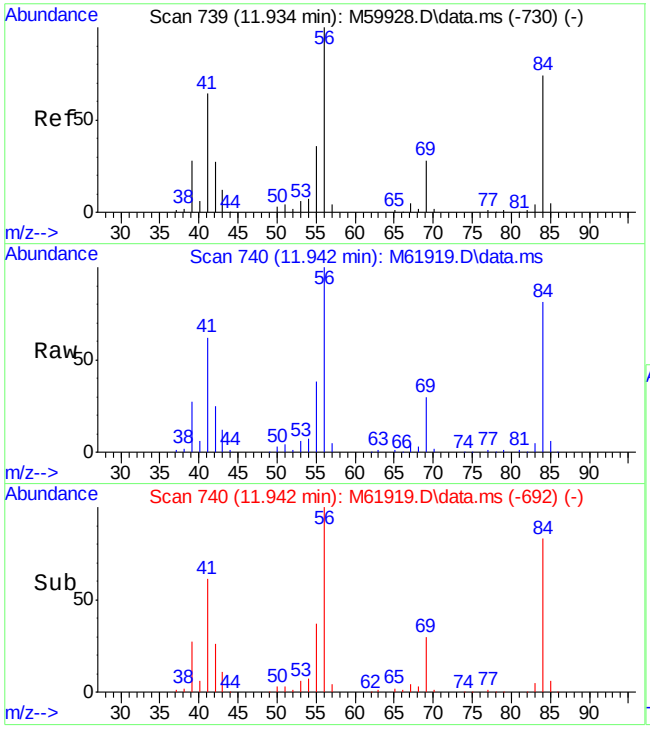




#36
Dibromofluoromethane
Concen: 18.47 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:111 Resp: 73968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.9 | 77.7 | 117.7 |
| 192 | 17.7 | 0.0 | 36.3 |

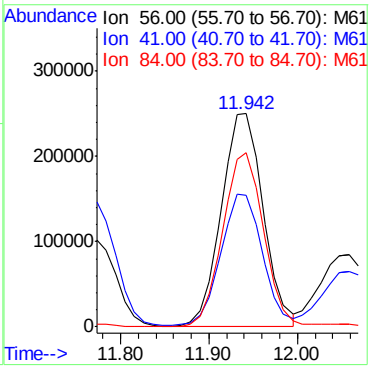


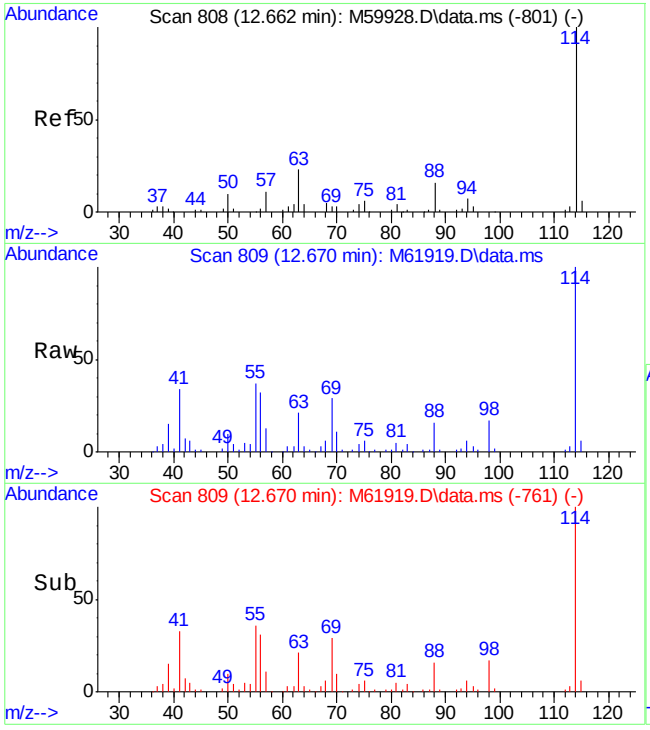



#38
Cyclohexane
Concen: 88.28 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 56 Resp: 819367

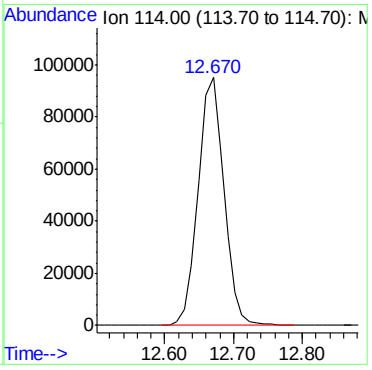
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 60.6 | 46.3 | 86.3 |
| 84 | 80.5 | 56.0 | 96.0 |

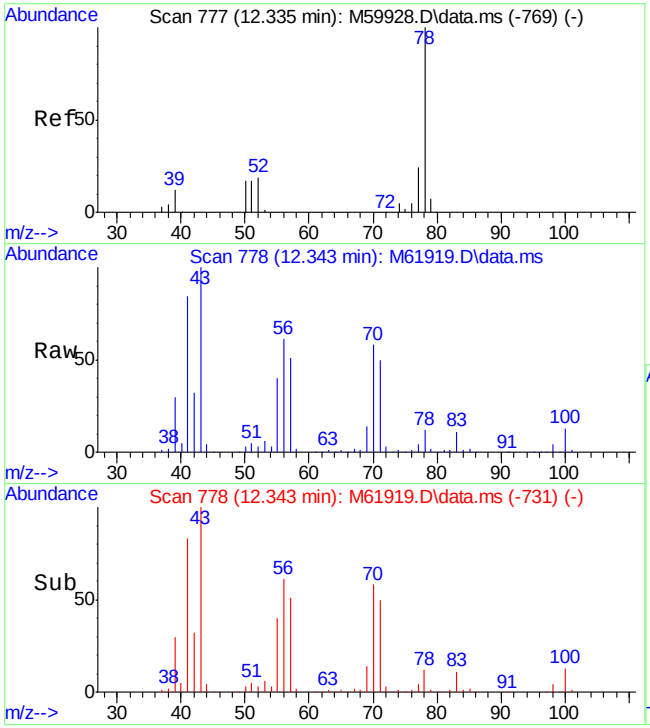



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

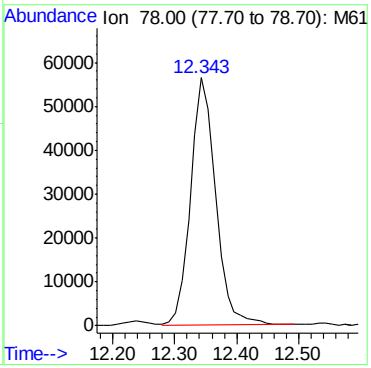
Tgt Ion:114 Resp: 248567

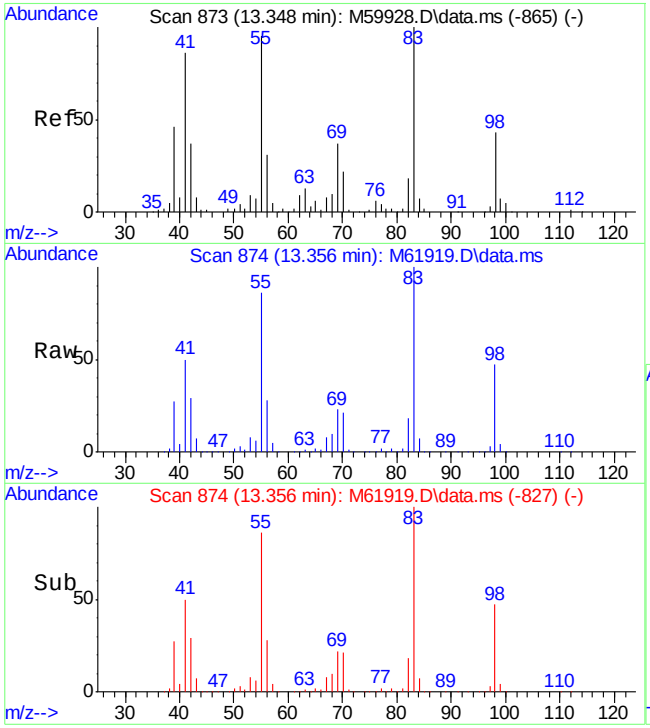





#45
Benzene
Concen: 7.96 ppb
RT: 12.343 min Scan# 778
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 78 Resp: 158479

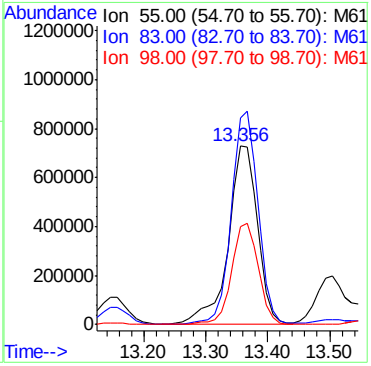


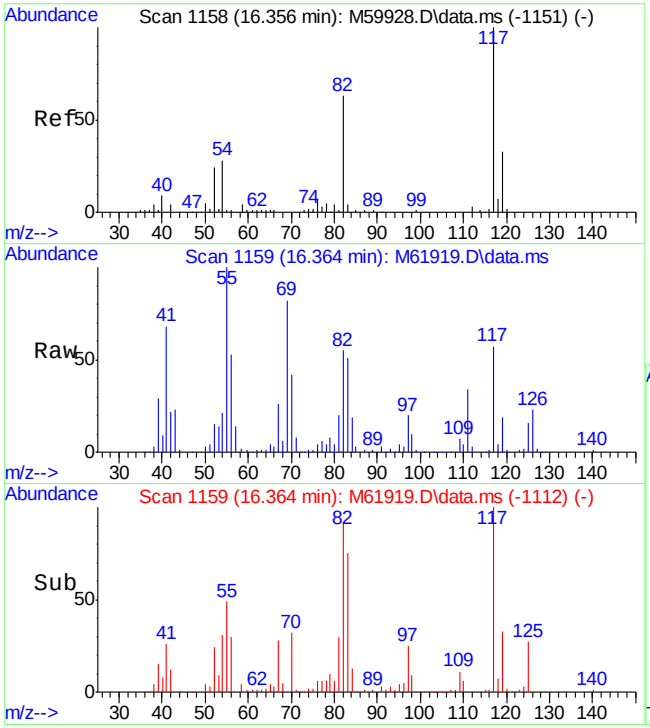




#48
Methylcyclohexane
Concen: 298.44 ppb
RT: 13.356 min Scan# 874
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 55 Resp: 2390755

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 109.2 | 84.5 | 124.5 |
| 98 | 51.9 | 27.0 | 67.0 |

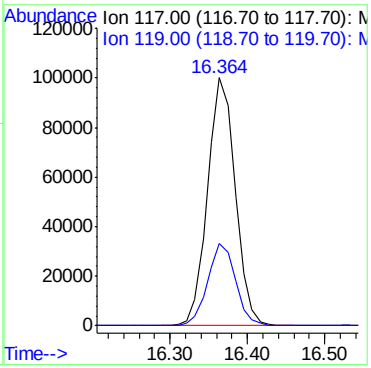


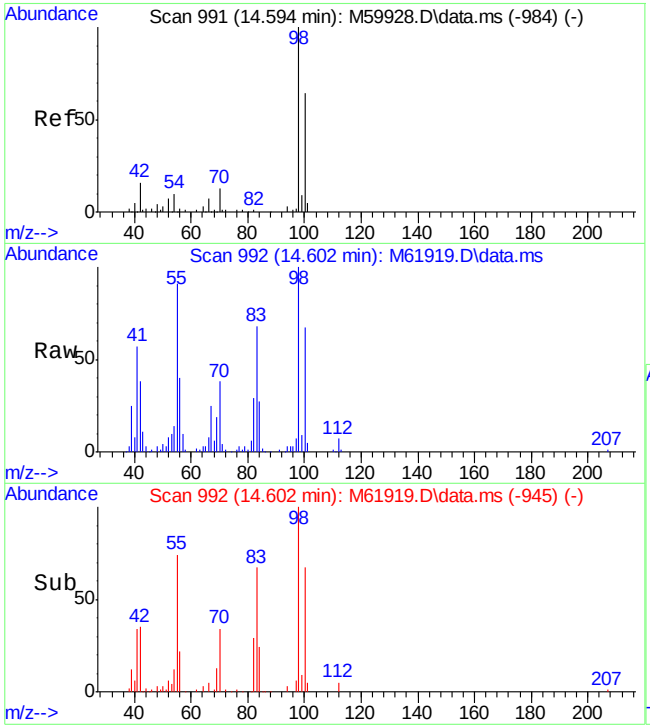



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:117 Resp: 248911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 33.8 | 11.2 | 51.2 |

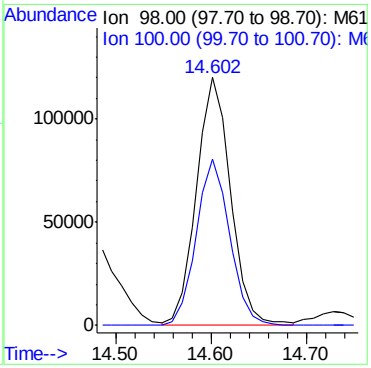


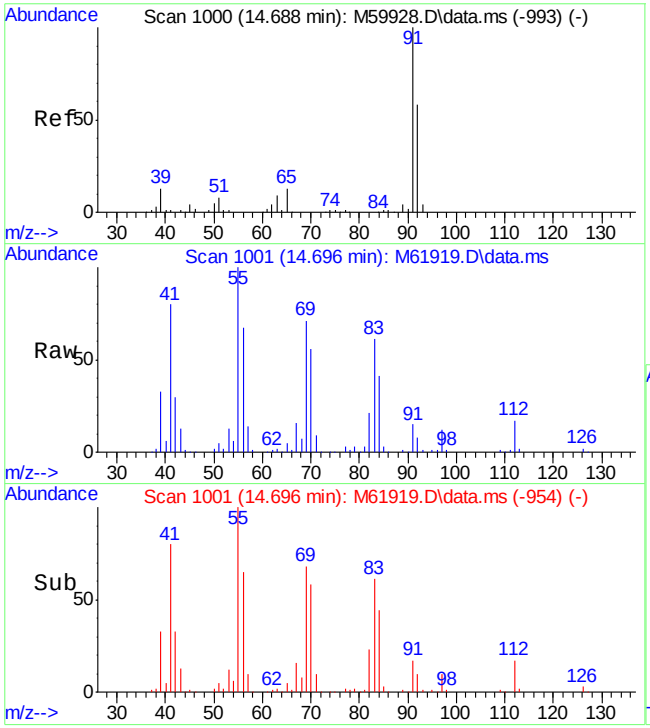




#56
Toluene-d8
Concen: 19.72 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 98 Resp: 299163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 44.3 | 84.3 |

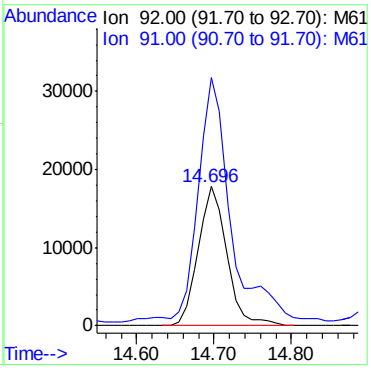


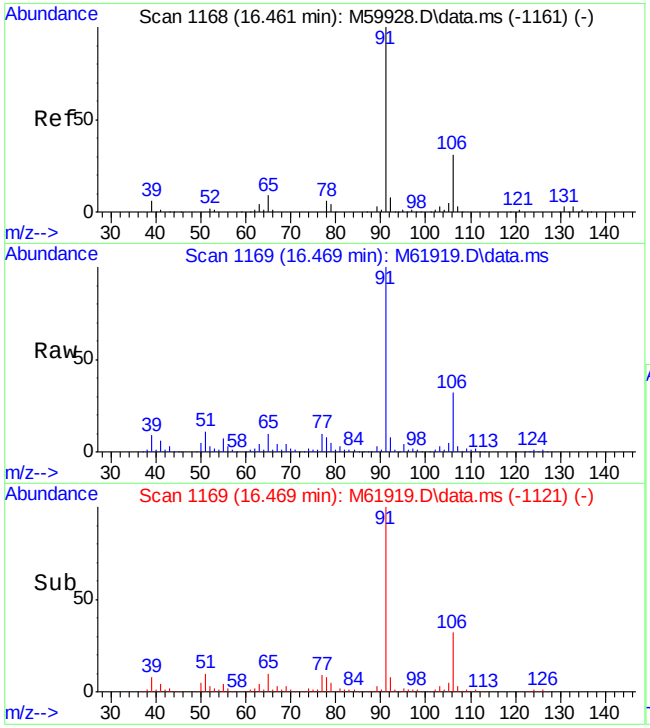



#57
Toluene
Concen: 3.81 ppb
RT: 14.696 min Scan# 1001
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 92 Resp: 45789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 204.5 | 150.5 | 190.5# |

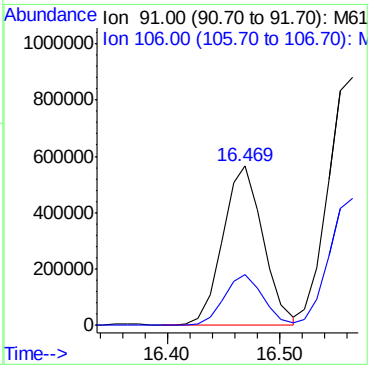


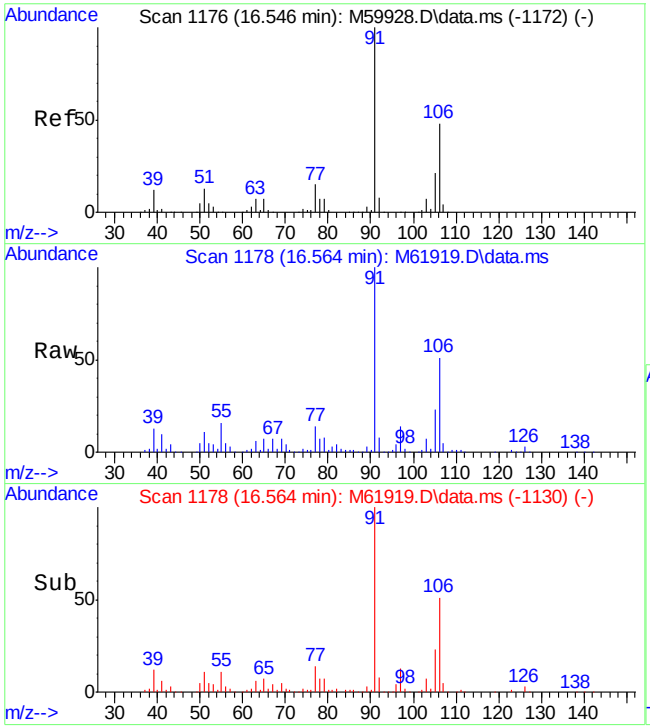




#67
Ethyl Benzene
Concen: 61.78 ppb
RT: 16.469 min Scan# 1169
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 1397207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.4 | 10.2 | 50.2 |

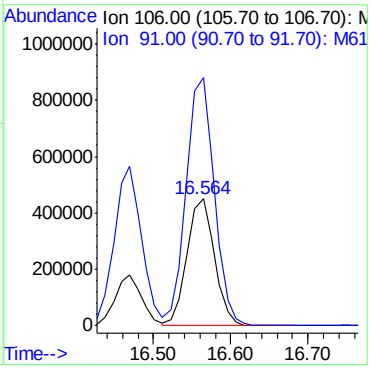


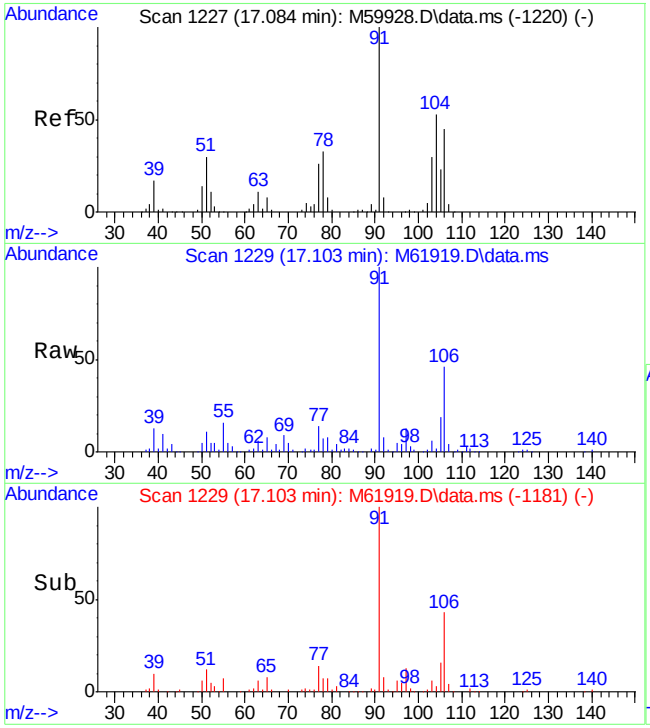



#68
Xylene, m+p
Concen: 129.85 ppb
RT: 16.564 min Scan# 1178
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:106 Resp: 1109881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 199.5 | 191.5 | 231.5 |

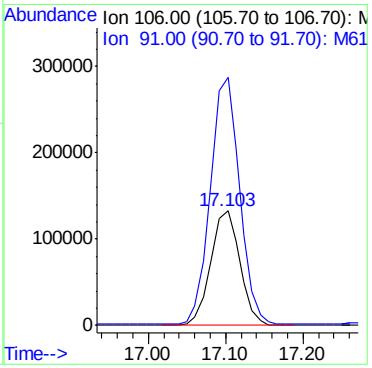


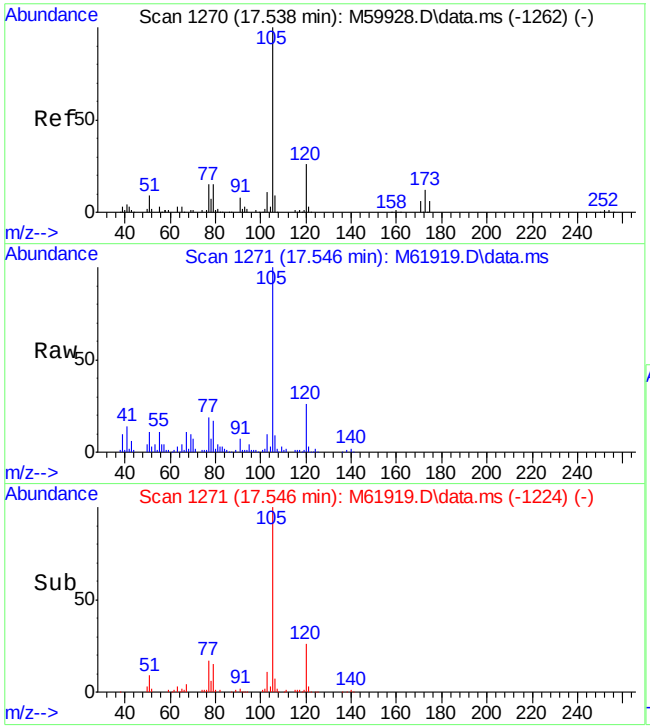




#69
Xylene, o
Concen: 40.23 ppb
RT: 17.103 min Scan# 1229
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:106 Resp: 348896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.3 | 203.2 | 243.2 |

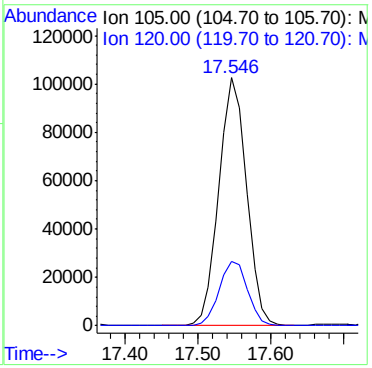


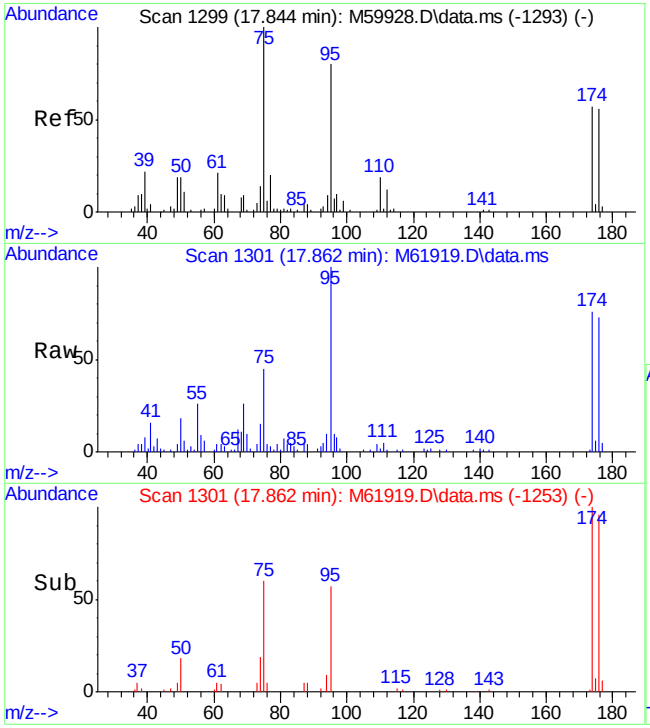



#73
Isopropylbenzene
Concen: 12.36 ppb
RT: 17.546 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 269991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 5.7 | 45.7 |

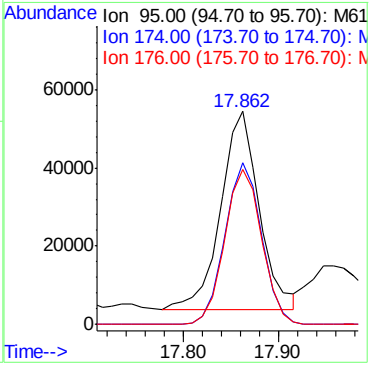


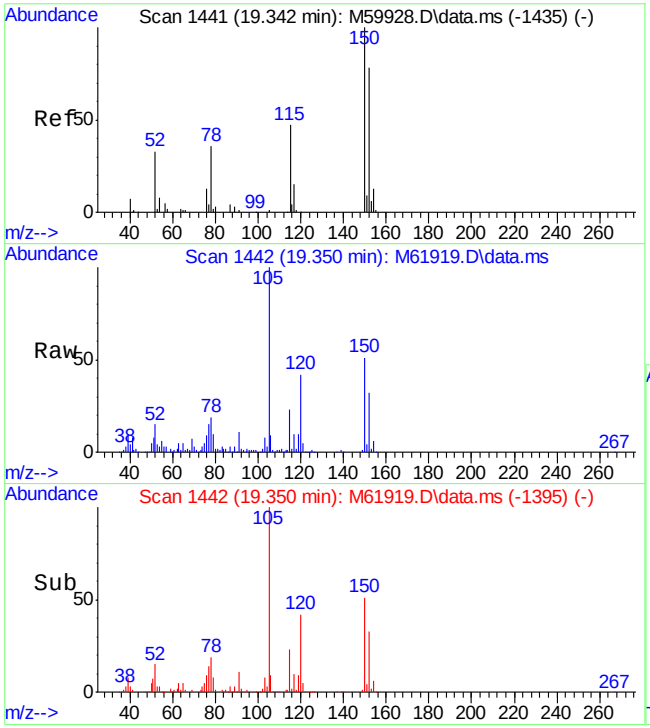




#74
4-Bromofluorobenzene
Concen: 22.32 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 95 Resp: 140710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 78.1 | 54.3 | 94.3 |
| 176 | 75.6 | 51.5 | 91.5 |

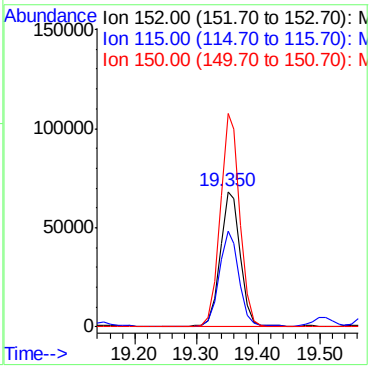


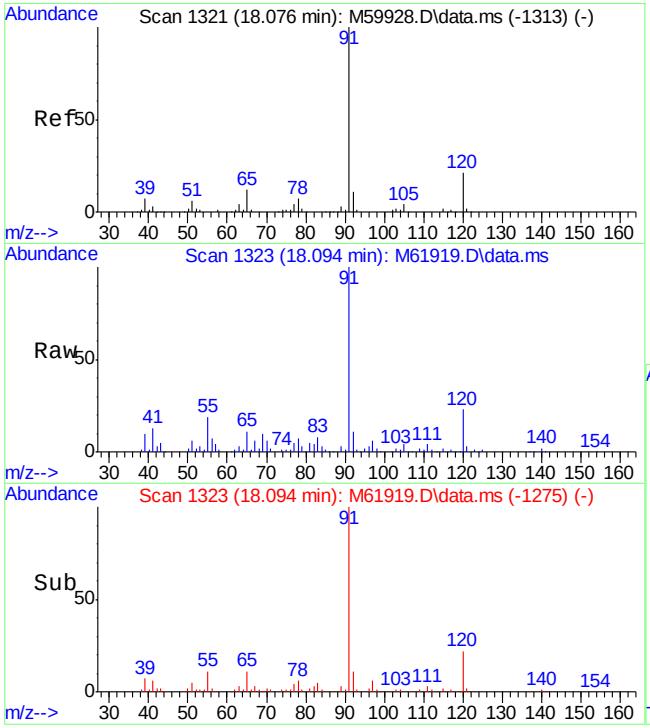



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:152 Resp: 156154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.5 | 40.9 | 80.9 |
| 150 | 151.6 | 178.6 | 218.6# |

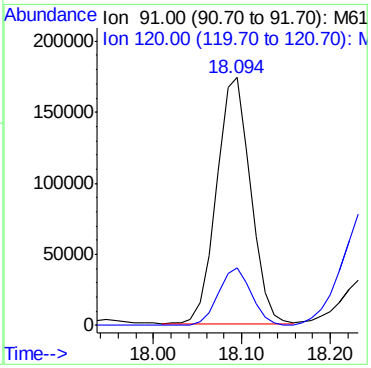


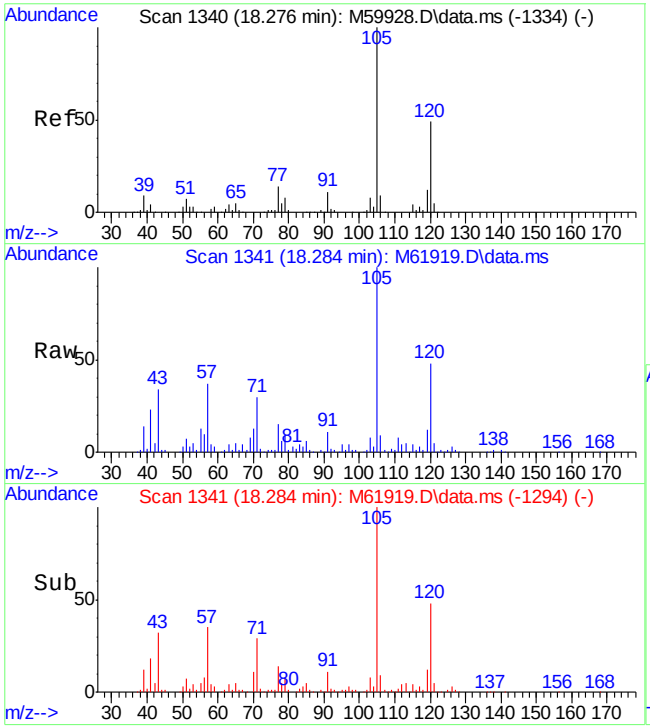




#79
n-Propylbenzene
Concen: 15.23 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 459082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.8 | 1.3 | 41.3 |

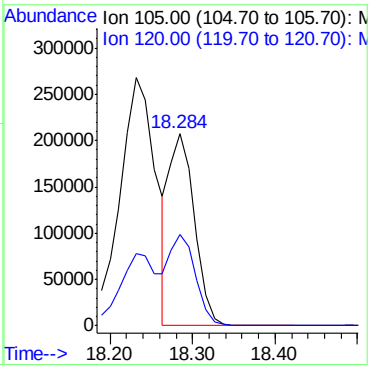


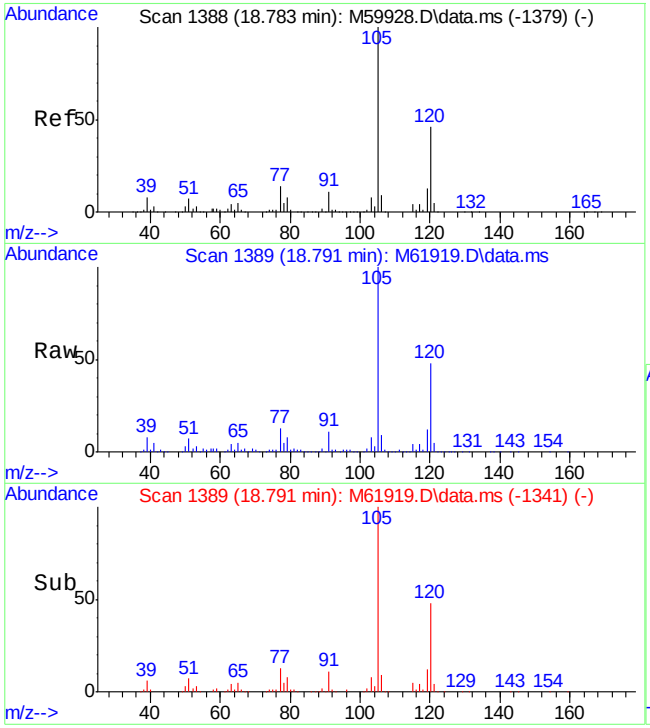



#81
1,3,5-Trimethylbenzene
Concen: 21.44 ppb
RT: 18.284 min Scan# 1341
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 437307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.0 | 26.6 | 66.6 |

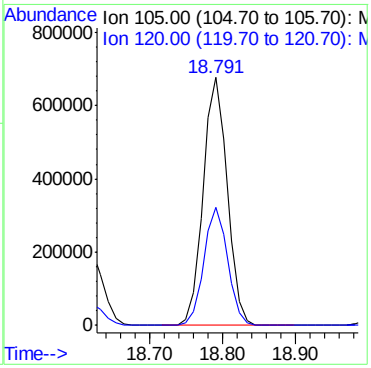


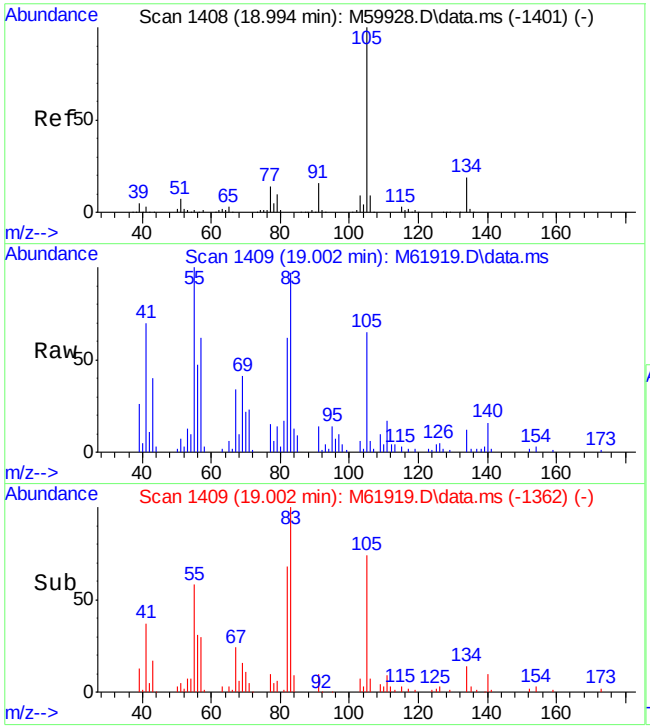




#86
1,2,4-Trimethylbenzene
Concen: 73.23 ppb
RT: 18.791 min Scan# 1389
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 1556562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.0 | 32.4 | 72.4 |

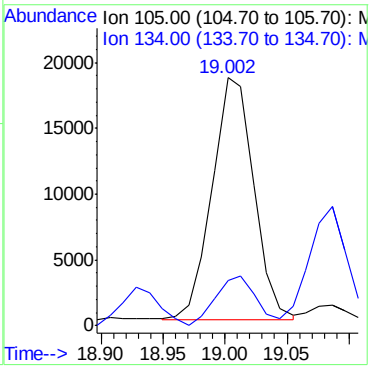


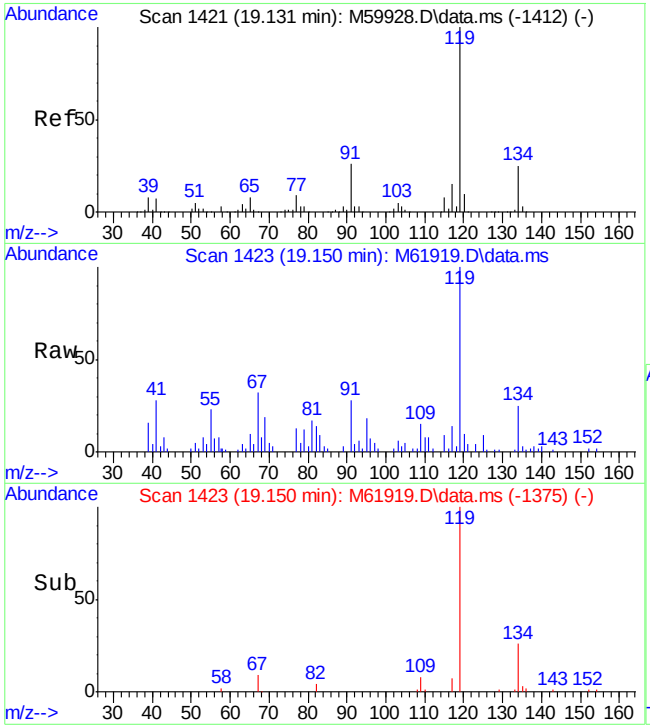



#87
sec-Butylbenzene
Concen: 1.64 ppb
RT: 19.002 min Scan# 1409
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:105 Resp: 43547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.1 | 0.0 | 38.7 |

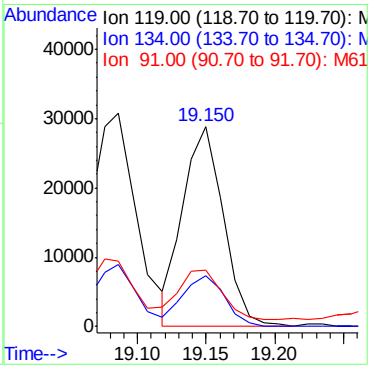


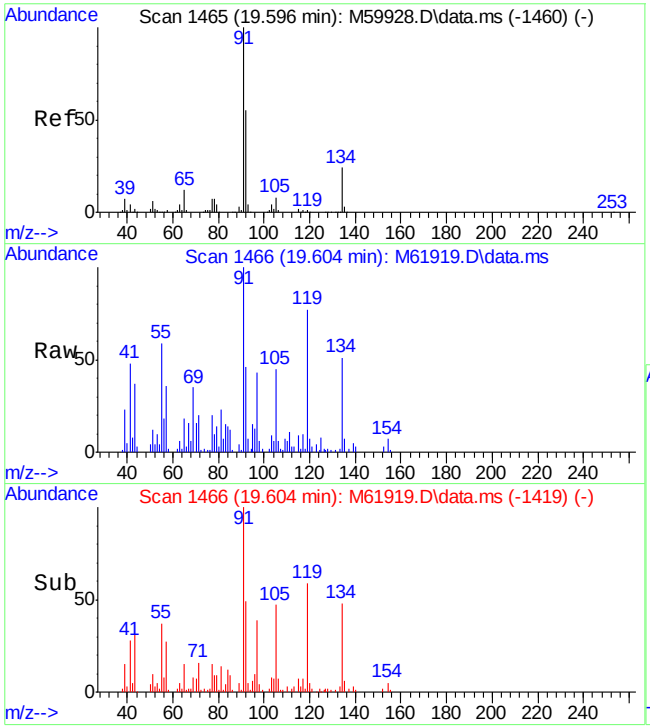




#88
p-Isopropyltoluene
Concen: 2.68 ppb
RT: 19.150 min Scan# 1423
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:119 Resp: 59146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.3 | 6.0 | 46.0 |
| 91 | 27.4 | 6.0 | 46.0 |

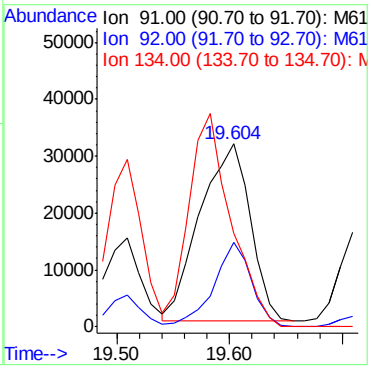


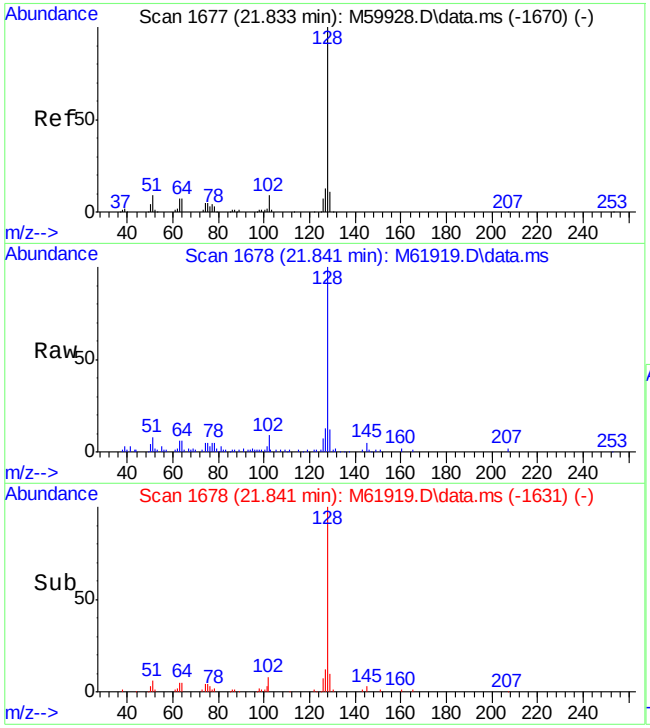



#92
n-Butylbenzene
Concen: 4.50 ppb
RT: 19.604 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion: 91 Resp: 96220

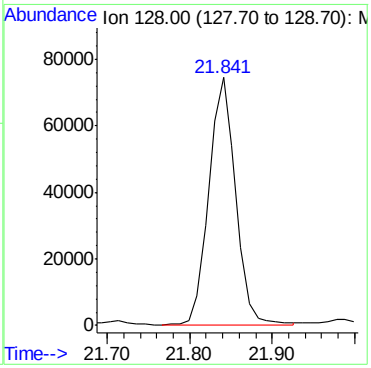
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 35.9 | 35.3 | 75.3 |
| 134 | 101.0 | 3.6 | 43.6# |

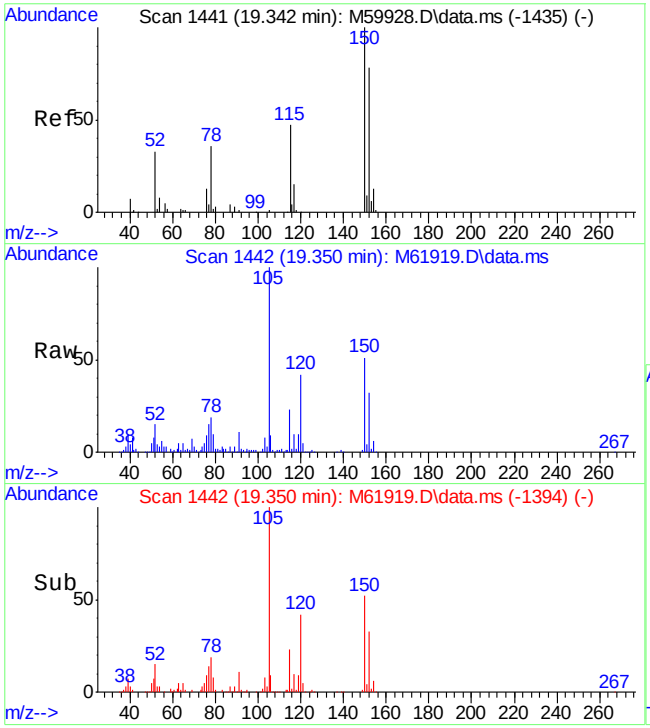



#97
Naphthalene
Concen: 9.01 ppb
RT: 21.841 min Scan# 1678
Delta R.T. -0.003 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:128 Resp: 169399

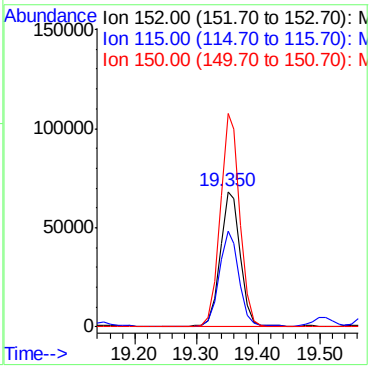


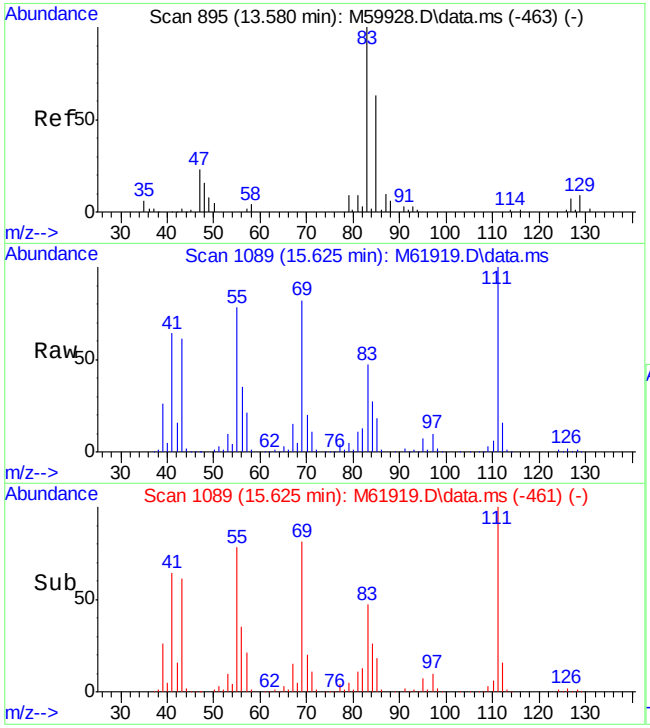



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. 0.008 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:152 Resp: 156154

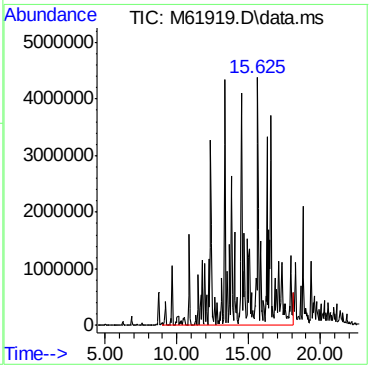
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.5 | 37.3 | 77.3 |
| 150 | 151.6 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 7780.40 ppb m
RT: 15.625 min Scan# 1089
Delta R.T. 2.075 min
Lab File: M61919.D
Acq: 18 Jul 2016 7:47 pm

Tgt Ion:TIC Resp:255502601



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61846.D
Acq On : 13 Jul 2016 7:59 pm
Operator : johannat
Sample : C46435-16R
Misc : MS1912,VM1859,5.67,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 02 10:12:14 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

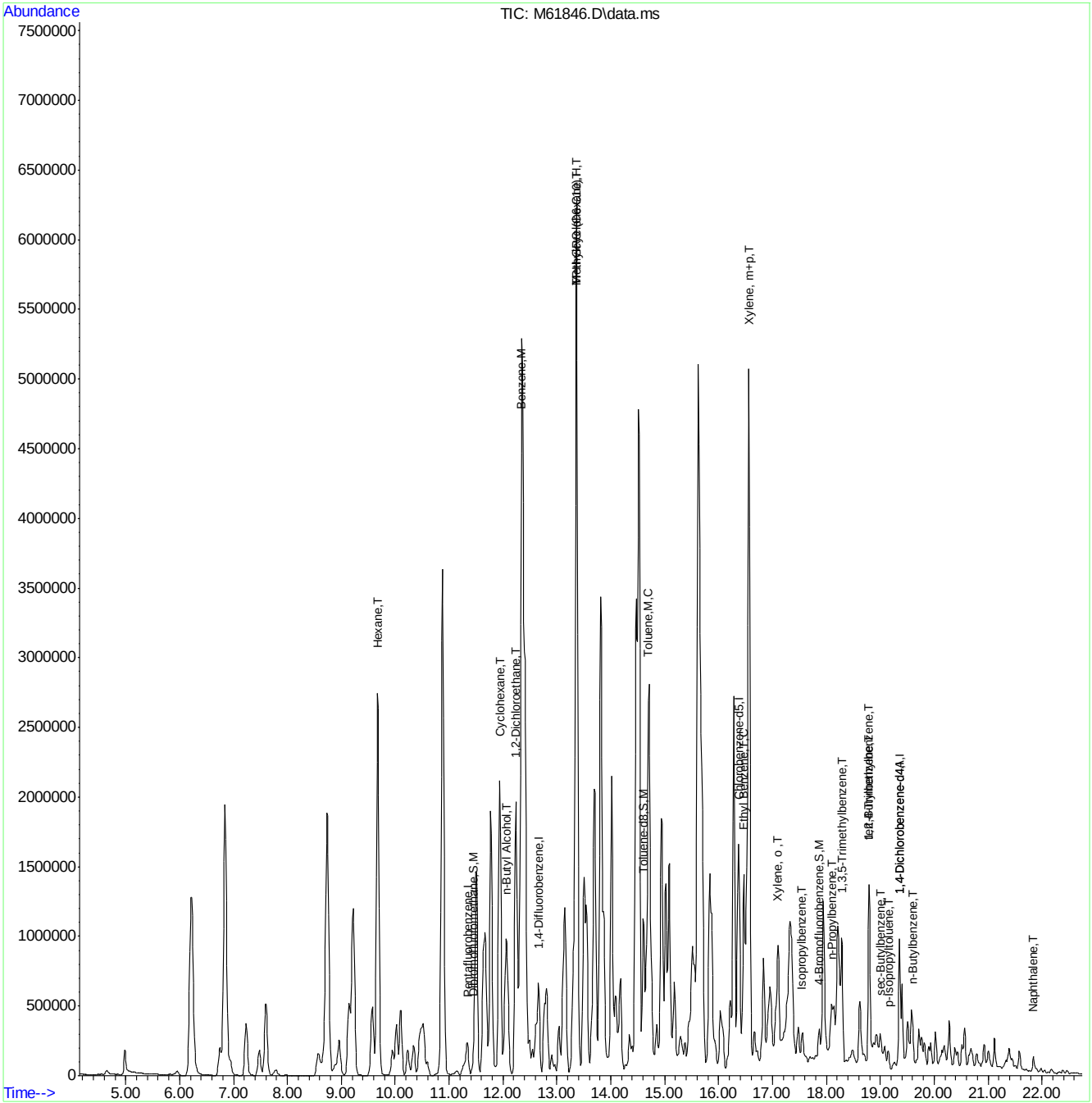
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 193231 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 283539 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 270648 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 159914 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 159914 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.456 | 111 | 83999 | 17.14 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 85.70% | | | | |
| 56) Toluene-d8 | 14.601 | 98 | 336248 | 19.04 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.20% | | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 149161 | 21.48 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 107.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 24) Hexane | 9.673 | 57 | 2187814 | 215.55 | ppb | | 99 |
| 38) Cyclohexane | 11.942 | 56 | 1609152 | 127.66 | ppb | | 92 |
| 42) n-Butyl Alcohol | 12.058 | 56 | 635349 | 4626.76 | ppb | | 96 |
| 44) 1,2-Dichloroethane | 12.237 | 62 | 7276 | 0.76 | ppb | | 95 |
| 45) Benzene | 12.343 | 78 | 527345 | 21.26 | ppb | | 100 |
| 48) Methylcyclohexane | 13.366 | 55 | 3446319 | 330.66 | ppb | | 94 |
| 57) Toluene | 14.696 | 92 | 548583 | 36.80 | ppb | | 99 |
| 67) Ethyl Benzene | 16.469 | 91 | 1231166 | 43.86 | ppb | | 98 |
| 68) Xylene, m+p | 16.564 | 106 | 1759764 | 171.69 | ppb | | 89 |
| 69) Xylene, o | 17.102 | 106 | 263584 | 25.49 | ppb | | 95 |
| 73) Isopropylbenzene | 17.545 | 105 | 227248 | 8.68 | ppb | | 99 |
| 79) n-Propylbenzene | 18.094 | 91 | 347623 | 9.21 | ppb | | 97 |
| 81) 1,3,5-Trimethylbenzene | 18.284 | 105 | 354545 | 14.17 | ppb | | 96 |
| 84) tert-Butylbenzene | 18.790 | 119 | 121087 | 4.97 | ppb | # | 79 |
| 86) 1,2,4-Trimethylbenzene | 18.790 | 105 | 995631 | 38.34 | ppb | | 91 |
| 87) sec-Butylbenzene | 19.012 | 105 | 49407 | 1.51 | ppb | | 99 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 59692 | 2.23 | ppb | | 99 |
| 92) n-Butylbenzene | 19.603 | 91 | 82038 | 3.01 | ppb | # | 34 |
| 97) Naphthalene | 21.840 | 128 | 107752 | 5.13 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 13.366 | TIC 343761788m | | 8568.64 | ppb | | |

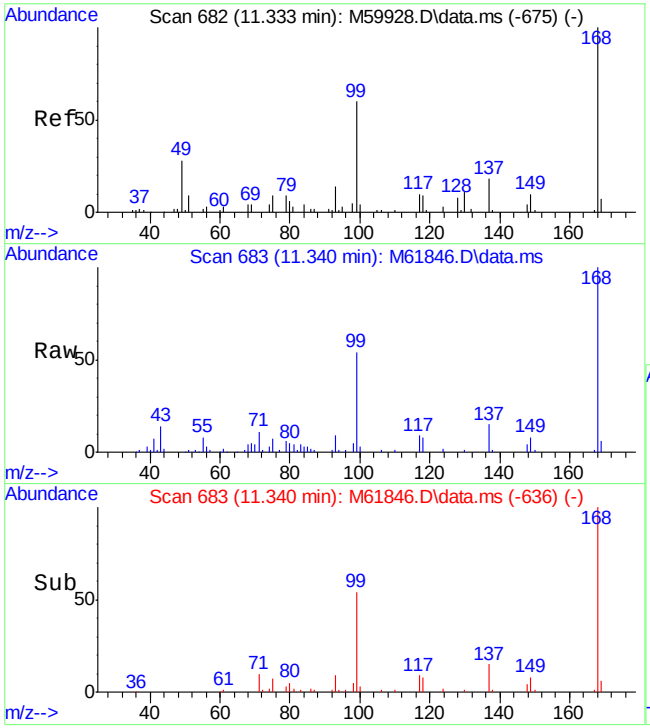
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61846.D
Acq On : 13 Jul 2016 7:59 pm
Operator : johannat
Sample : C46435-16R
Misc : MS1912,VM1859,5.67,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

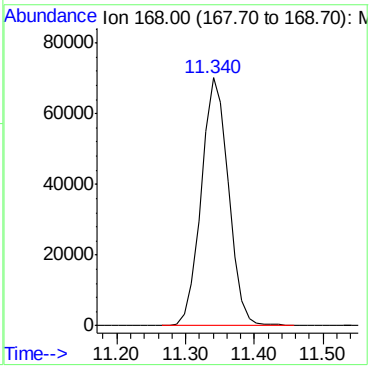
Quant Time: Aug 02 10:12:14 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

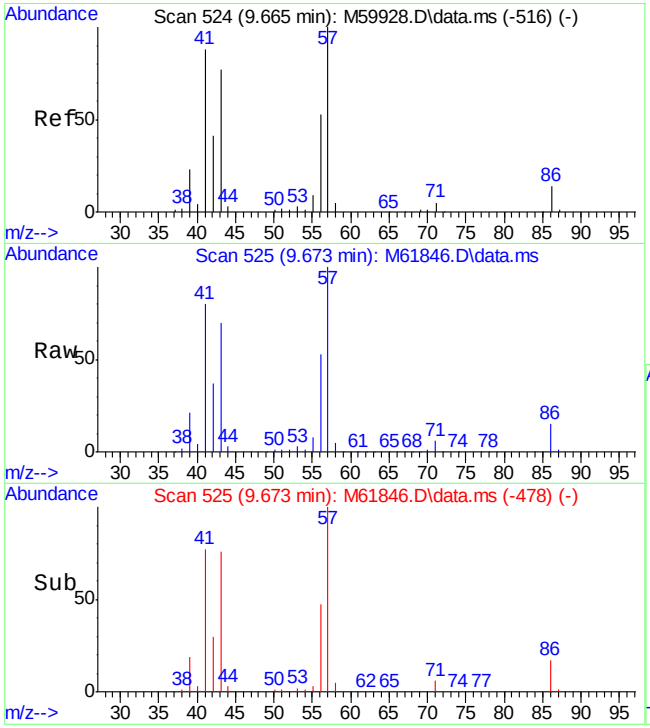





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:168 Resp: 193231

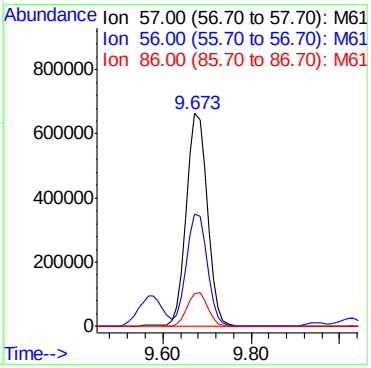


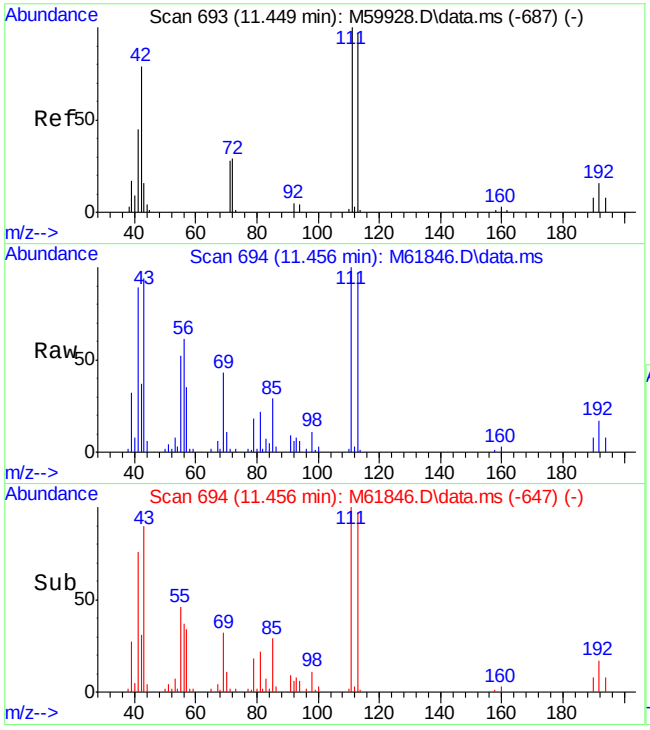




#24
Hexane
Concen: 215.55 ppb
RT: 9.673 min Scan# 525
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 57 Resp: 2187814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.6 | 32.9 | 72.9 |
| 86 | 15.6 | 0.0 | 34.1 |

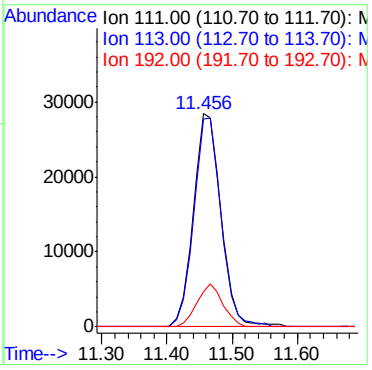


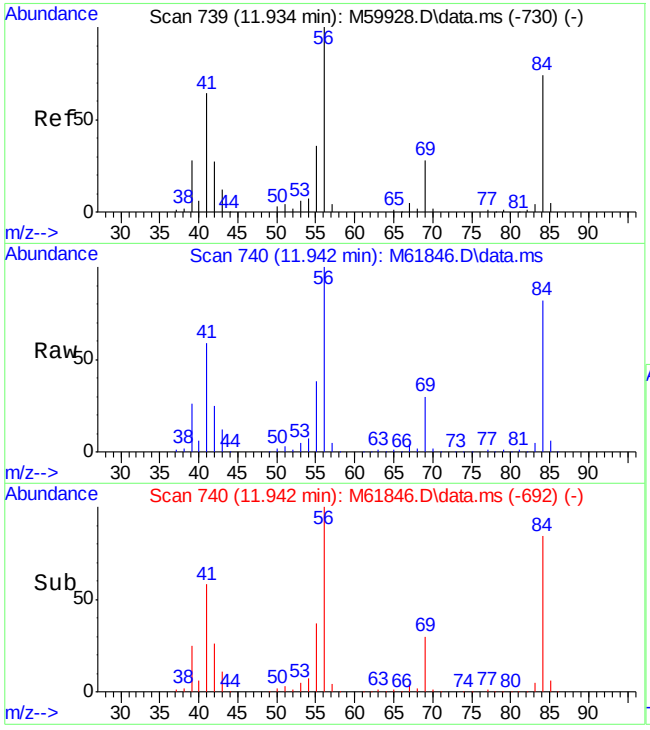



#36
Dibromofluoromethane
Concen: 17.14 ppb
RT: 11.456 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:111 Resp: 83999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.2 | 77.7 | 117.7 |
| 192 | 18.8 | 0.0 | 36.3 |

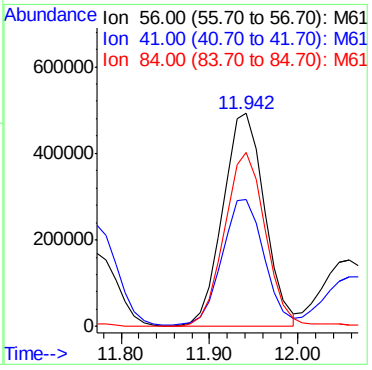


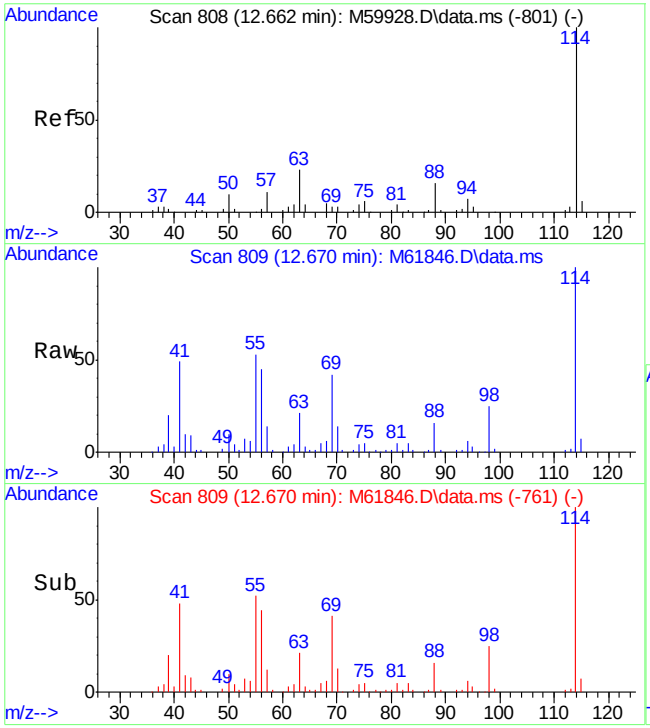




#38
Cyclohexane
Concen: 127.66 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 56 Resp: 1609152

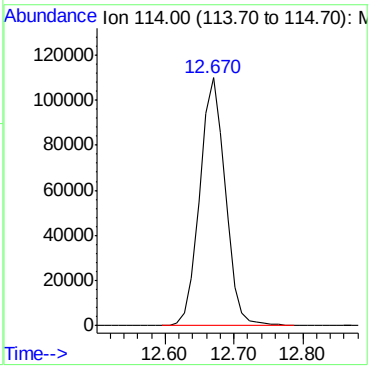
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.6 | 46.3 | 86.3 |
| 84 | 80.8 | 56.0 | 96.0 |

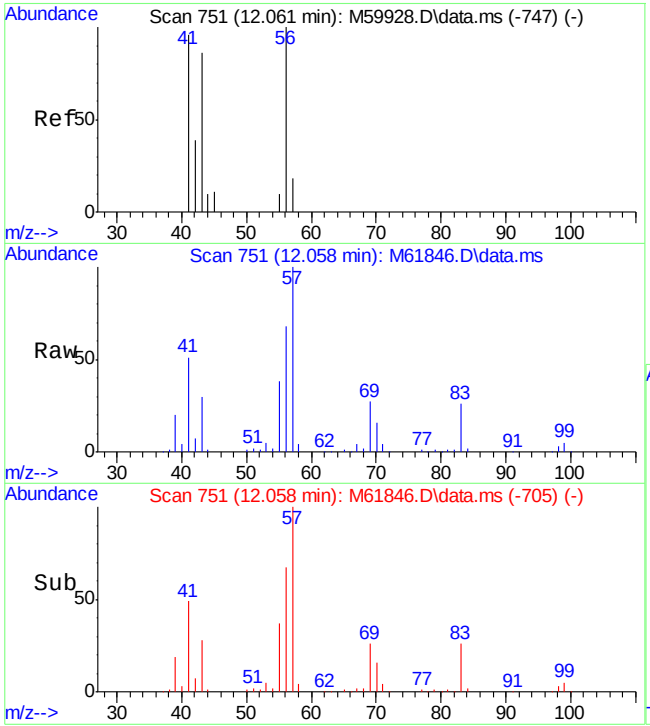





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:114 Resp: 283539

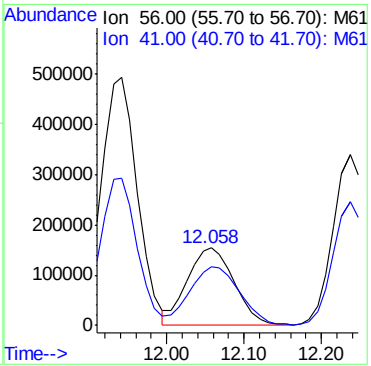


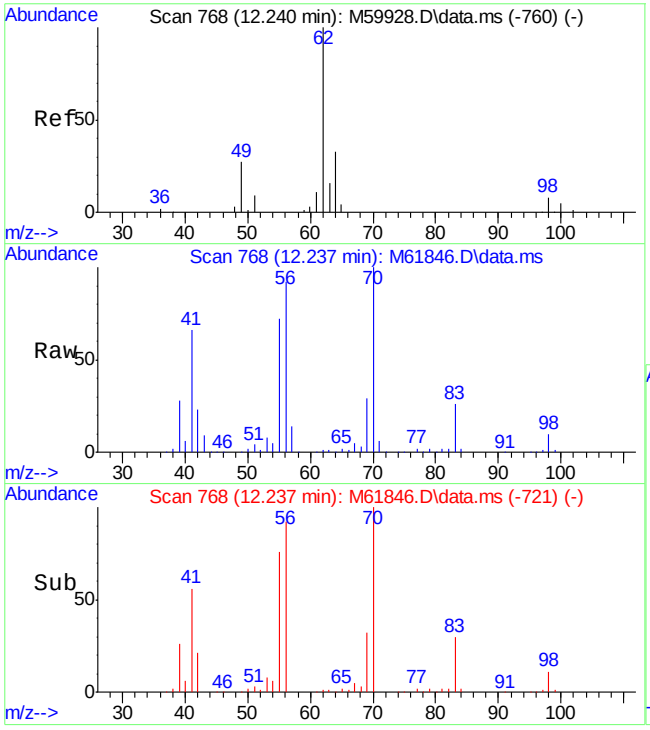




#42
n-Butyl Alcohol
Concen: 4626.76 ppb
RT: 12.058 min Scan# 751
Delta R.T. -0.014 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 56 Resp: 635349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 80.2 | 63.5 | 103.5 |

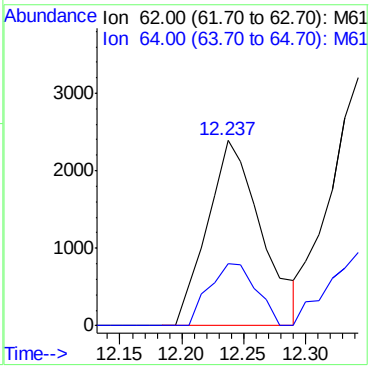


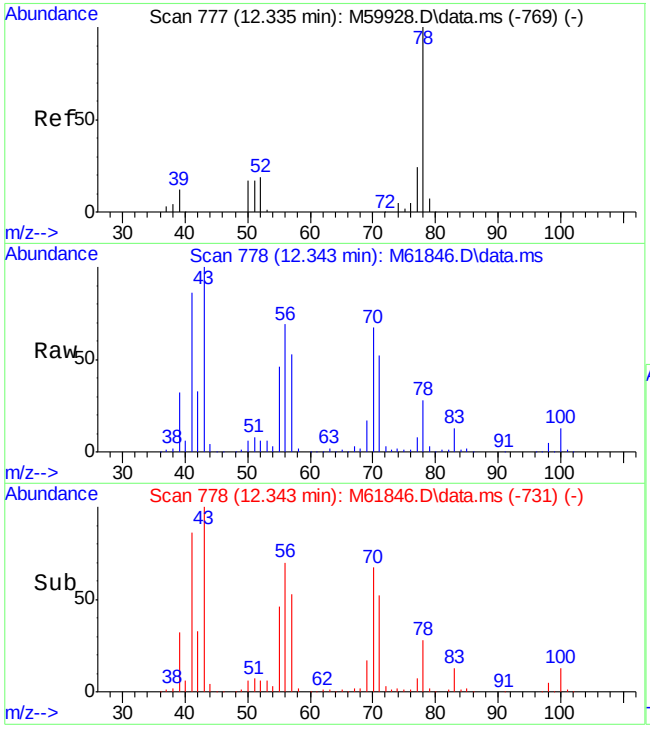



#44
1,2-Dichloroethane
Concen: 0.76 ppb
RT: 12.237 min Scan# 768
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 62 Resp: 7276

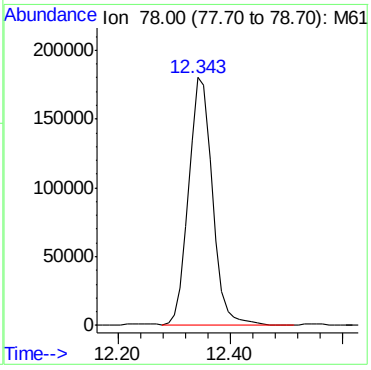
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.5 | 12.5 | 52.5 |

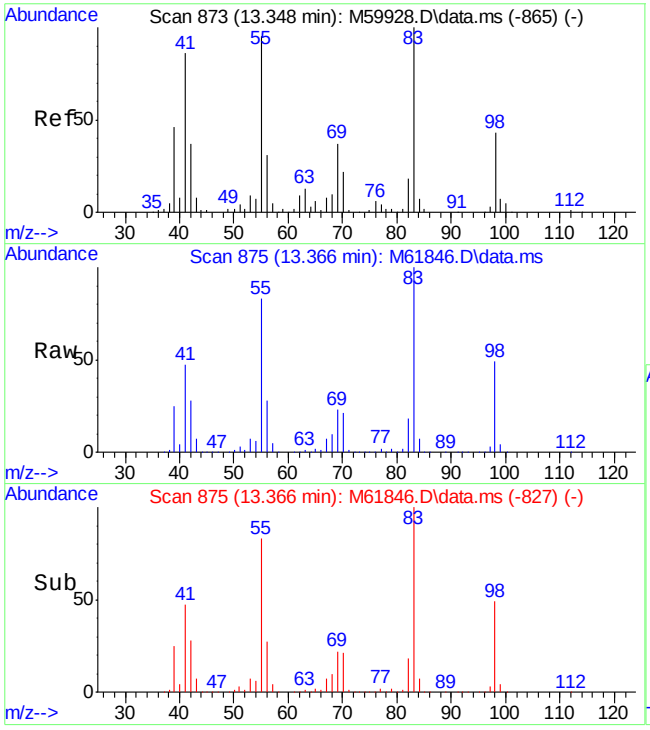



#45
Benzene
Concen: 21.26 ppb
RT: 12.343 min Scan# 778
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 78 Resp: 527345

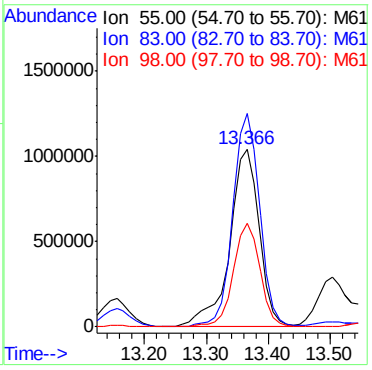


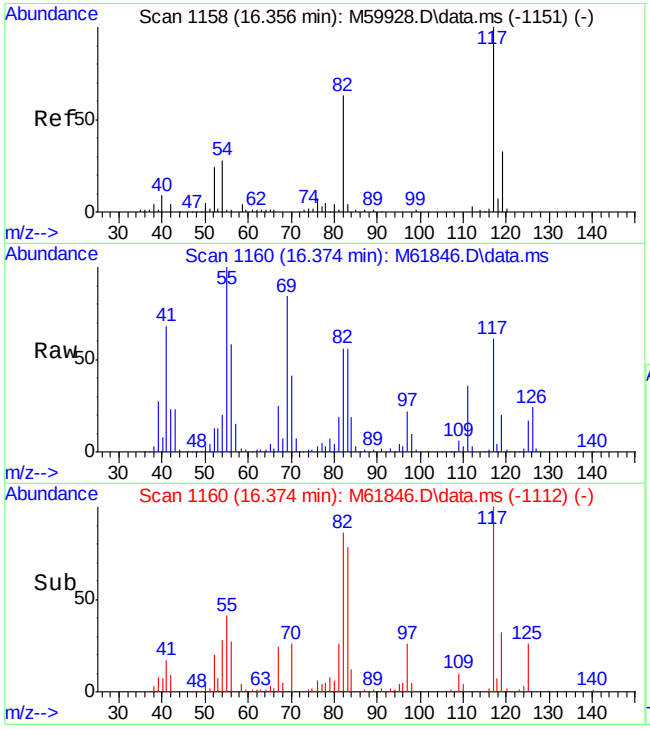



#48
Methylcyclohexane
Concen: 330.66 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 55 Resp: 3446319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 109.8 | 84.5 | 124.5 |
| 98 | 52.9 | 27.0 | 67.0 |

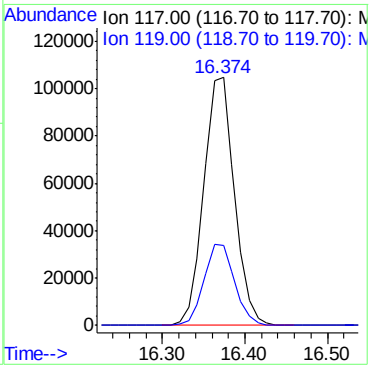


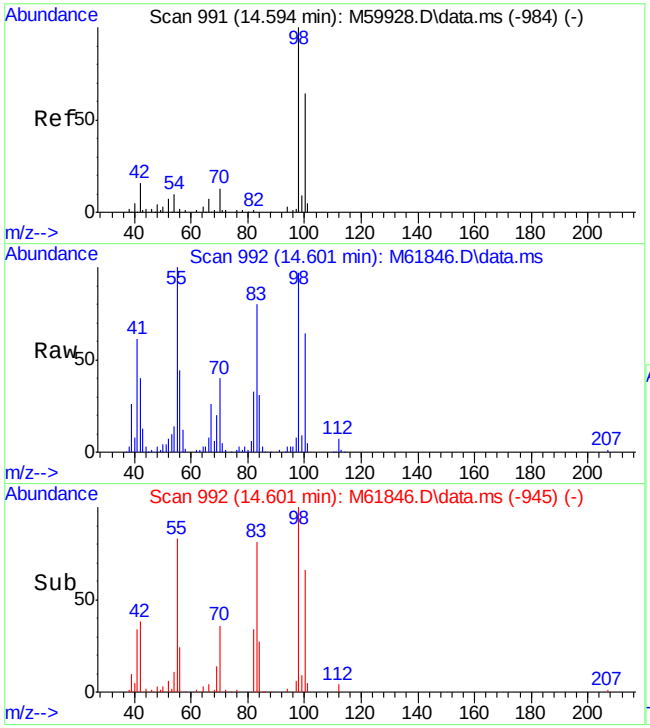




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:117 Resp: 270648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.6 | 11.2 | 51.2 |

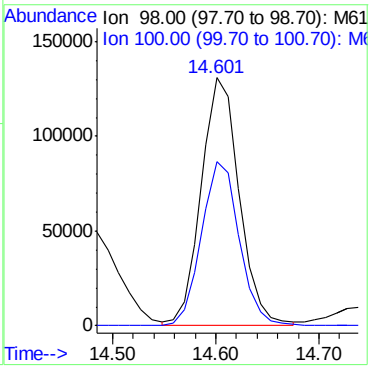


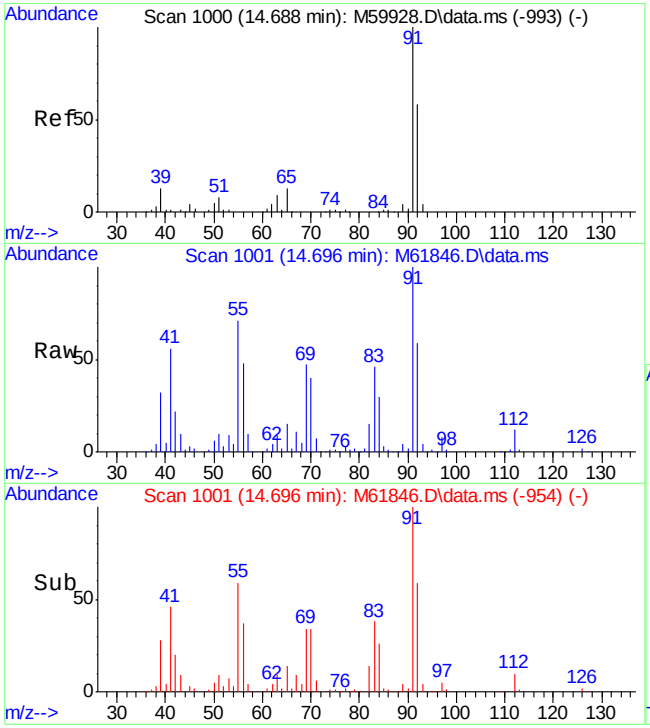



#56
Toluene-d8
Concen: 19.04 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 98 Resp: 336248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.3 | 44.3 | 84.3 |

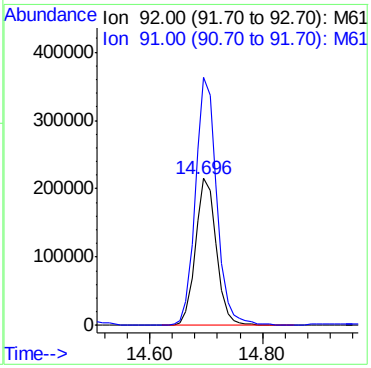


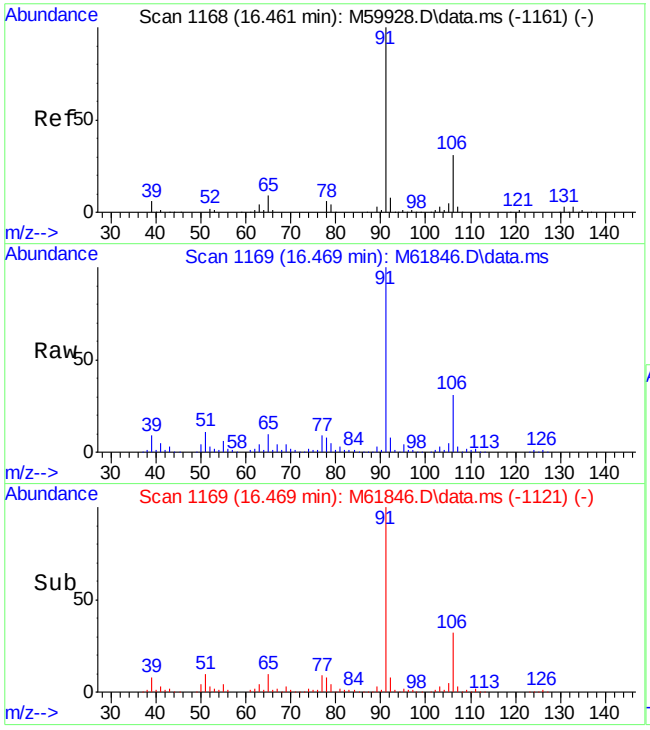




#57
Toluene
Concen: 36.80 ppb
RT: 14.696 min Scan# 1001
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 92 Resp: 548583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.3 | 150.5 | 190.5 |

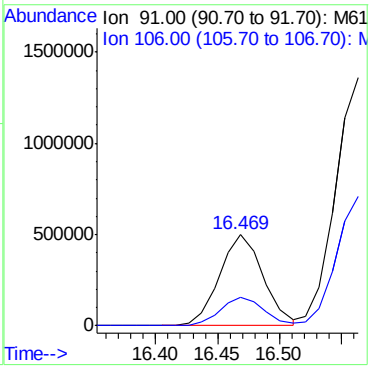


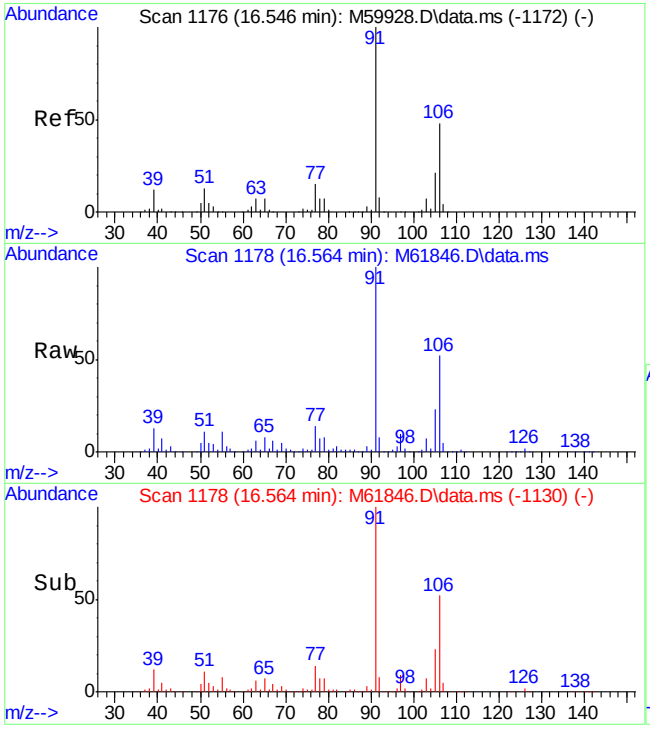



#67
Ethyl Benzene
Concen: 43.86 ppb
RT: 16.469 min Scan# 1169
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 1231166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.3 | 10.2 | 50.2 |

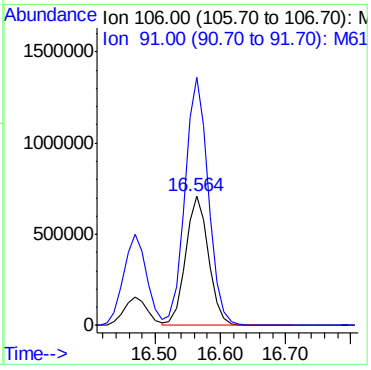


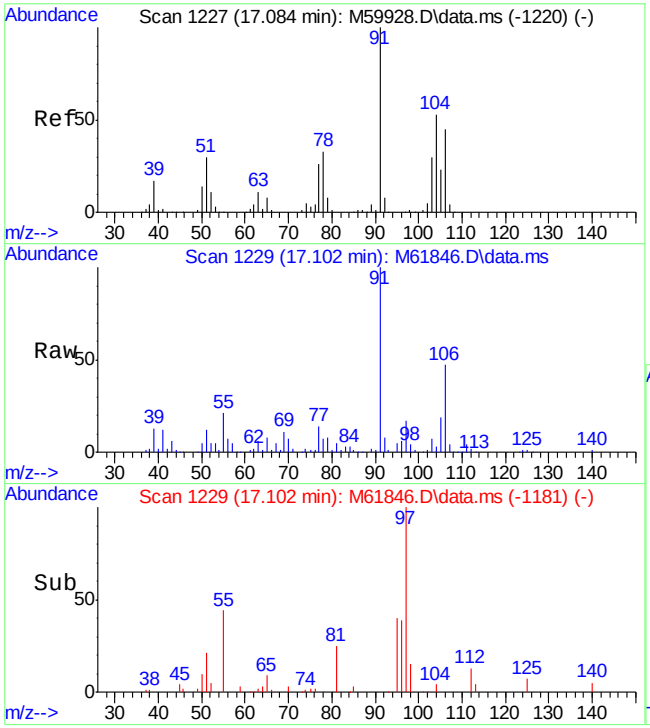




#68
Xylene, m+p
Concen: 171.69 ppb
RT: 16.564 min Scan# 1178
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:106 Resp: 1759764

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 194.7 | 191.5 | 231.5 |

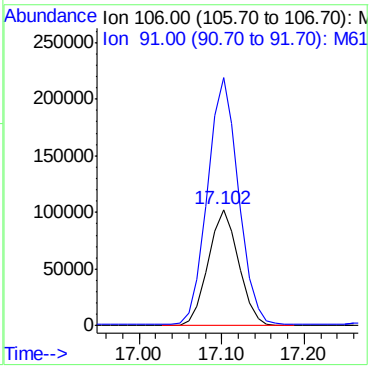


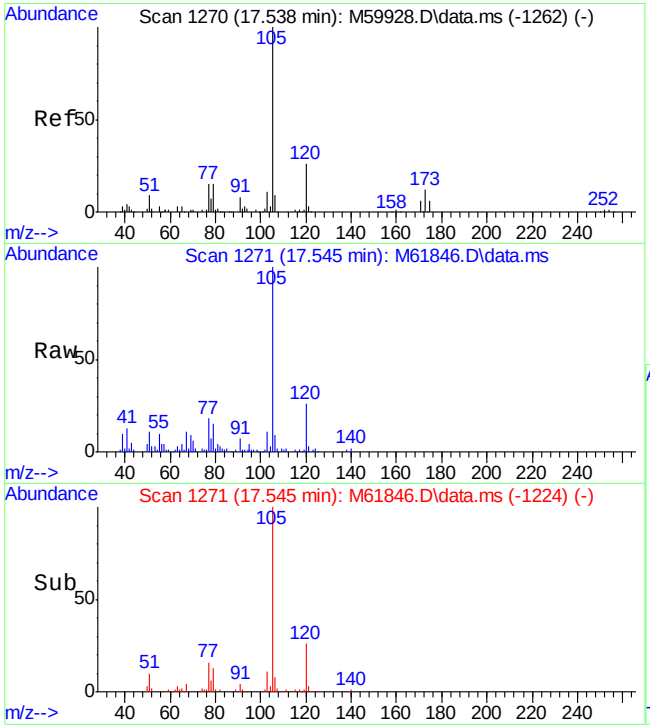



#69
Xylene, o
Concen: 25.49 ppb
RT: 17.102 min Scan# 1229
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:106 Resp: 263584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.8 | 203.2 | 243.2 |

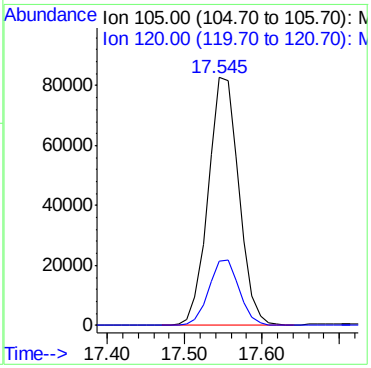


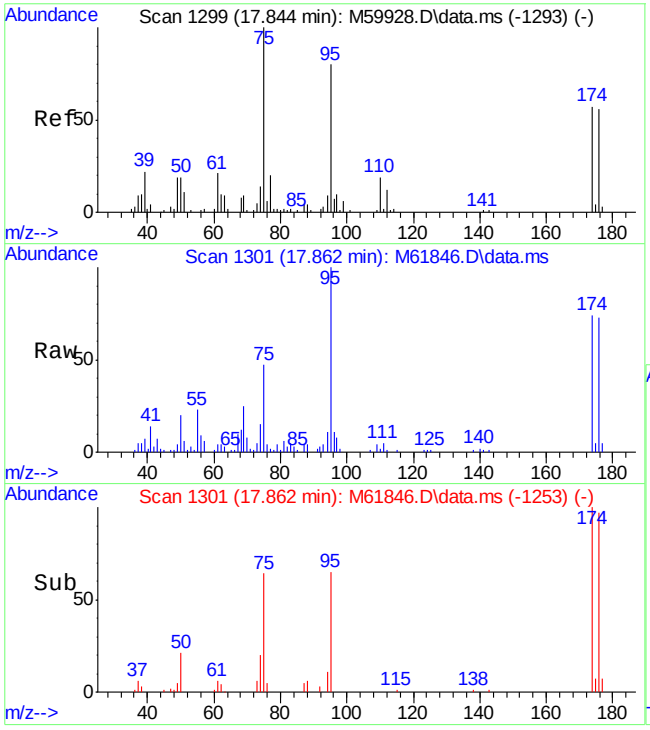




#73
Isopropylbenzene
Concen: 8.68 ppb
RT: 17.545 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 227248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 5.7 | 45.7 |

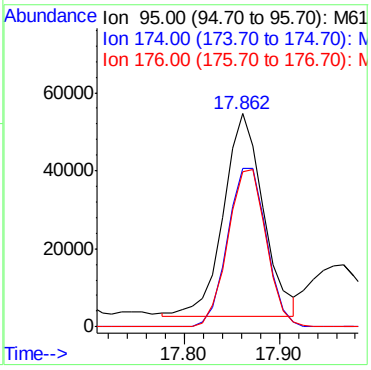


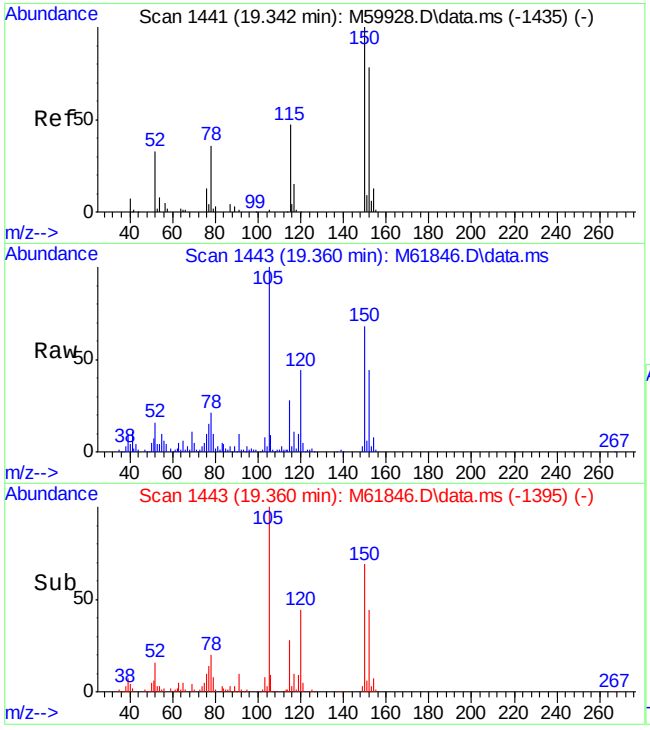



#74
4-Bromofluorobenzene
Concen: 21.48 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 95 Resp: 149161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.7 | 54.3 | 94.3 |
| 176 | 75.3 | 51.5 | 91.5 |

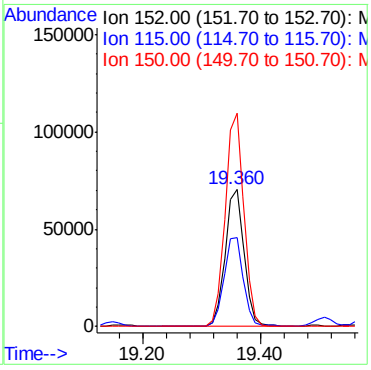


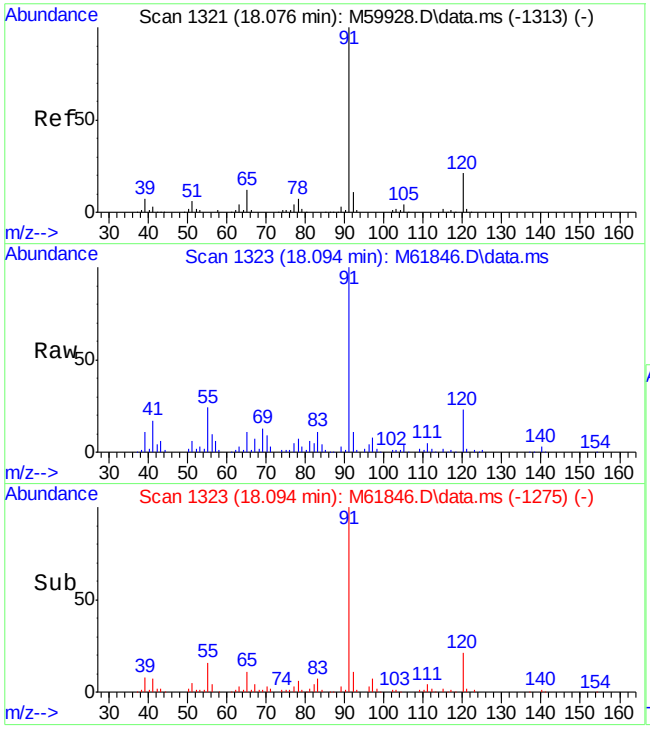




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:152 Resp: 159914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.6 | 40.9 | 80.9 |
| 150 | 151.5 | 178.6 | 218.6# |

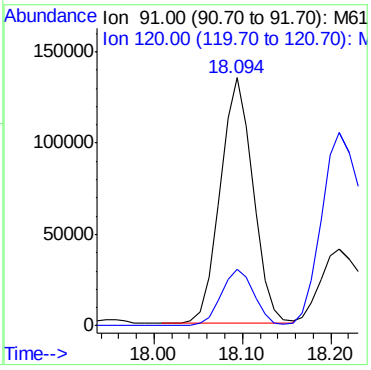


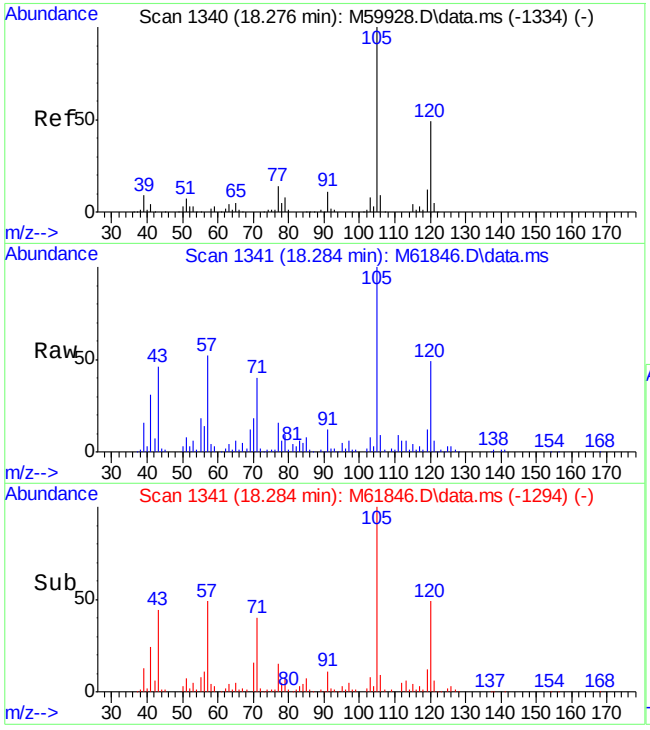



#79
n-Propylbenzene
Concen: 9.21 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 347623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 1.3 | 41.3 |

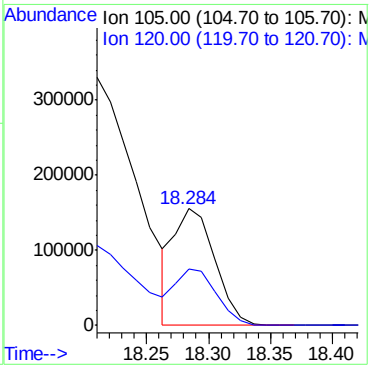


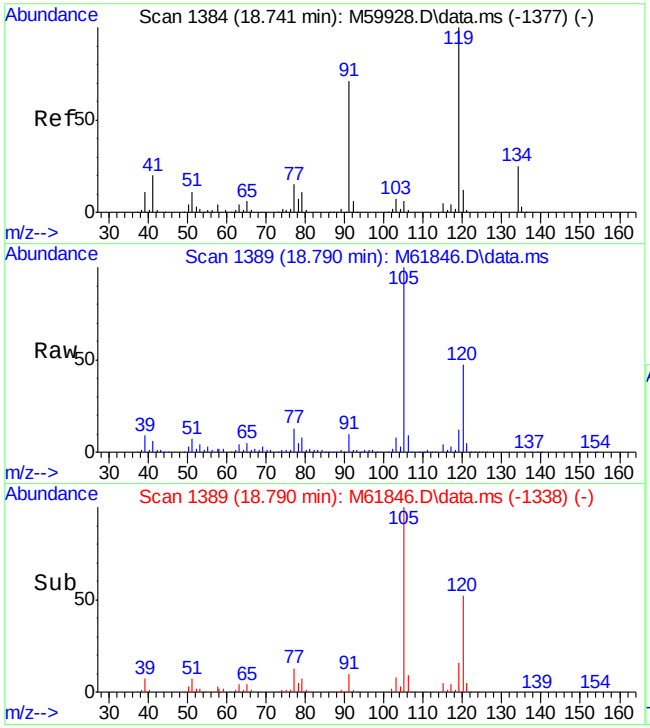




#81
1,3,5-Trimethylbenzene
Concen: 14.17 ppb
RT: 18.284 min Scan# 1341
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 354545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.5 | 26.6 | 66.6 |

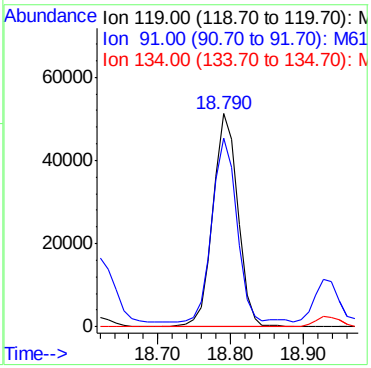


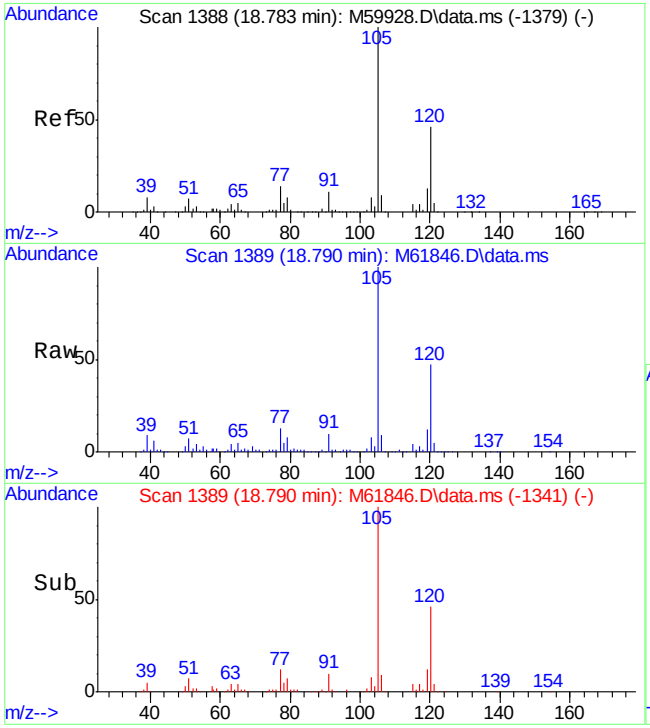



#84
tert-Butylbenzene
Concen: 4.97 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.039 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:119 Resp: 121087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 86.6 | 54.6 | 94.6 |
| 134 | 0.0 | 0.4 | 40.4# |

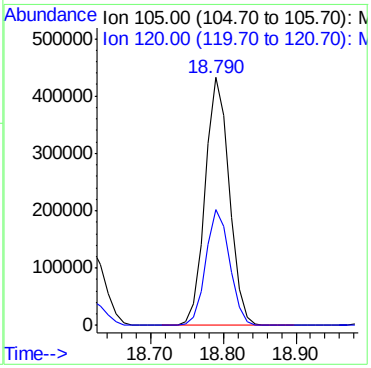


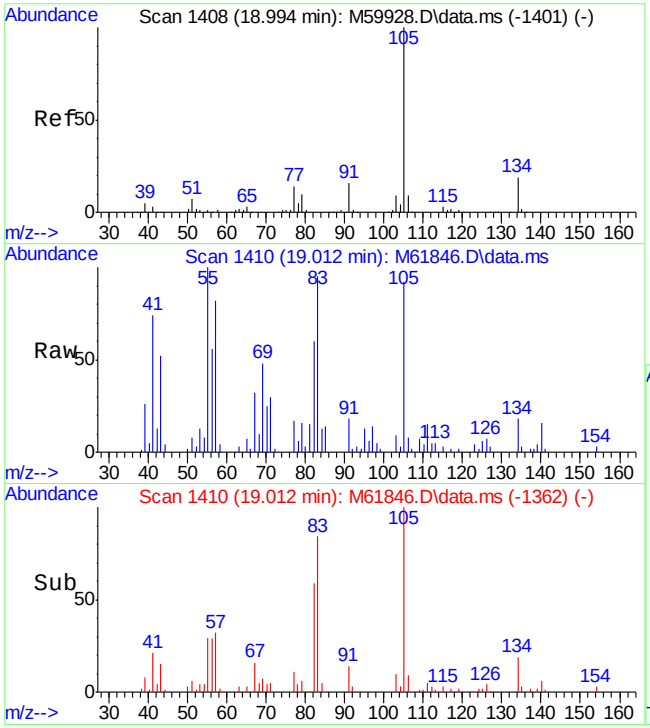




#86
1,2,4-Trimethylbenzene
Concen: 38.34 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 995631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.3 | 32.4 | 72.4 |

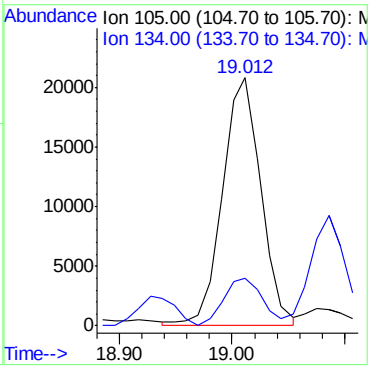


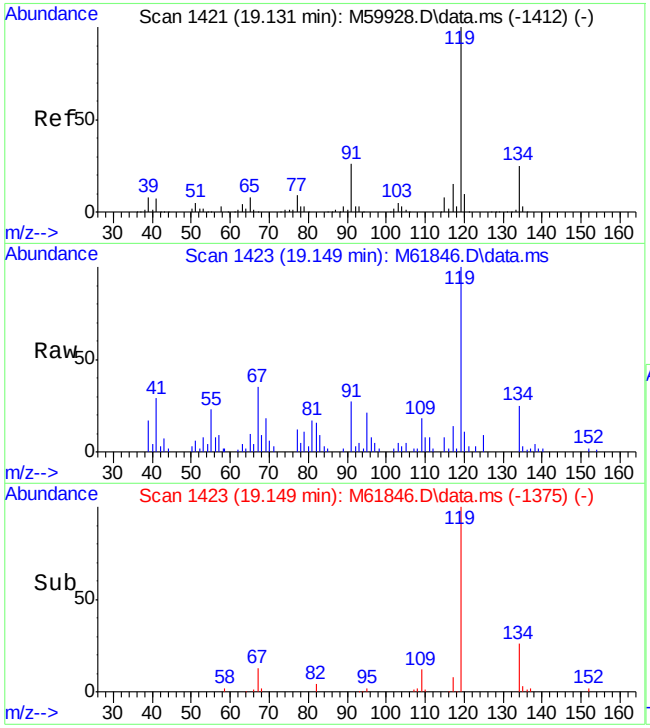



#87
sec-Butylbenzene
Concen: 1.51 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 49407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 0.0 | 38.7 |

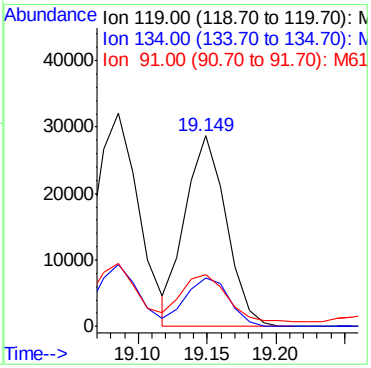


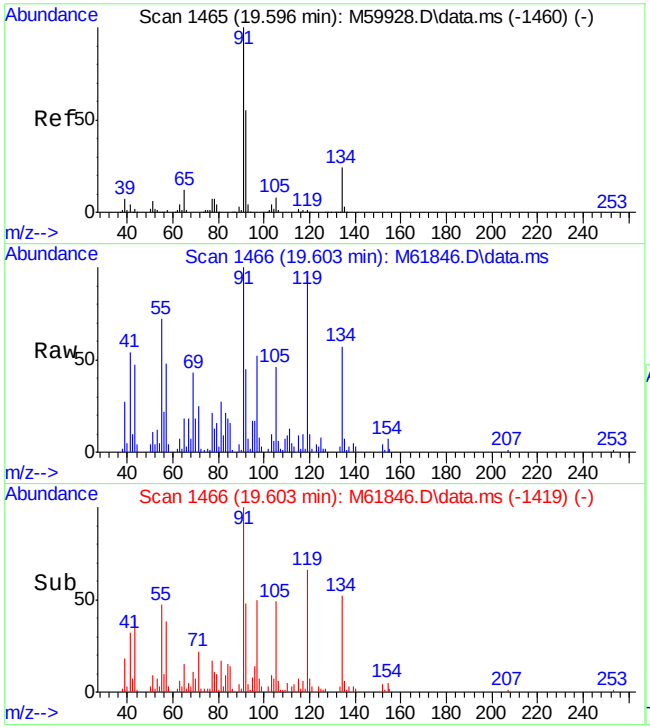




#88
p-Isopropyltoluene
Concen: 2.23 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:119 Resp: 59692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.8 | 6.0 | 46.0 |
| 91 | 26.5 | 6.0 | 46.0 |

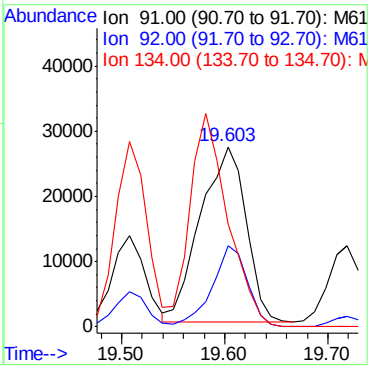


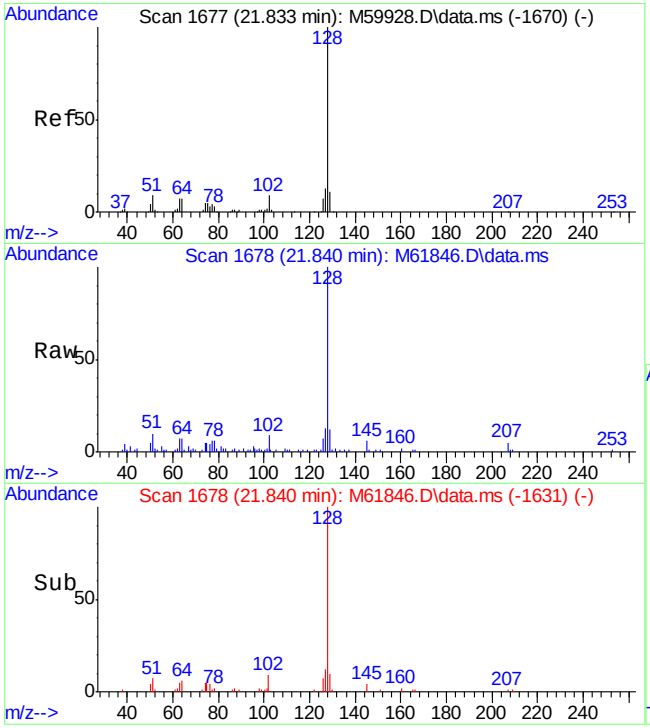



#92
n-Butylbenzene
Concen: 3.01 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 82038

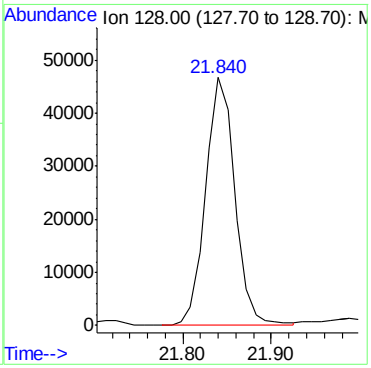
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 36.2 | 35.3 | 75.3 |
| 134 | 102.0 | 3.6 | 43.6# |

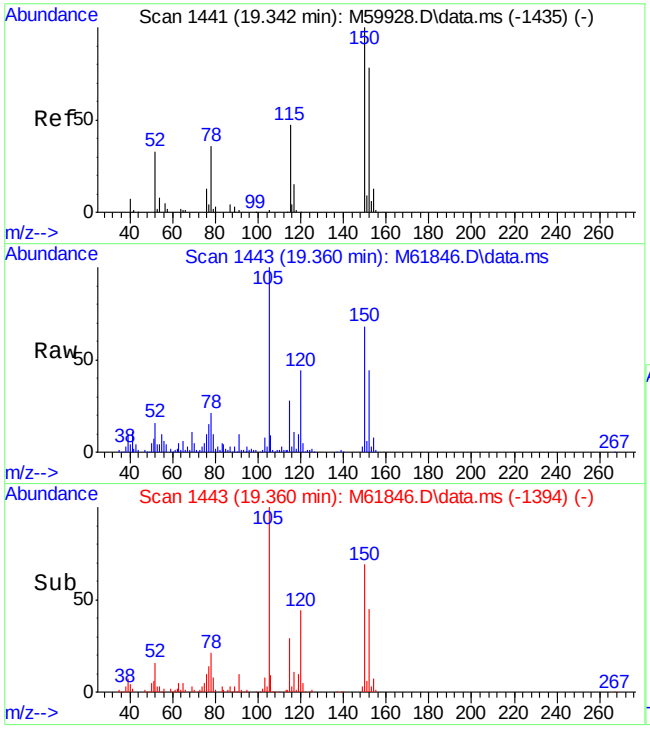



#97
Naphthalene
Concen: 5.13 ppb
RT: 21.840 min Scan# 1678
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:128 Resp: 107752

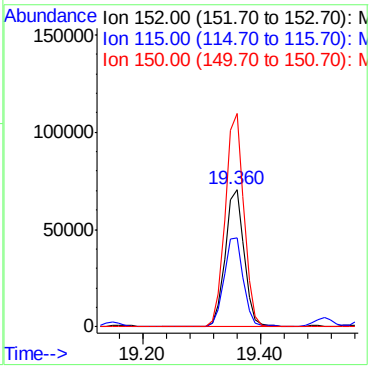


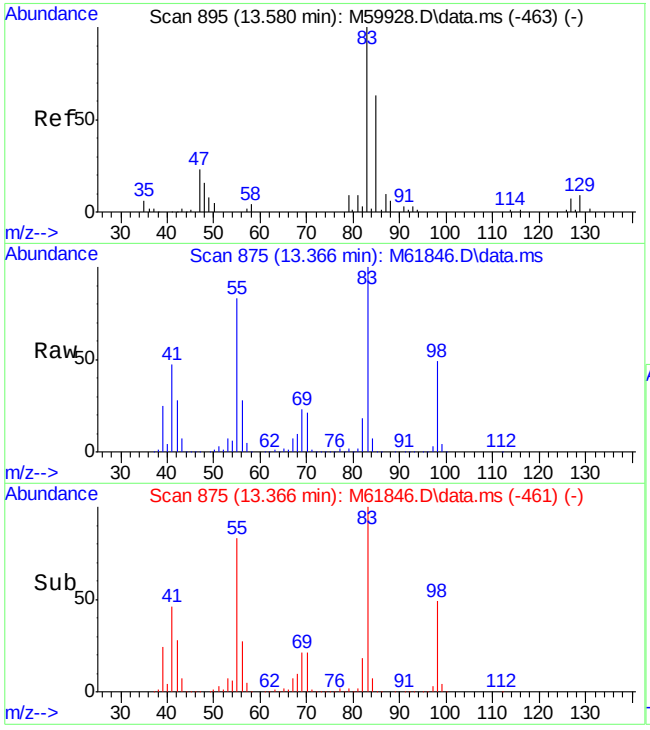



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:152 Resp: 159914

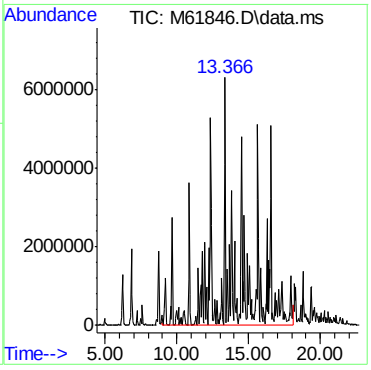
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.6 | 37.3 | 77.3 |
| 150 | 151.5 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 8568.64 ppb m
RT: 13.366 min Scan# 875
Delta R.T. -0.184 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:TIC Resp:343761788



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61846.D
Acq On : 13 Jul 2016 7:59 pm
Operator : johannat
Sample : C46435-16R
Misc : MS1912,VM1859,5.67,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 02 10:12:14 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

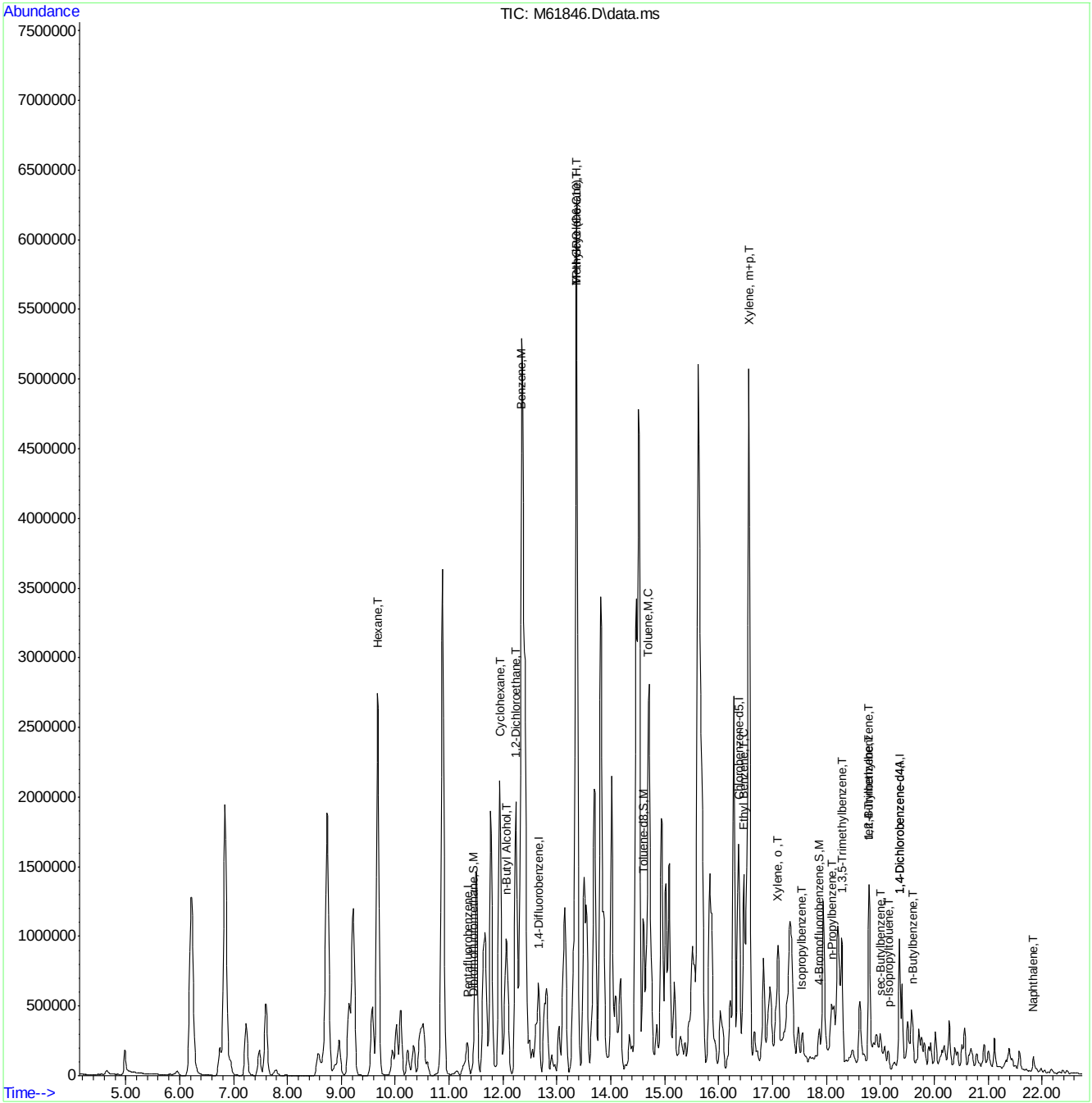
| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 193231 | 20.00 | ppb | | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 283539 | 20.00 | ppb | | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 270648 | 20.00 | ppb | | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 159914 | 20.00 | ppb | | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 159914 | 20.00 | ppb | | 0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 36) Dibromofluoromethane | 11.456 | 111 | 83999 | 17.14 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 85.70% | | | | |
| 56) Toluene-d8 | 14.601 | 98 | 336248 | 19.04 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.20% | | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 149161 | 21.48 | ppb | | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 107.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 24) Hexane | 9.673 | 57 | 2187814 | 215.55 | ppb | | 99 |
| 38) Cyclohexane | 11.942 | 56 | 1609152 | 127.66 | ppb | | 92 |
| 42) n-Butyl Alcohol | 12.058 | 56 | 635349 | 4626.76 | ppb | | 96 |
| 44) 1,2-Dichloroethane | 12.237 | 62 | 7276 | 0.76 | ppb | | 95 |
| 45) Benzene | 12.343 | 78 | 527345 | 21.26 | ppb | | 100 |
| 48) Methylcyclohexane | 13.366 | 55 | 3446319 | 330.66 | ppb | | 94 |
| 57) Toluene | 14.696 | 92 | 548583 | 36.80 | ppb | | 99 |
| 67) Ethyl Benzene | 16.469 | 91 | 1231166 | 43.86 | ppb | | 98 |
| 68) Xylene, m+p | 16.564 | 106 | 1759764 | 171.69 | ppb | | 89 |
| 69) Xylene, o | 17.102 | 106 | 263584 | 25.49 | ppb | | 95 |
| 73) Isopropylbenzene | 17.545 | 105 | 227248 | 8.68 | ppb | | 99 |
| 79) n-Propylbenzene | 18.094 | 91 | 347623 | 9.21 | ppb | | 97 |
| 81) 1,3,5-Trimethylbenzene | 18.284 | 105 | 354545 | 14.17 | ppb | | 96 |
| 84) tert-Butylbenzene | 18.790 | 119 | 121087 | 4.97 | ppb | # | 79 |
| 86) 1,2,4-Trimethylbenzene | 18.790 | 105 | 995631 | 38.34 | ppb | | 91 |
| 87) sec-Butylbenzene | 19.012 | 105 | 49407 | 1.51 | ppb | | 99 |
| 88) p-Isopropyltoluene | 19.149 | 119 | 59692 | 2.23 | ppb | | 99 |
| 92) n-Butylbenzene | 19.603 | 91 | 82038 | 3.01 | ppb | # | 34 |
| 97) Naphthalene | 21.840 | 128 | 107752 | 5.13 | ppb | | 100 |
| 100) TPH-GRO (C6-C10) | 13.366 | TIC | 343761788m | 8568.64 | ppb | | |

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

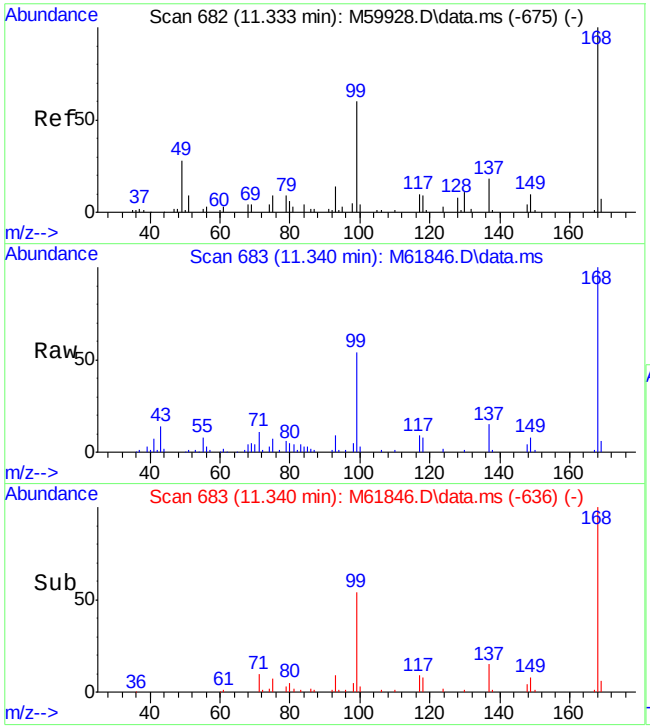
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61846.D
Acq On : 13 Jul 2016 7:59 pm
Operator : johannat
Sample : C46435-16R
Misc : MS1912,VM1859,5.67,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 02 10:12:14 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

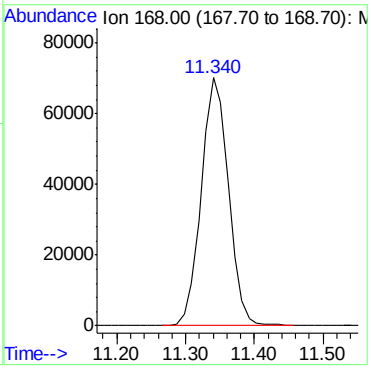


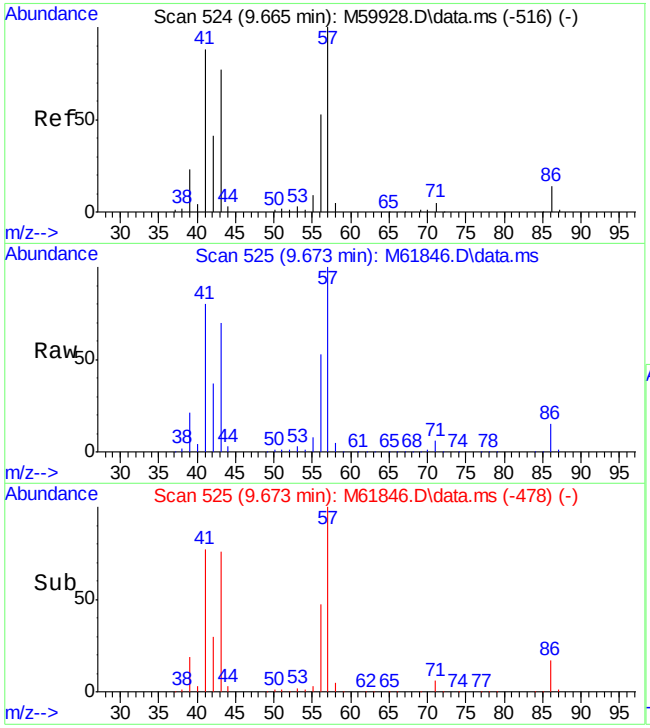

VM1848S.M Tue Aug 02 11:53:12 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:168 Resp: 193231

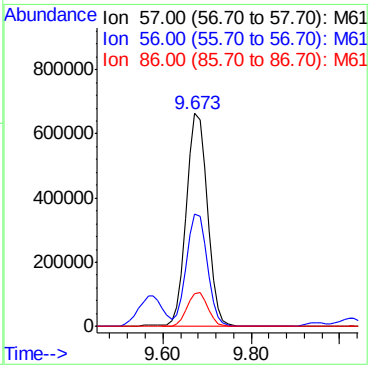


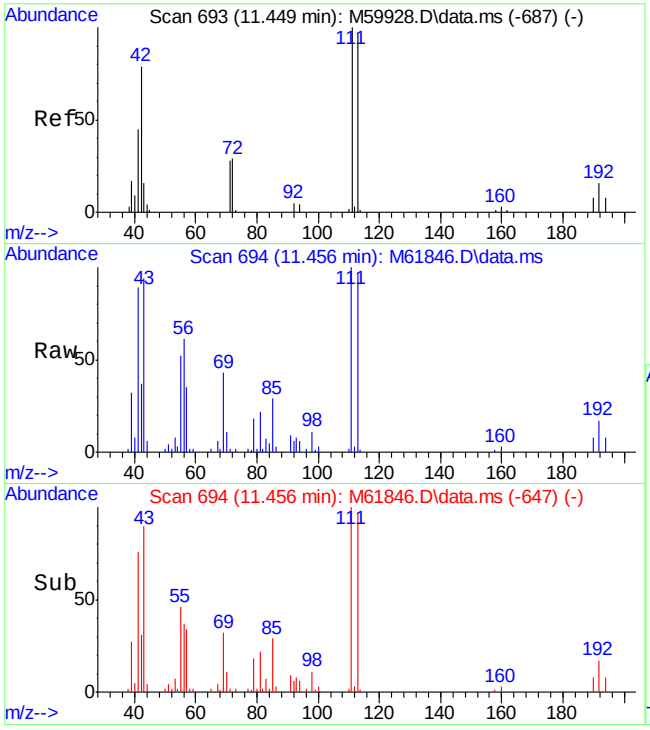




#24
Hexane
Concen: 215.55 ppb
RT: 9.673 min Scan# 525
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 57 Resp: 2187814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 52.6 | 32.9 | 72.9 |
| 86 | 15.6 | 0.0 | 34.1 |

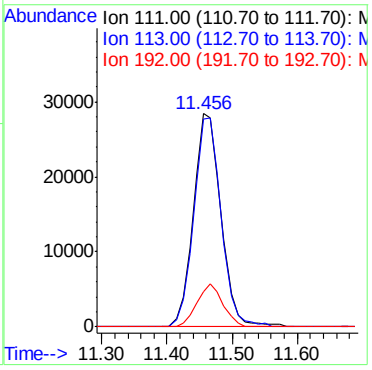


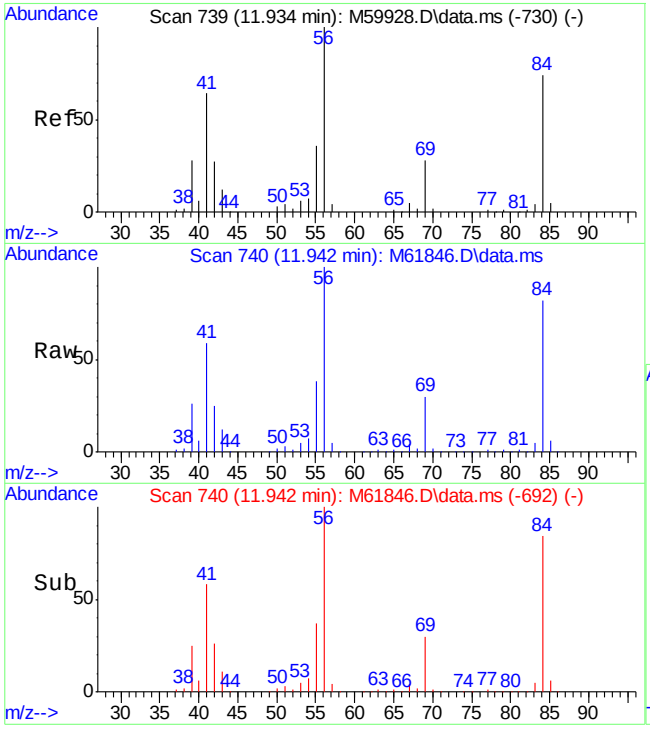



#36
Dibromofluoromethane
Concen: 17.14 ppb
RT: 11.456 min Scan# 694
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:111 Resp: 83999

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.2 | 77.7 | 117.7 |
| 192 | 18.8 | 0.0 | 36.3 |

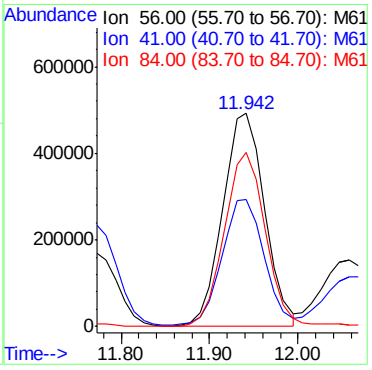


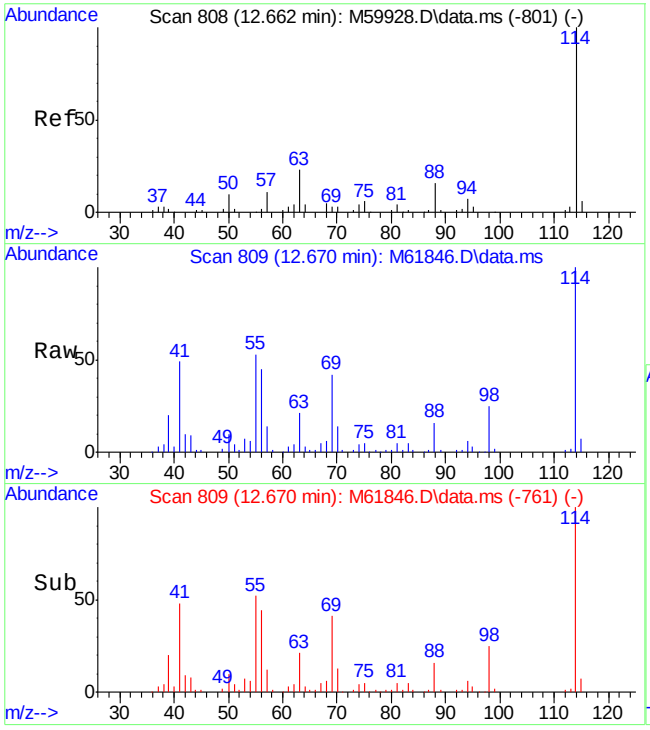




#38
Cyclohexane
Concen: 127.66 ppb
RT: 11.942 min Scan# 740
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 56 Resp: 1609152

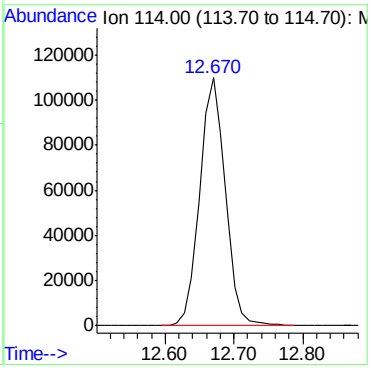
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.6 | 46.3 | 86.3 |
| 84 | 80.8 | 56.0 | 96.0 |

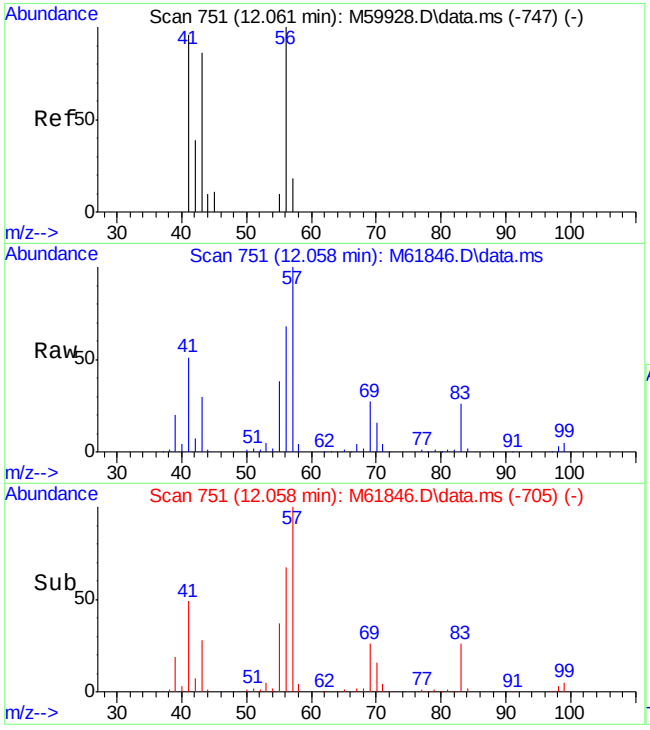





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:114 Resp: 283539

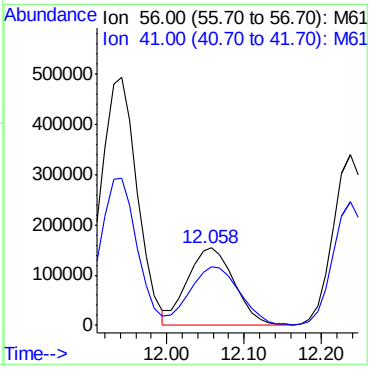


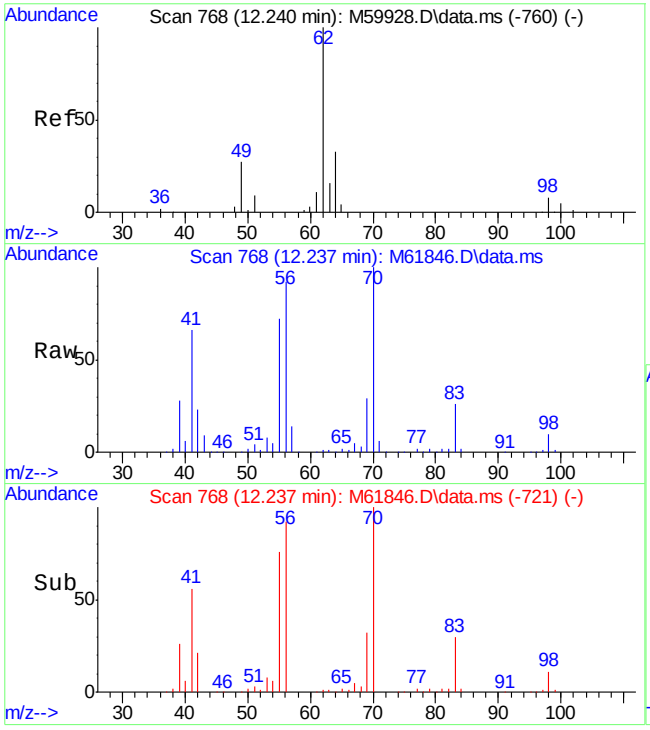




#42
n-Butyl Alcohol
Concen: 4626.76 ppb
RT: 12.058 min Scan# 751
Delta R.T. -0.014 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 56 Resp: 635349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 80.2 | 63.5 | 103.5 |

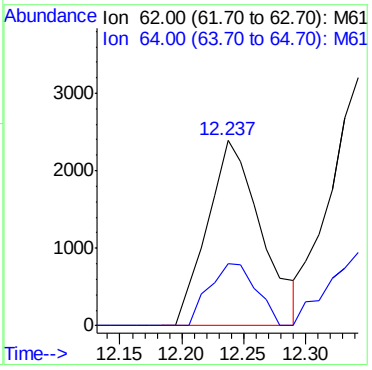


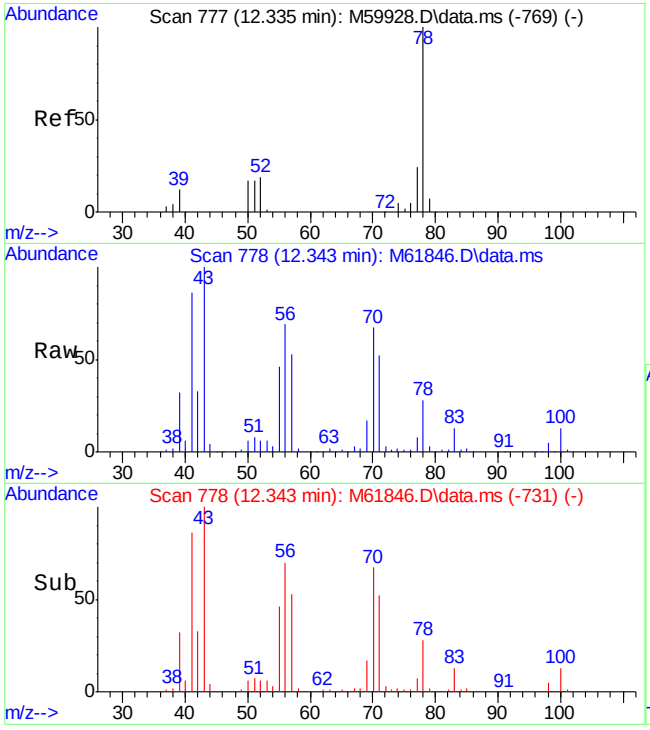



#44
1,2-Dichloroethane
Concen: 0.76 ppb
RT: 12.237 min Scan# 768
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 62 Resp: 7276

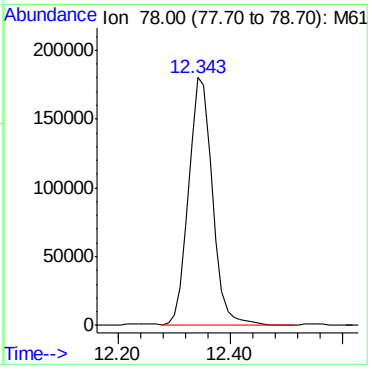
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 29.5 | 12.5 | 52.5 |

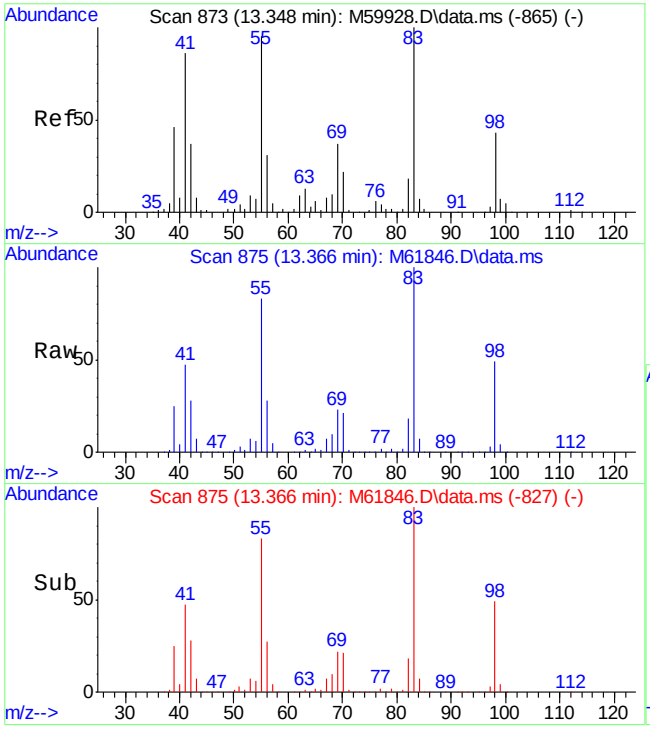



#45
Benzene
Concen: 21.26 ppb
RT: 12.343 min Scan# 778
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 78 Resp: 527345

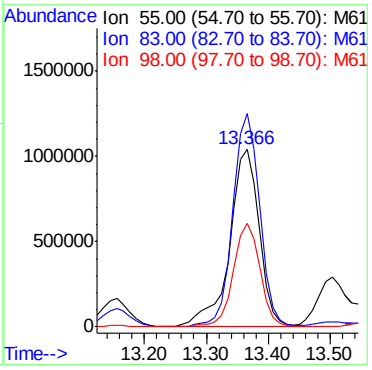


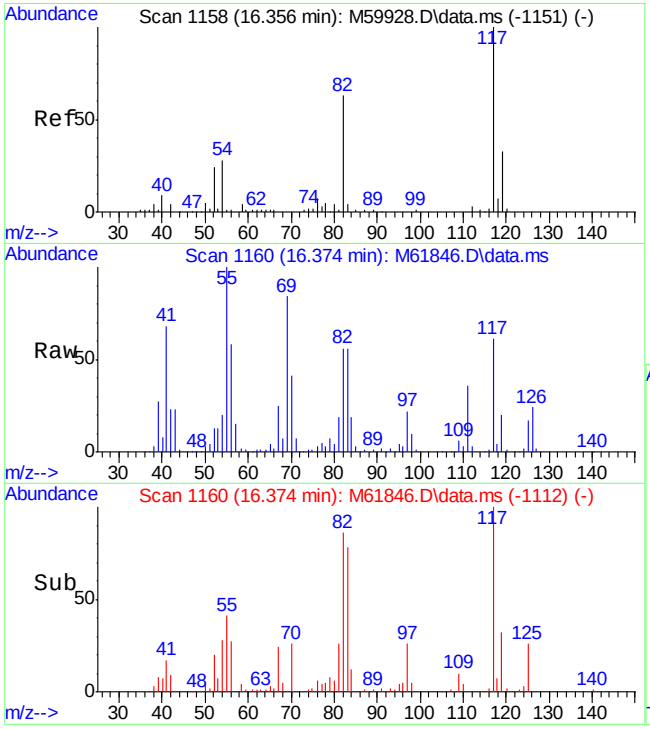



#48
Methylcyclohexane
Concen: 330.66 ppb
RT: 13.366 min Scan# 875
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 55 Resp: 3446319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 109.8 | 84.5 | 124.5 |
| 98 | 52.9 | 27.0 | 67.0 |

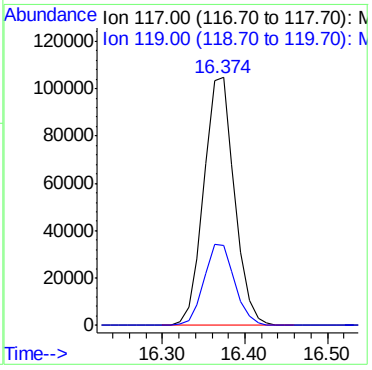


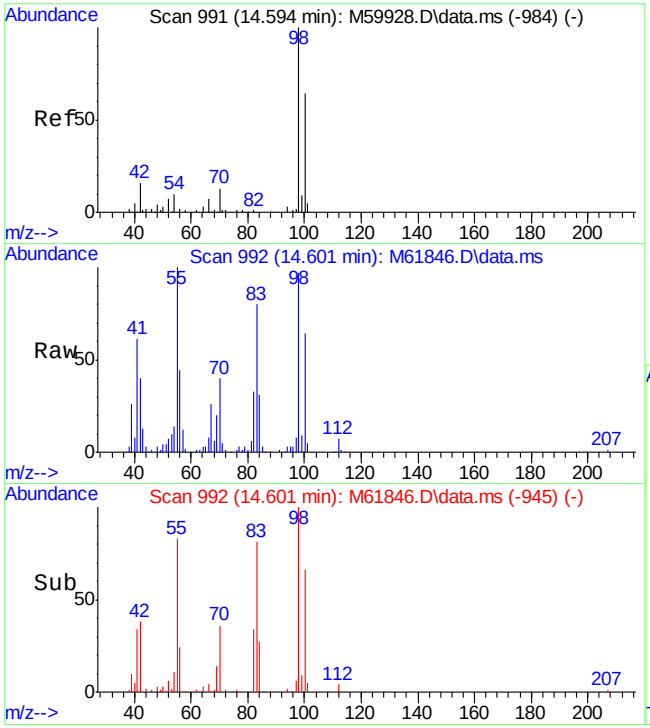




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:117 Resp: 270648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.6 | 11.2 | 51.2 |

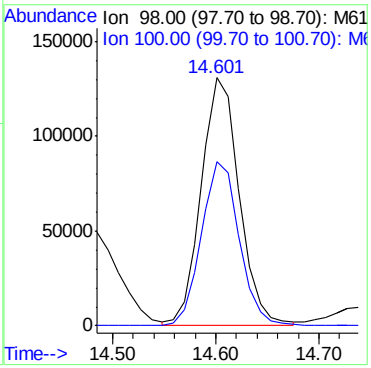


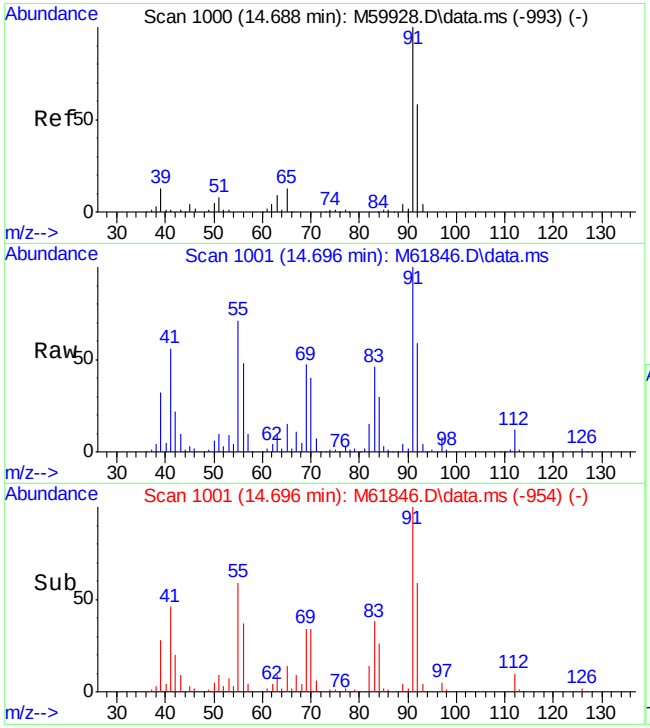



#56
Toluene-d8
Concen: 19.04 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 98 Resp: 336248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.3 | 44.3 | 84.3 |

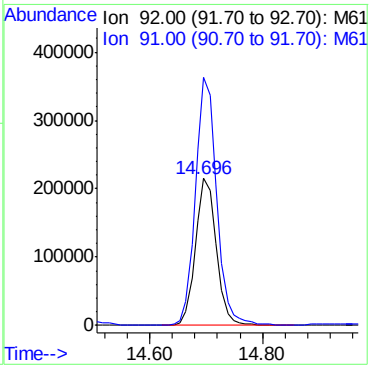


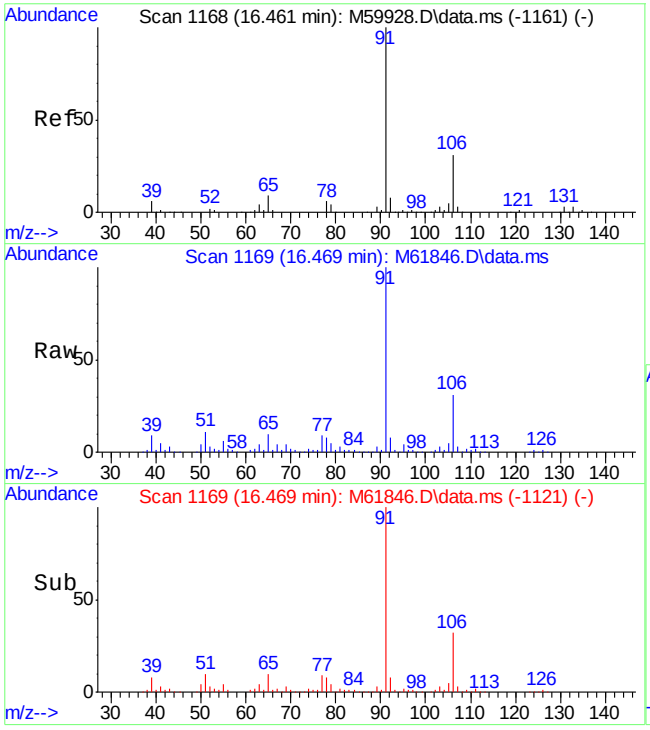




#57
Toluene
Concen: 36.80 ppb
RT: 14.696 min Scan# 1001
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 92 Resp: 548583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.3 | 150.5 | 190.5 |

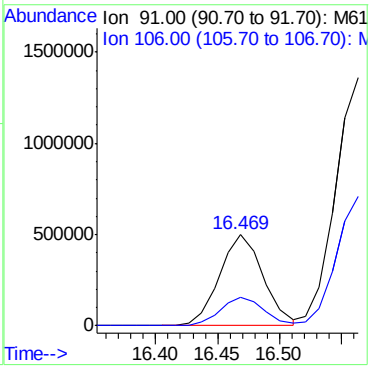


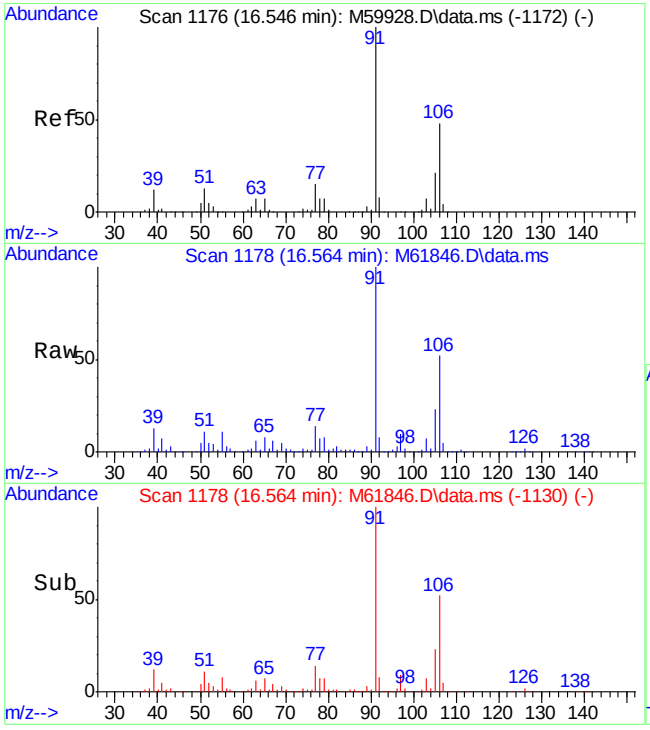



#67
Ethyl Benzene
Concen: 43.86 ppb
RT: 16.469 min Scan# 1169
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 1231166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.3 | 10.2 | 50.2 |

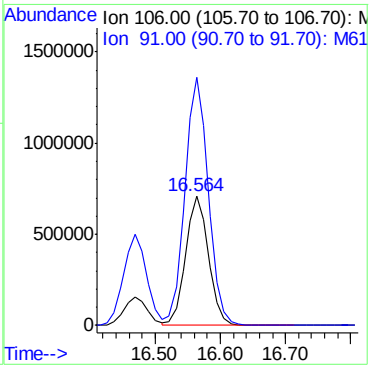


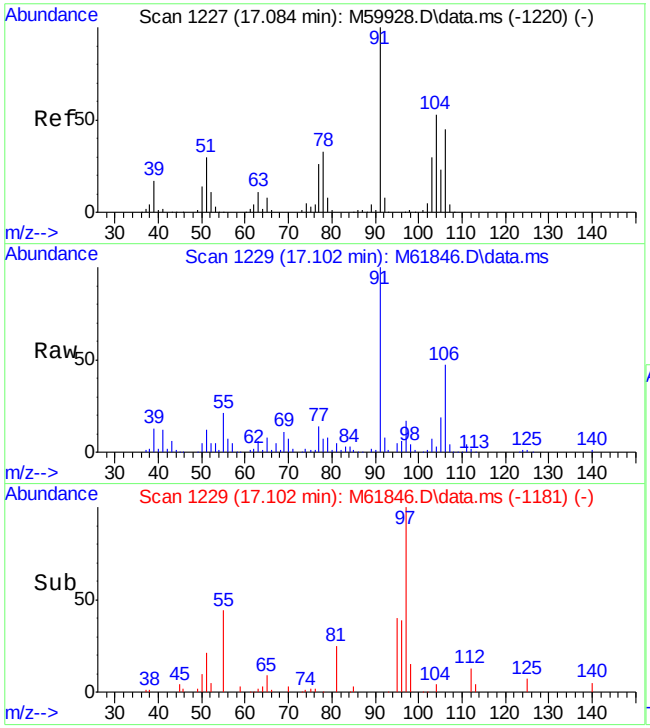




#68
Xylene, m+p
Concen: 171.69 ppb
RT: 16.564 min Scan# 1178
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:106 Resp: 1759764

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 194.7 | 191.5 | 231.5 |

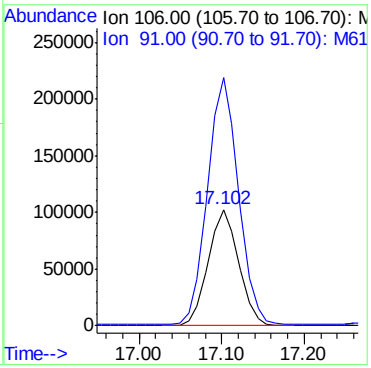


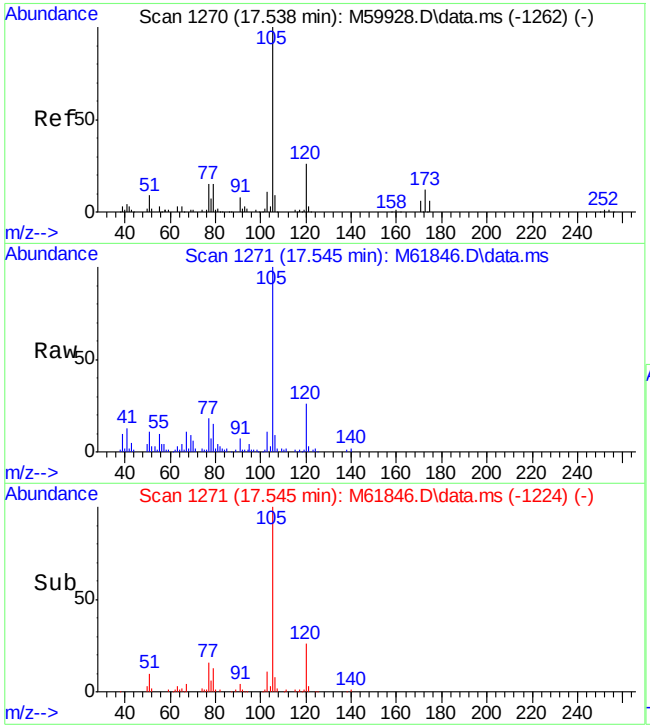



#69
Xylene, o
Concen: 25.49 ppb
RT: 17.102 min Scan# 1229
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:106 Resp: 263584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.8 | 203.2 | 243.2 |

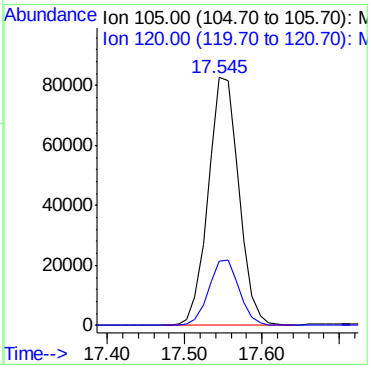


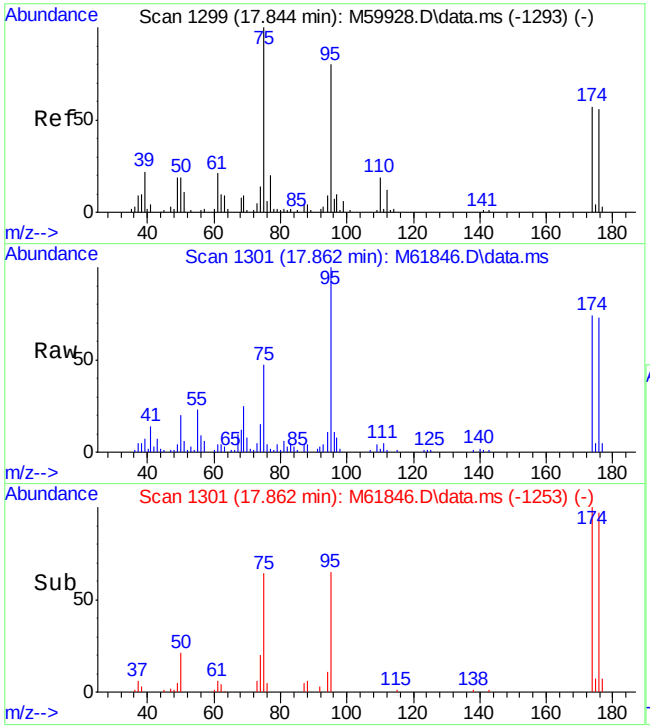




#73
Isopropylbenzene
Concen: 8.68 ppb
RT: 17.545 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 227248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.3 | 5.7 | 45.7 |

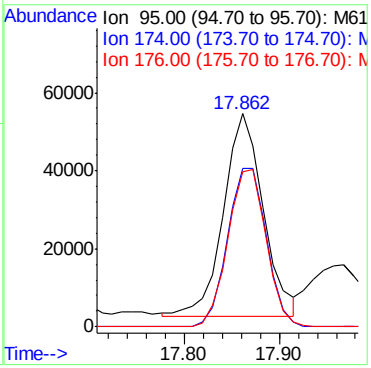


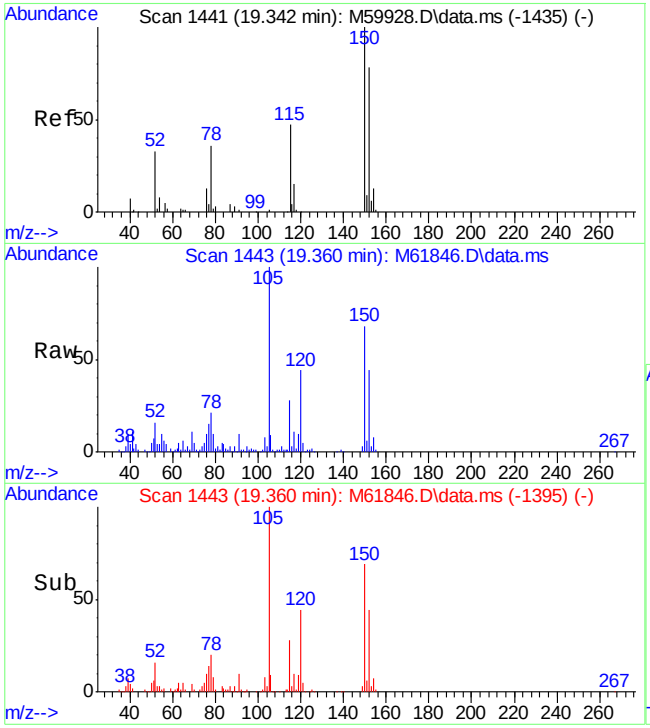



#74
4-Bromofluorobenzene
Concen: 21.48 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 95 Resp: 149161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.7 | 54.3 | 94.3 |
| 176 | 75.3 | 51.5 | 91.5 |

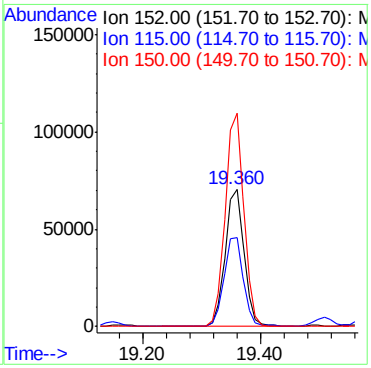


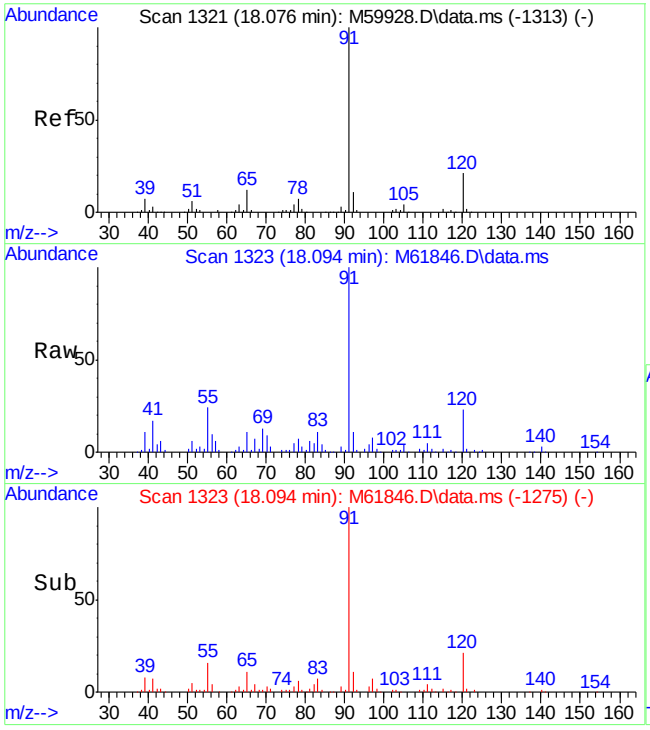




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:152 Resp: 159914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.6 | 40.9 | 80.9 |
| 150 | 151.5 | 178.6 | 218.6# |

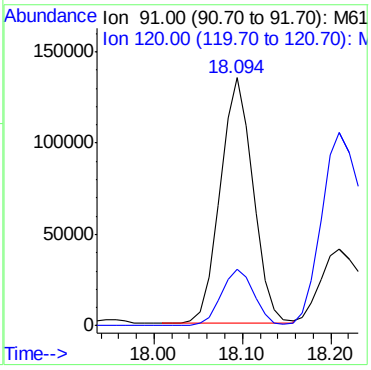


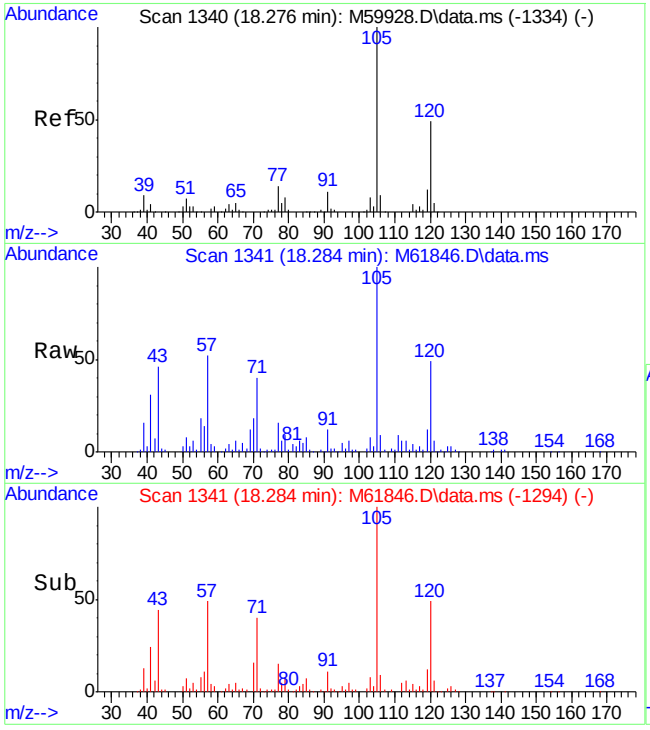



#79
n-Propylbenzene
Concen: 9.21 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 347623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.9 | 1.3 | 41.3 |

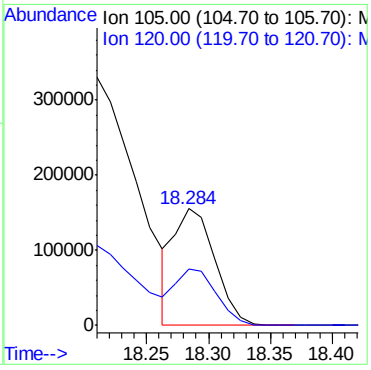


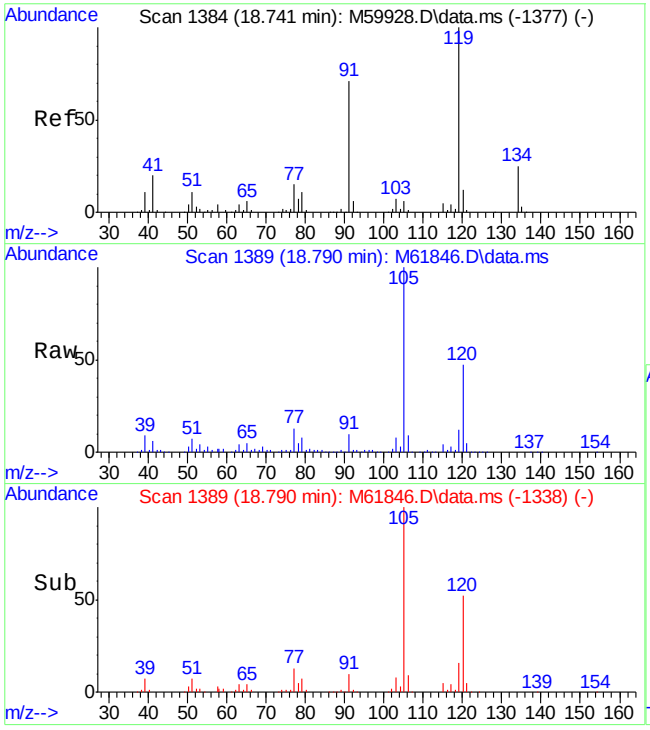




#81
1,3,5-Trimethylbenzene
Concen: 14.17 ppb
RT: 18.284 min Scan# 1341
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 354545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.5 | 26.6 | 66.6 |

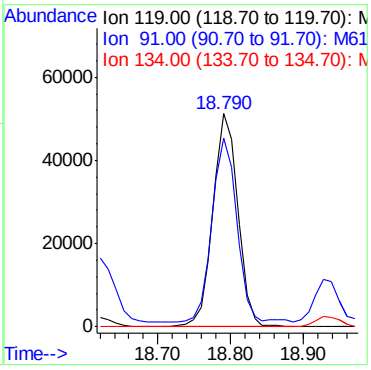


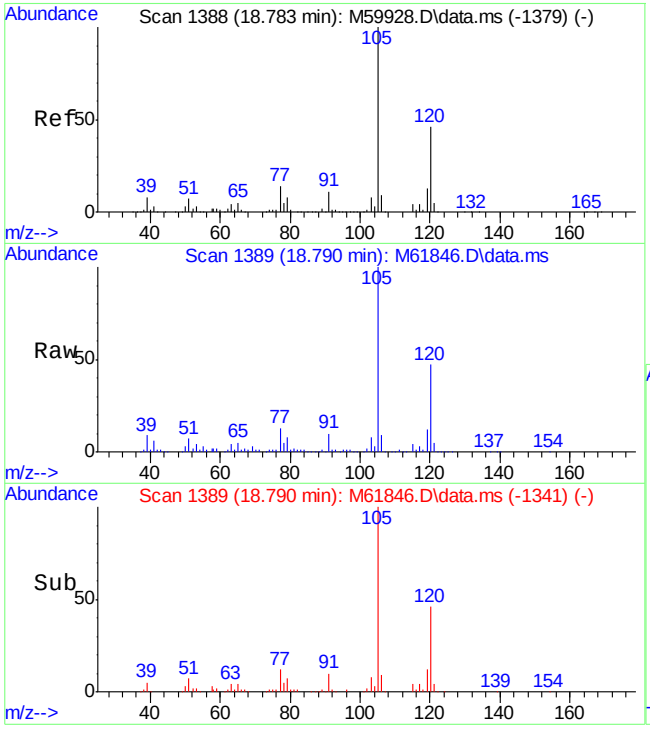



#84
tert-Butylbenzene
Concen: 4.97 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.039 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:119 Resp: 121087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 86.6 | 54.6 | 94.6 |
| 134 | 0.0 | 0.4 | 40.4# |

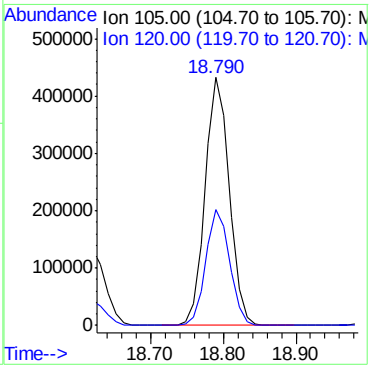


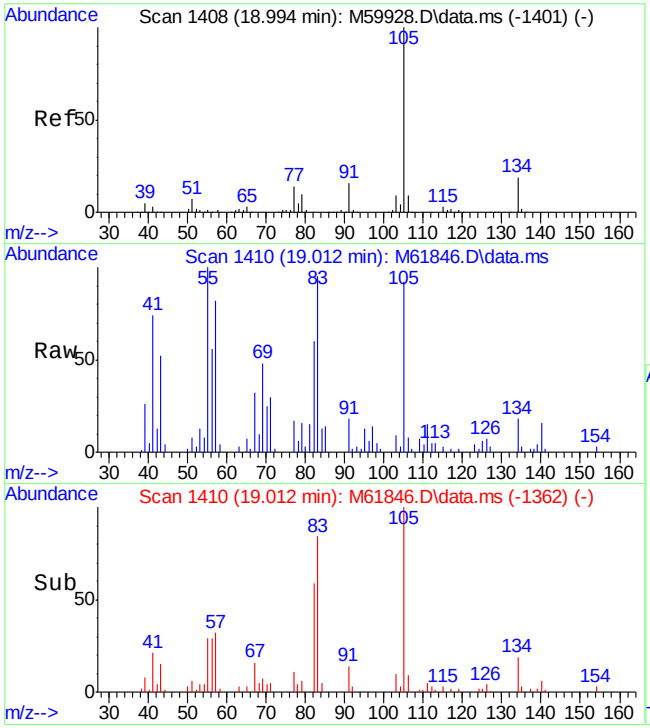




#86
1,2,4-Trimethylbenzene
Concen: 38.34 ppb
RT: 18.790 min Scan# 1389
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 995631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.3 | 32.4 | 72.4 |

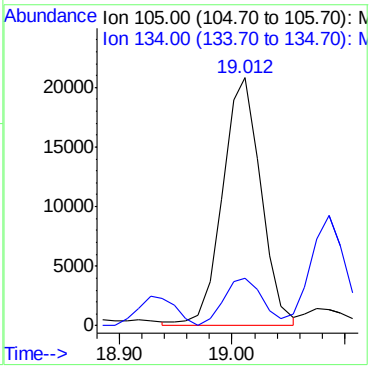


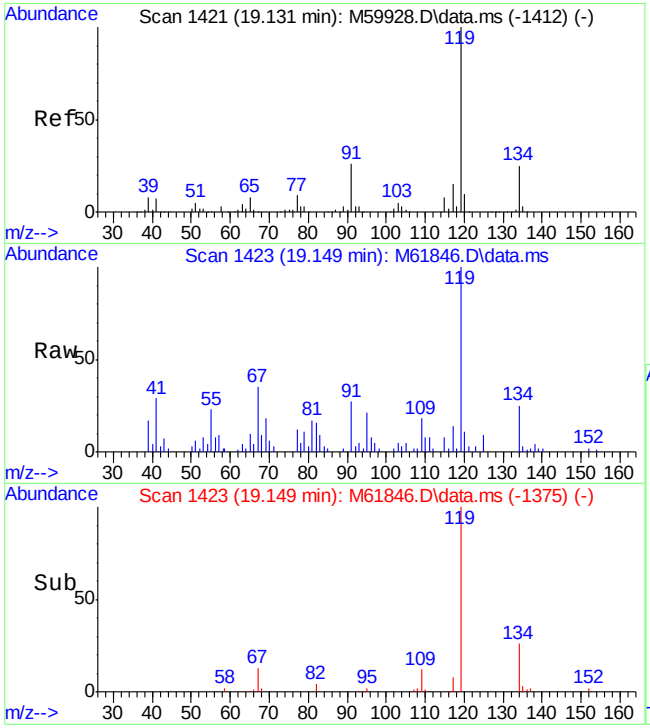



#87
sec-Butylbenzene
Concen: 1.51 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:105 Resp: 49407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 0.0 | 38.7 |

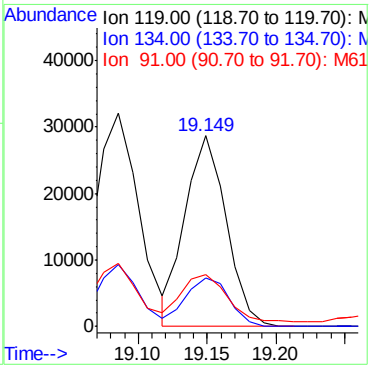


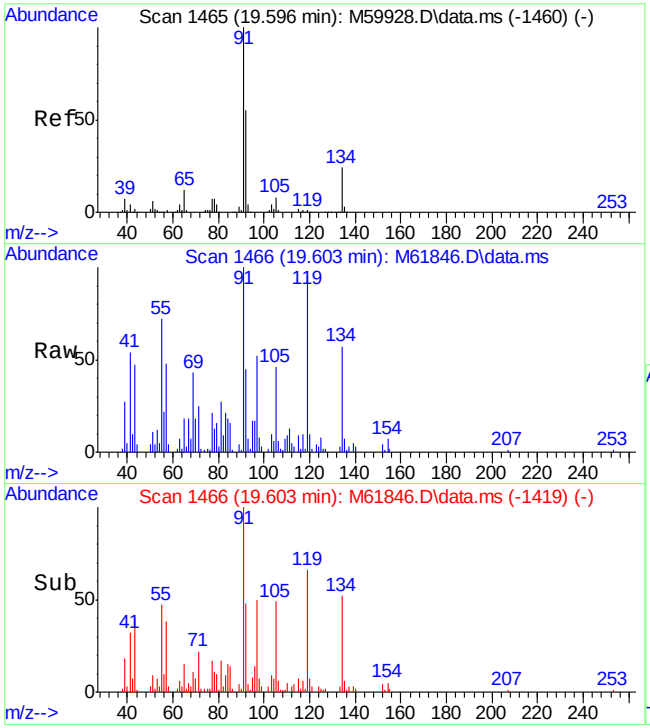




#88
p-Isopropyltoluene
Concen: 2.23 ppb
RT: 19.149 min Scan# 1423
Delta R.T. 0.007 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:119 Resp: 59692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.8 | 6.0 | 46.0 |
| 91 | 26.5 | 6.0 | 46.0 |

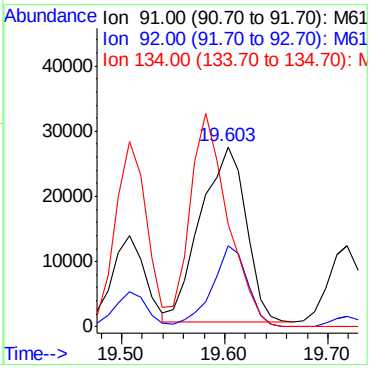


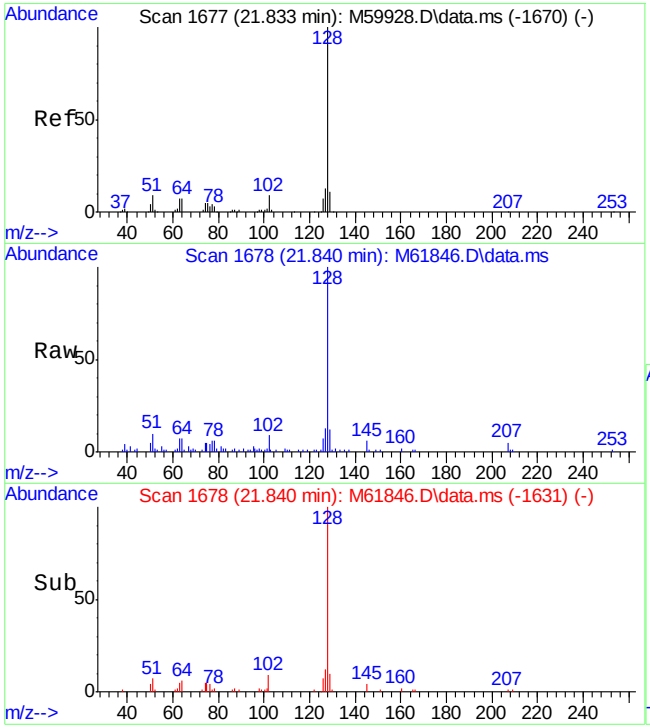



#92
n-Butylbenzene
Concen: 3.01 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion: 91 Resp: 82038

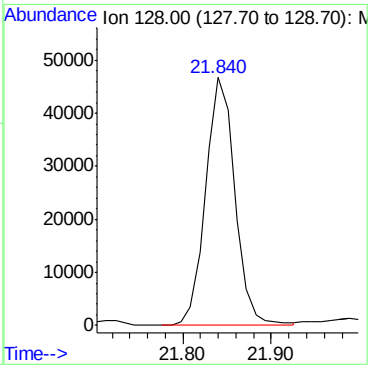
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 36.2 | 35.3 | 75.3 |
| 134 | 102.0 | 3.6 | 43.6# |

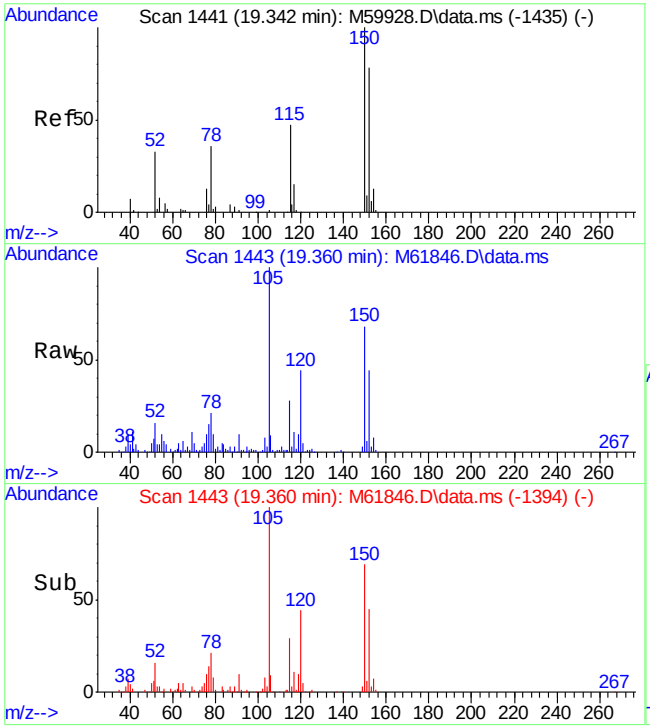



#97
Naphthalene
Concen: 5.13 ppb
RT: 21.840 min Scan# 1678
Delta R.T. -0.003 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:128 Resp: 107752

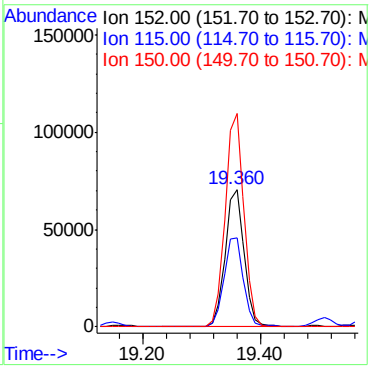


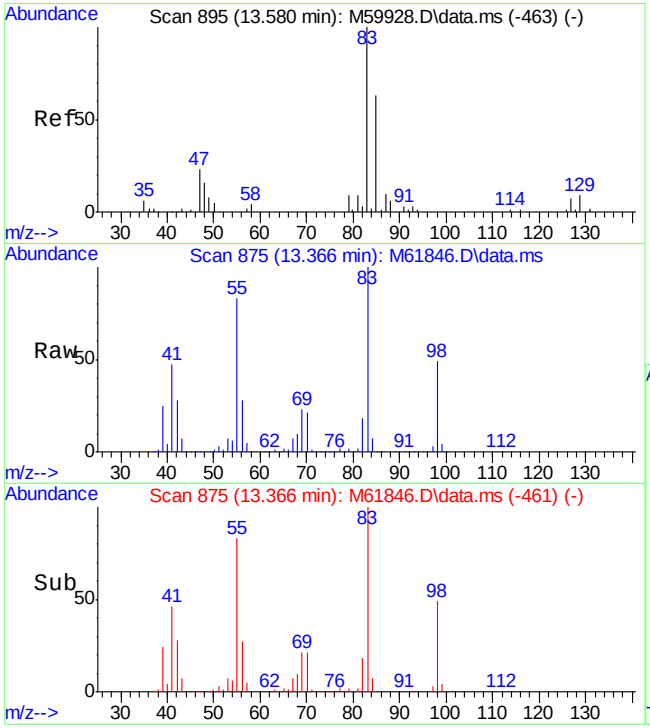



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:152 Resp: 159914

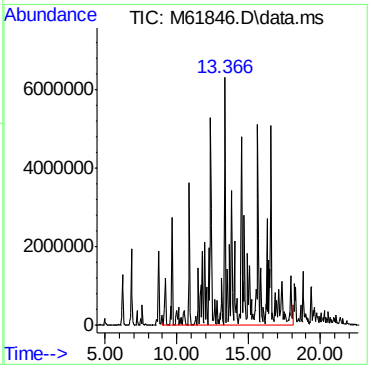
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.6 | 37.3 | 77.3 |
| 150 | 151.5 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 8568.64 ppb m
RT: 13.366 min Scan# 875
Delta R.T. -0.184 min
Lab File: M61846.D
Acq: 13 Jul 2016 7:59 pm

Tgt Ion:TIC Resp:343761788



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61845.D
Acq On : 13 Jul 2016 7:29 pm
Operator : johannat
Sample : C46435-17R
Misc : MS1912,VM1859,5.20,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 02 10:11:33 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

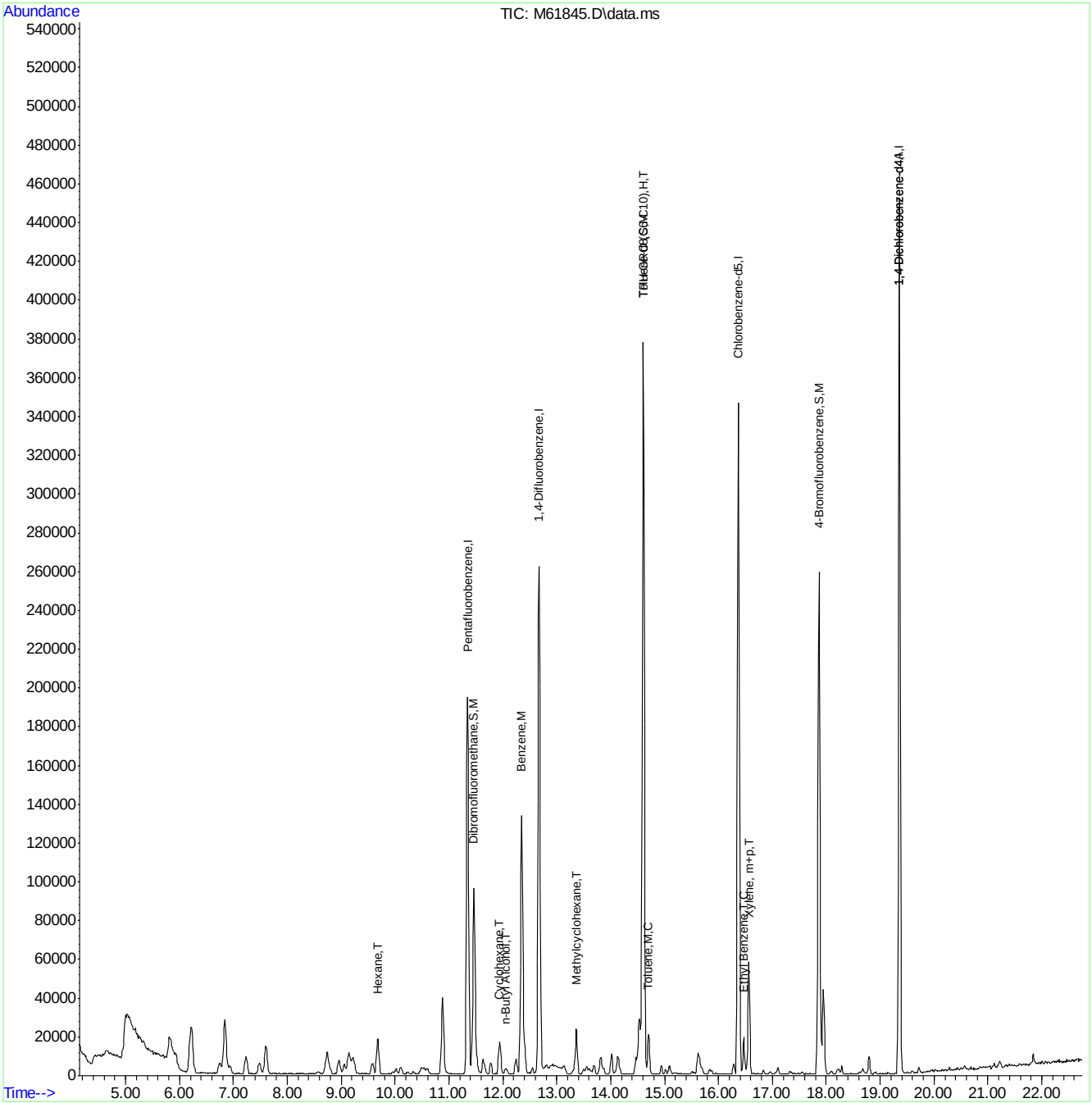
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 195190 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 289895 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 279960 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.352 | 152 | 165193 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.352 | 152 | 165193 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 87717 | 17.72 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 88.60% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 344609 | 18.86 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.30% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 145358 | 20.24 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.20% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 24) Hexane | 9.685 | 57 | 14874 | 1.45 | ppb | 98 |
| 38) Cyclohexane | 11.933 | 56 | 13018 | 1.02 | ppb | 95 |
| 42) n-Butyl Alcohol | 12.049 | 56 | 2180 | 15.53 | ppb | 90 |
| 45) Benzene | 12.345 | 78 | 155925 | 6.15 | ppb | 100 |
| 48) Methylcyclohexane | 13.358 | 55 | 12982 | 1.22 | ppb | 98 |
| 57) Toluene | 14.698 | 92 | 10590 | 0.69 | ppb | 99 |
| 67) Ethyl Benzene | 16.471 | 91 | 20910 | 0.72 | ppb | 98 |
| 68) Xylene, m+p | 16.566 | 106 | 24160 | 2.28 | ppb | 96 |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 5985185m | 29.27 | ppb | |

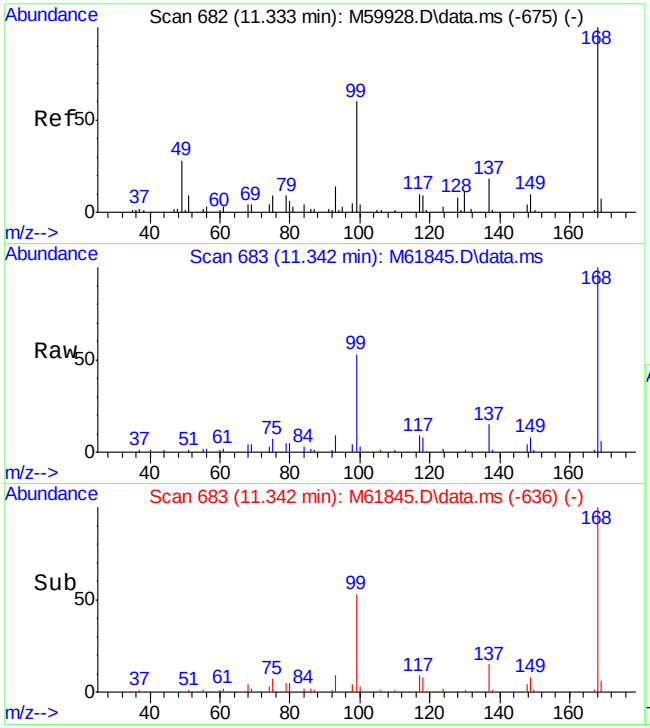
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61845.D
Acq On : 13 Jul 2016 7:29 pm
Operator : johannat
Sample : C46435-17R
Misc : MS1912,VM1859,5.20,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

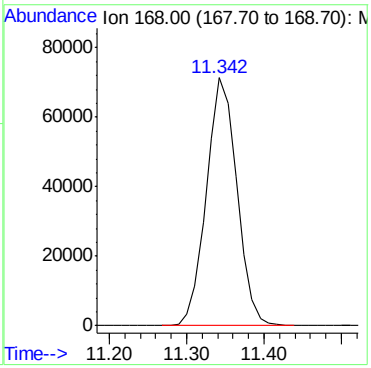
Quant Time: Aug 02 10:11:33 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

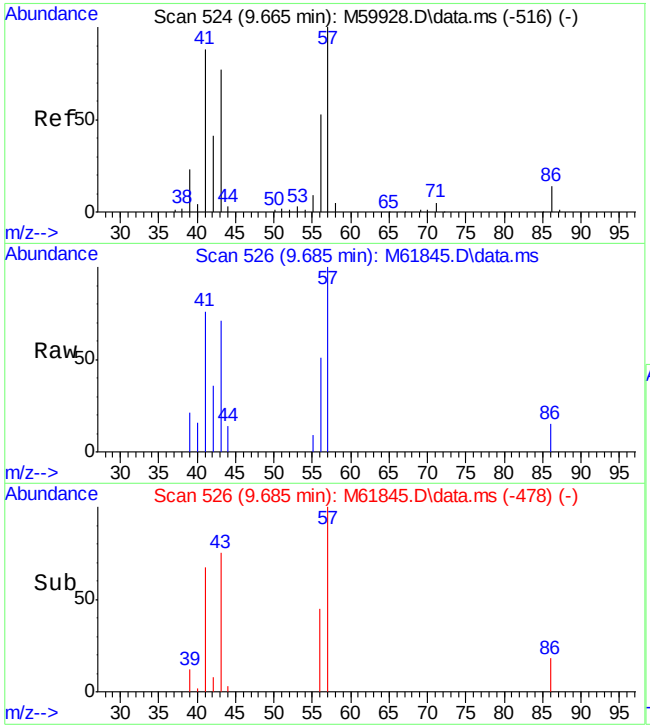





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:168 Resp: 195190

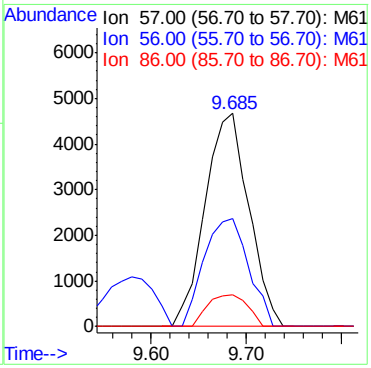


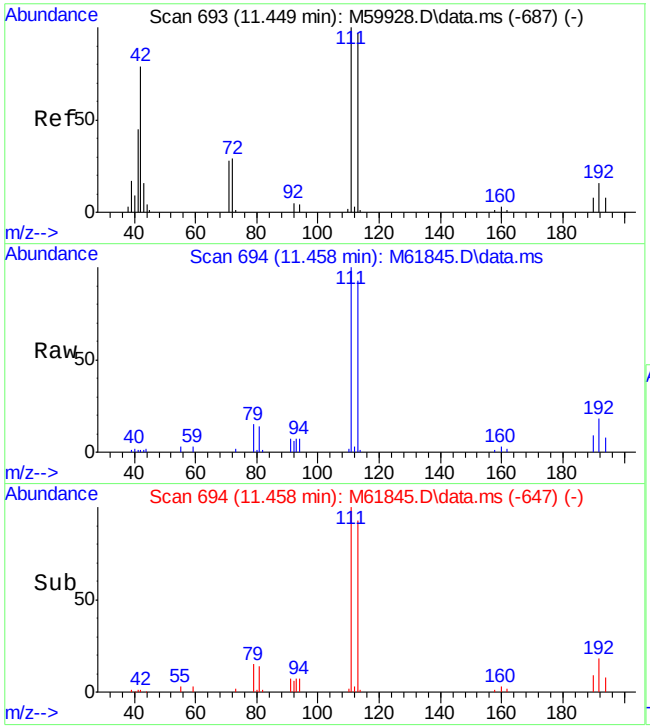




#24
Hexane
Concen: 1.45 ppb
RT: 9.685 min Scan# 526
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 57 Resp: 14874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 51.6 | 32.9 | 72.9 |
| 86 | 13.6 | 0.0 | 34.1 |

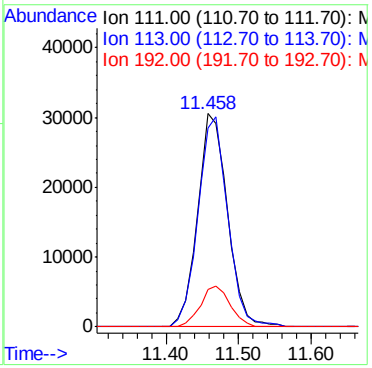


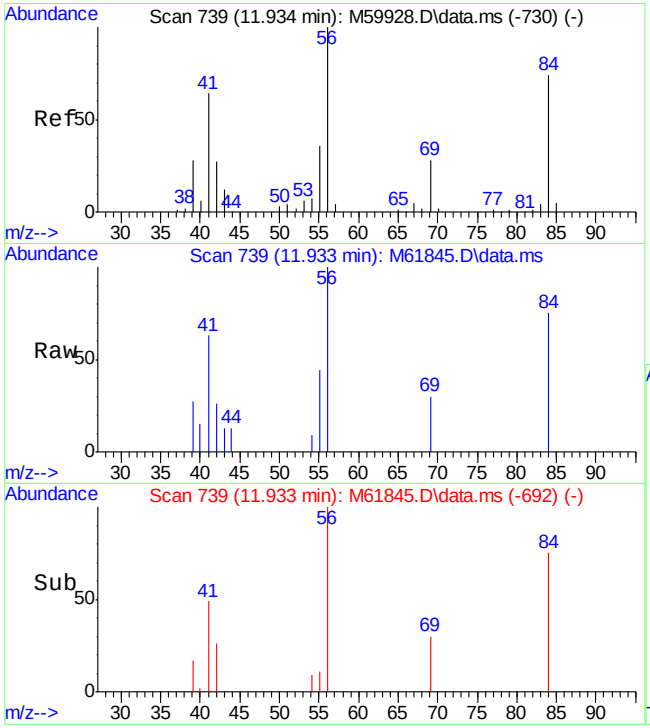



#36
Dibromofluoromethane
Concen: 17.72 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:111 Resp: 87717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 77.7 | 117.7 |
| 192 | 18.6 | 0.0 | 36.3 |

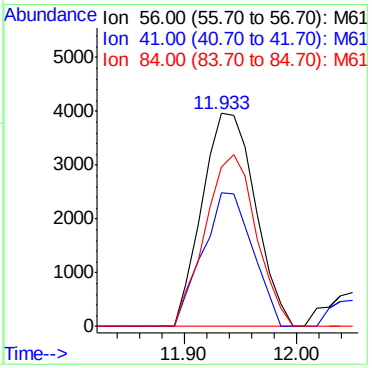


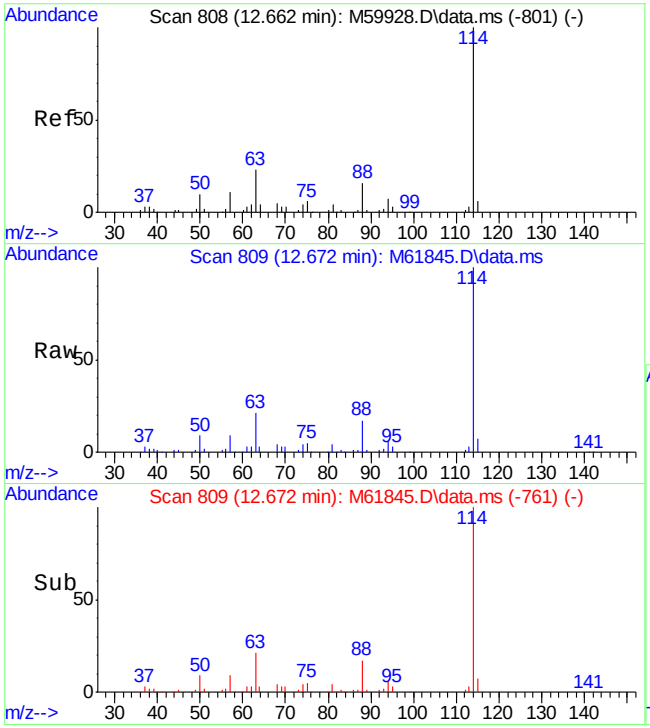




#38
Cyclohexane
Concen: 1.02 ppb
RT: 11.933 min Scan# 739
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 56 Resp: 13018

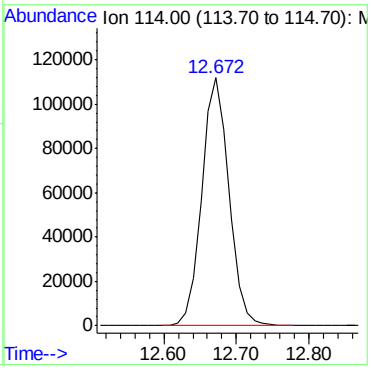
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.5 | 46.3 | 86.3 |
| 84 | 77.0 | 56.0 | 96.0 |

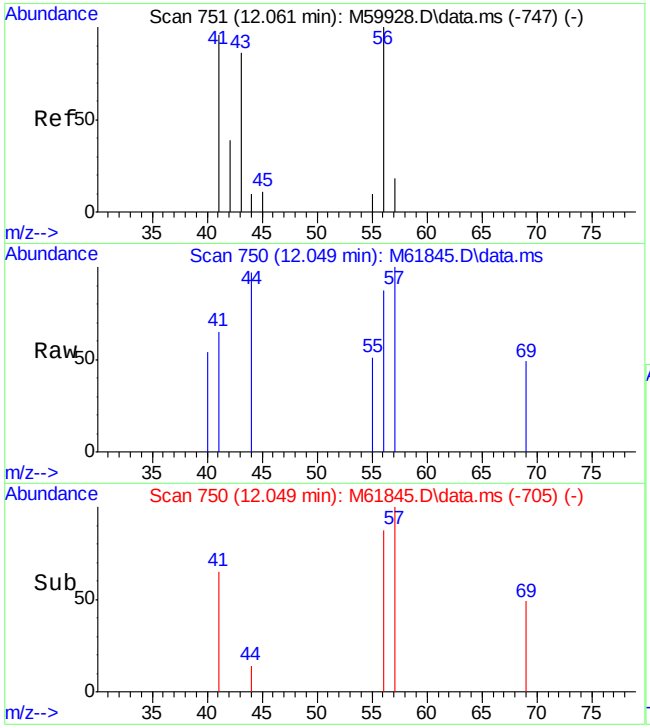





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:114 Resp: 289895

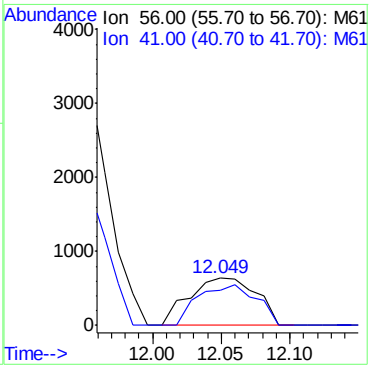


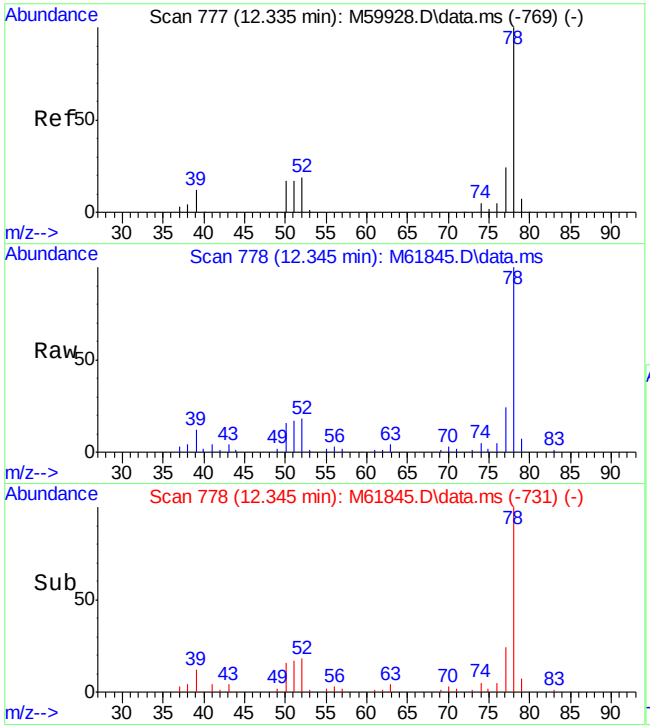




#42
n-Butyl Alcohol
Concen: 15.53 ppb
RT: 12.049 min Scan# 750
Delta R.T. -0.022 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 56 Resp: 2180

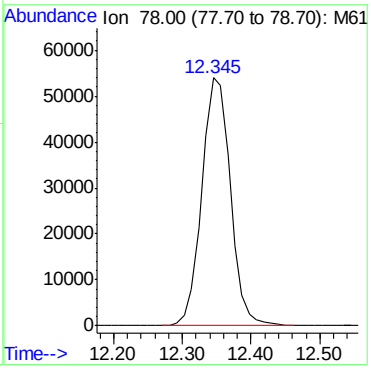
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 74.1 | 63.5 | 103.5 |

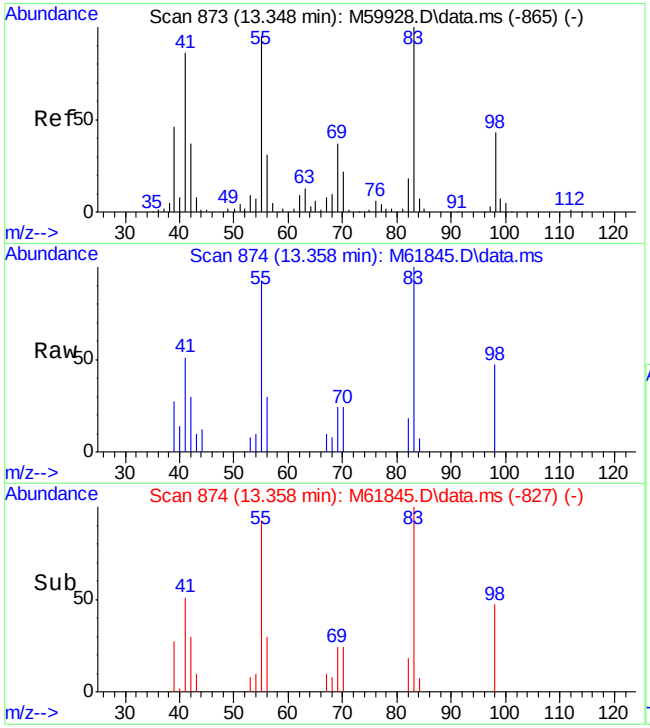





#45
Benzene
Concen: 6.15 ppb
RT: 12.345 min Scan# 778
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 78 Resp: 155925

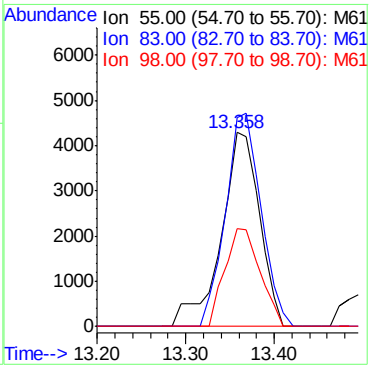


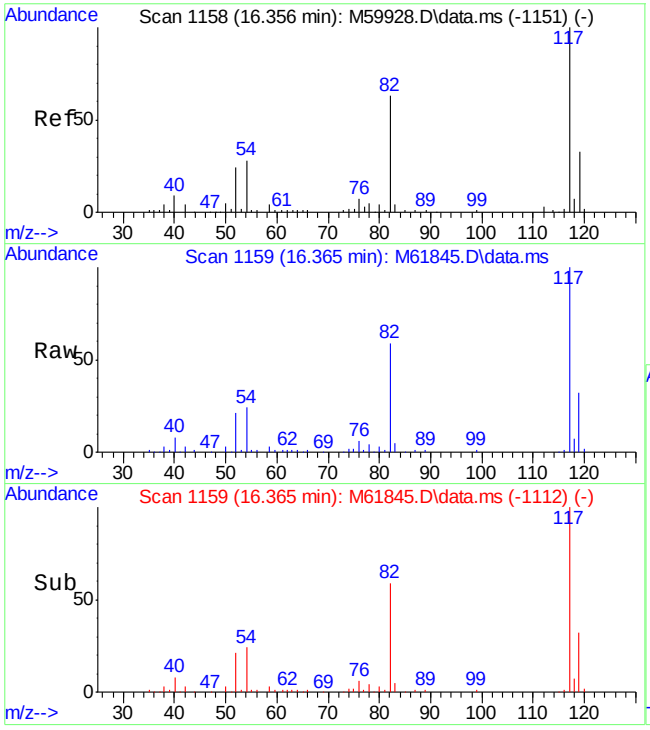




#48
Methylcyclohexane
Concen: 1.22 ppb
RT: 13.358 min Scan# 874
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 55 Resp: 12982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 101.6 | 84.5 | 124.5 |
| 98 | 46.1 | 27.0 | 67.0 |

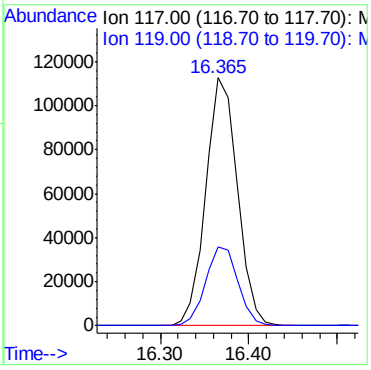


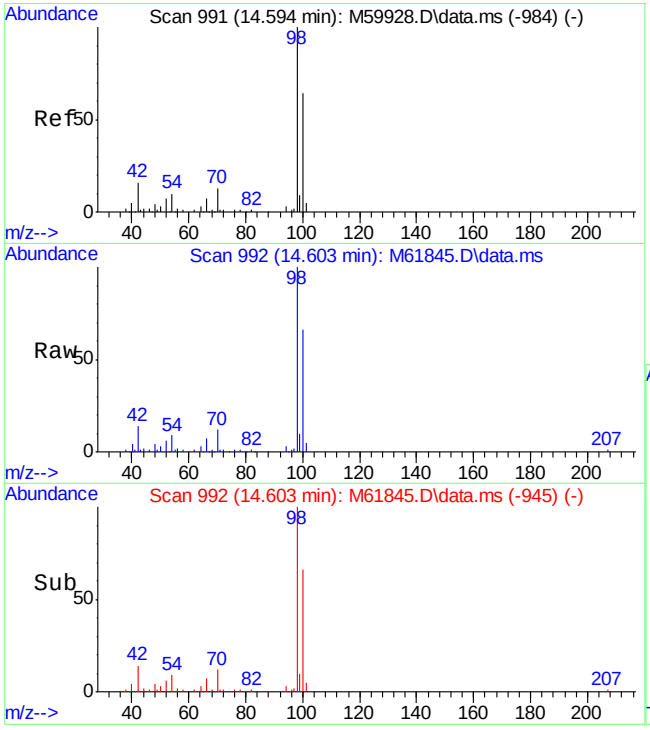



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:117 Resp: 279960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.7 | 11.2 | 51.2 |

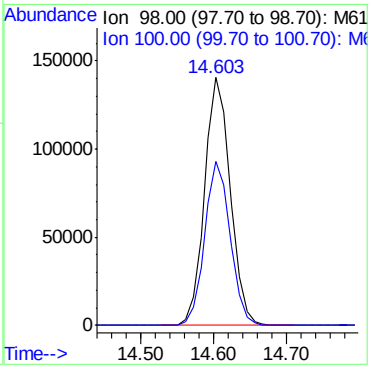


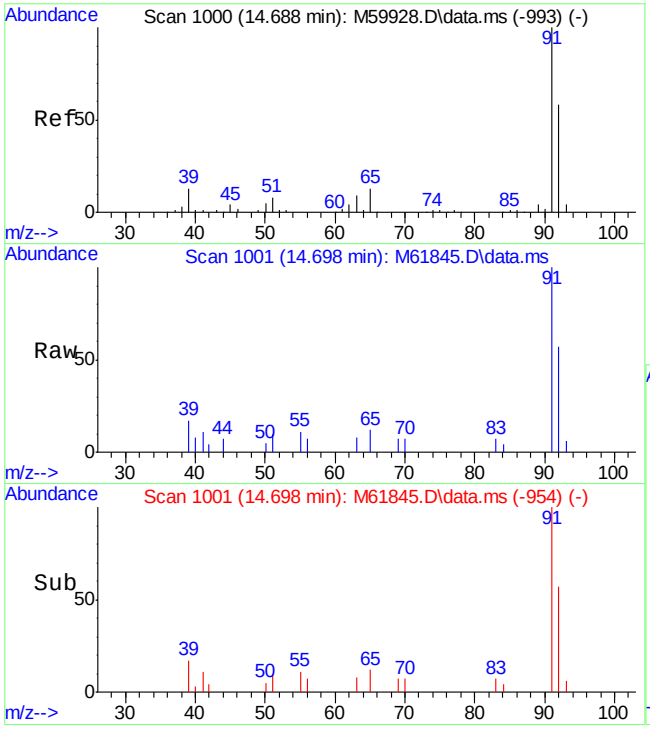




#56
Toluene-d8
Concen: 18.86 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 98 Resp: 344609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 44.3 | 84.3 |

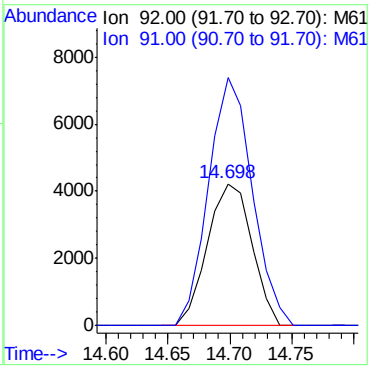


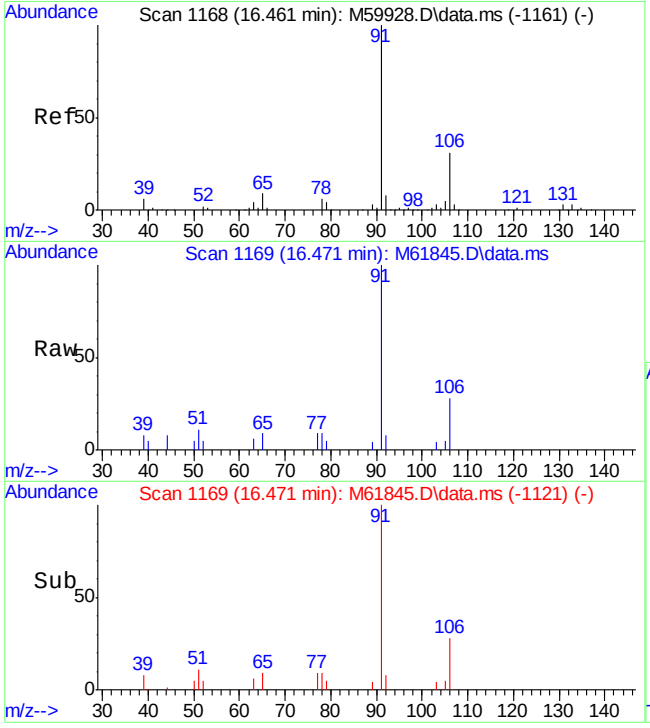



#57
Toluene
Concen: 0.69 ppb
RT: 14.698 min Scan# 1001
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 92 Resp: 10590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.4 | 150.5 | 190.5 |

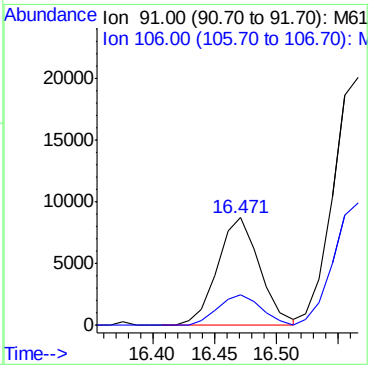


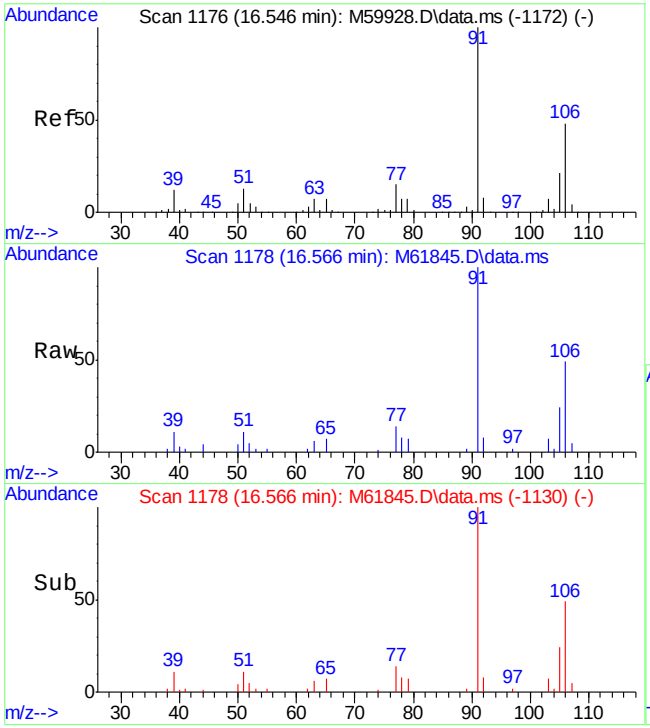




#67
Ethyl Benzene
Concen: 0.72 ppb
RT: 16.471 min Scan# 1169
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 91 Resp: 20910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.2 | 10.2 | 50.2 |

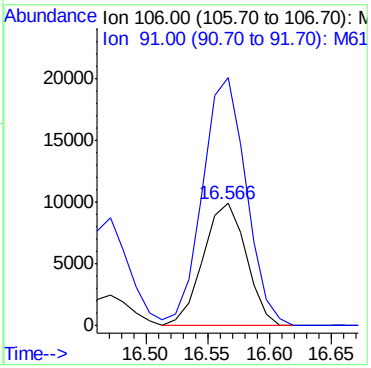


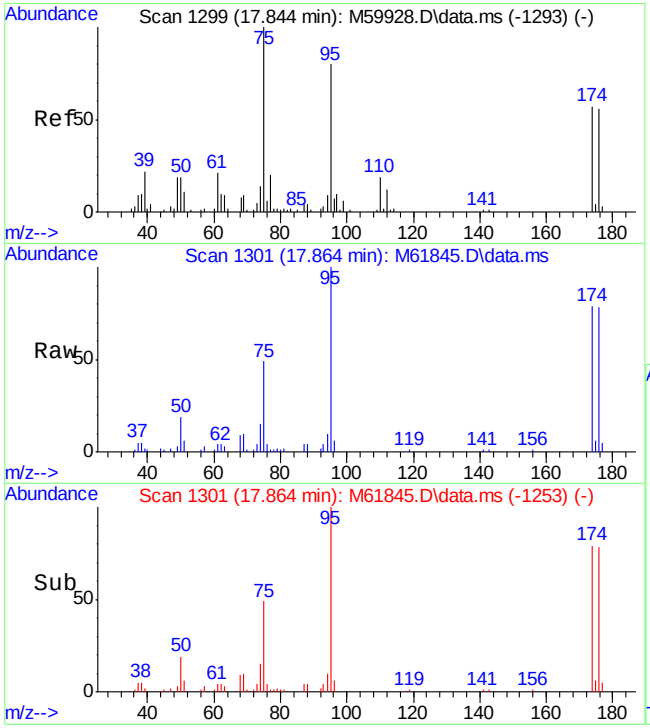



#68
Xylene, m+p
Concen: 2.28 ppb
RT: 16.566 min Scan# 1178
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:106 Resp: 24160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 204.5 | 191.5 | 231.5 |

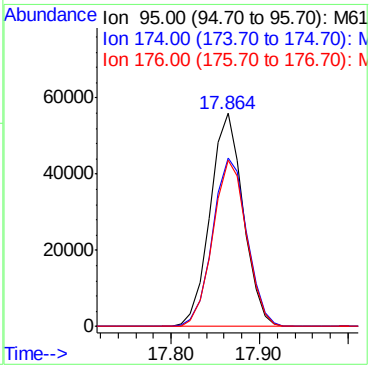


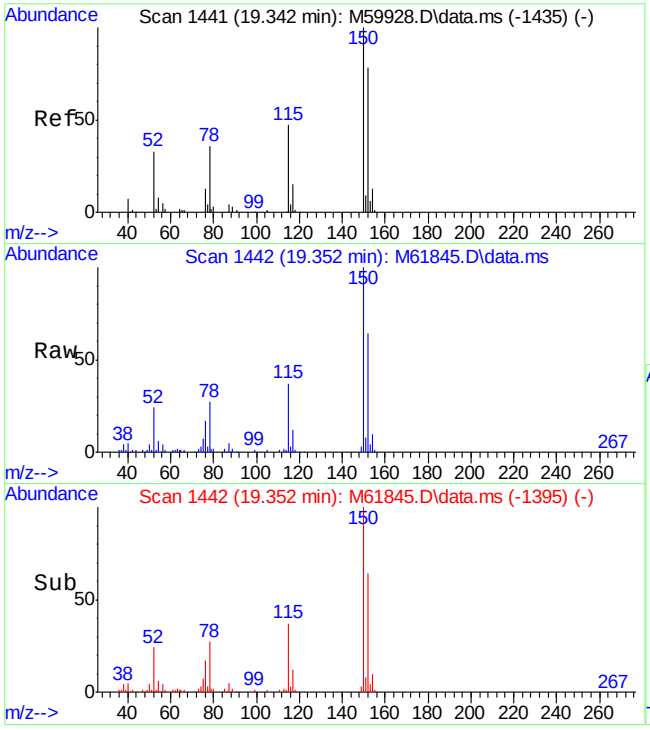




#74
4-Bromofluorobenzene
Concen: 20.24 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 95 Resp: 145358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 81.9 | 54.3 | 94.3 |
| 176 | 79.3 | 51.5 | 91.5 |

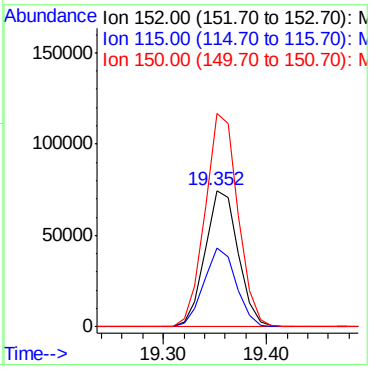


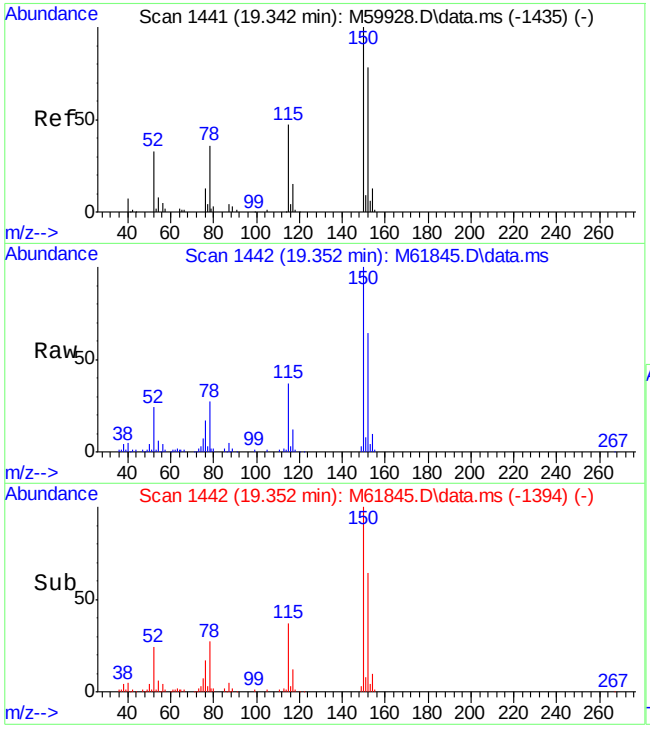



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:152 Resp: 165193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 56.7 | 40.9 | 80.9 |
| 150 | 155.8 | 178.6 | 218.6# |

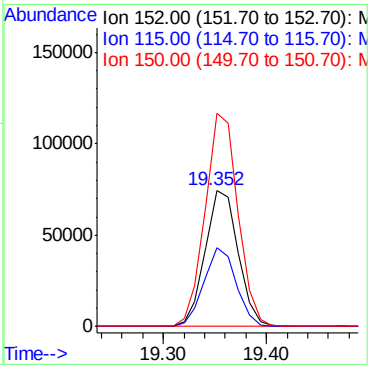


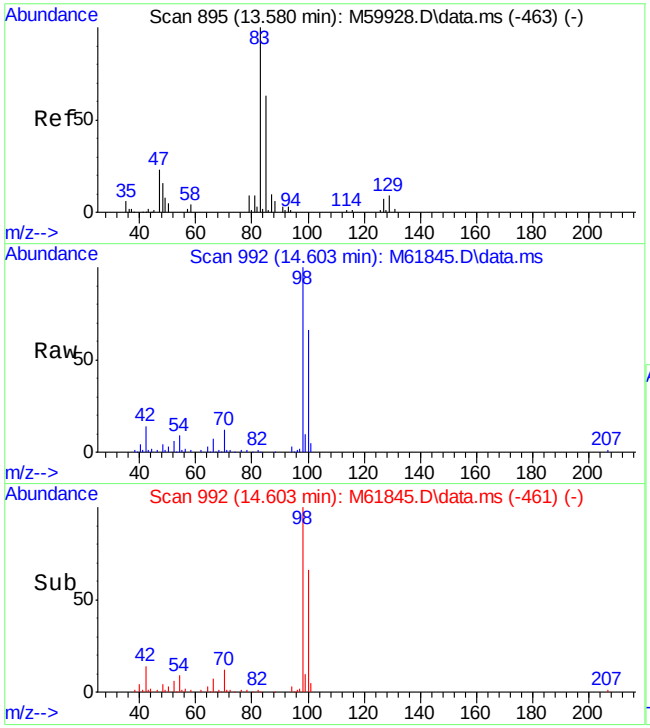




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:152 Resp: 165193

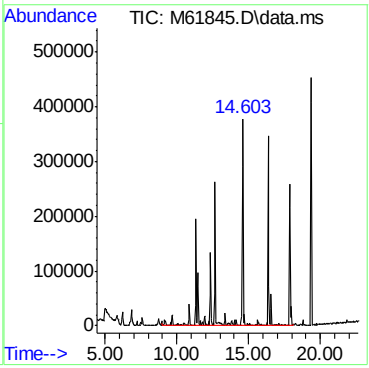
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 56.7 | 37.3 | 77.3 |
| 150 | 155.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 29.27 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:TIC Resp: 5985185



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61845.D
Acq On : 13 Jul 2016 7:29 pm
Operator : johannat
Sample : C46435-17R
Misc : MS1912,VM1859,5.20,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 02 10:11:33 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

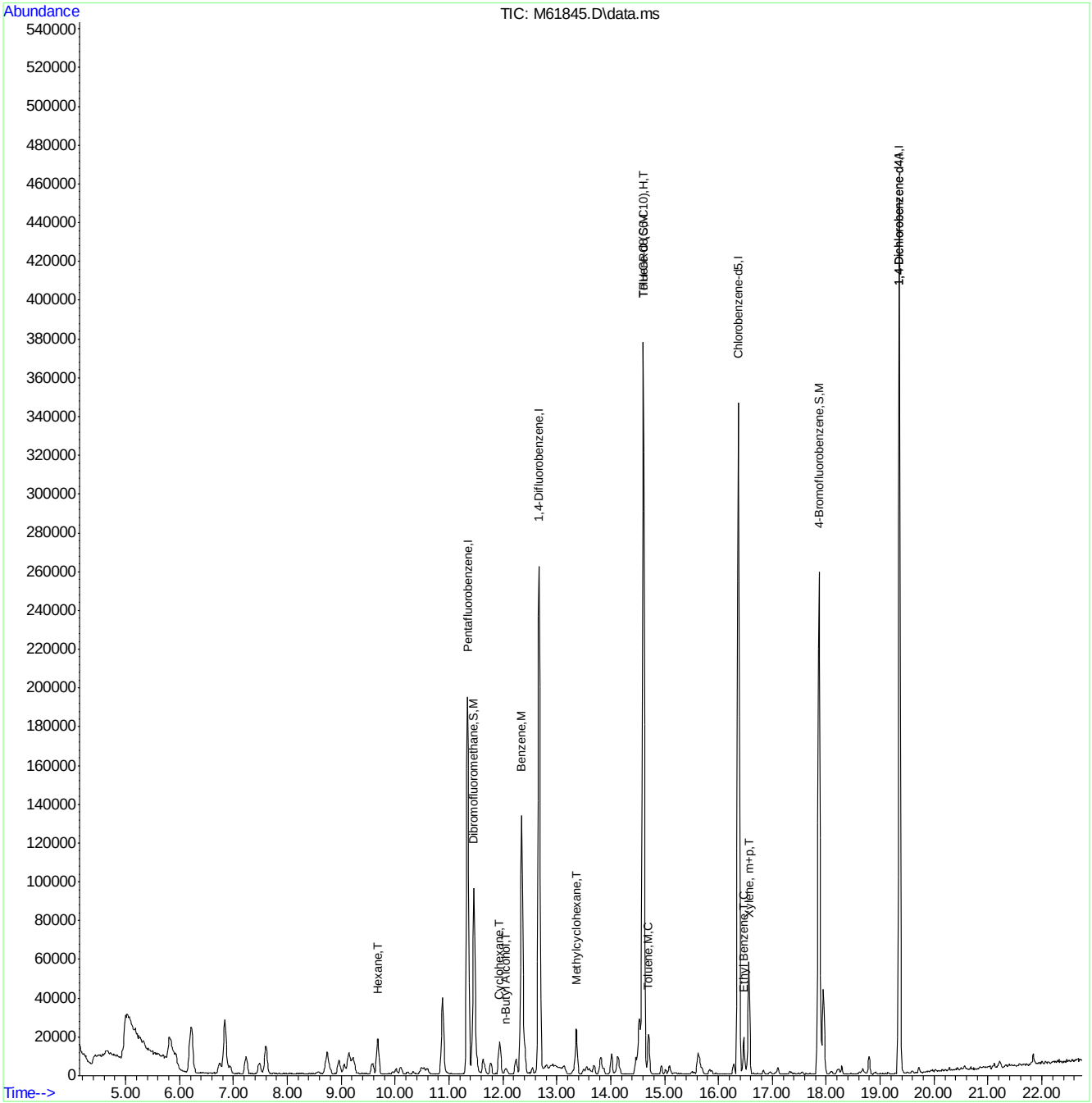
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 195190 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 289895 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 279960 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.352 | 152 | 165193 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.352 | 152 | 165193 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 87717 | 17.72 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 88.60% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 344609 | 18.86 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.30% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 145358 | 20.24 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.20% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 24) Hexane | 9.685 | 57 | 14874 | 1.45 | ppb | 98 |
| 38) Cyclohexane | 11.933 | 56 | 13018 | 1.02 | ppb | 95 |
| 42) n-Butyl Alcohol | 12.049 | 56 | 2180 | 15.53 | ppb | 90 |
| 45) Benzene | 12.345 | 78 | 155925 | 6.15 | ppb | 100 |
| 48) Methylcyclohexane | 13.358 | 55 | 12982 | 1.22 | ppb | 98 |
| 57) Toluene | 14.698 | 92 | 10590 | 0.69 | ppb | 99 |
| 67) Ethyl Benzene | 16.471 | 91 | 20910 | 0.72 | ppb | 98 |
| 68) Xylene, m+p | 16.566 | 106 | 24160 | 2.28 | ppb | 96 |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 5985185m | 29.27 | ppb | |

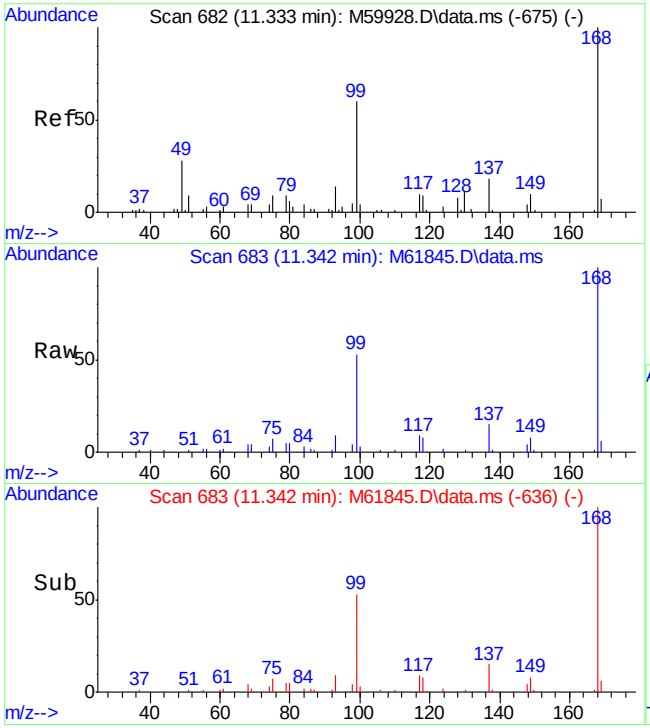
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61845.D
Acq On : 13 Jul 2016 7:29 pm
Operator : johannat
Sample : C46435-17R
Misc : MS1912,VM1859,5.20,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

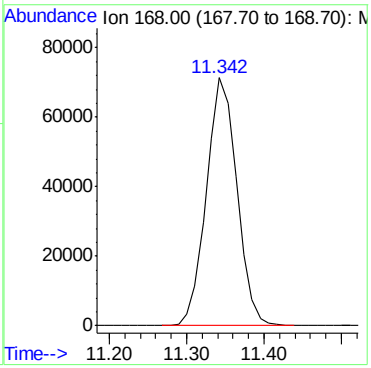
Quant Time: Aug 02 10:11:33 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

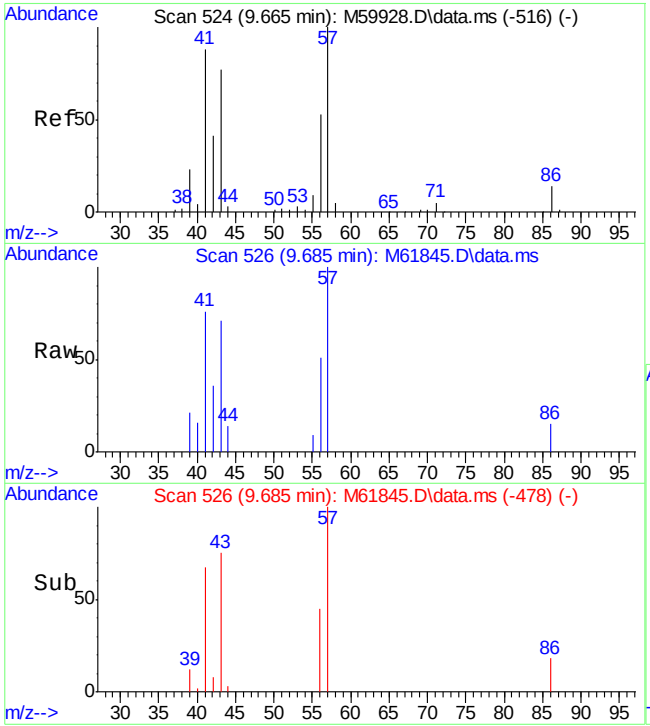





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:168 Resp: 195190

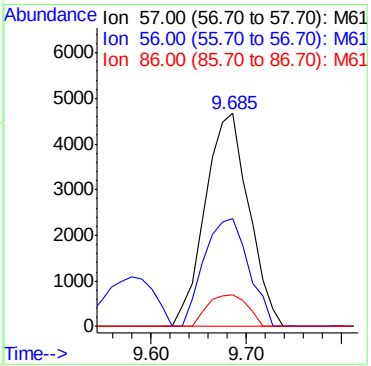


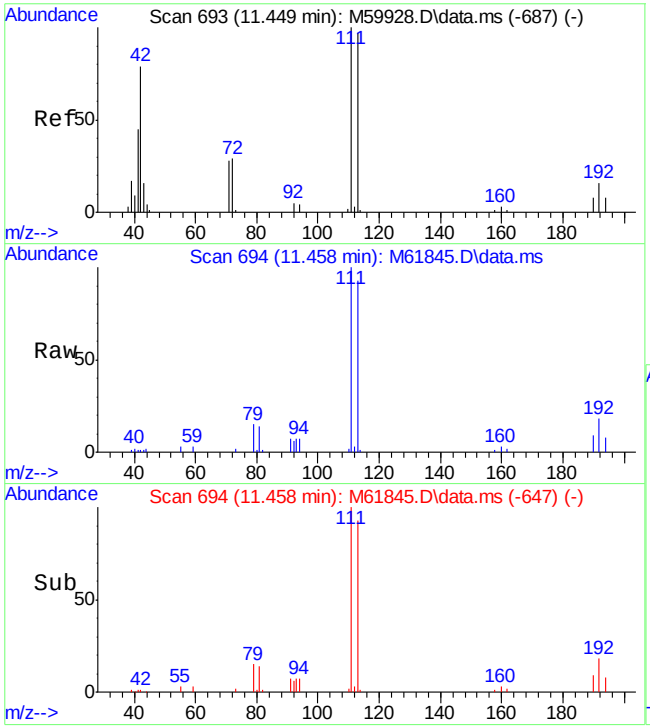




#24
Hexane
Concen: 1.45 ppb
RT: 9.685 min Scan# 526
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 57 Resp: 14874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 56 | 51.6 | 32.9 | 72.9 |
| 86 | 13.6 | 0.0 | 34.1 |

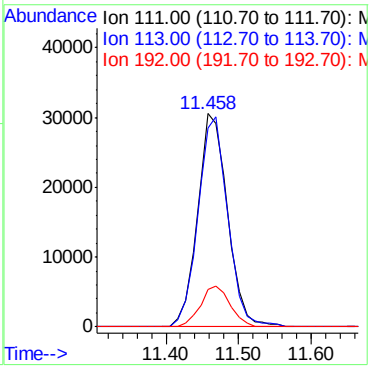


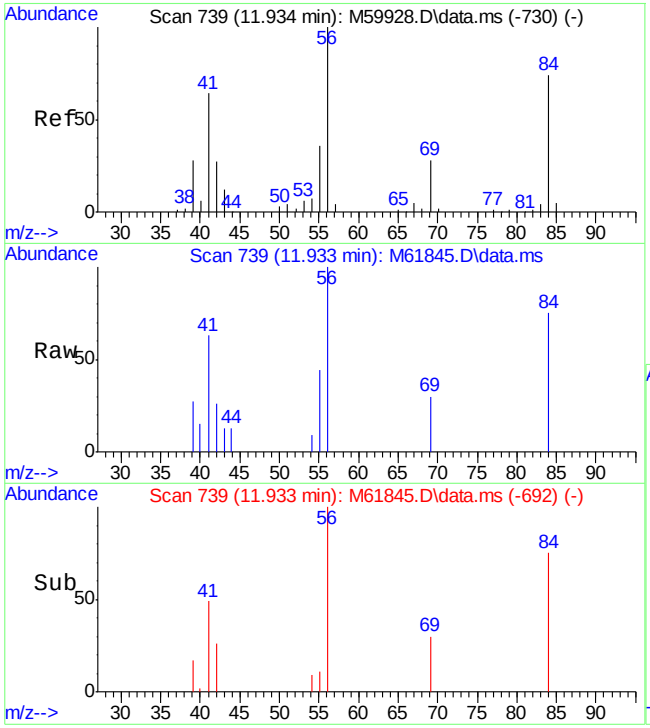



#36
Dibromofluoromethane
Concen: 17.72 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:111 Resp: 87717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 77.7 | 117.7 |
| 192 | 18.6 | 0.0 | 36.3 |

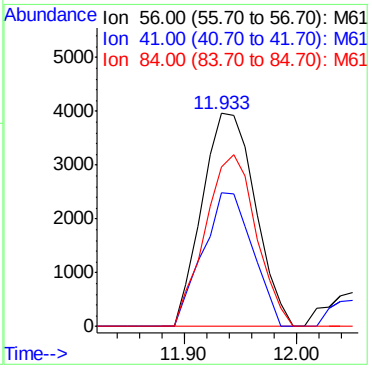


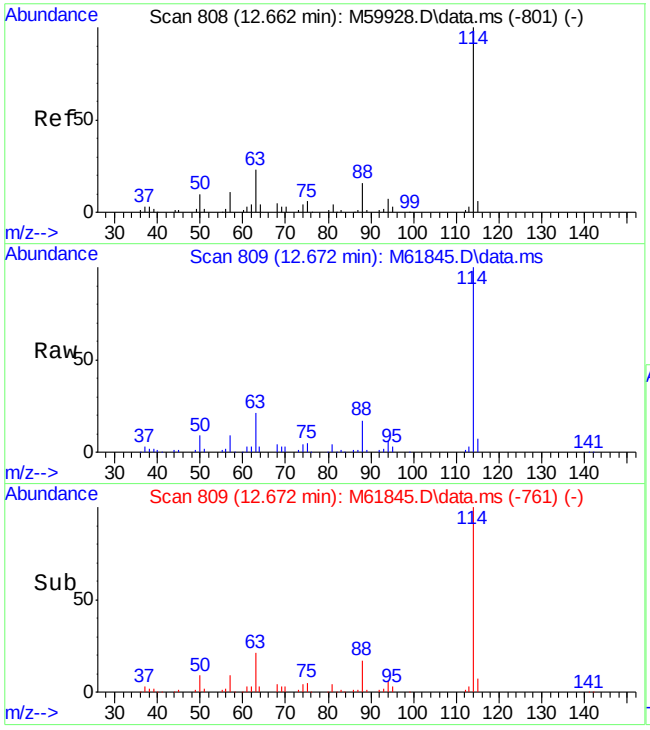




#38
Cyclohexane
Concen: 1.02 ppb
RT: 11.933 min Scan# 739
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 56 Resp: 13018

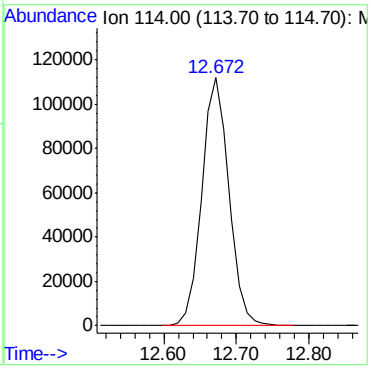
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 58.5 | 46.3 | 86.3 |
| 84 | 77.0 | 56.0 | 96.0 |

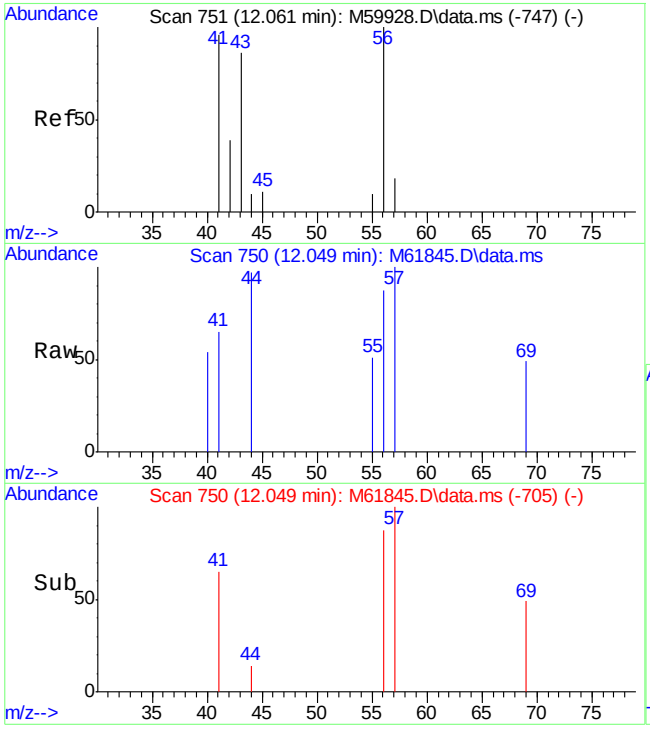





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:114 Resp: 289895

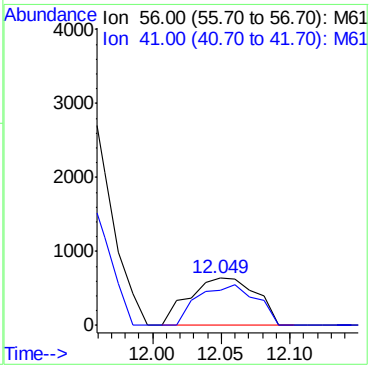


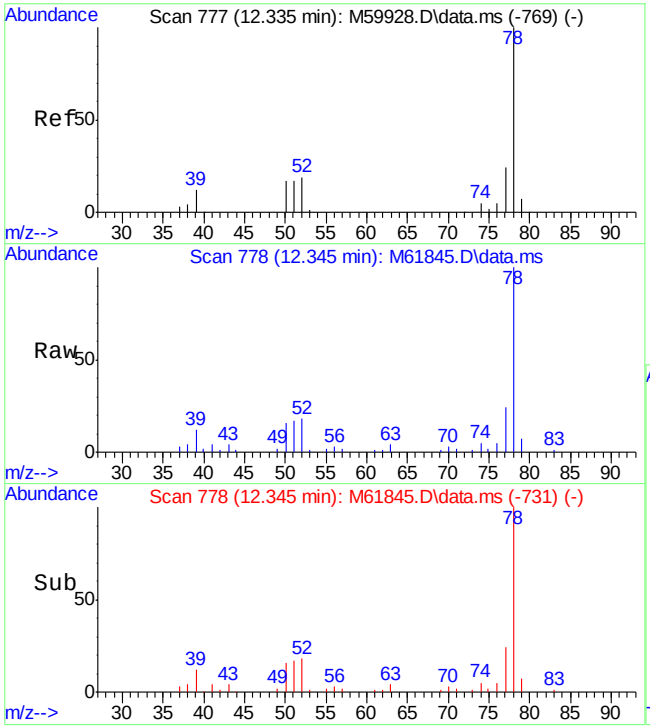




#42
n-Butyl Alcohol
Concen: 15.53 ppb
RT: 12.049 min Scan# 750
Delta R.T. -0.022 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 56 Resp: 2180

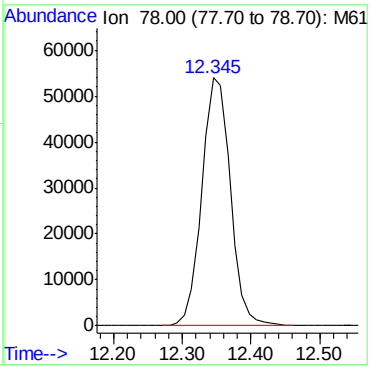
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 74.1 | 63.5 | 103.5 |

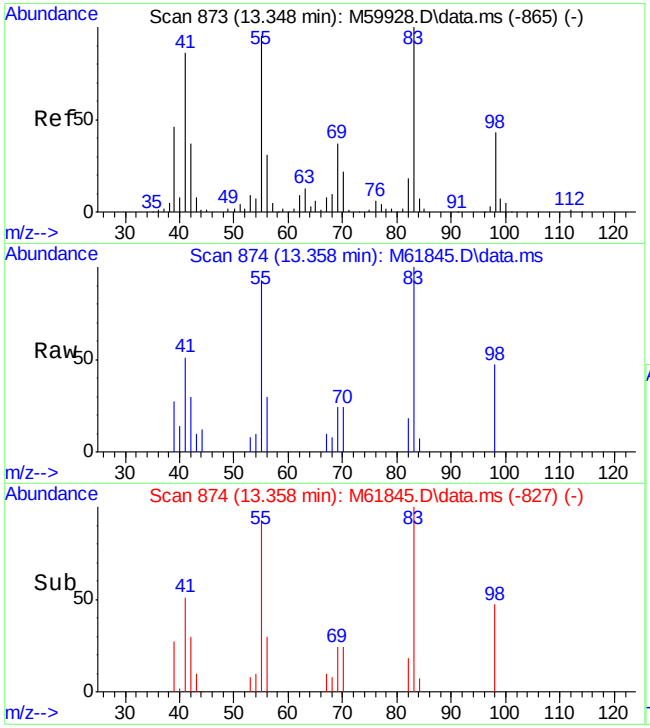





#45
Benzene
Concen: 6.15 ppb
RT: 12.345 min Scan# 778
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 78 Resp: 155925

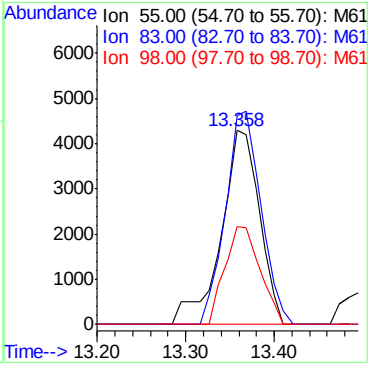


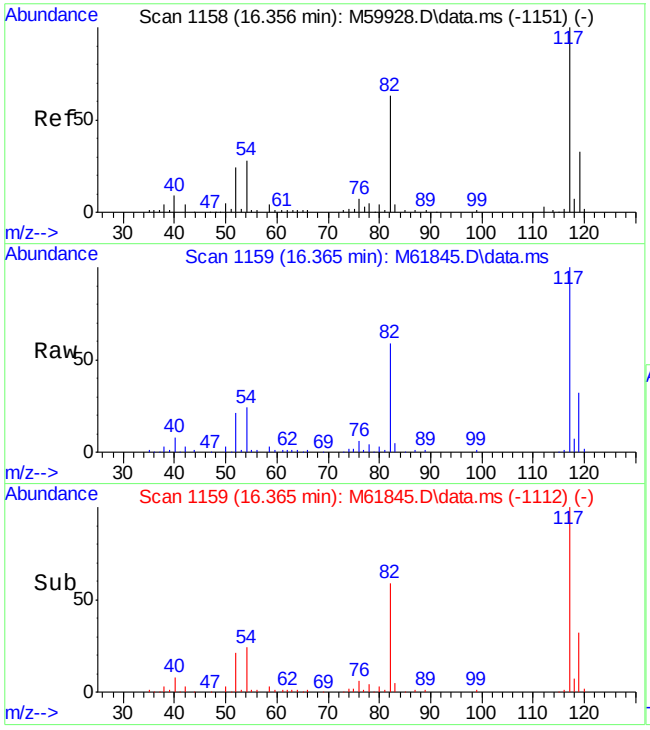




#48
Methylcyclohexane
Concen: 1.22 ppb
RT: 13.358 min Scan# 874
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 55 Resp: 12982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 101.6 | 84.5 | 124.5 |
| 98 | 46.1 | 27.0 | 67.0 |

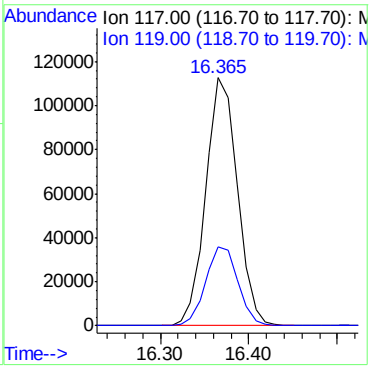


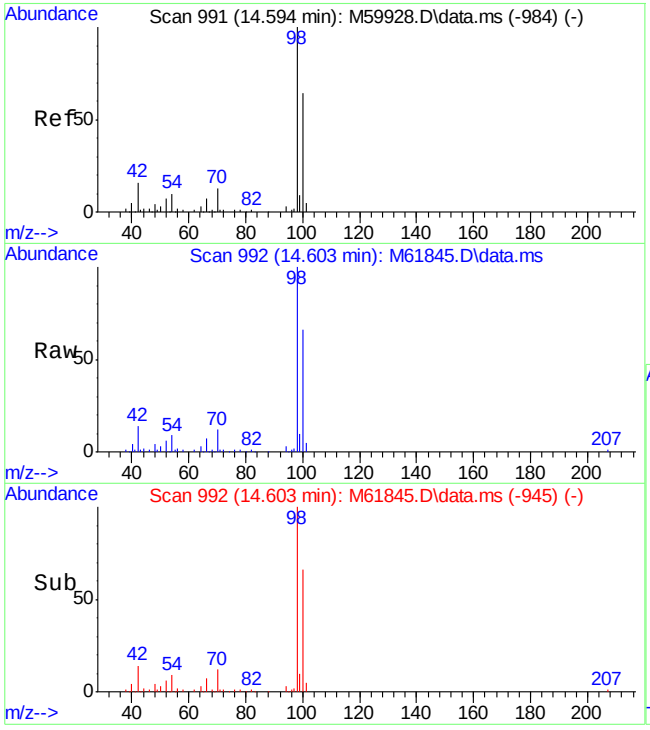



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:117 Resp: 279960

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.7 | 11.2 | 51.2 |

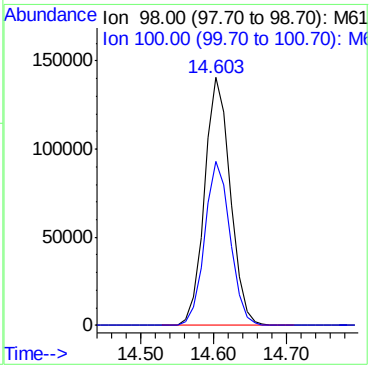


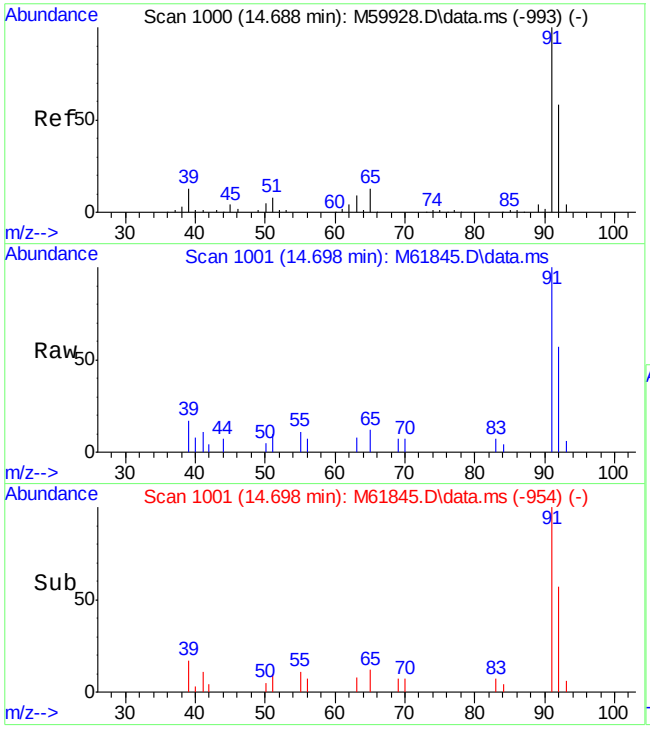




#56
Toluene-d8
Concen: 18.86 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 98 Resp: 344609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 44.3 | 84.3 |

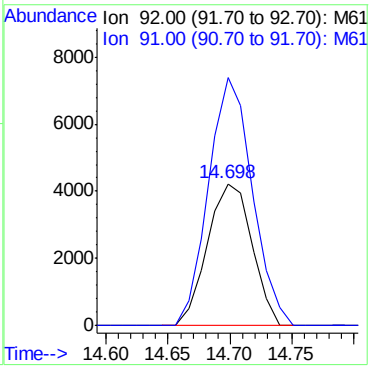


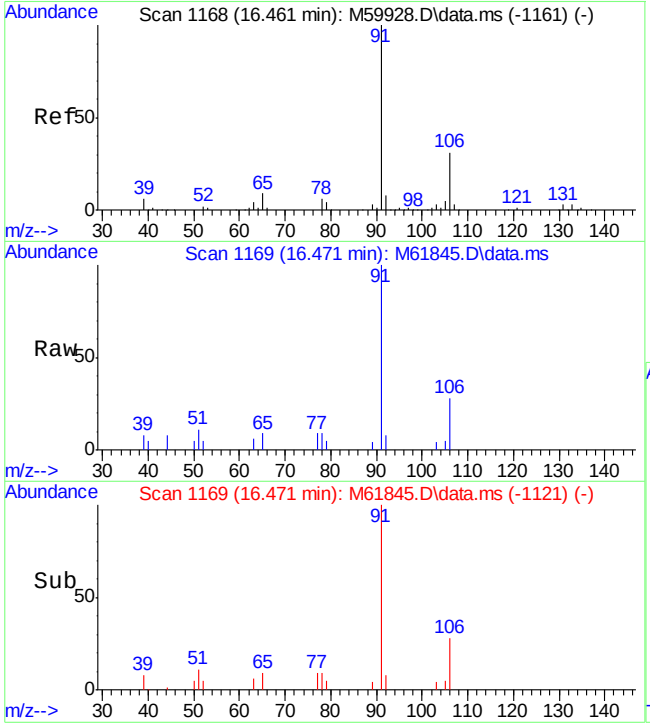



#57
Toluene
Concen: 0.69 ppb
RT: 14.698 min Scan# 1001
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 92 Resp: 10590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.4 | 150.5 | 190.5 |

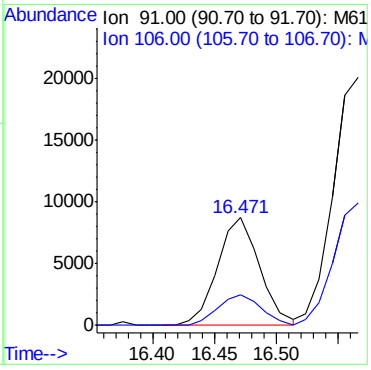


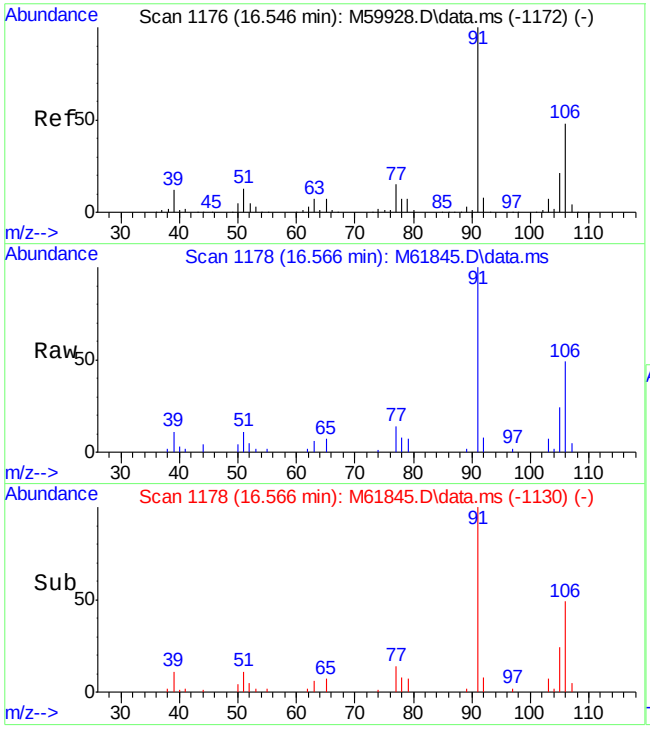




#67
Ethyl Benzene
Concen: 0.72 ppb
RT: 16.471 min Scan# 1169
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 91 Resp: 20910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.2 | 10.2 | 50.2 |

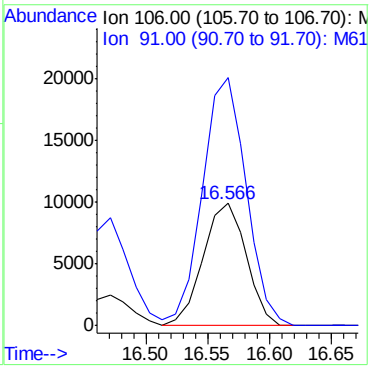


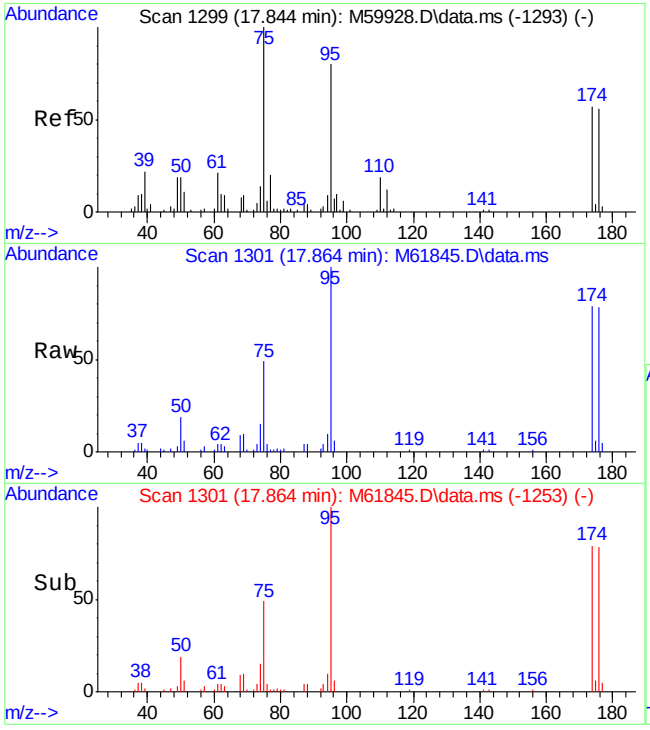



#68
Xylene, m+p
Concen: 2.28 ppb
RT: 16.566 min Scan# 1178
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:106 Resp: 24160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 204.5 | 191.5 | 231.5 |

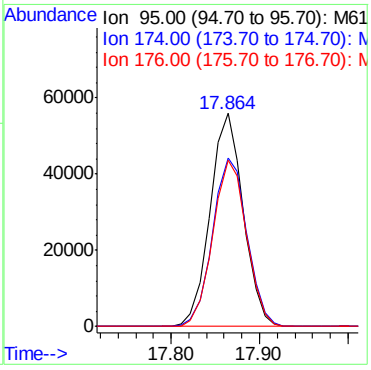


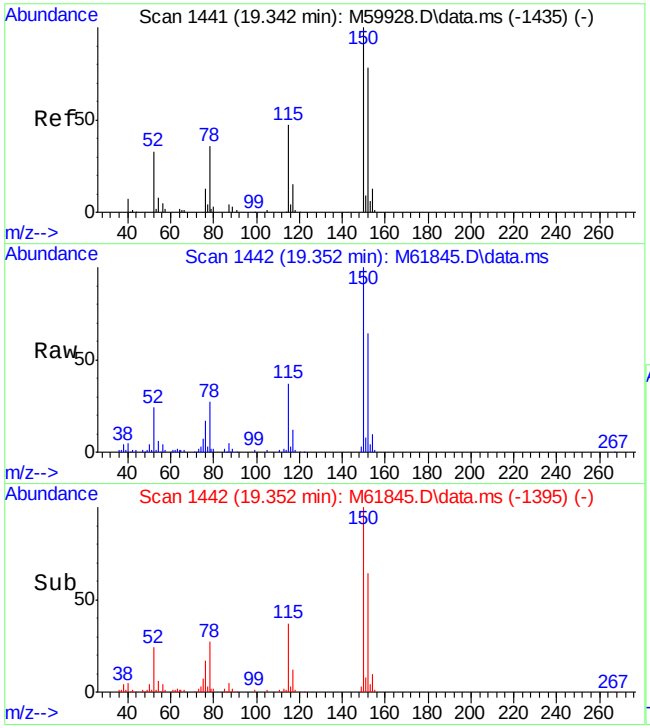




#74
4-Bromofluorobenzene
Concen: 20.24 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion: 95 Resp: 145358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 81.9 | 54.3 | 94.3 |
| 176 | 79.3 | 51.5 | 91.5 |

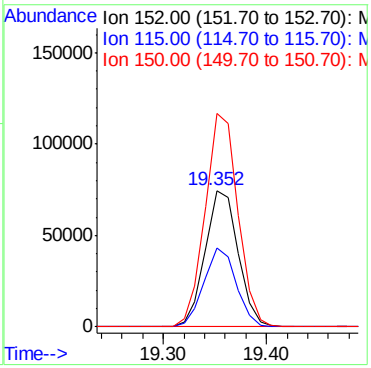


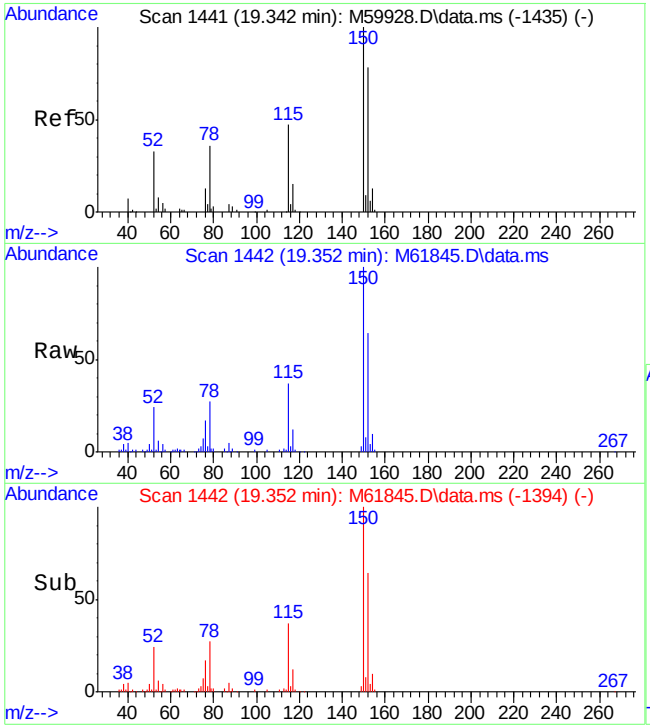



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. -0.001 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:152 Resp: 165193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 56.7 | 40.9 | 80.9 |
| 150 | 155.8 | 178.6 | 218.6# |

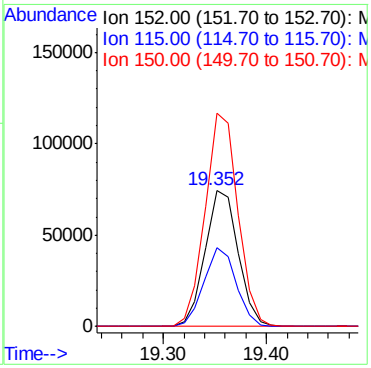


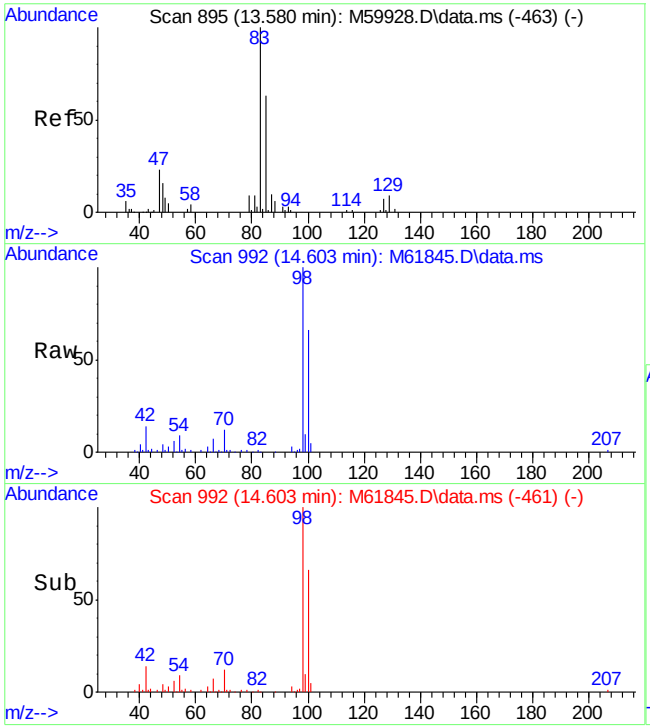




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. 0.010 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:152 Resp: 165193

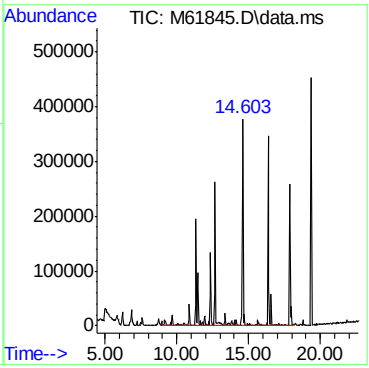
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 56.7 | 37.3 | 77.3 |
| 150 | 155.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 29.27 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61845.D
Acq: 13 Jul 2016 7:29 pm

Tgt Ion:TIC Resp: 5985185



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49986.D
Acq On : 12 Jul 2016 7:40 pm
Operator : johannat
Sample : C46435-18R
Misc : MS1912,VL1499,5.37,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 02 11:01:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

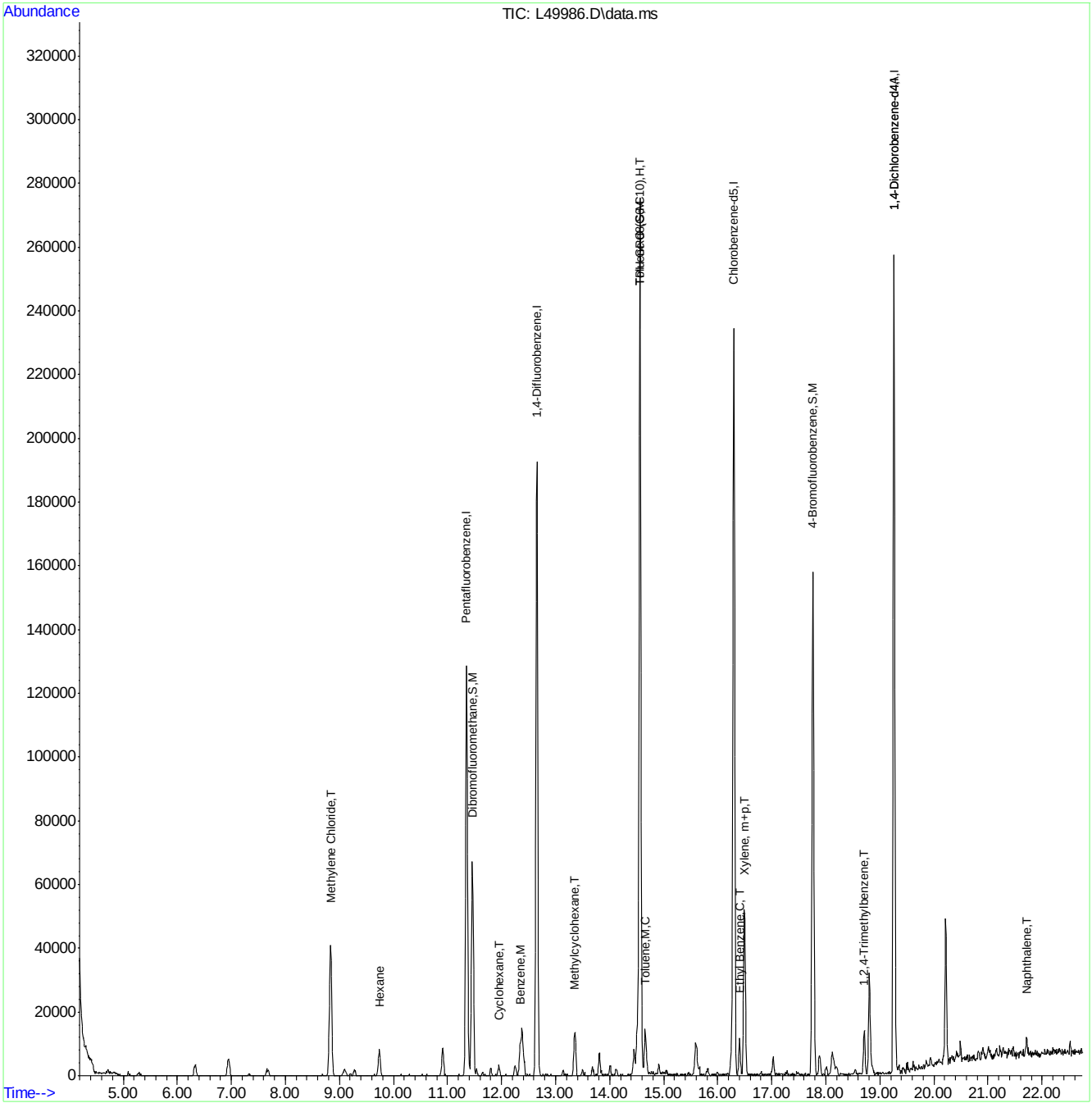
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1175405 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2023954 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1741130 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 797205 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 797205 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 616465 | 17.52 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 87.60% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2436357 | 19.81 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.05% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 905510 | 17.72 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 88.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 19) Methylene Chloride | 8.836 | 84 | 275721 | 7.14 | ug/Kg | 93 |
| 24) Hexane | 9.741 | 57 | 59985 | 1.62 | ug/Kg | 96 |
| 38) Cyclohexane | 11.951 | 56 | 27484 | 0.52 | ug/Kg | 92 |
| 45) Benzene | 12.339 | 78 | 74242 | 0.49 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.348 | 55 | 84817 | 1.79 | ug/Kg | 95 |
| 57) Toluene | 14.658 | 92 | 78884 | 0.91 | ug/Kg | 93 |
| 67) Ethyl Benzene | 16.404 | 91 | 133006 | 0.79 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.502 | 106 | 209791 | 3.52 | ug/Kg | 100 |
| 86) 1,2,4-Trimethylbenzene | 18.712 | 105 | 140061 | 1.06 | ug/Kg | 90 |
| 97) Naphthalene | 21.718 | 128 | 100629 | 0.83 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 32699215m | 83.55 | ug/Kg | |

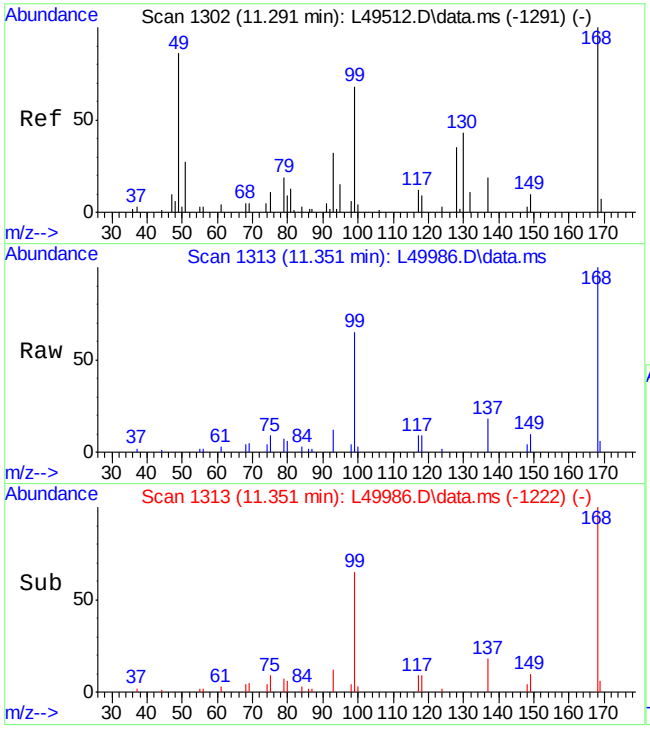
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49986.D
Acq On : 12 Jul 2016 7:40 pm
Operator : johannat
Sample : C46435-18R
Misc : MS1912,VL1499,5.37,,,,1
ALS Vial : 19 Sample Multiplier: 1

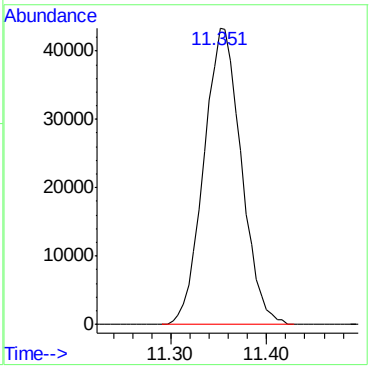
Quant Time: Aug 02 11:01:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

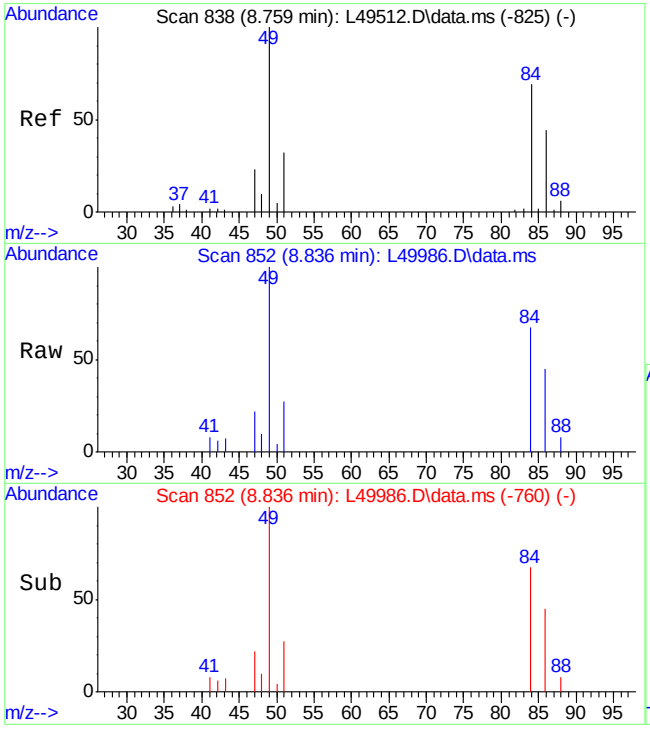





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:168 Resp: 1175405

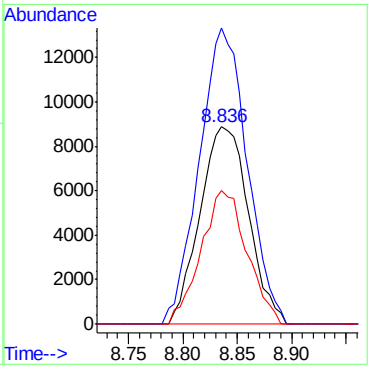


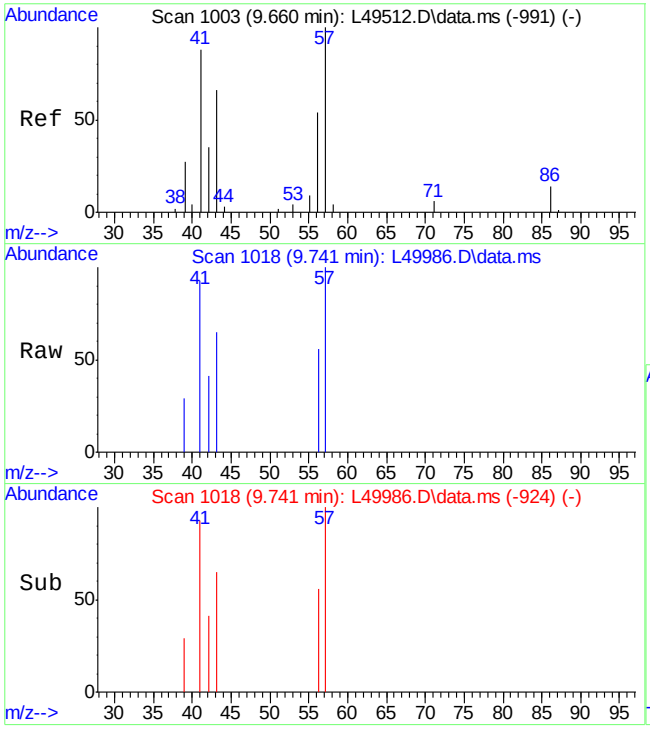




#19
Methylene Chloride
Concen: 7.14 ug/Kg
RT: 8.836 min Scan# 852
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 84 Resp: 275721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 147.8 | 140.4 | 180.4 |
| 86 | 63.9 | 44.5 | 84.5 |

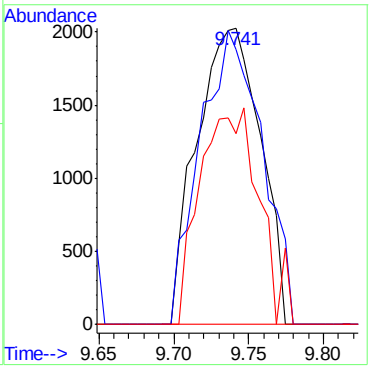


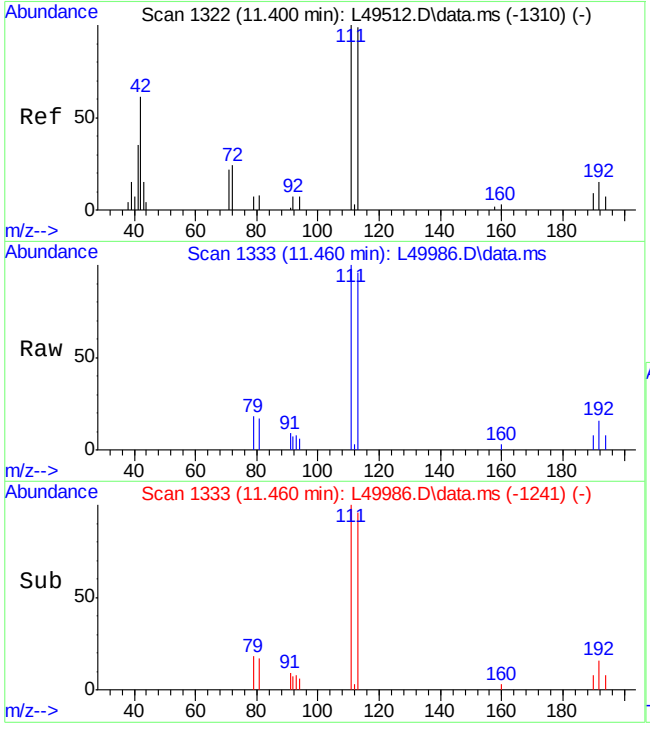



#24
Hexane
Concen: 1.62 ug/Kg
RT: 9.741 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 57 Resp: 59985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 96.5 | 73.8 | 110.8 |
| 43 | 67.9 | 56.6 | 84.8 |

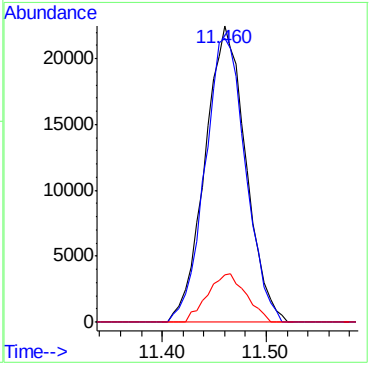


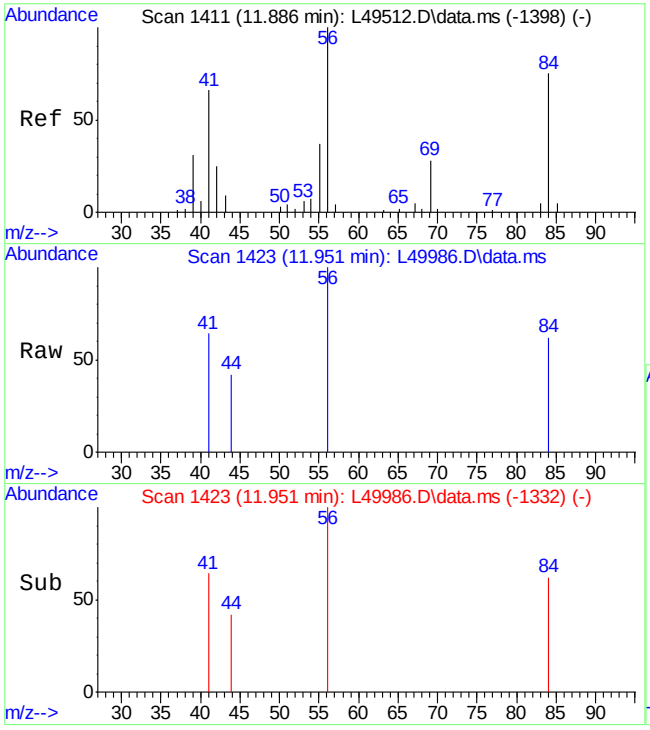




#36
Dibromofluoromethane
Concen: 17.52 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:111 Resp: 616465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.8 | 78.6 | 118.6 |
| 192 | 15.5 | 0.0 | 34.1 |

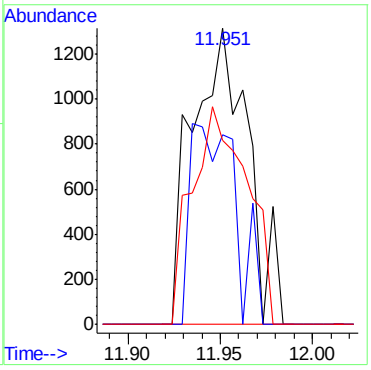


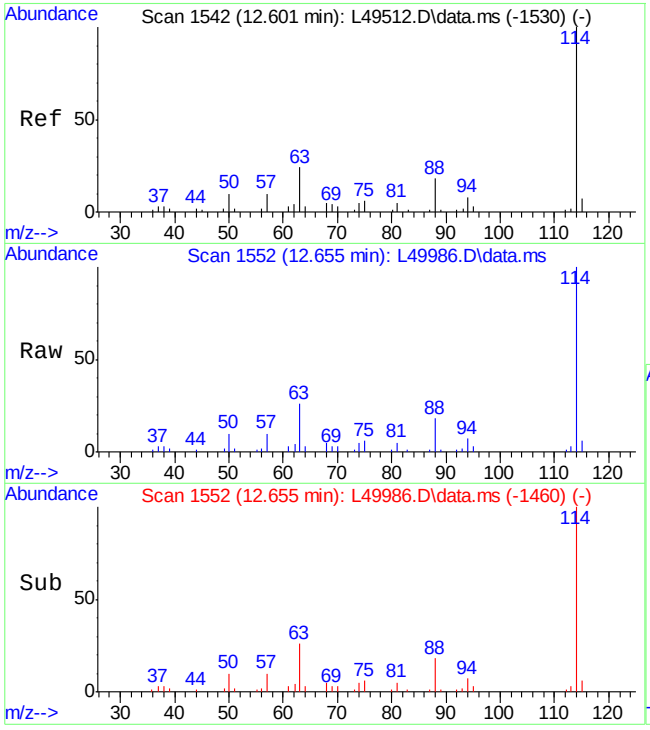



#38
Cyclohexane
Concen: 0.52 ug/Kg
RT: 11.951 min Scan# 1423
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 56 Resp: 27484

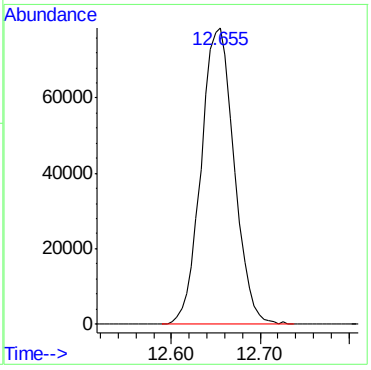
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 55.9 | 53.7 | 80.5 |
| 84 | 73.6 | 60.5 | 90.7 |

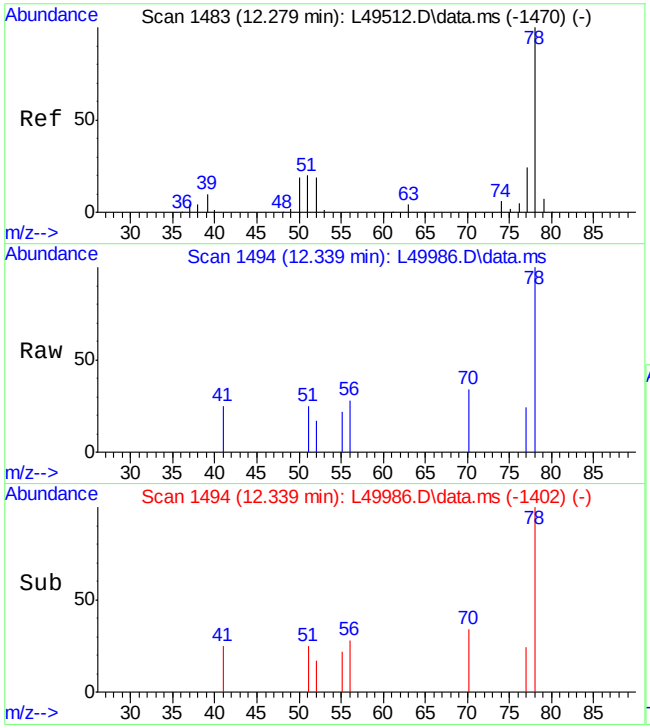



#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

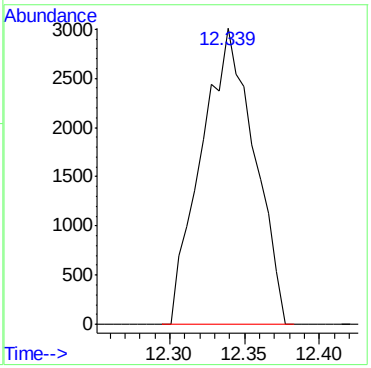
Tgt Ion:114 Resp: 2023954

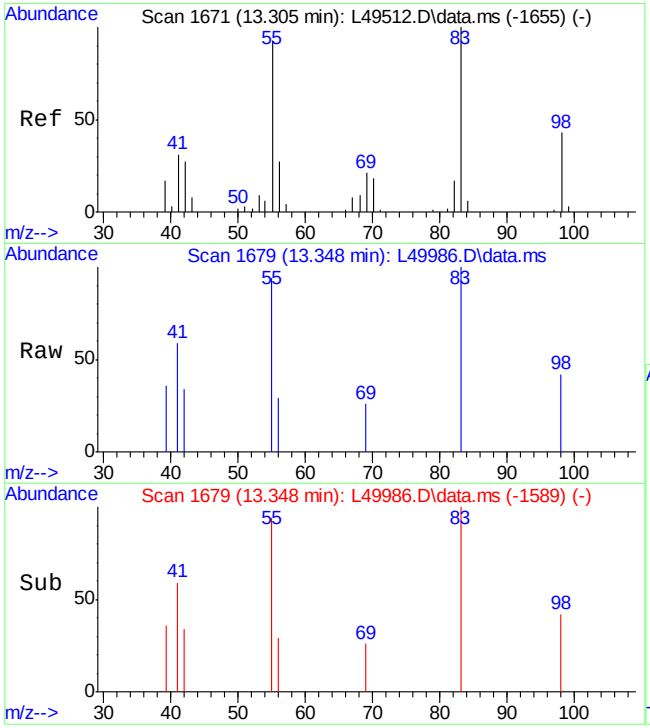





#45
Benzene
Concen: 0.49 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 78 Resp: 74242

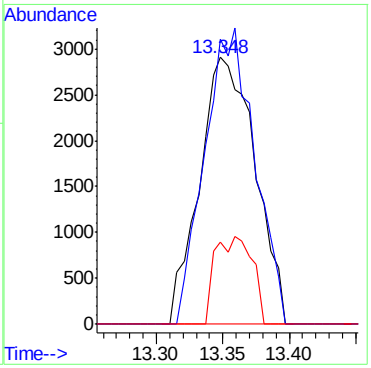


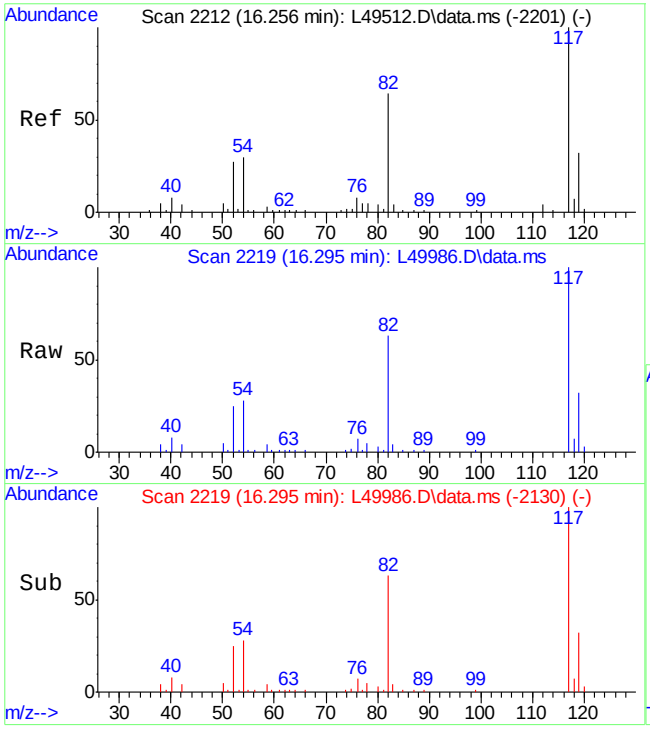




#48
Methylcyclohexane
Concen: 1.79 ug/Kg
RT: 13.348 min Scan# 1679
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 55 Resp: 84817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 99.8 | 80.6 | 120.6 |
| 56 | 22.1 | 11.5 | 51.5 |

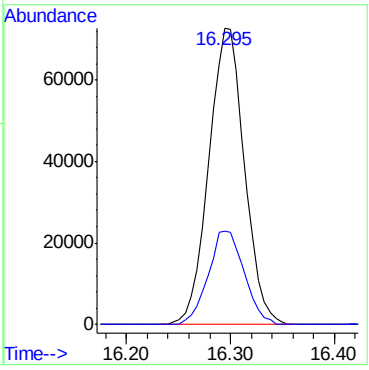


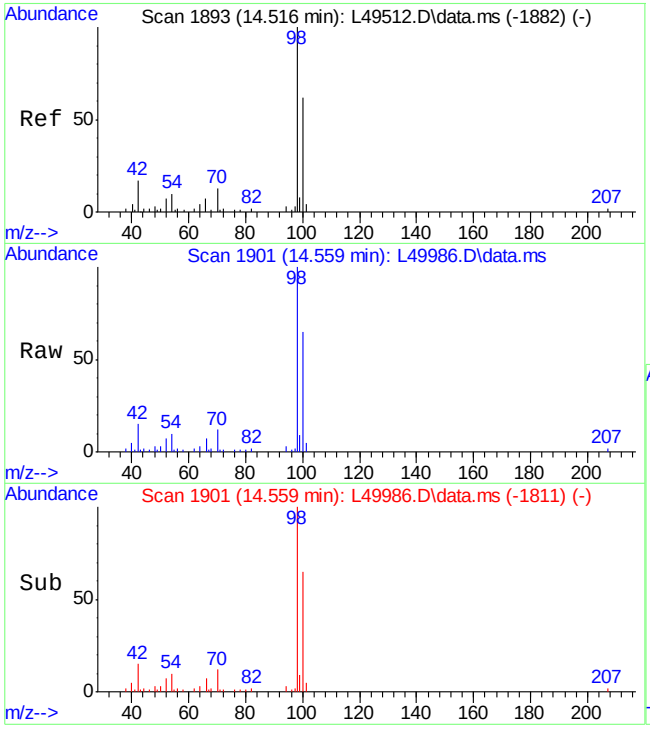



#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:117 Resp: 1741130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.7 | 10.2 | 50.2 |

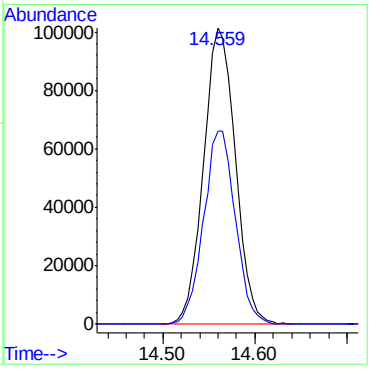


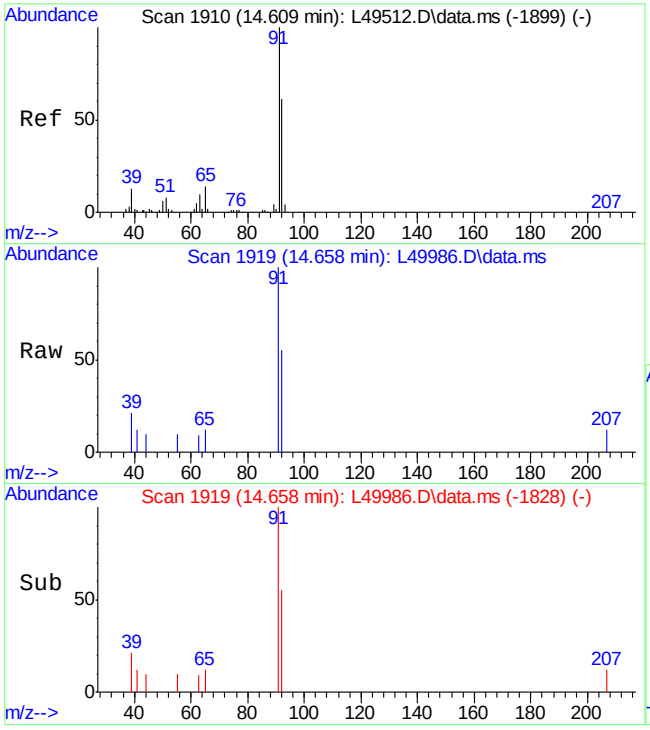




#56
Toluene-d8
Concen: 19.81 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 98 Resp: 2436357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 45.2 | 85.2 |

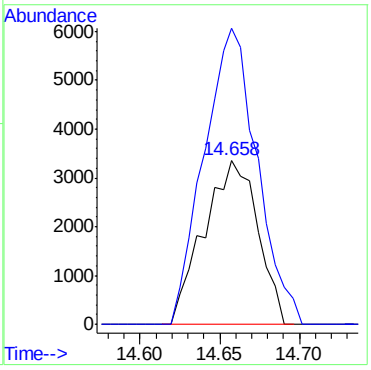


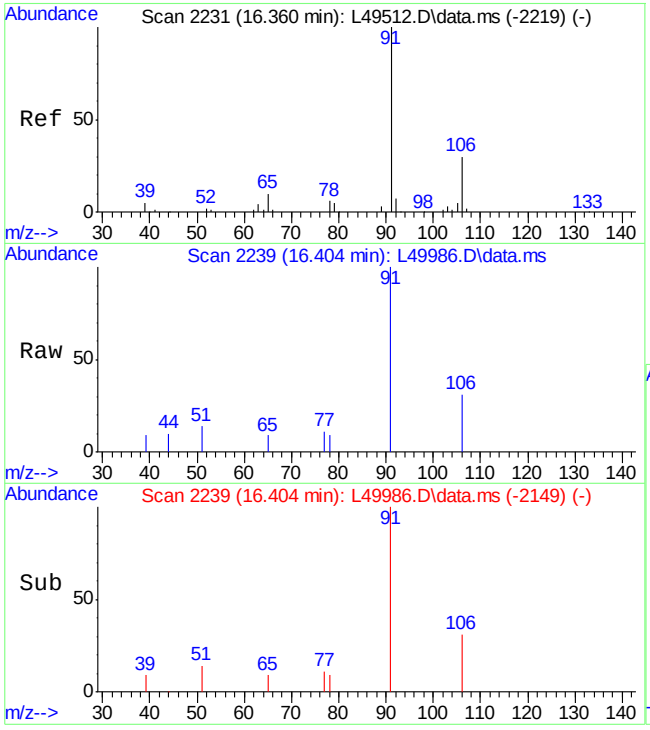



#57
Toluene
Concen: 0.91 ug/Kg
RT: 14.658 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 92 Resp: 78884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 178.2 | 149.2 | 189.2 |

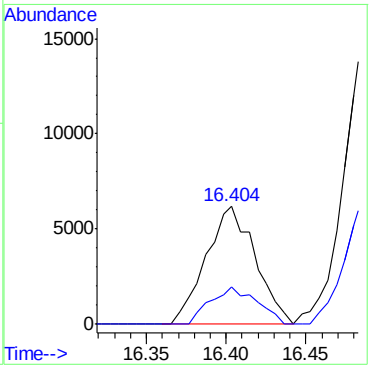


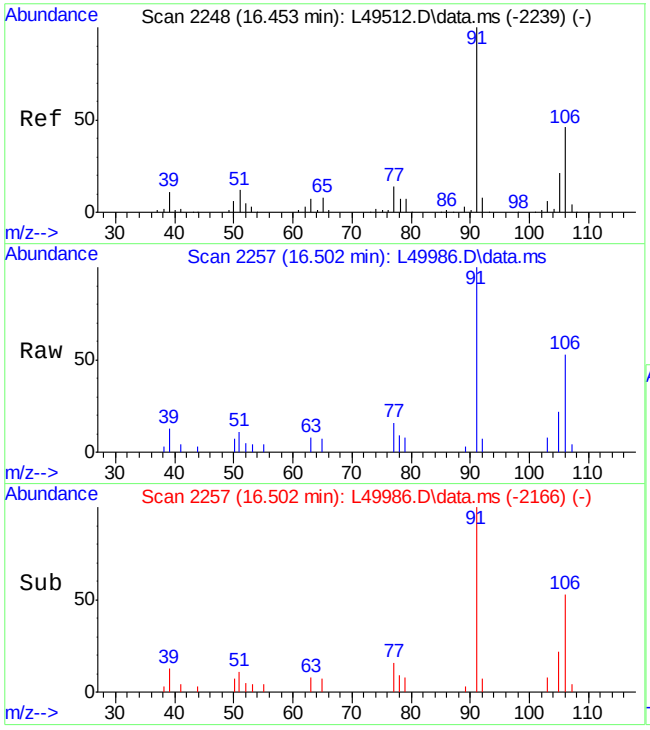




#67
Ethyl Benzene
Concen: 0.79 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 91 Resp: 133006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.3 | 8.6 | 48.6 |

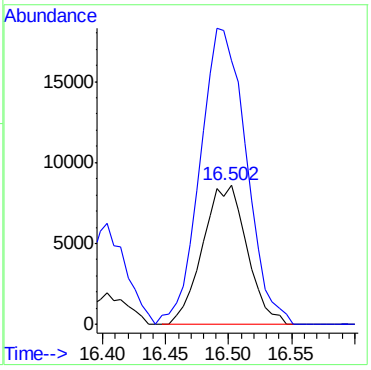


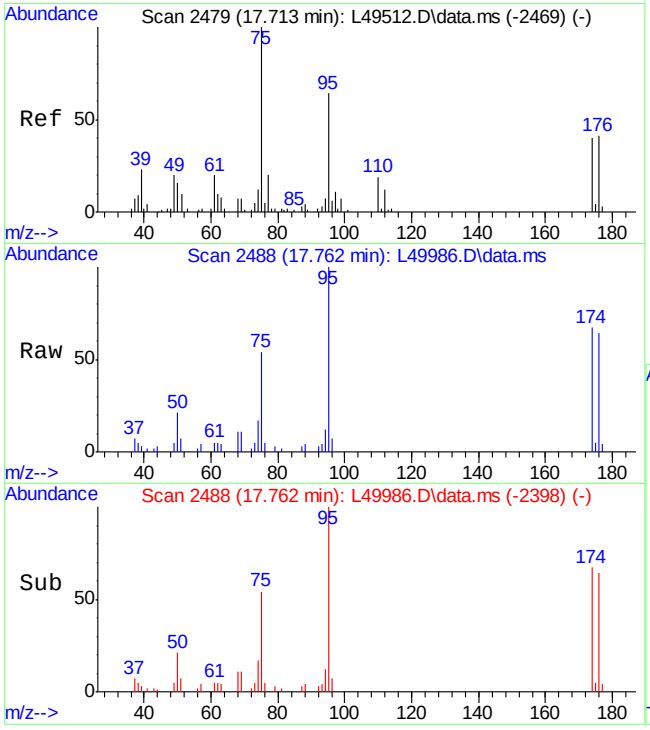



#68
Xylene, m+p
Concen: 3.52 ug/Kg
RT: 16.502 min Scan# 2257
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:106 Resp: 209791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.5 | 202.1 | 242.1 |

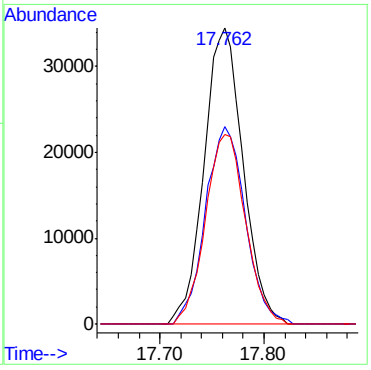


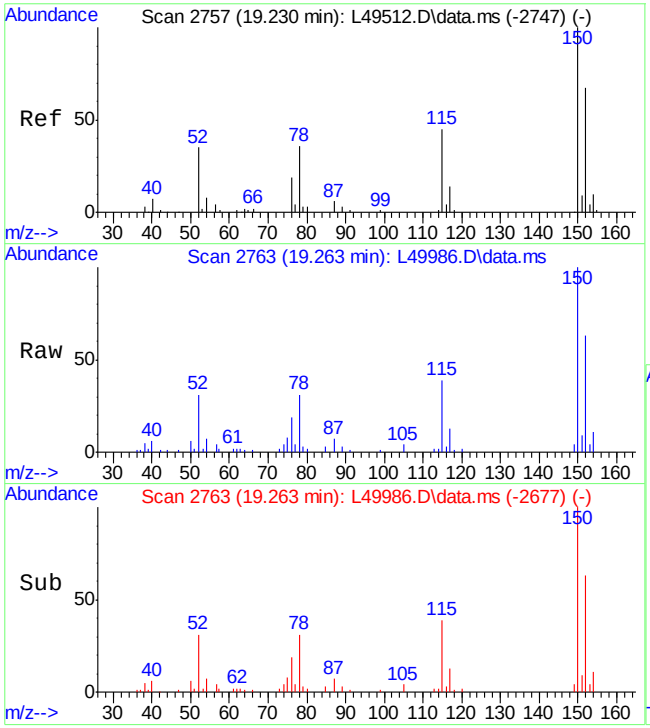




#74
4-Bromofluorobenzene
Concen: 17.72 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 95 Resp: 905510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.1 | 41.6 | 81.6 |
| 176 | 65.9 | 39.6 | 79.6 |

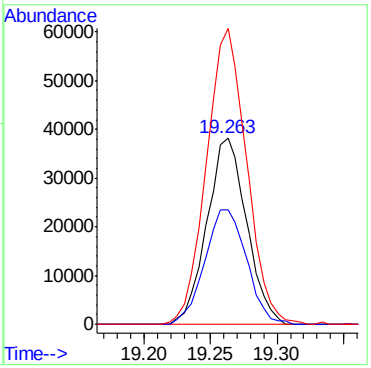


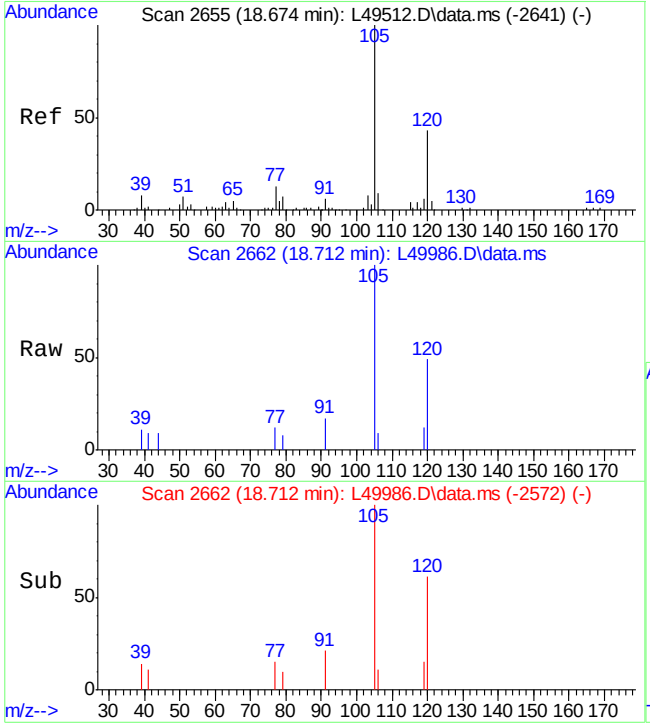



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:152 Resp: 797205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 48.8 | 88.8 |
| 150 | 160.7 | 174.3 | 214.3# |

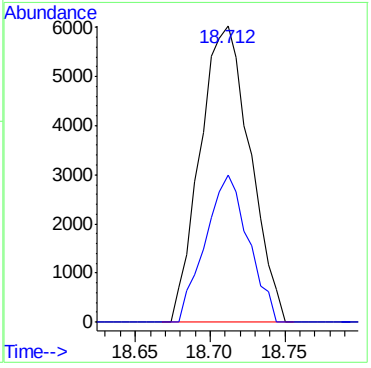


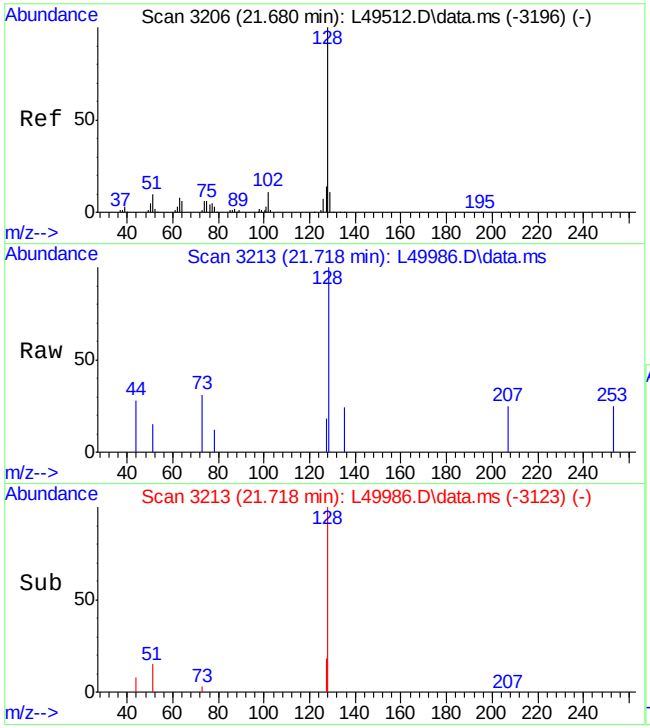




#86
1,2,4-Trimethylbenzene
Concen: 1.06 ug/Kg
RT: 18.712 min Scan# 2662
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:105 Resp: 140061

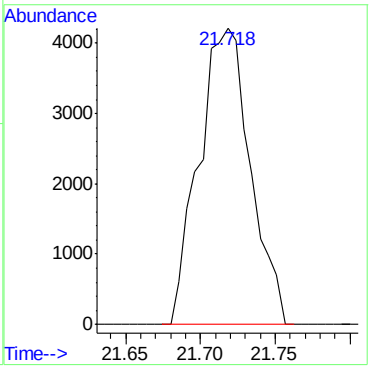
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.8 | 29.7 | 69.7 |

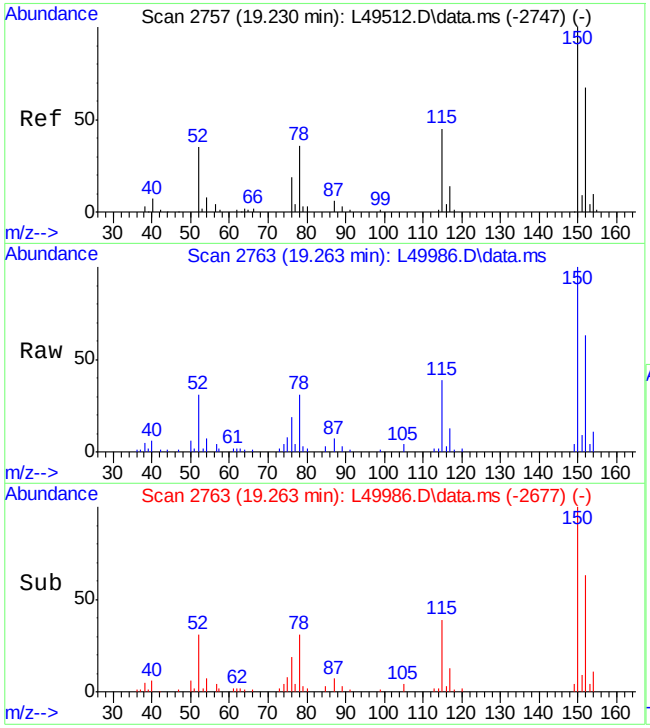





#97
Naphthalene
Concen: 0.83 ug/Kg
RT: 21.718 min Scan# 3213
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:128 Resp: 100629

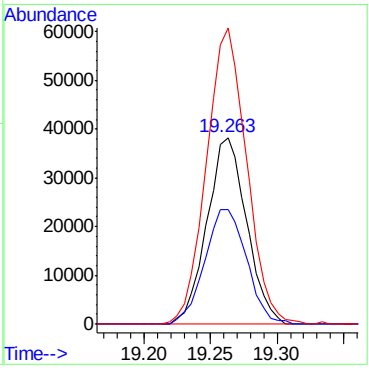


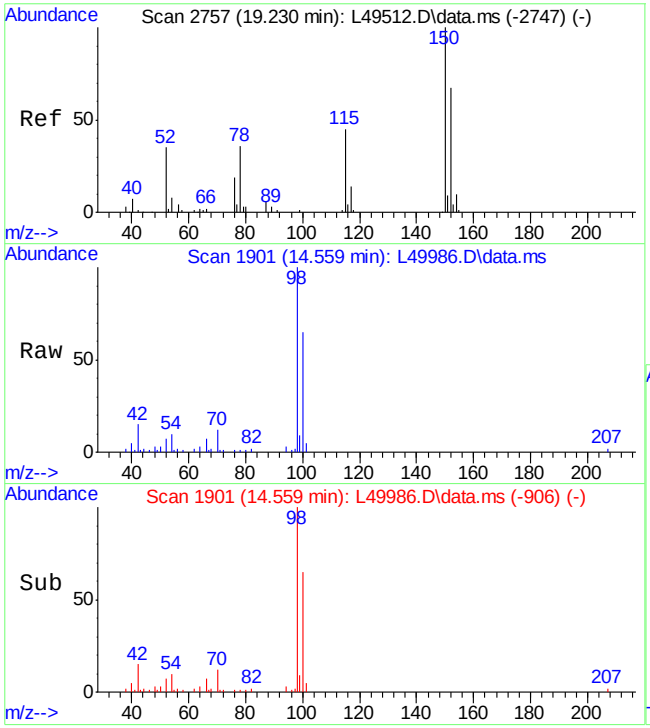




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:152 Resp: 797205

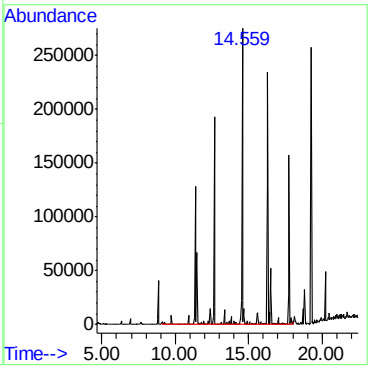
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 41.6 | 81.6 |
| 150 | 160.7 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 83.55 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:TIC Resp:32699215



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49986.D
Acq On : 12 Jul 2016 7:40 pm
Operator : johannat
Sample : C46435-18R
Misc : MS1912,VL1499,5.37,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 02 11:01:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

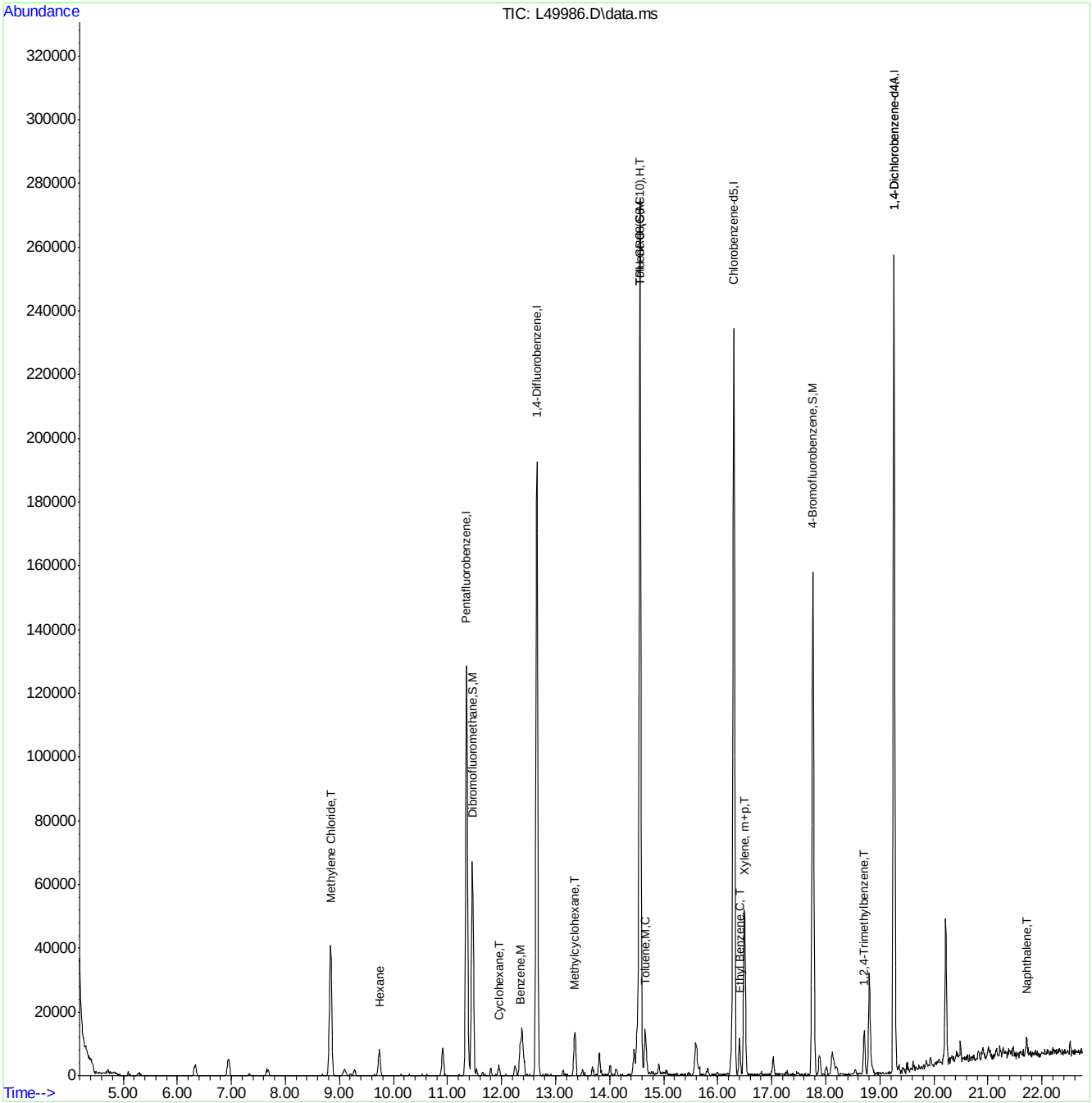
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1175405 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.655 | 114 | 2023954 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1741130 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 797205 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 797205 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 616465 | 17.52 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 87.60% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2436357 | 19.81 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 99.05% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 905510 | 17.72 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 88.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 19) Methylene Chloride | 8.836 | 84 | 275721 | 7.14 | ug/Kg | 93 |
| 24) Hexane | 9.741 | 57 | 59985 | 1.62 | ug/Kg | 96 |
| 38) Cyclohexane | 11.951 | 56 | 27484 | 0.52 | ug/Kg | 92 |
| 45) Benzene | 12.339 | 78 | 74242 | 0.49 | ug/Kg | 100 |
| 48) Methylcyclohexane | 13.348 | 55 | 84817 | 1.79 | ug/Kg | 95 |
| 57) Toluene | 14.658 | 92 | 78884 | 0.91 | ug/Kg | 93 |
| 67) Ethyl Benzene | 16.404 | 91 | 133006 | 0.79 | ug/Kg | 99 |
| 68) Xylene, m+p | 16.502 | 106 | 209791 | 3.52 | ug/Kg | 100 |
| 86) 1,2,4-Trimethylbenzene | 18.712 | 105 | 140061 | 1.06 | ug/Kg | 90 |
| 97) Naphthalene | 21.718 | 128 | 100629 | 0.83 | ug/Kg | 100 |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 32699215m | 83.55 | ug/Kg | |

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

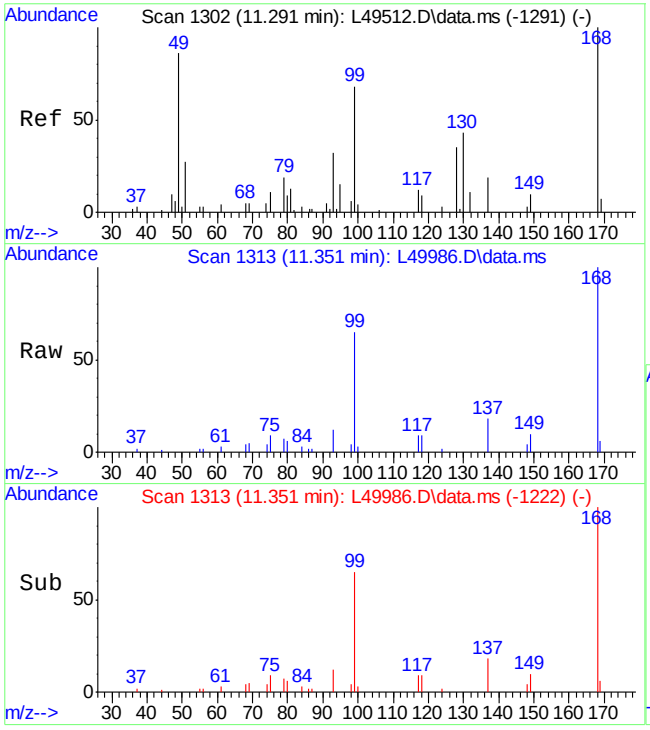
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49986.D
Acq On : 12 Jul 2016 7:40 pm
Operator : johannat
Sample : C46435-18R
Misc : MS1912,VL1499,5.37,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 02 11:01:51 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

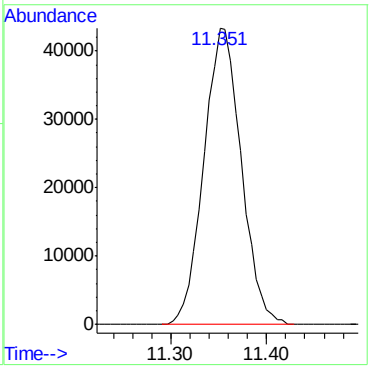


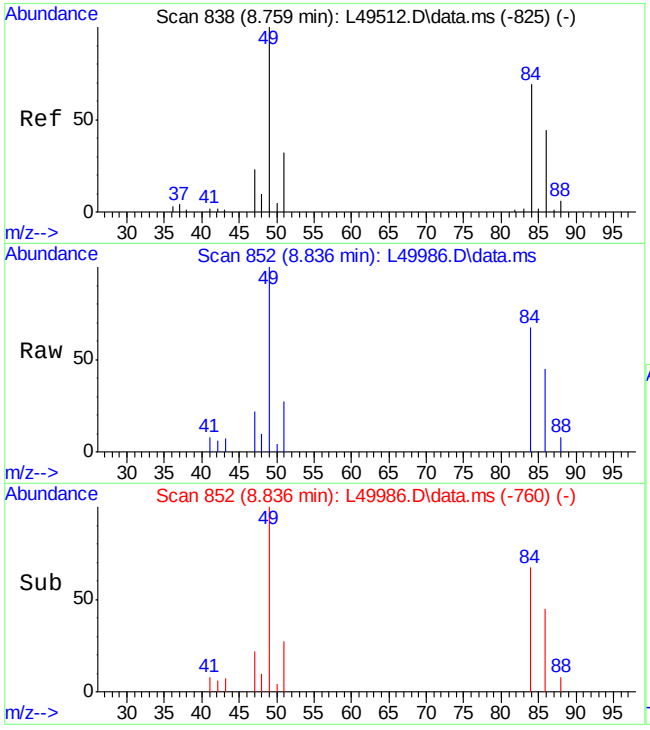

VL1485S.M Tue Aug 02 11:02:43 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:168 Resp: 1175405

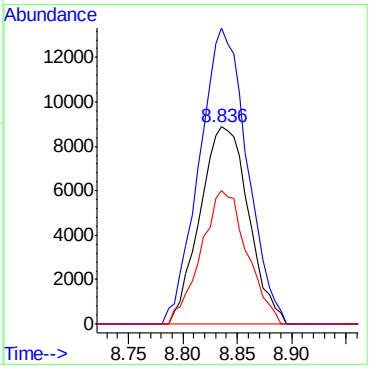


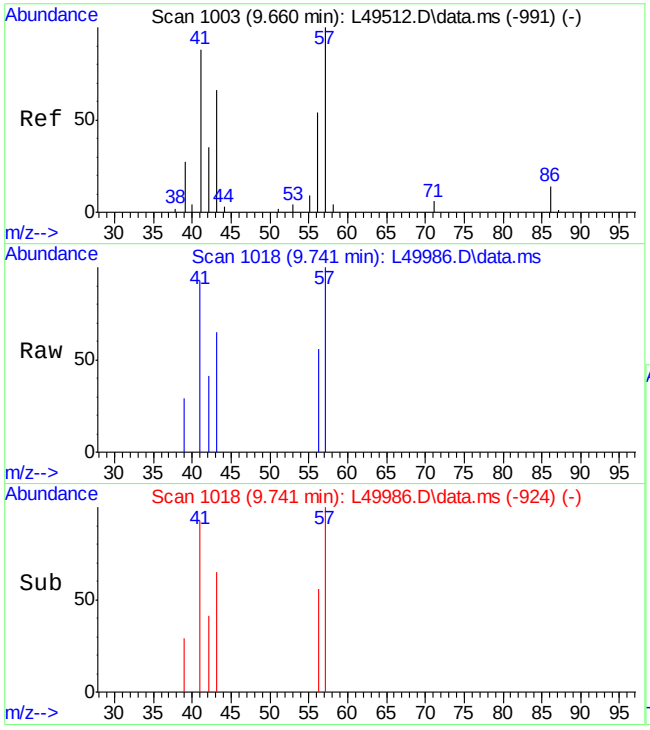




#19
Methylene Chloride
Concen: 7.14 ug/Kg
RT: 8.836 min Scan# 852
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 84 Resp: 275721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 147.8 | 140.4 | 180.4 |
| 86 | 63.9 | 44.5 | 84.5 |

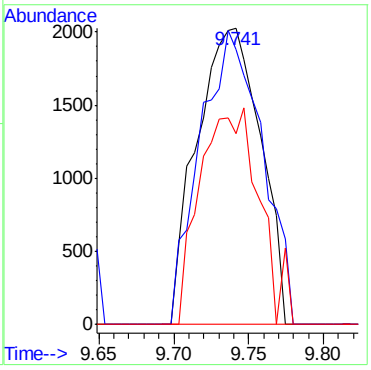


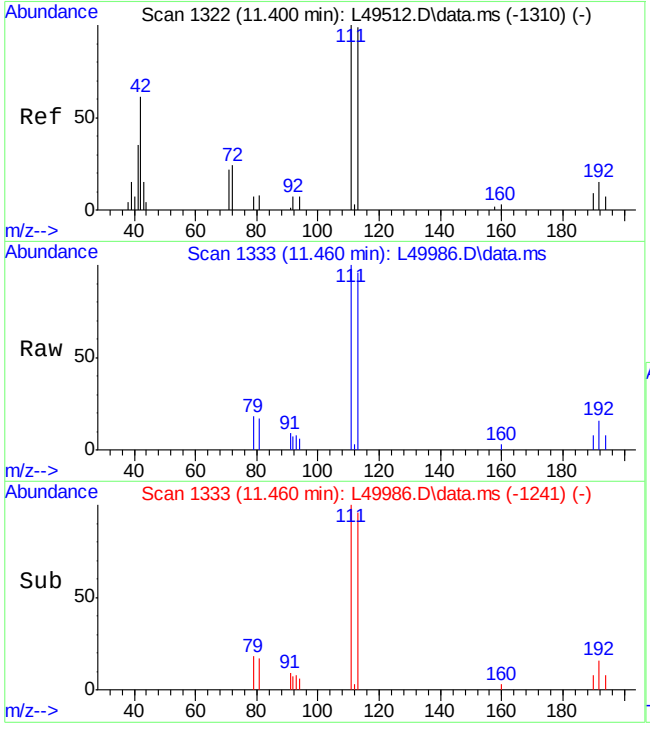



#24
Hexane
Concen: 1.62 ug/Kg
RT: 9.741 min Scan# 1018
Delta R.T. 0.011 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 57 Resp: 59985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 96.5 | 73.8 | 110.8 |
| 43 | 67.9 | 56.6 | 84.8 |

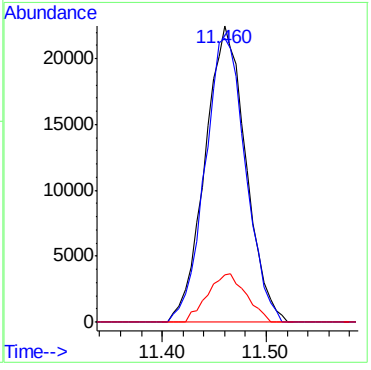


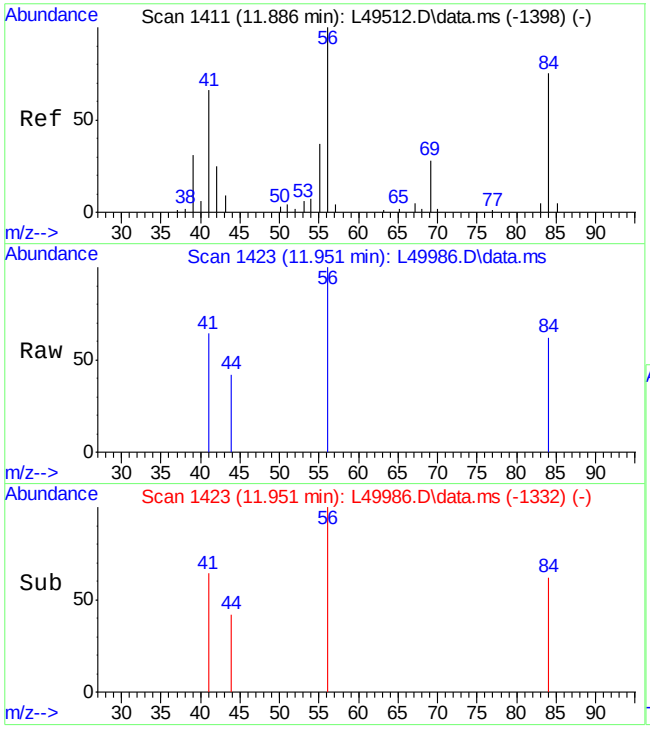




#36
Dibromofluoromethane
Concen: 17.52 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:111 Resp: 616465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 95.8 | 78.6 | 118.6 |
| 192 | 15.5 | 0.0 | 34.1 |

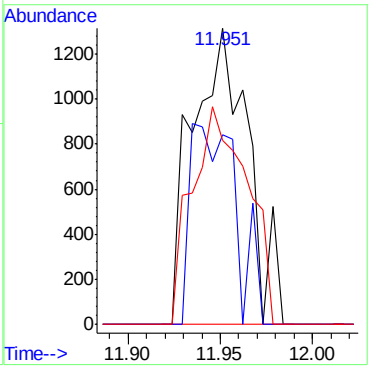


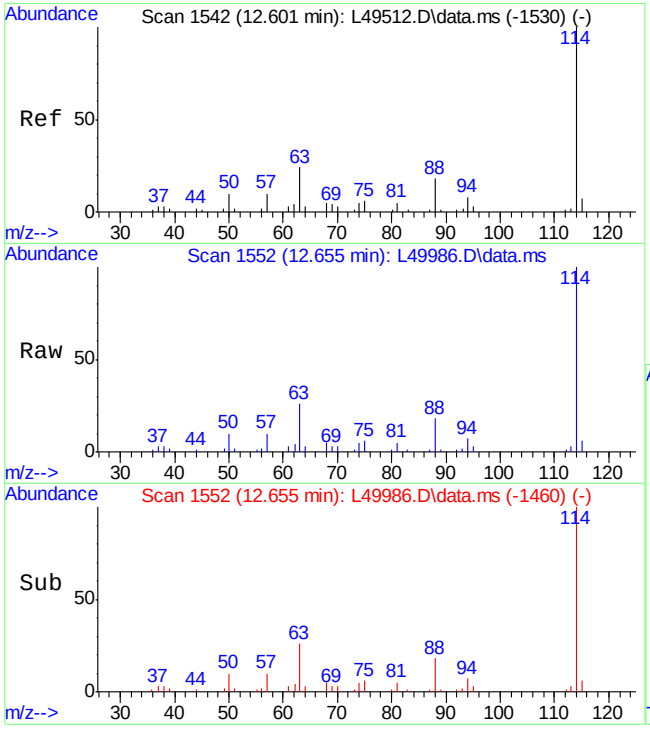



#38
Cyclohexane
Concen: 0.52 ug/Kg
RT: 11.951 min Scan# 1423
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 56 Resp: 27484

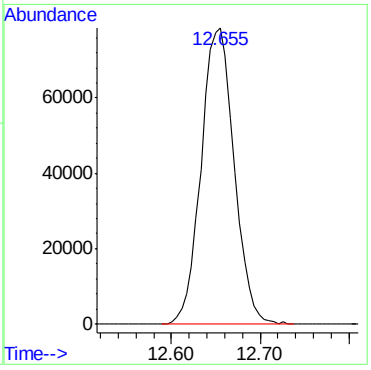
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 41 | 55.9 | 53.7 | 80.5 |
| 84 | 73.6 | 60.5 | 90.7 |

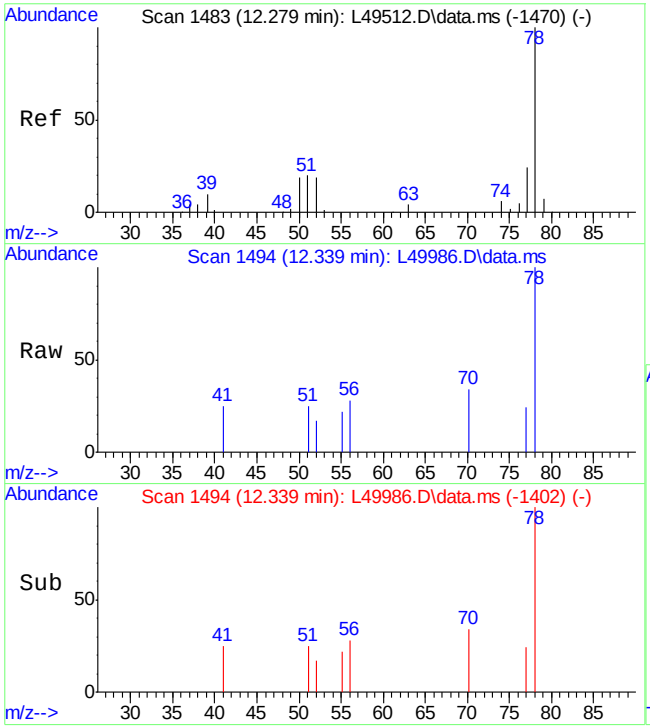



#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.655 min Scan# 1552
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

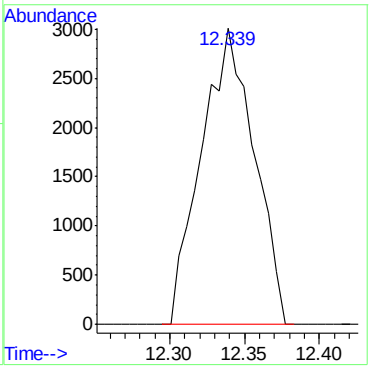
Tgt Ion:114 Resp: 2023954

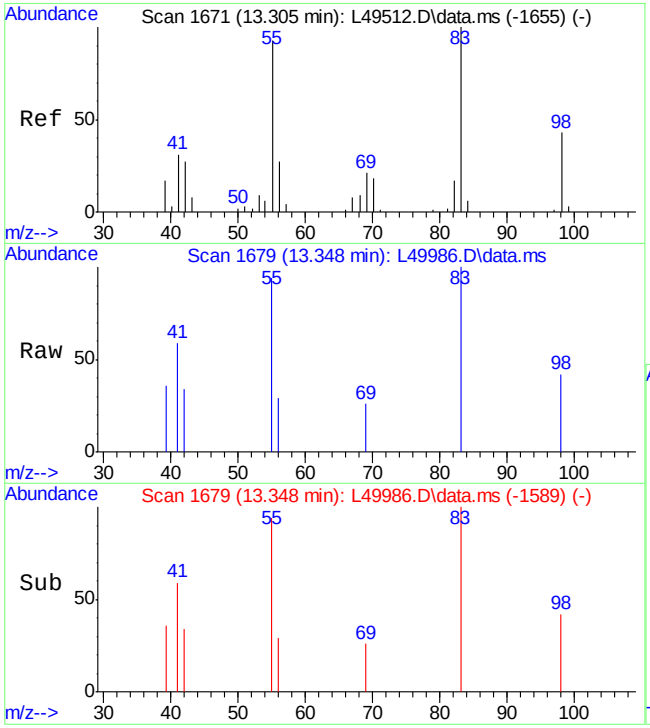





#45
Benzene
Concen: 0.49 ug/Kg
RT: 12.339 min Scan# 1494
Delta R.T. 0.000 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 78 Resp: 74242

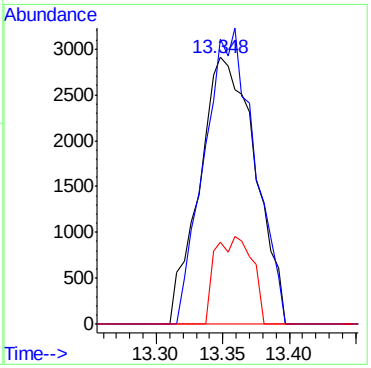


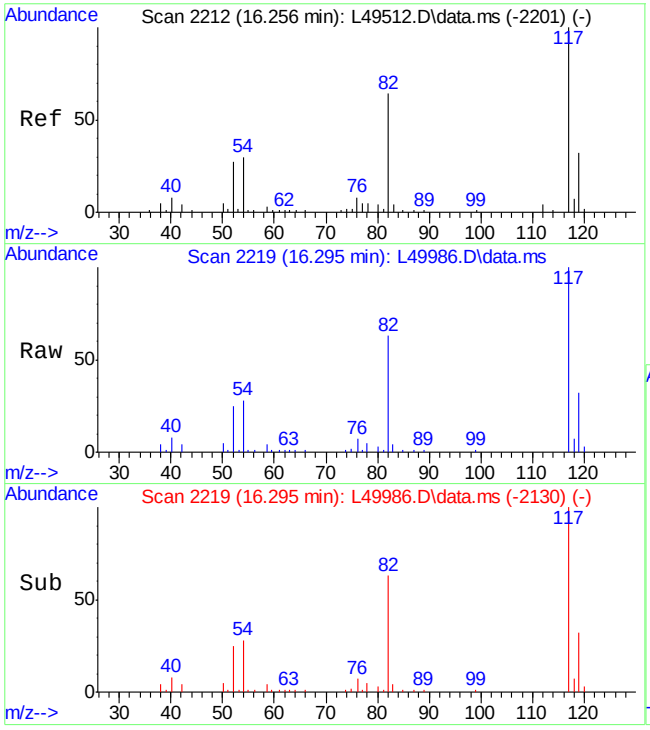




#48
Methylcyclohexane
Concen: 1.79 ug/Kg
RT: 13.348 min Scan# 1679
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 55 Resp: 84817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 55 | 100 | | |
| 83 | 99.8 | 80.6 | 120.6 |
| 56 | 22.1 | 11.5 | 51.5 |

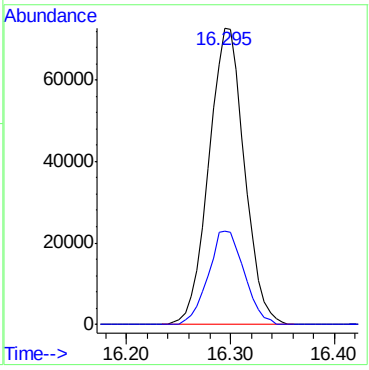


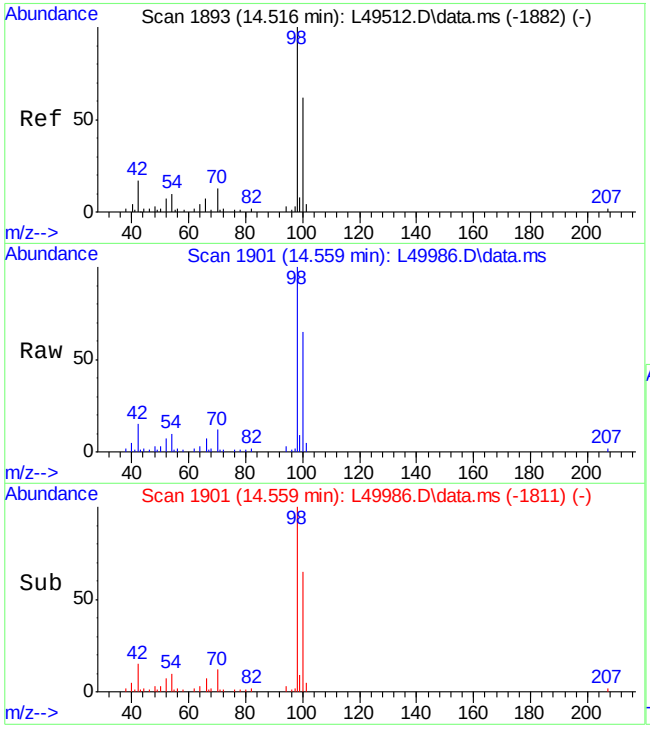



#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:117 Resp: 1741130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.7 | 10.2 | 50.2 |

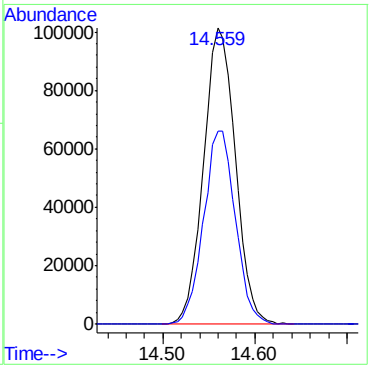


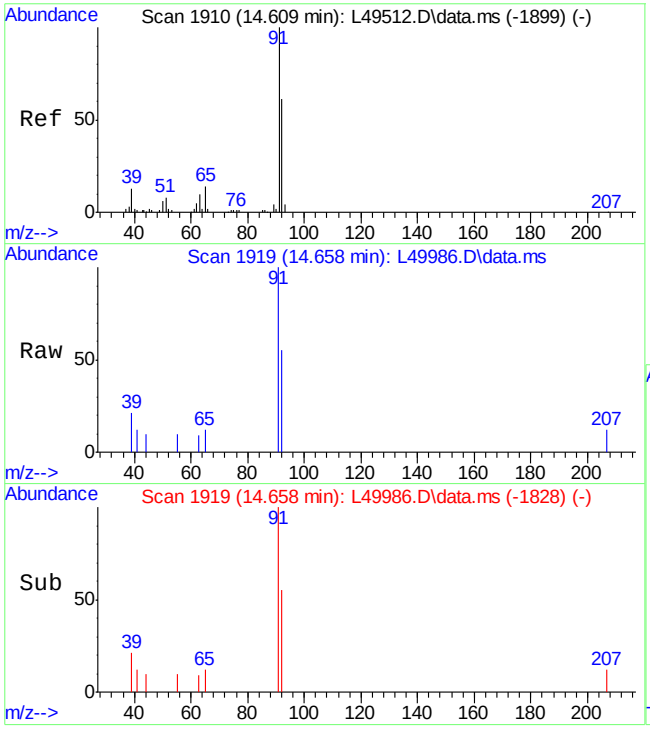




#56
Toluene-d8
Concen: 19.81 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 98 Resp: 2436357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 45.2 | 85.2 |

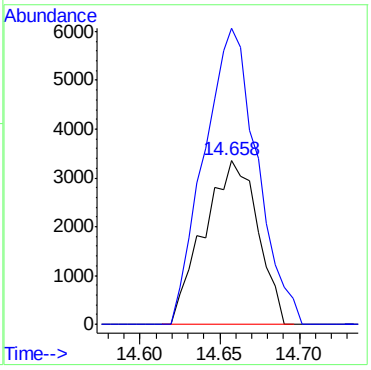


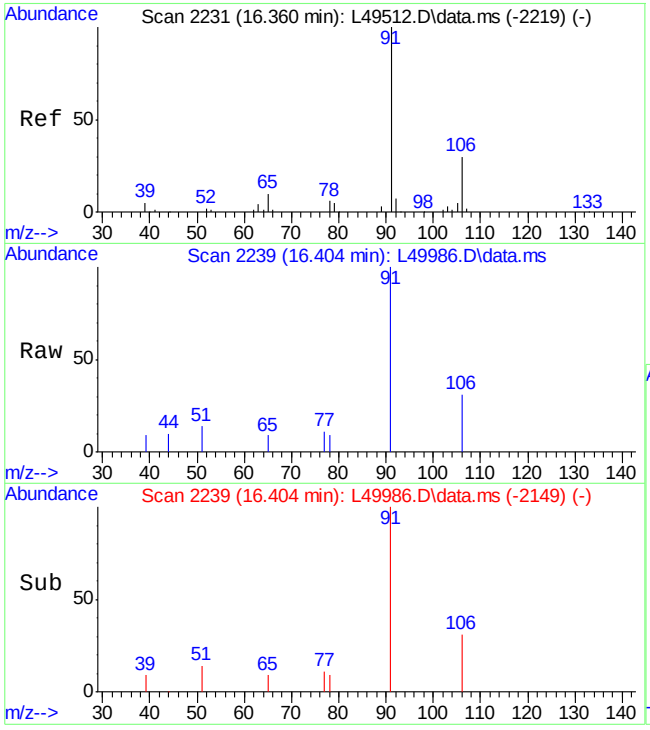



#57
Toluene
Concen: 0.91 ug/Kg
RT: 14.658 min Scan# 1919
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 92 Resp: 78884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 178.2 | 149.2 | 189.2 |

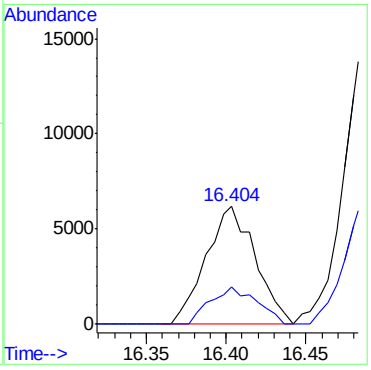


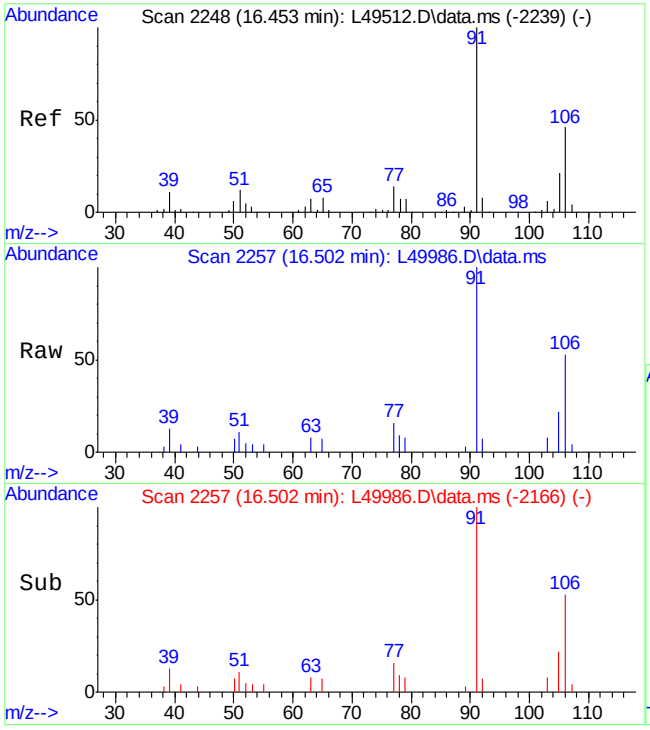




#67
Ethyl Benzene
Concen: 0.79 ug/Kg
RT: 16.404 min Scan# 2239
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 91 Resp: 133006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.3 | 8.6 | 48.6 |

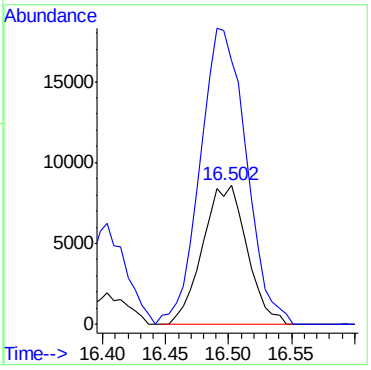


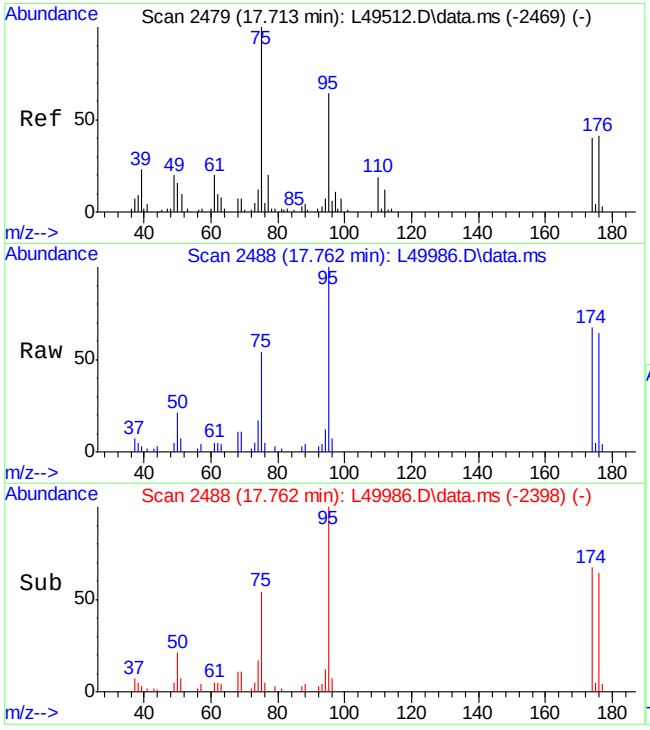



#68
Xylene, m+p
Concen: 3.52 ug/Kg
RT: 16.502 min Scan# 2257
Delta R.T. -0.005 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:106 Resp: 209791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.5 | 202.1 | 242.1 |

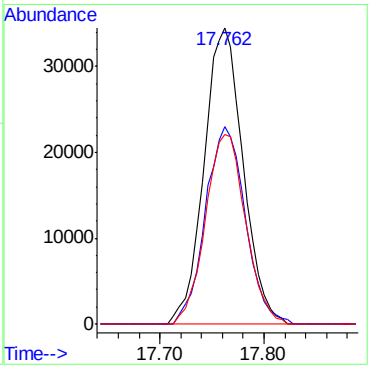


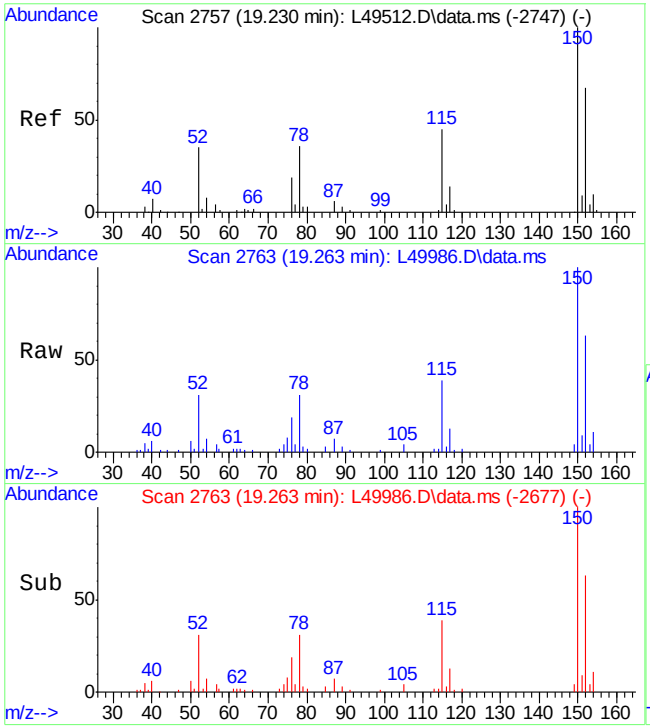




#74
4-Bromofluorobenzene
Concen: 17.72 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion: 95 Resp: 905510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.1 | 41.6 | 81.6 |
| 176 | 65.9 | 39.6 | 79.6 |

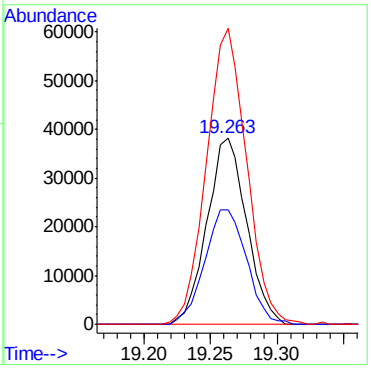


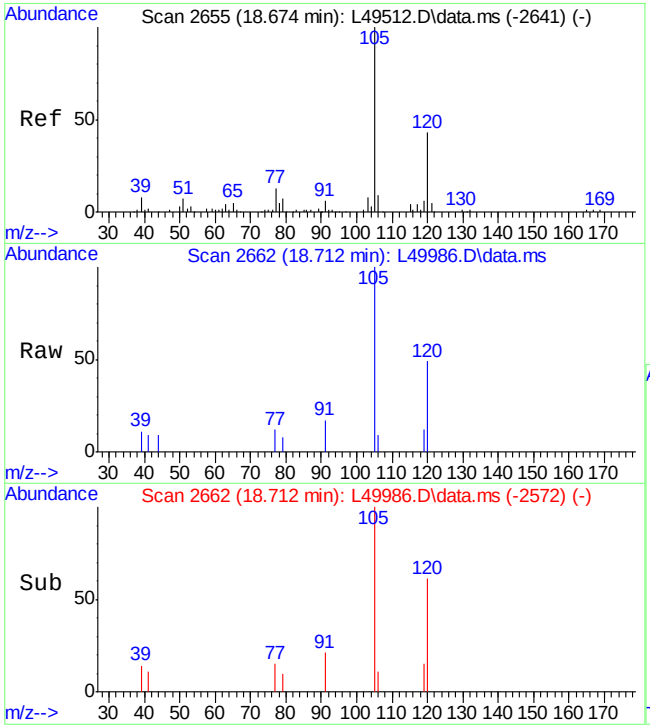



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:152 Resp: 797205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 48.8 | 88.8 |
| 150 | 160.7 | 174.3 | 214.3# |

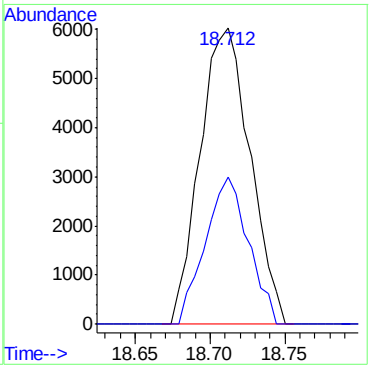


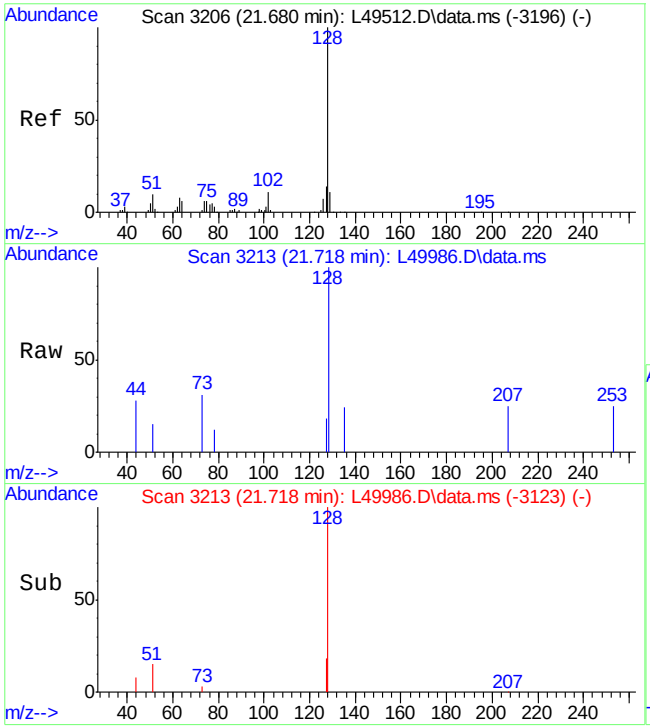




#86
1,2,4-Trimethylbenzene
Concen: 1.06 ug/Kg
RT: 18.712 min Scan# 2662
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:105 Resp: 140061

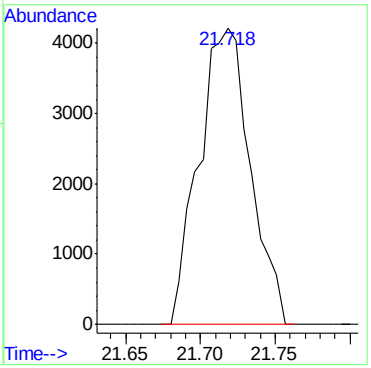
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.8 | 29.7 | 69.7 |

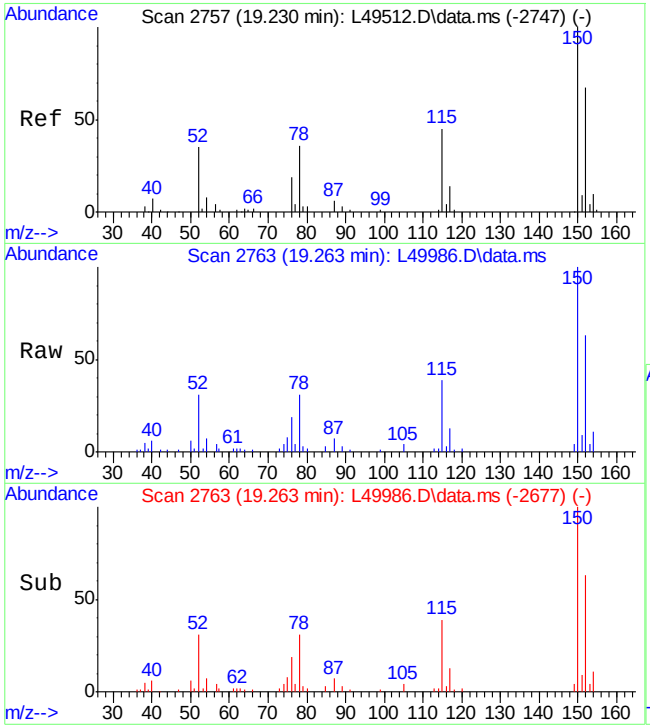





#97
Naphthalene
Concen: 0.83 ug/Kg
RT: 21.718 min Scan# 3213
Delta R.T. -0.010 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:128 Resp: 100629

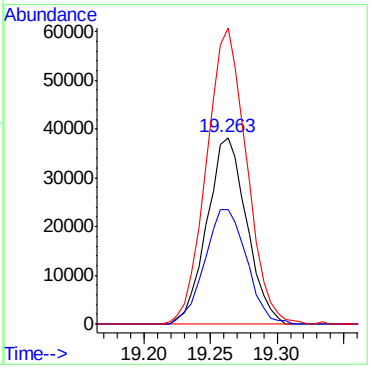


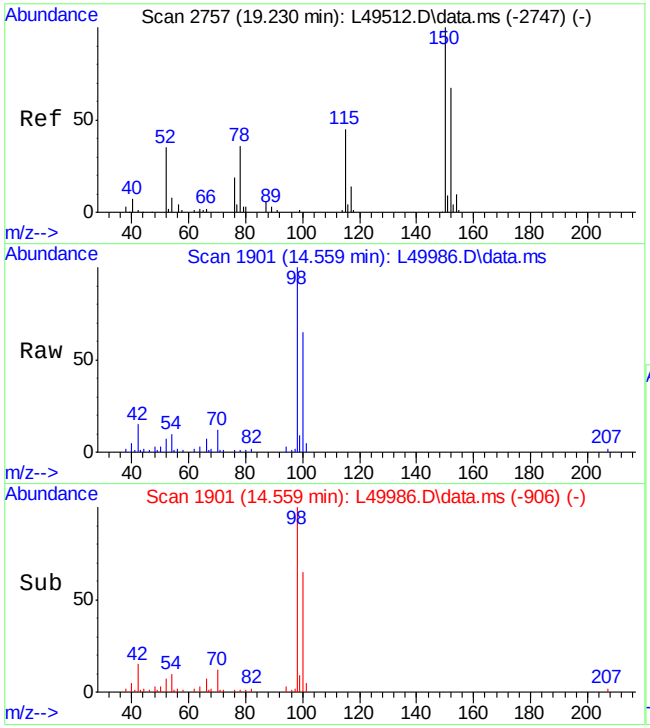




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:152 Resp: 797205

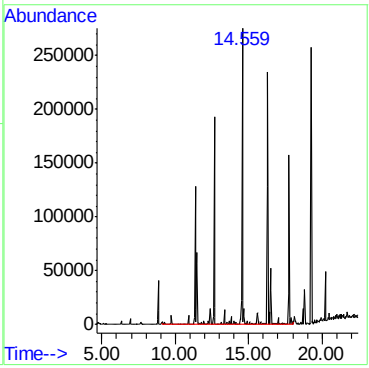
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.9 | 41.6 | 81.6 |
| 150 | 160.7 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 83.55 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49986.D
Acq: 12 Jul 2016 7:40 pm

Tgt Ion:TIC Resp:32699215



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49949.D
Acq On : 11 Jul 2016 2:49 pm
Operator : johannat
Sample : MB
Misc : MS1912,VL1498,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 12 09:24:03 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

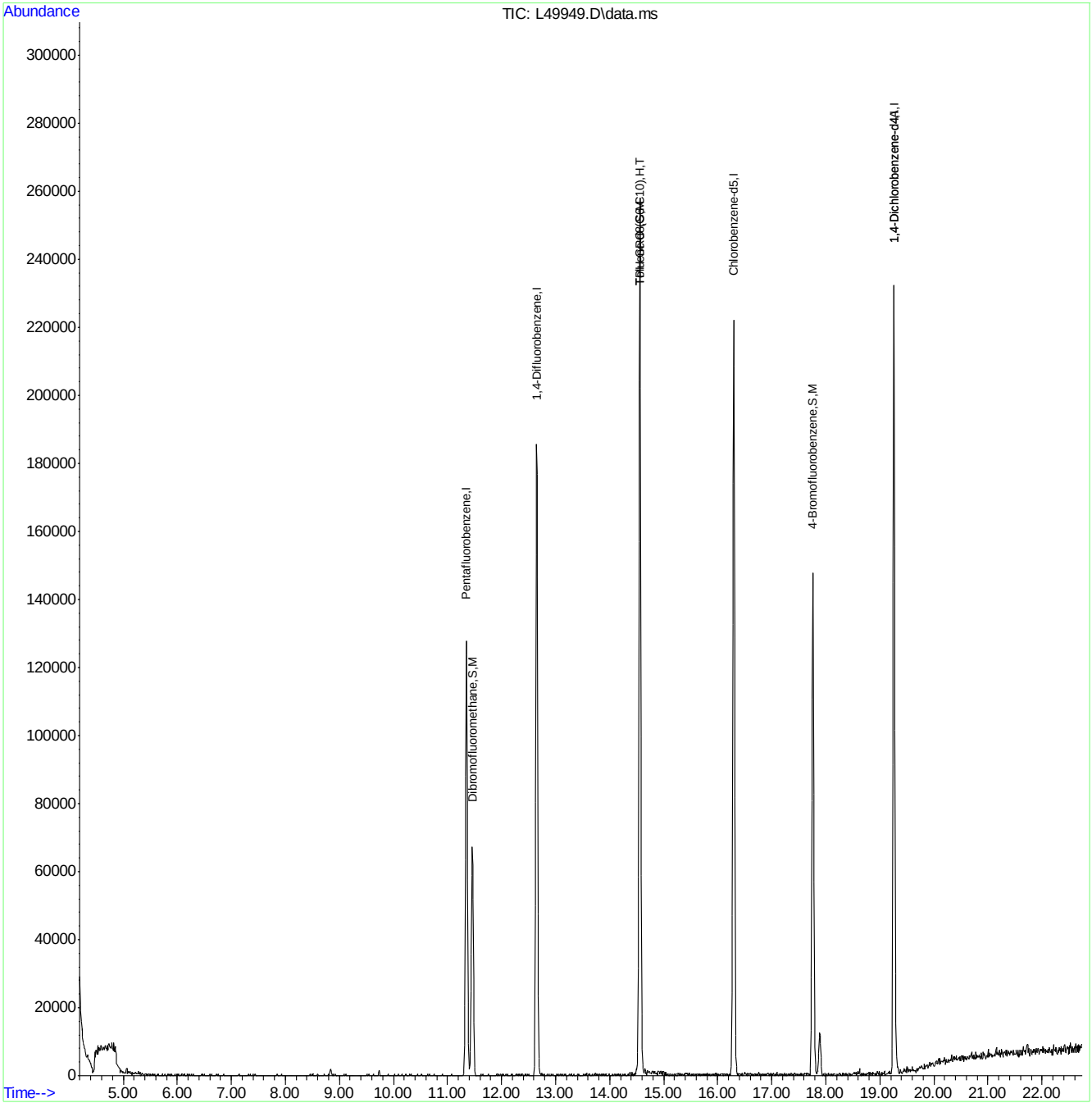
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1142254 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1932647 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1635849 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 748222 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 748222 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.455 | 111 | 608199 | 17.78 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 88.90% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2203100 | 19.07 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 95.35% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 864909 | 18.01 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 90.05% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 26536742m | 62.11 | ug/Kg | |

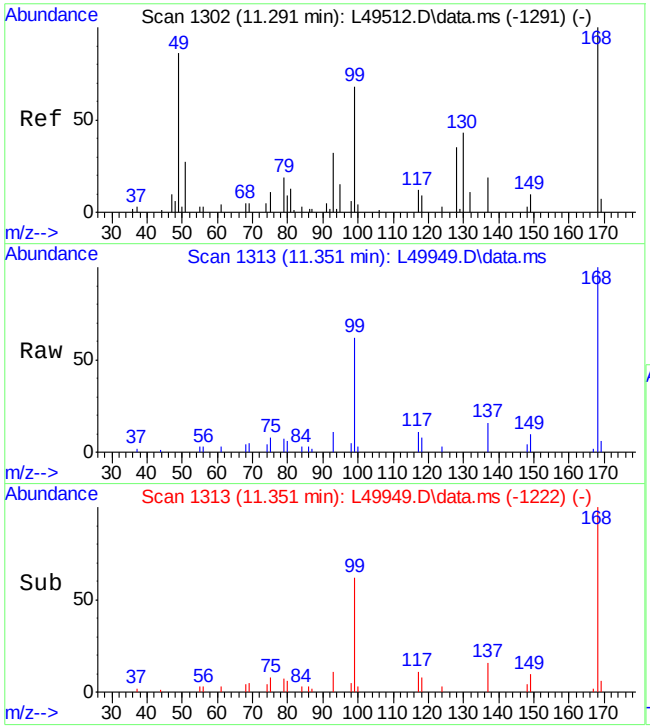
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160711\
Data File : L49949.D
Acq On : 11 Jul 2016 2:49 pm
Operator : johannat
Sample : MB
Misc : MS1912,VL1498,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

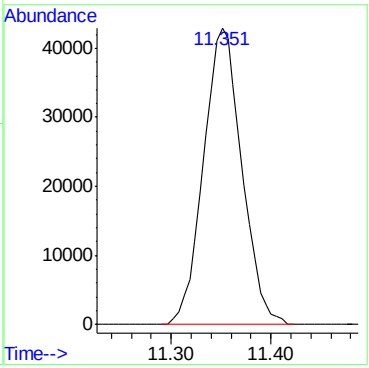
Quant Time: Jul 12 09:24:03 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

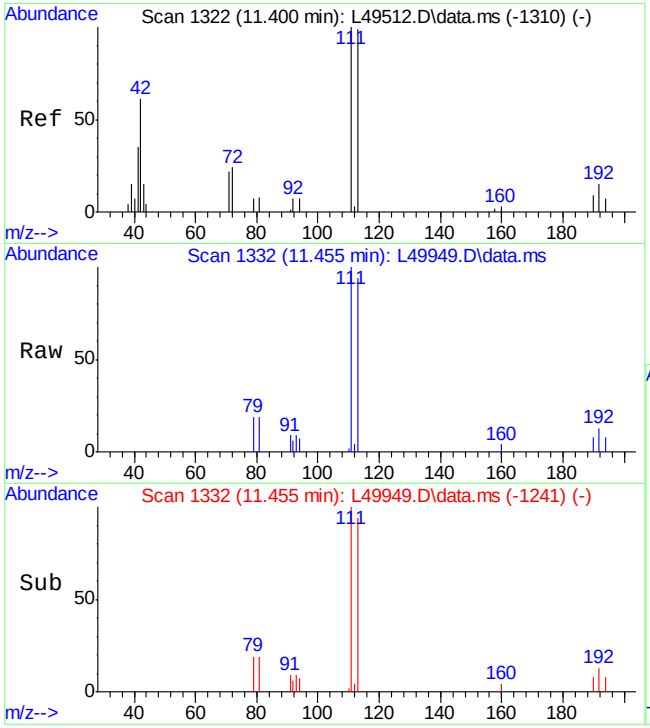





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:168 Resp: 1142254

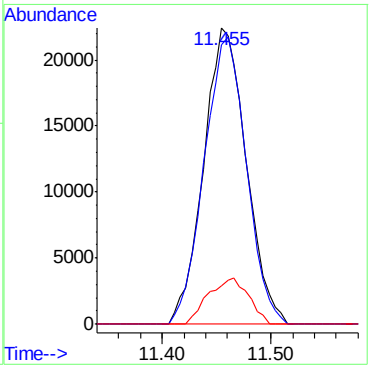


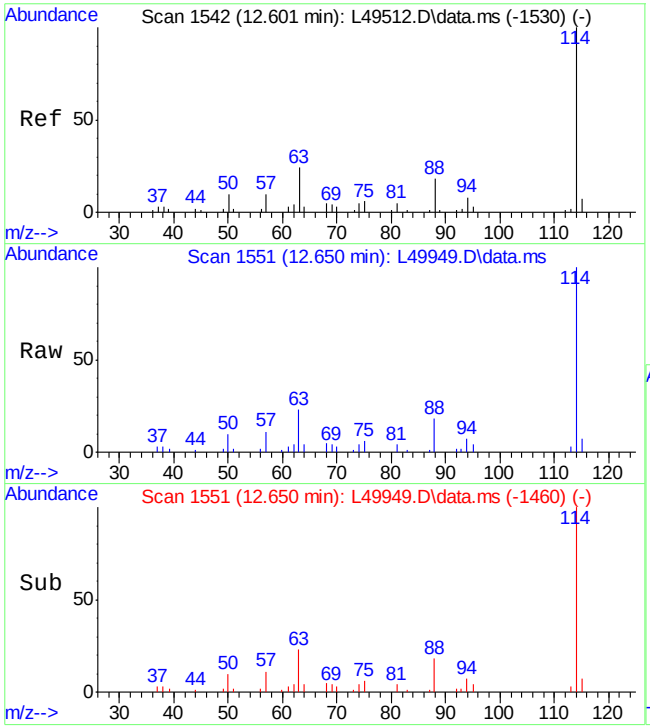




#36
Dibromofluoromethane
Concen: 17.78 ug/Kg
RT: 11.455 min Scan# 1332
Delta R.T. -0.005 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:111 Resp: 608199

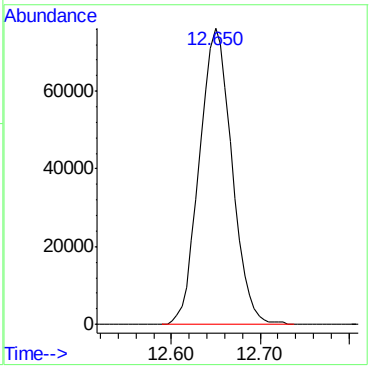
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.1 | 78.6 | 118.6 |
| 192 | 14.6 | 0.0 | 34.1 |

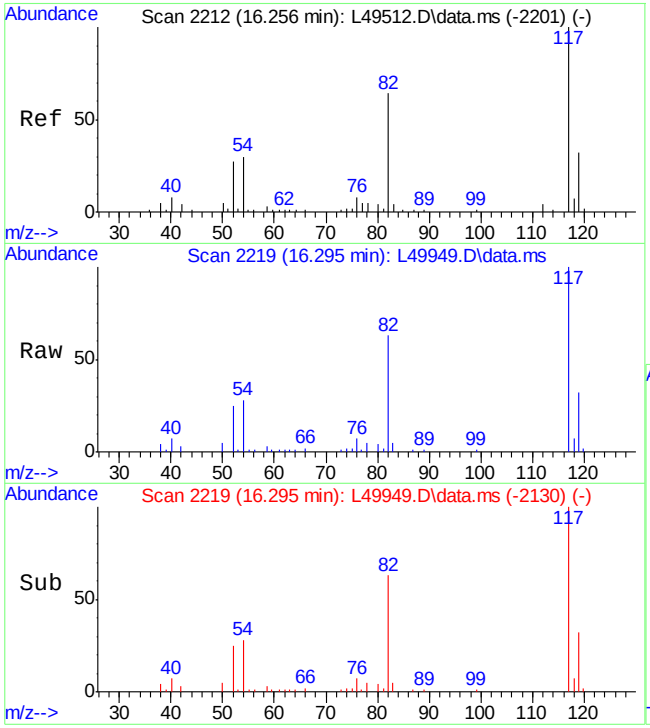





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:114 Resp: 1932647

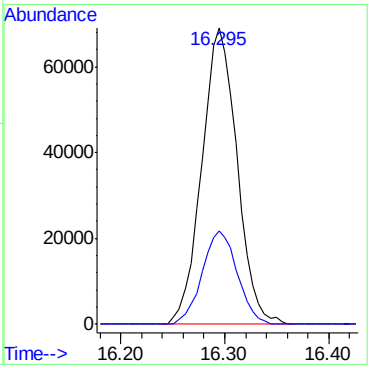


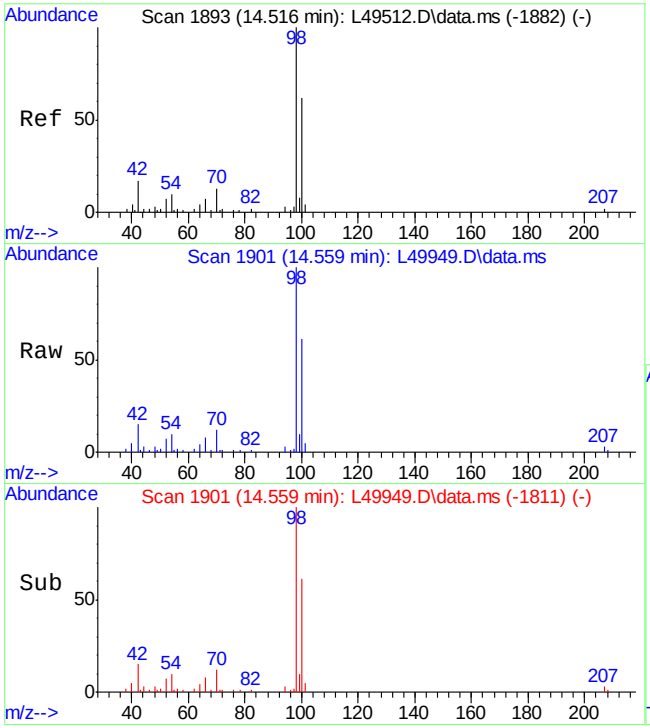




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:117 Resp: 1635849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.3 | 10.2 | 50.2 |

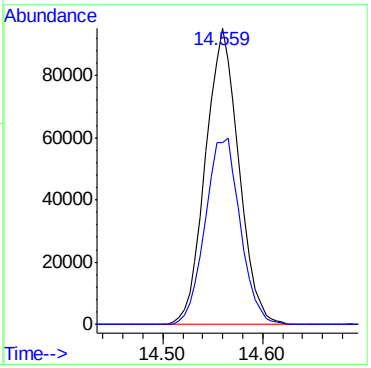


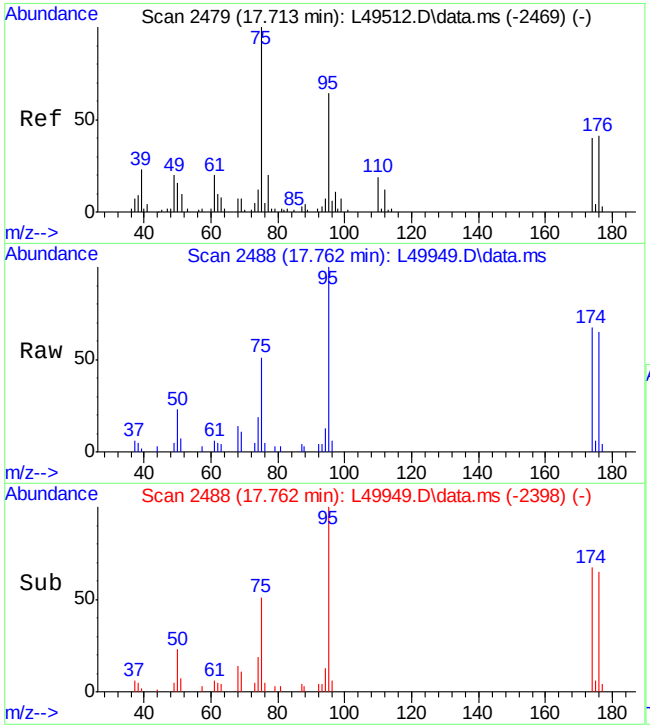



#56
Toluene-d8
Concen: 19.07 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion: 98 Resp: 2203100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.1 | 45.2 | 85.2 |

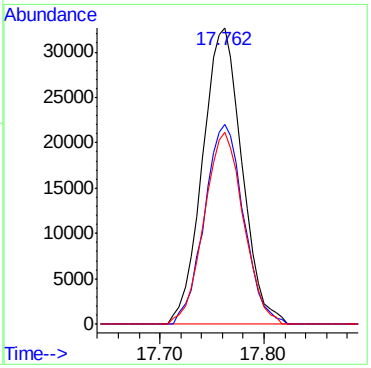


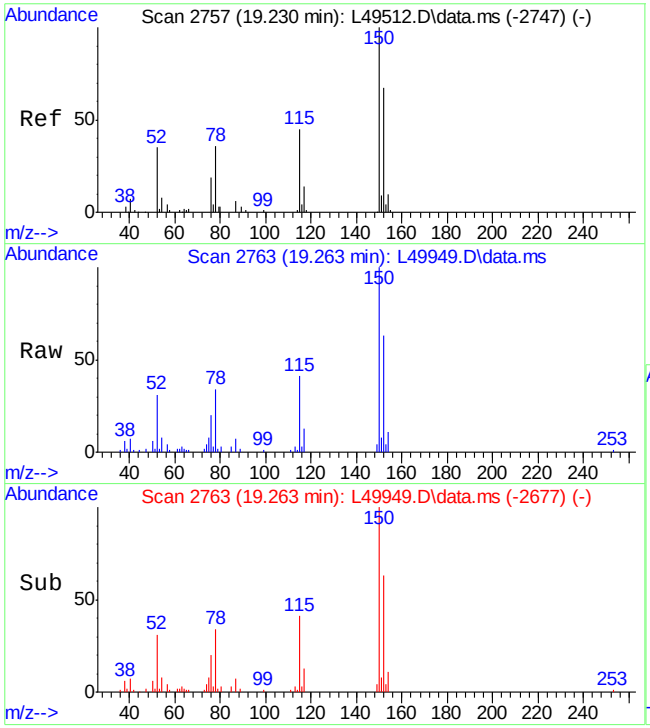




#74
4-Bromofluorobenzene
Concen: 18.01 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion: 95 Resp: 864909

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 67.2 | 41.6 | 81.6 |
| 176 | 64.7 | 39.6 | 79.6 |

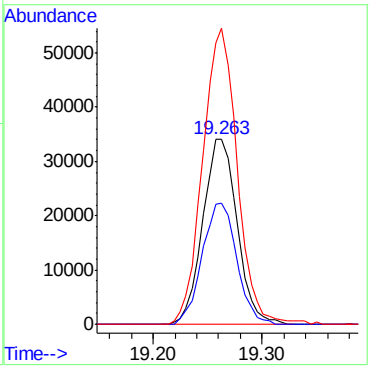


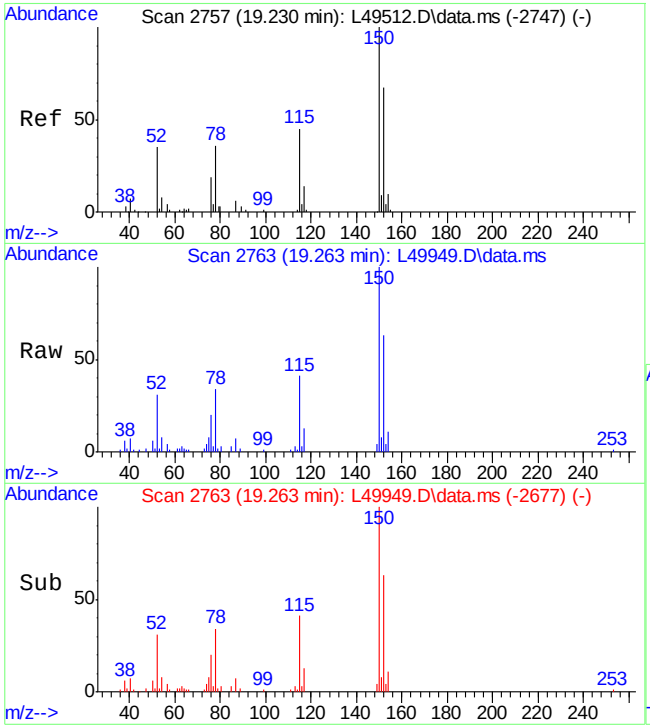



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:152 Resp: 748222

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.7 | 48.8 | 88.8 |
| 150 | 160.9 | 174.3 | 214.3# |

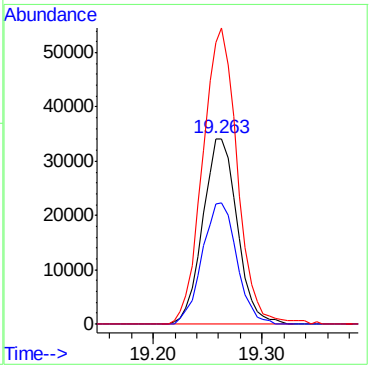


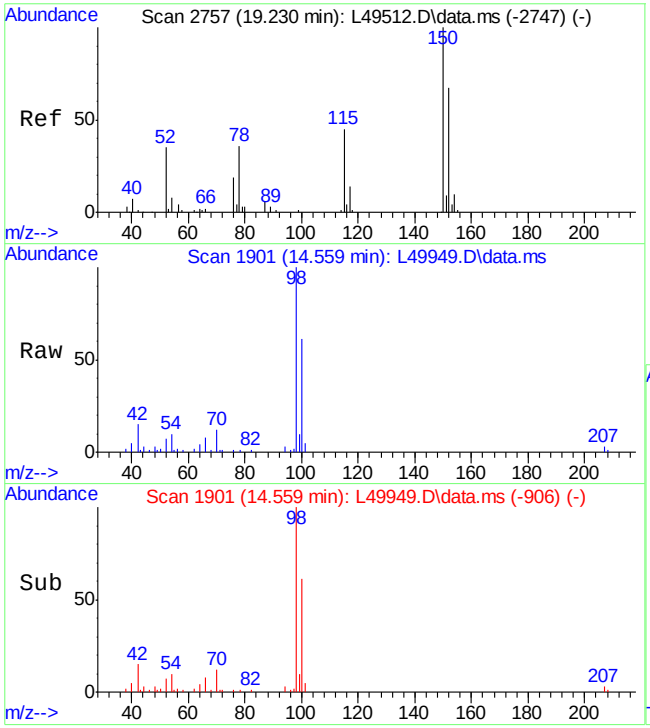




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:152 Resp: 748222

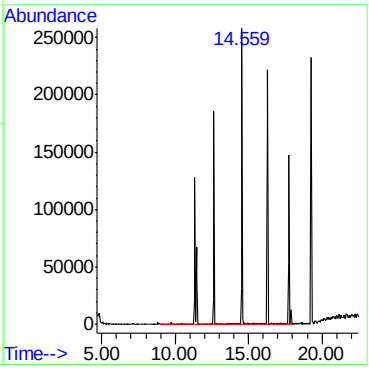
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.7 | 41.6 | 81.6 |
| 150 | 160.9 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 62.11 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49949.D
Acq: 11 Jul 2016 2:49 pm

Tgt Ion:TIC Resp:26536742



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49974.D
Acq On : 12 Jul 2016 1:43 pm
Operator : johannat
Sample : MB
Misc : MS1912,VL1499,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 13 08:56:18 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

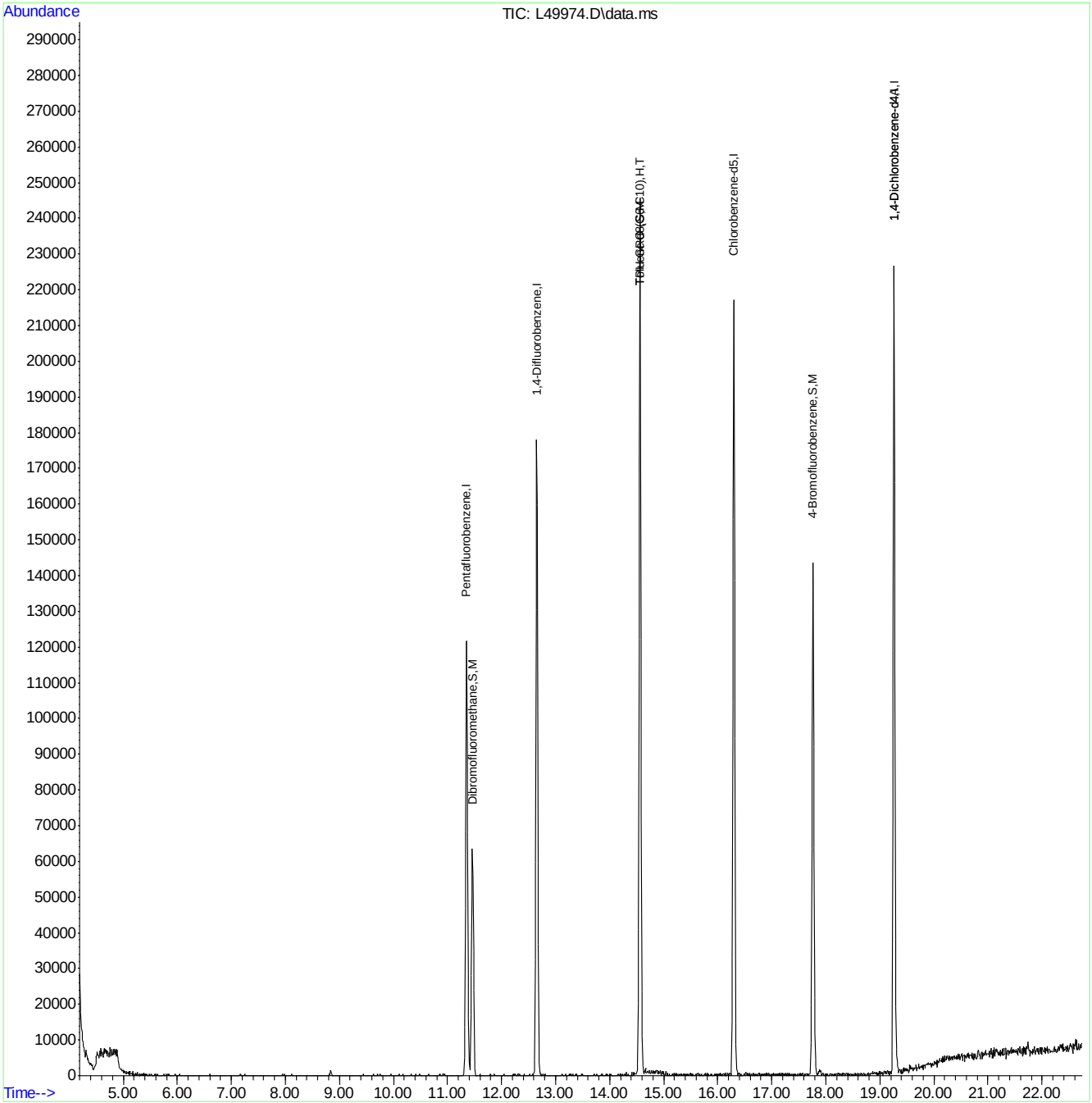
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 11.351 | 168 | 1074645 | 20.00 | ug/Kg | 0.00 |
| 40) 1,4-Difluorobenzene | 12.650 | 114 | 1849379 | 20.00 | ug/Kg | 0.00 |
| 55) Chlorobenzene-d5 | 16.295 | 117 | 1560138 | 20.00 | ug/Kg | -0.02 |
| 77) 1,4-Dichlorobenzene-d4 | 19.263 | 152 | 722968 | 20.00 | ug/Kg | -0.03 |
| 99) 1,4-Dichlorobenzene-d4A | 19.263 | 152 | 722968 | 20.00 | ug/Kg | -0.03 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 11.460 | 111 | 596002 | 18.52 | ug/Kg | 0.00 |
| Spiked Amount 20.000 | Range 72 - 140 | | Recovery = 92.60% | | | |
| 56) Toluene-d8 | 14.559 | 98 | 2164680 | 19.65 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 87 - 113 | | Recovery = 98.25% | | | |
| 74) 4-Bromofluorobenzene | 17.762 | 95 | 832676 | 18.18 | ug/Kg | -0.01 |
| Spiked Amount 20.000 | Range 81 - 115 | | Recovery = 90.90% | | | |
| Target Compounds | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.559 | TIC | 25047508m | 58.93 | ug/Kg | |

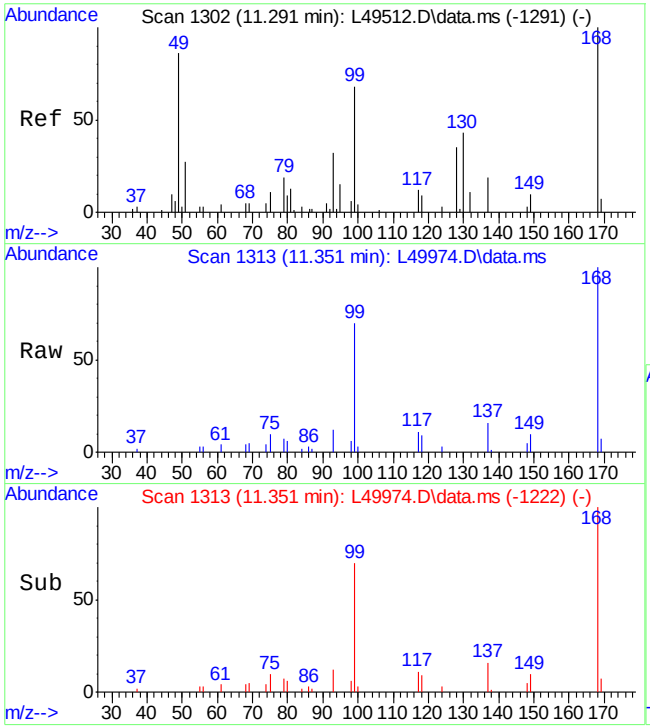
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L160712\
Data File : L49974.D
Acq On : 12 Jul 2016 1:43 pm
Operator : johannat
Sample : MB
Misc : MS1912,VL1499,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

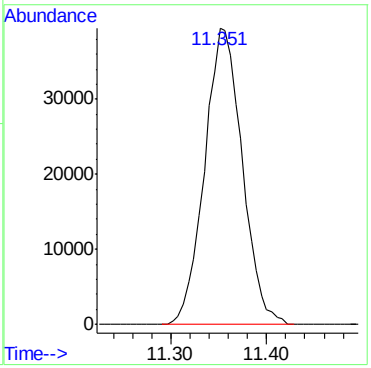
Quant Time: Jul 13 08:56:18 2016
Quant Method : C:\msdchem\1\METHODS\VL1485S.M
Quant Title : EPA -8260B
QLast Update : Mon Jul 11 13:46:33 2016
Response via : Initial Calibration

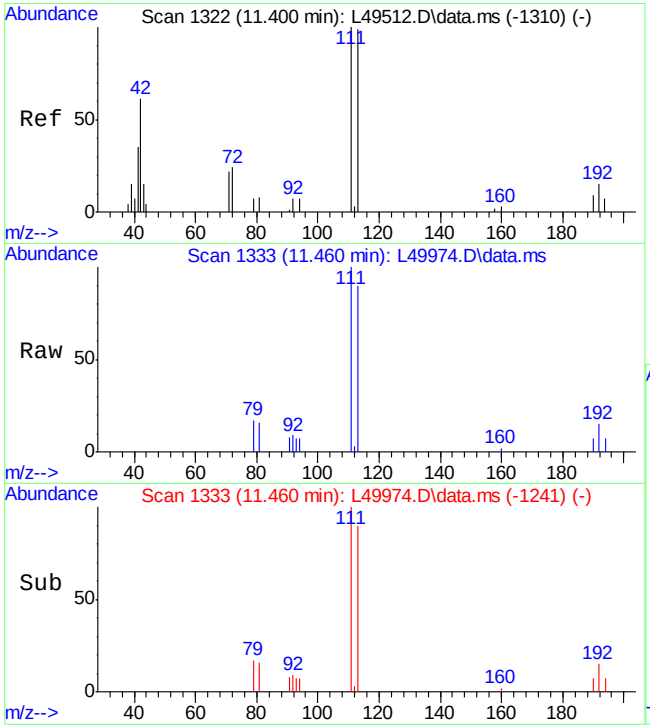





#1
Pentafluorobenzene
Concen: 20.00 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. -0.005 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:168 Resp: 1074645

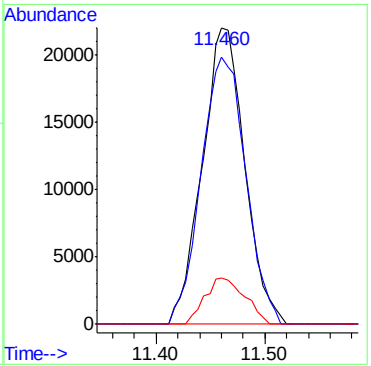


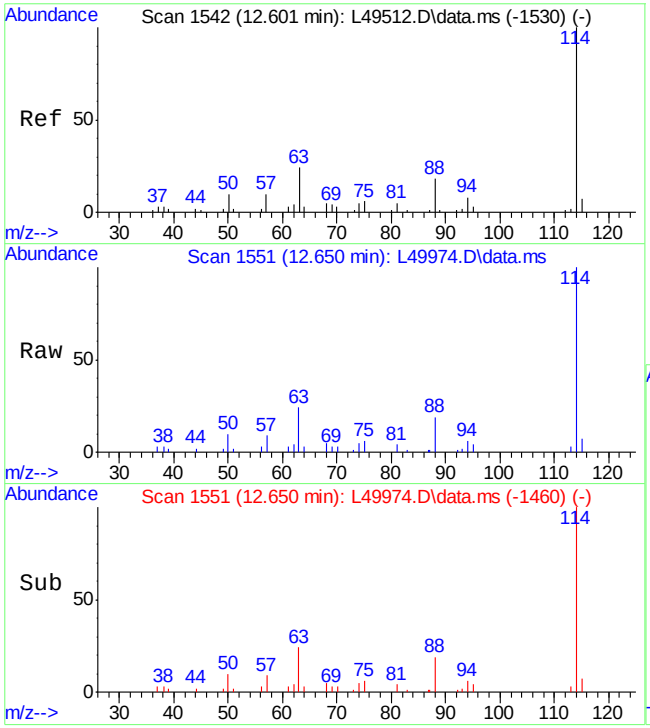




#36
Dibromofluoromethane
Concen: 18.52 ug/Kg
RT: 11.460 min Scan# 1333
Delta R.T. 0.000 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:111 Resp: 596002

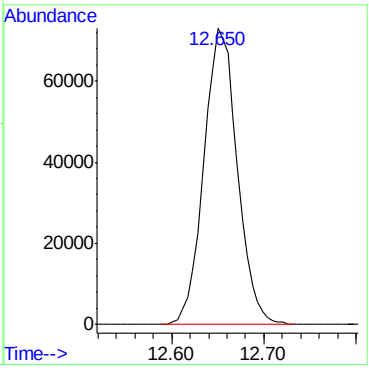
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 94.7 | 78.6 | 118.6 |
| 192 | 14.6 | 0.0 | 34.1 |

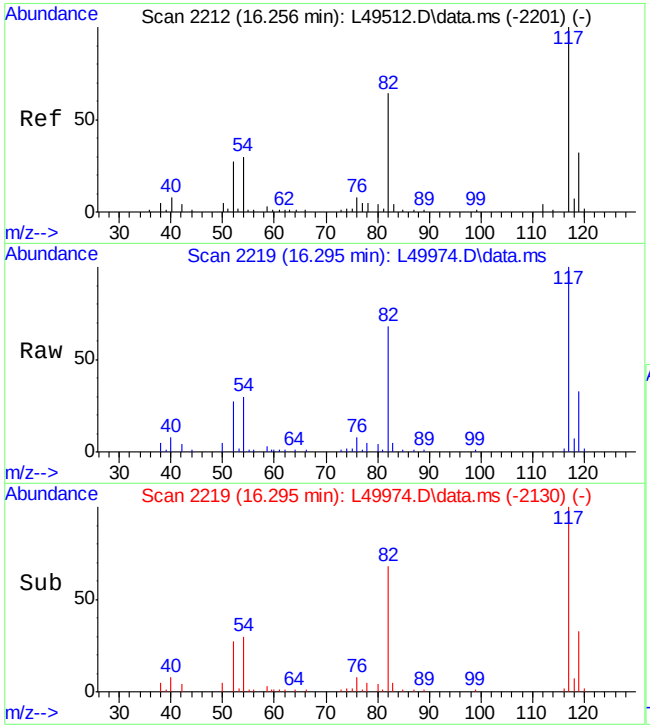





#40
1,4-Difluorobenzene
Concen: 20.00 ug/Kg
RT: 12.650 min Scan# 1551
Delta R.T. -0.005 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:114 Resp: 1849379

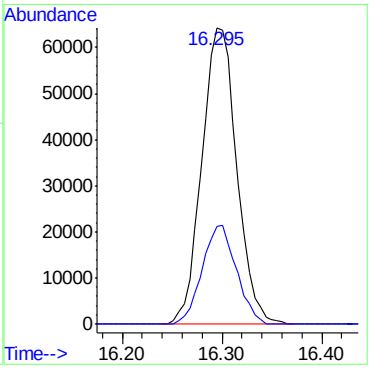


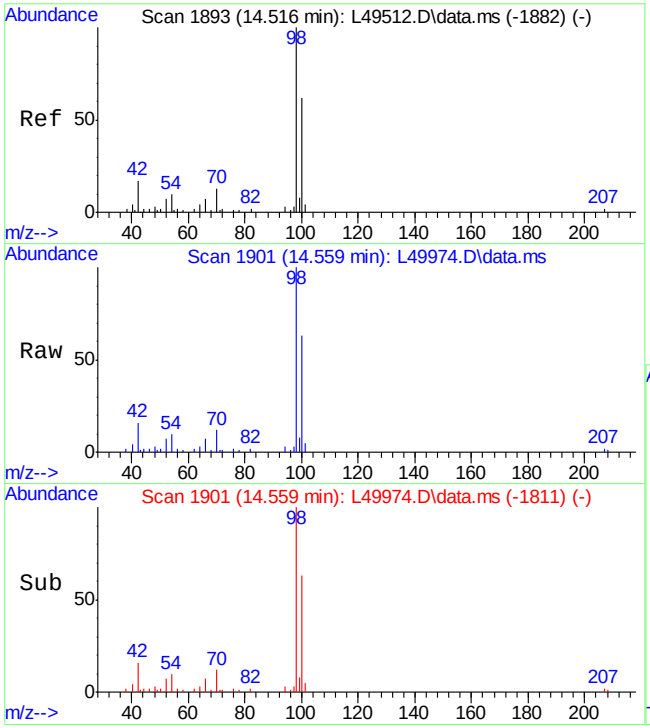




#55
Chlorobenzene-d5
Concen: 20.00 ug/Kg
RT: 16.295 min Scan# 2219
Delta R.T. -0.016 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:117 Resp: 1560138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.6 | 10.2 | 50.2 |

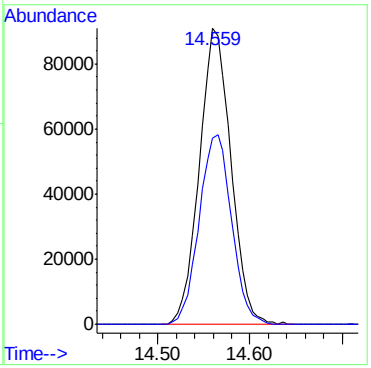


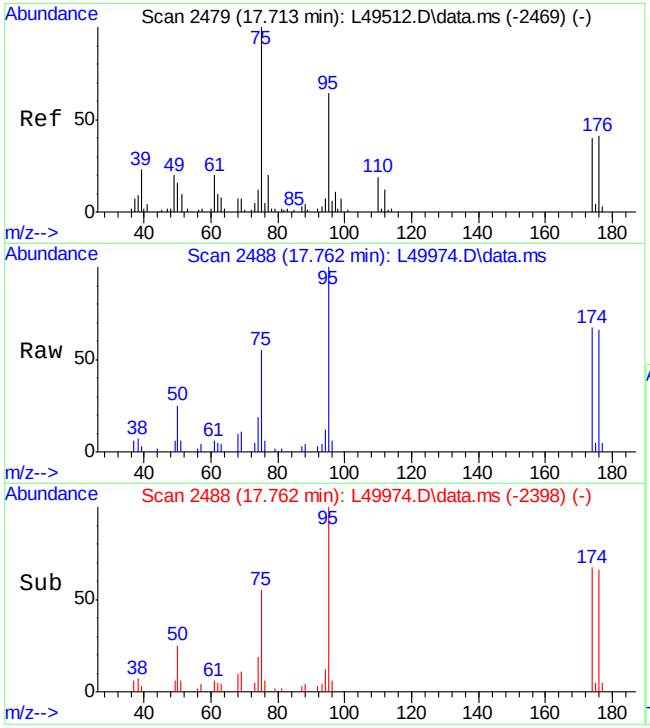



#56
Toluene-d8
Concen: 19.65 ug/Kg
RT: 14.559 min Scan# 1901
Delta R.T. -0.010 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion: 98 Resp: 2164680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 45.2 | 85.2 |

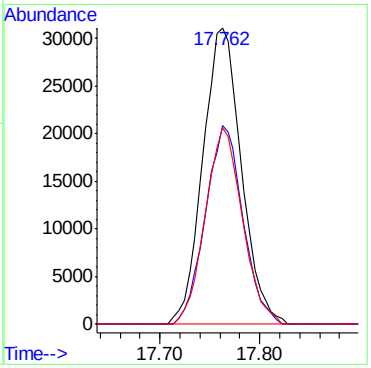


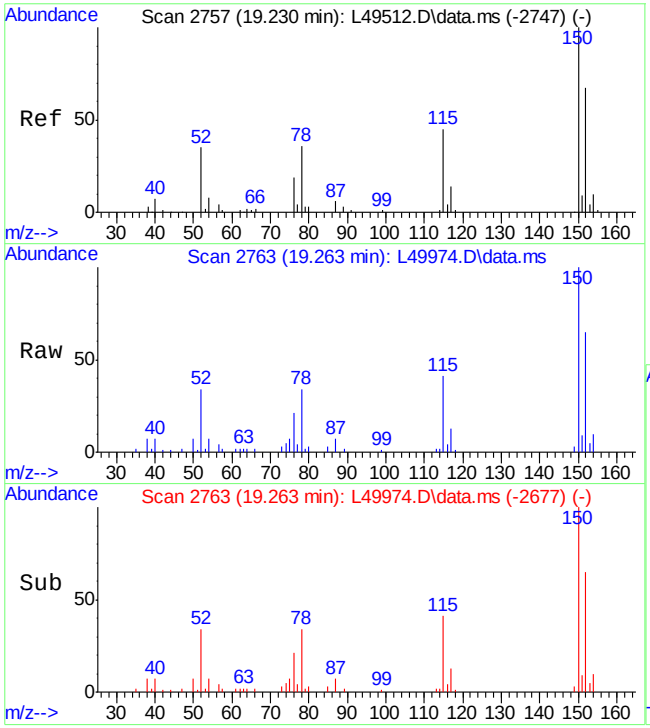




#74
4-Bromofluorobenzene
Concen: 18.18 ug/Kg
RT: 17.762 min Scan# 2488
Delta R.T. -0.010 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion: 95 Resp: 832676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 65.4 | 41.6 | 81.6 |
| 176 | 63.9 | 39.6 | 79.6 |

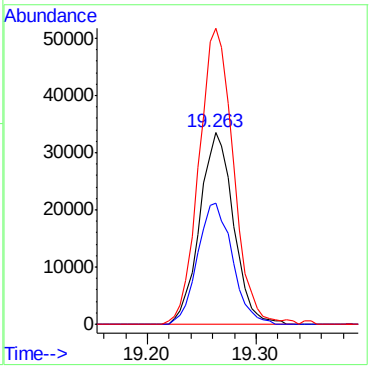


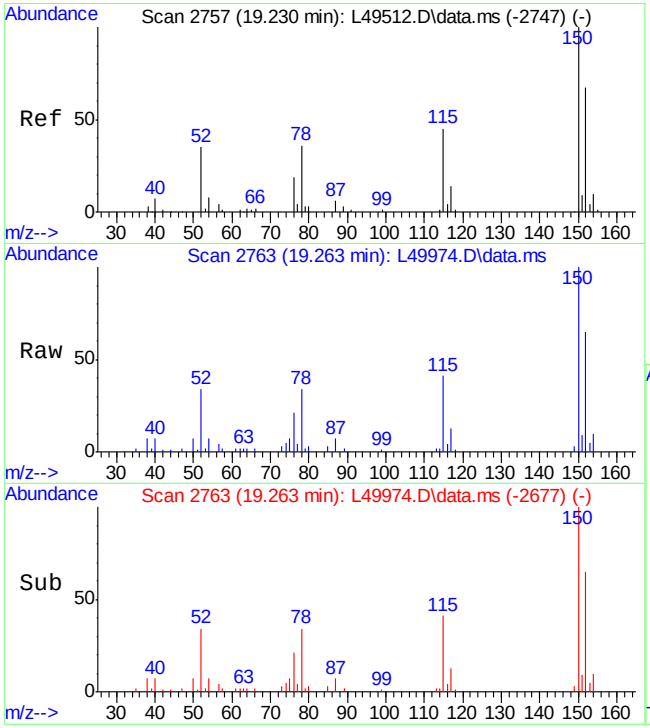



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:152 Resp: 722968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 48.8 | 88.8 |
| 150 | 157.0 | 174.3 | 214.3# |

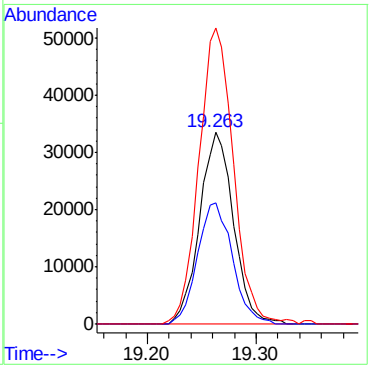


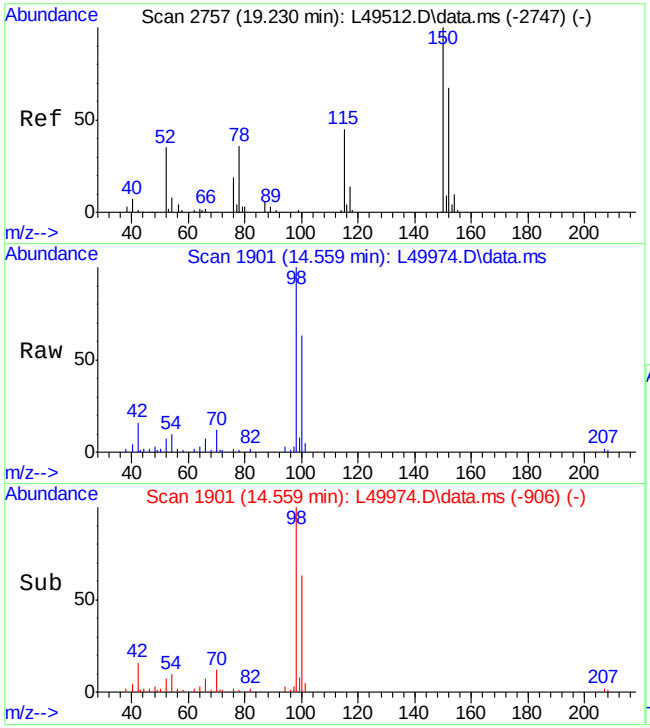




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ug/Kg
RT: 19.263 min Scan# 2763
Delta R.T. -0.030 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:152 Resp: 722968

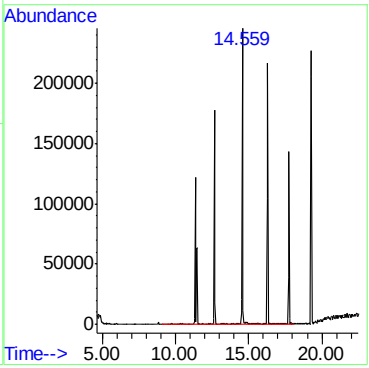
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.8 | 41.6 | 81.6 |
| 150 | 157.0 | 176.9 | 216.9# |






#100
TPH-GRO (C6-C10)
Concen: 58.93 ug/Kg m
RT: 14.559 min Scan# 1901
Delta R.T. 0.034 min
Lab File: L49974.D
Acq: 12 Jul 2016 1:43 pm

Tgt Ion:TIC Resp:25047508



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61834.D
Acq On : 13 Jul 2016 1:58 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1859,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:34:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

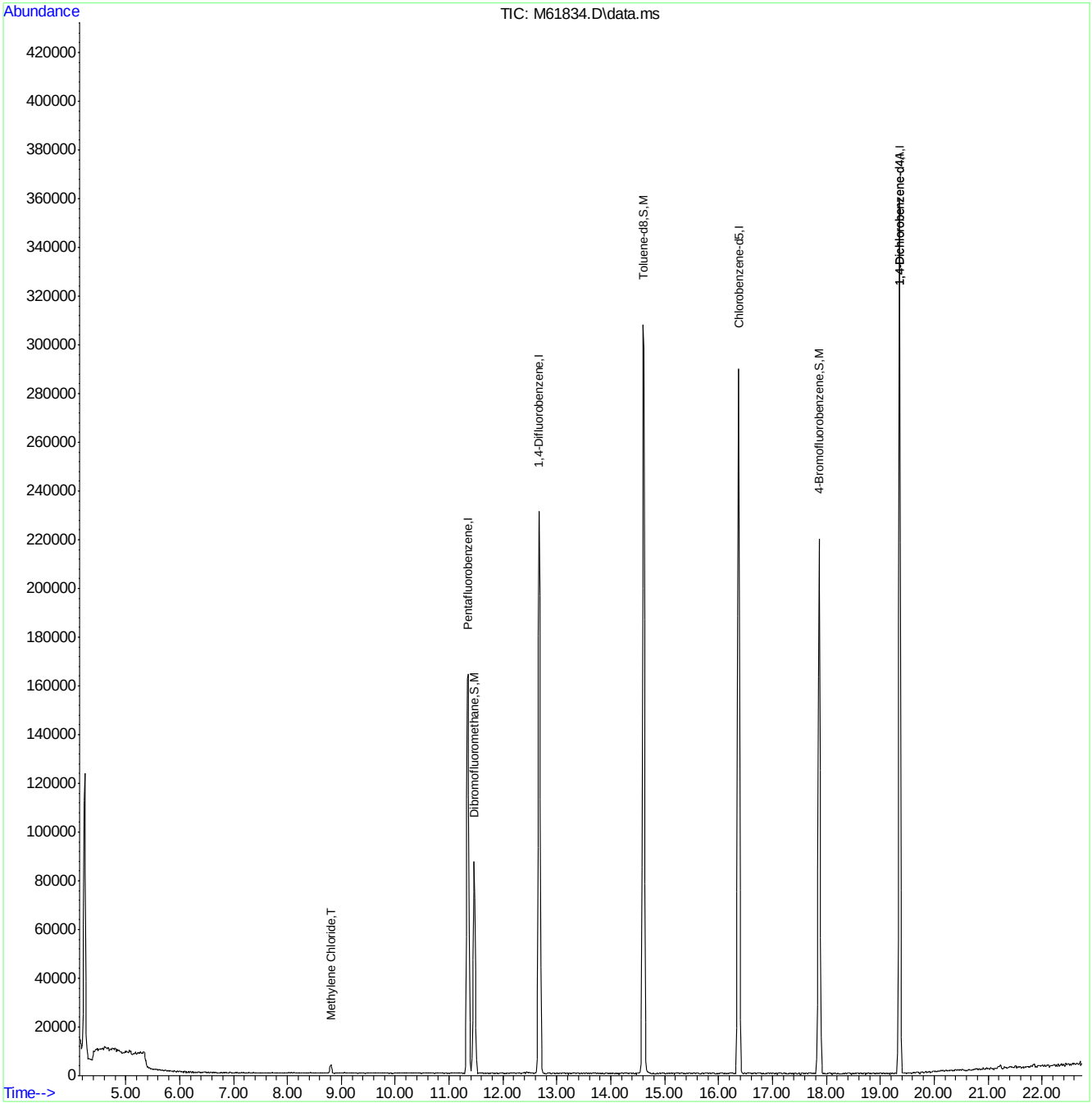
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.351 | 168 | 163557 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 244456 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 235313 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.361 | 152 | 128649 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.361 | 152 | 128649 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 79332 | 19.13 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 95.65% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 285757 | 18.61 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 93.05% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 122149 | 20.23 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.15% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.808 | 84 | 2606 | 0.45 | ppb | # 75 |

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

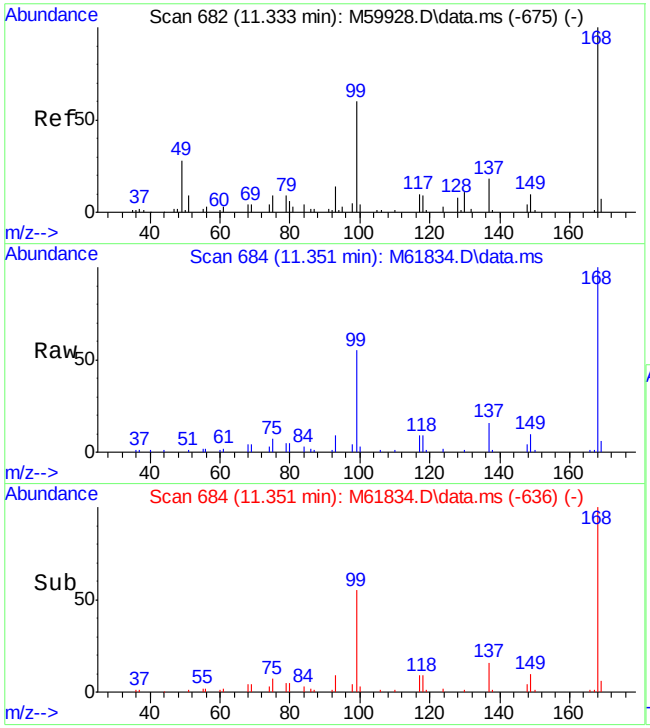
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61834.D
Acq On : 13 Jul 2016 1:58 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1859,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:34:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

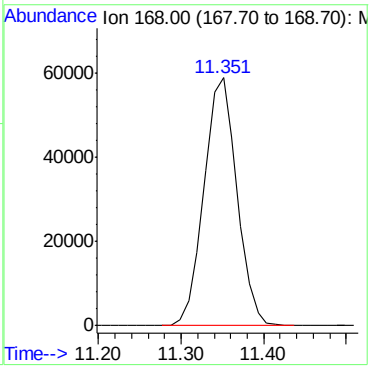


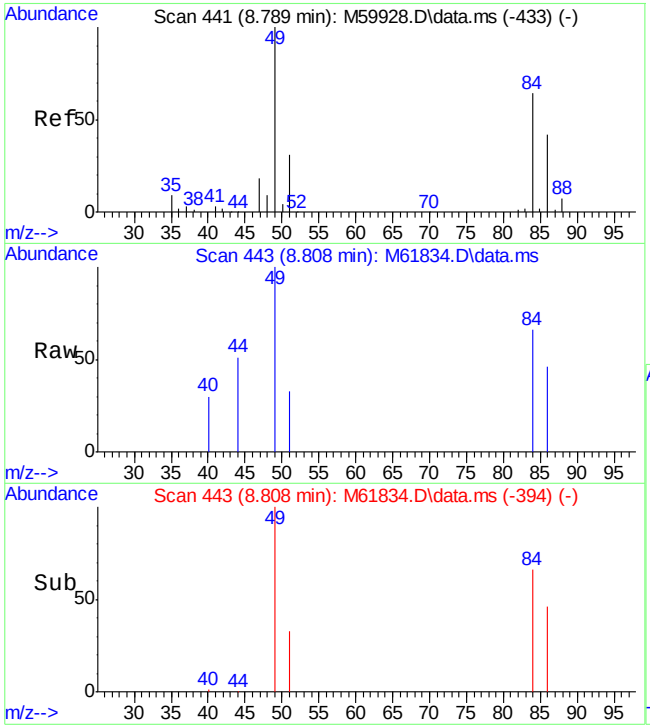

VM1848S.M Wed Jul 13 16:36:14 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.351 min Scan# 684
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:168 Resp: 163557

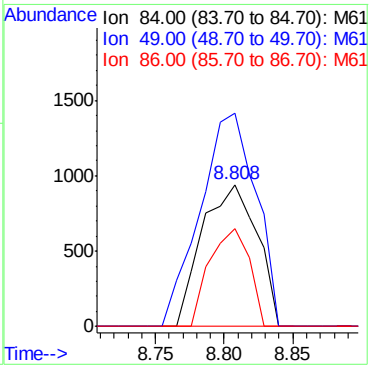


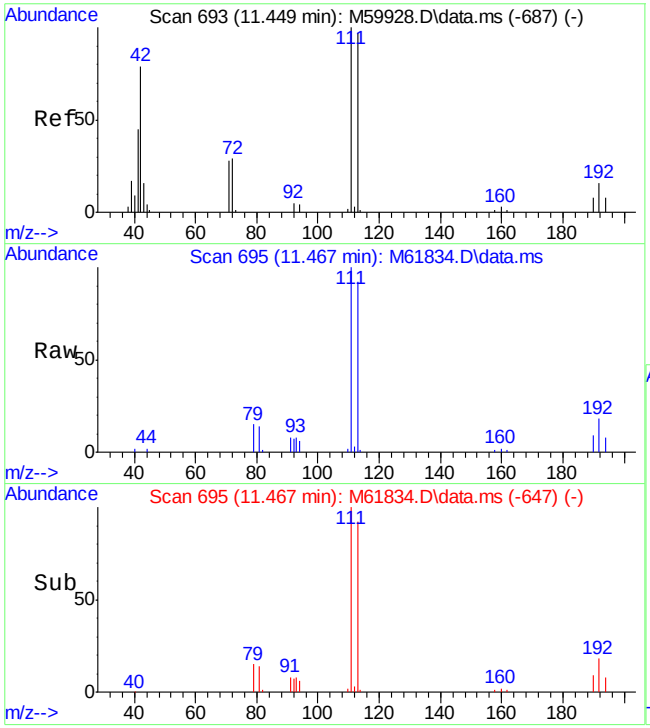




#19
Methylene Chloride
Concen: 0.45 ppb
RT: 8.808 min Scan# 443
Delta R.T. 0.018 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 84 Resp: 2606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 152.3 | 134.5 | 174.5 |
| 86 | 0.0 | 43.8 | 83.8# |

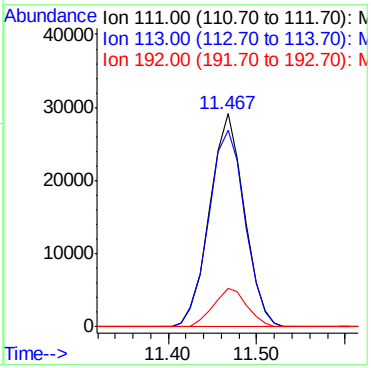


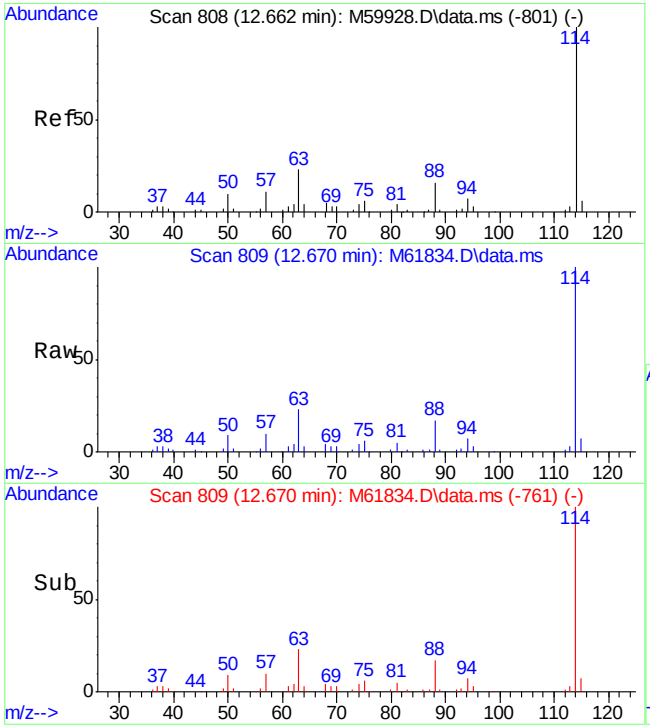



#36
Dibromofluoromethane
Concen: 19.13 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:111 Resp: 79332

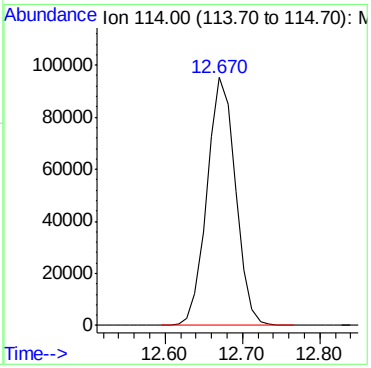
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.8 | 77.7 | 117.7 |
| 192 | 17.6 | 0.0 | 36.3 |

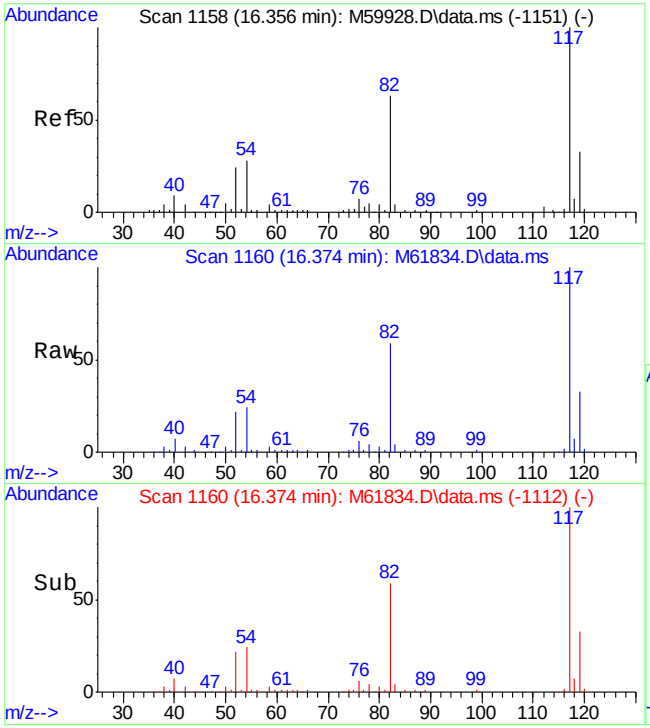



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:114 Resp: 244456

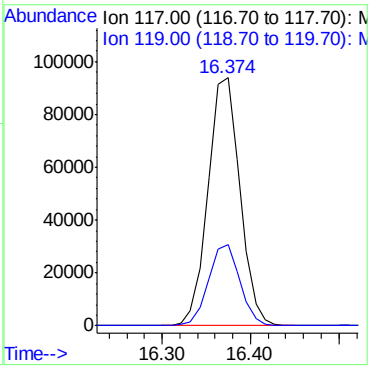


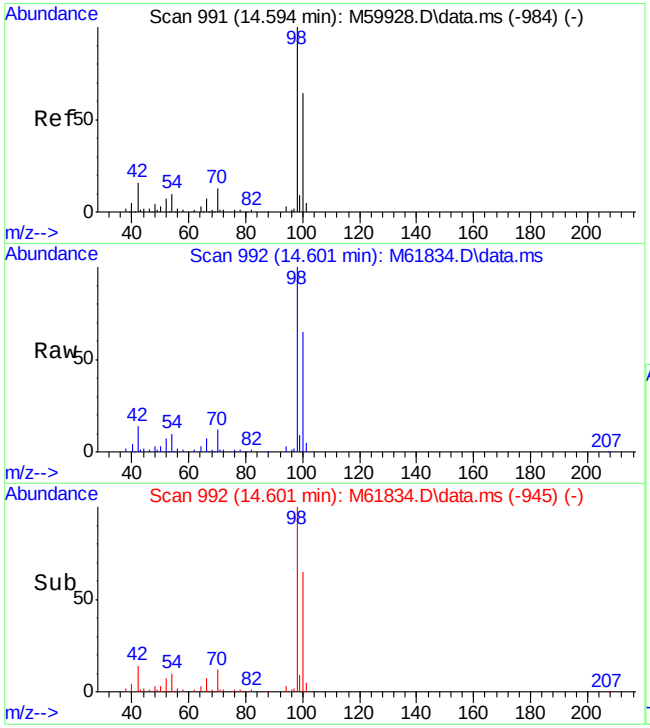



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:117 Resp: 235313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

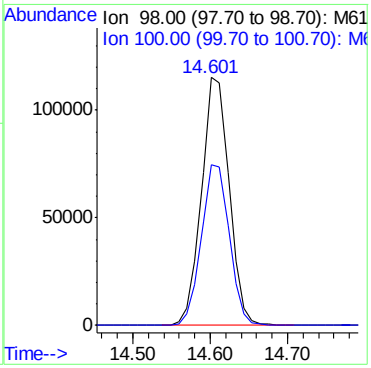


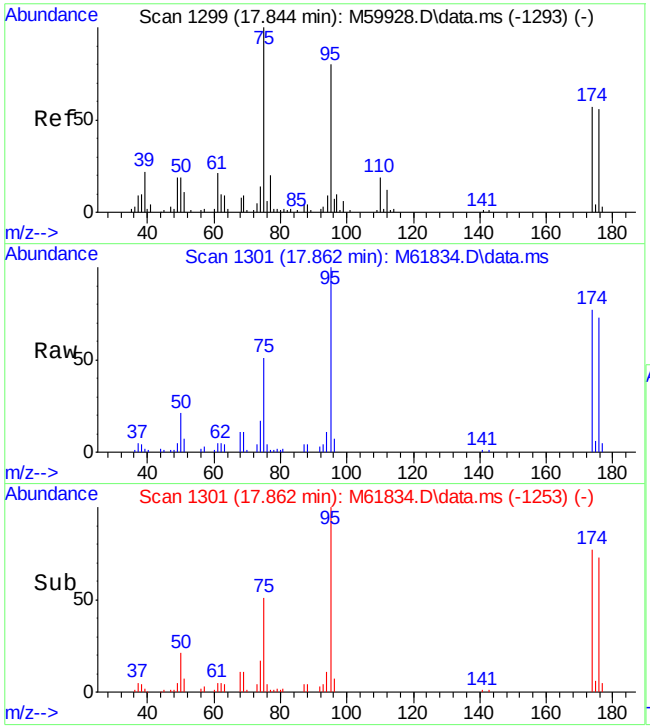




#56
Toluene-d8
Concen: 18.61 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 98 Resp: 285757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 44.3 | 84.3 |

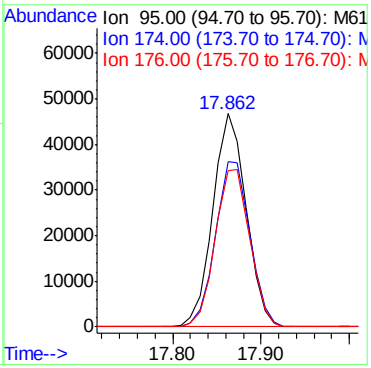


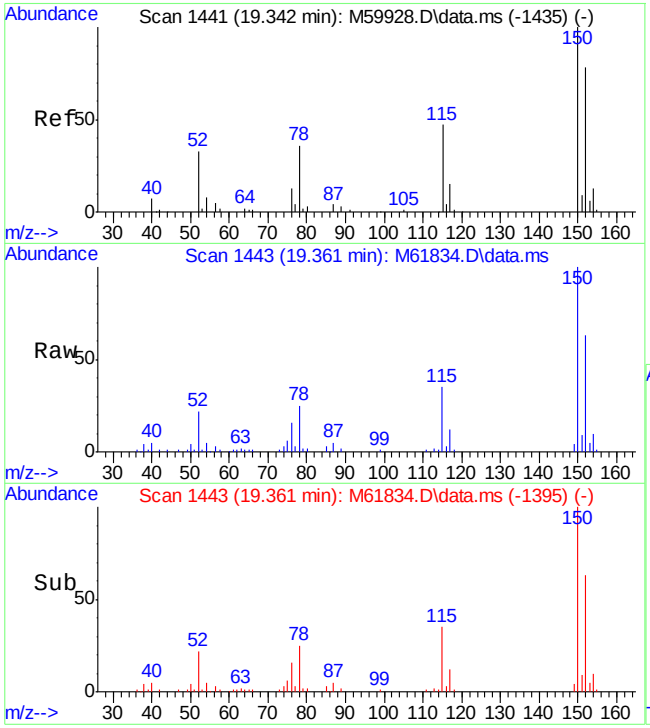



#74
4-Bromofluorobenzene
Concen: 20.23 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 95 Resp: 122149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 80.1 | 54.3 | 94.3 |
| 176 | 76.8 | 51.5 | 91.5 |

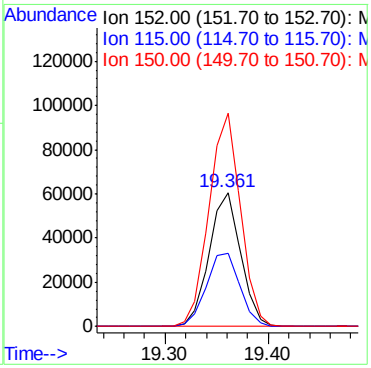


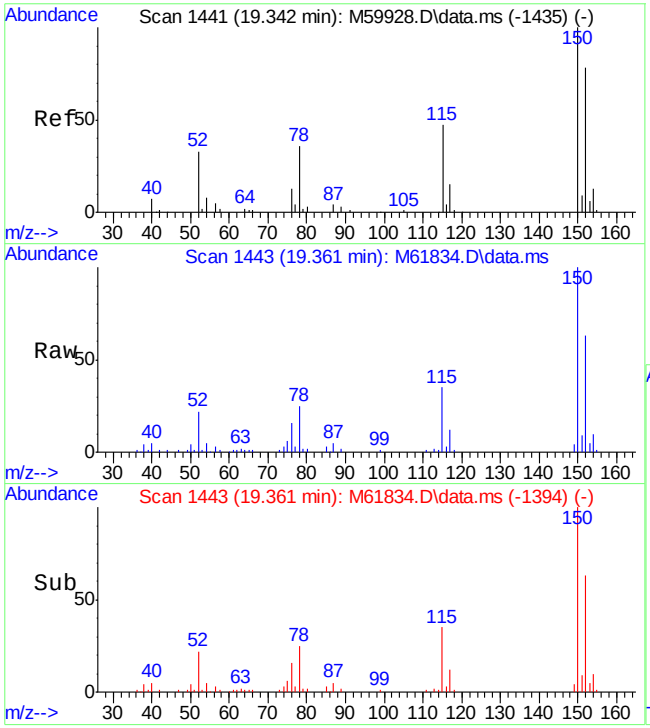




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.361 min Scan# 1443
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:152 Resp: 128649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.5 | 40.9 | 80.9 |
| 150 | 159.1 | 178.6 | 218.6# |

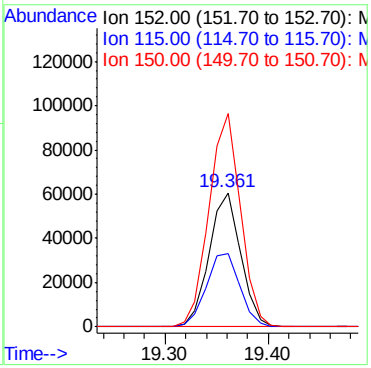





#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.361 min Scan# 1443
Delta R.T. 0.019 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:152 Resp: 128649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.5 | 37.3 | 77.3 |
| 150 | 159.1 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61913.D
Acq On : 18 Jul 2016 4:51 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1861,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 19 09:00:23 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

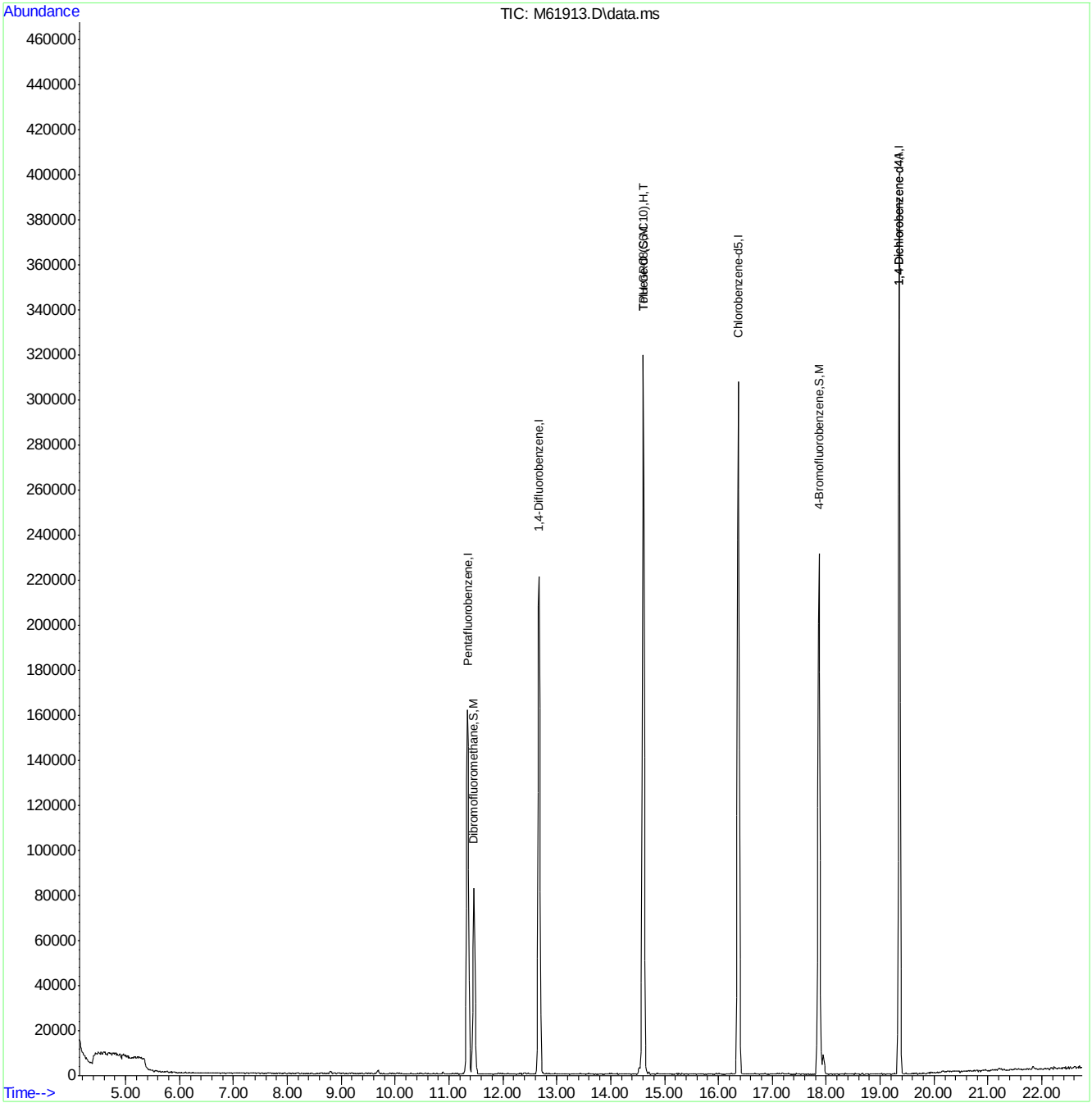
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 160520 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 244448 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 241467 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.352 | 152 | 137692 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.352 | 152 | 137692 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 76953 | 20.20 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 101.00% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 289959 | 19.70 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 98.50% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 125901 | 20.59 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 102.95% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 3662668m | 34.74 | ppb | |

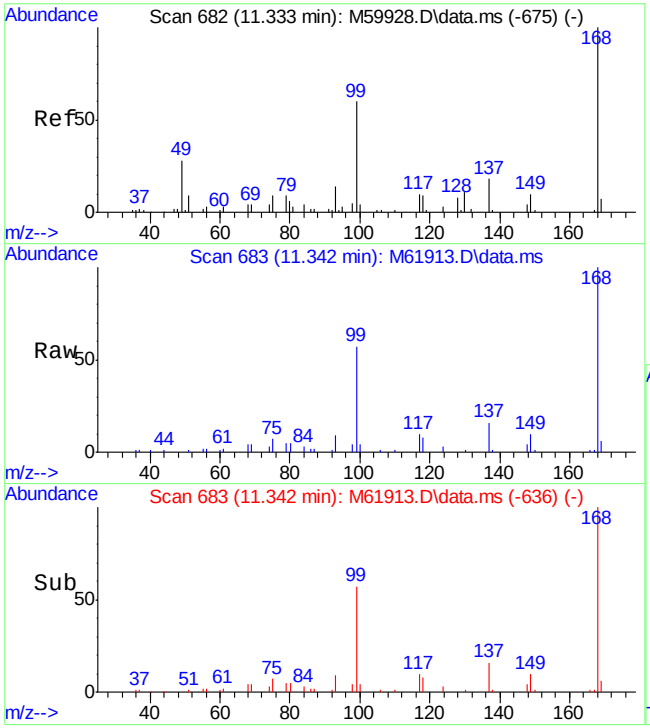
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61913.D
Acq On : 18 Jul 2016 4:51 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1861,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

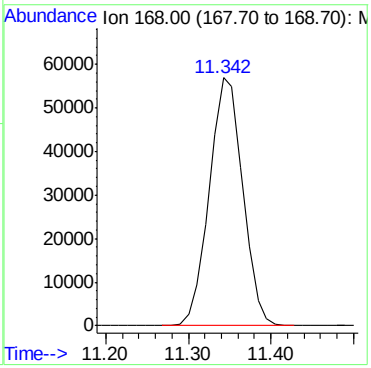
Quant Time: Jul 19 09:00:23 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

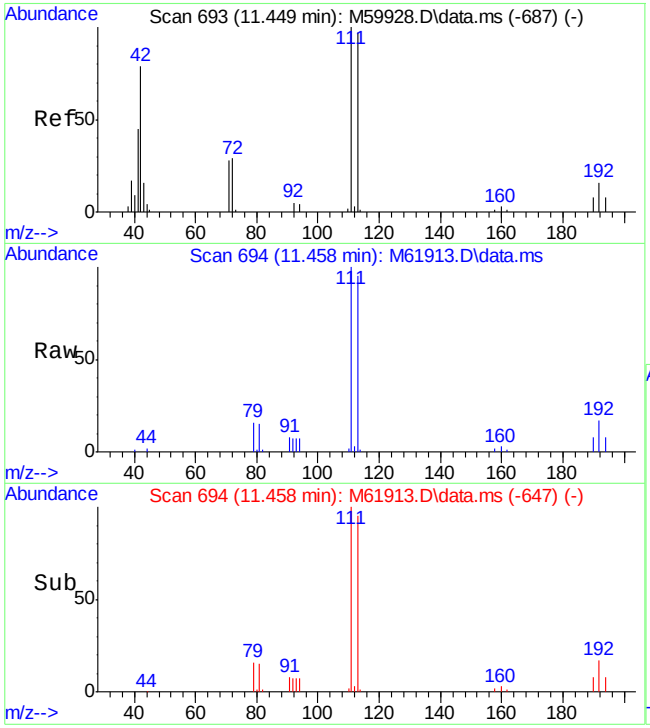





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:168 Resp: 160520

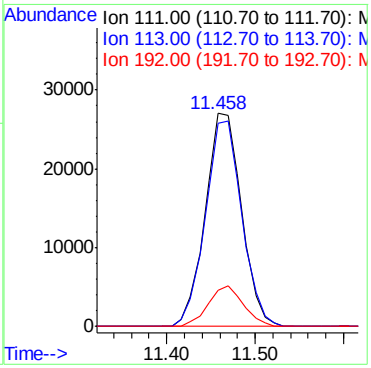


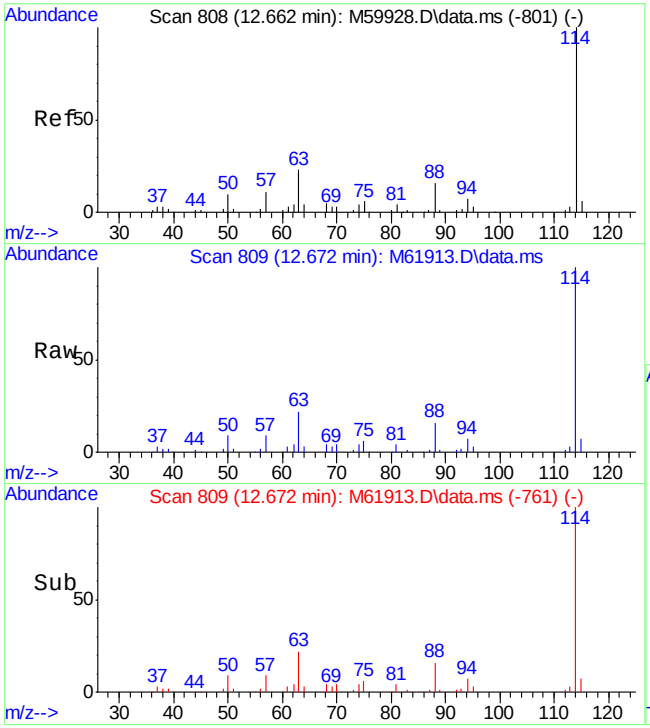




#36
Dibromofluoromethane
Concen: 20.20 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:111 Resp: 76953

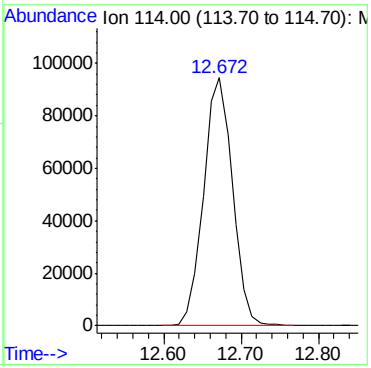
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.8 | 77.7 | 117.7 |
| 192 | 18.5 | 0.0 | 36.3 |

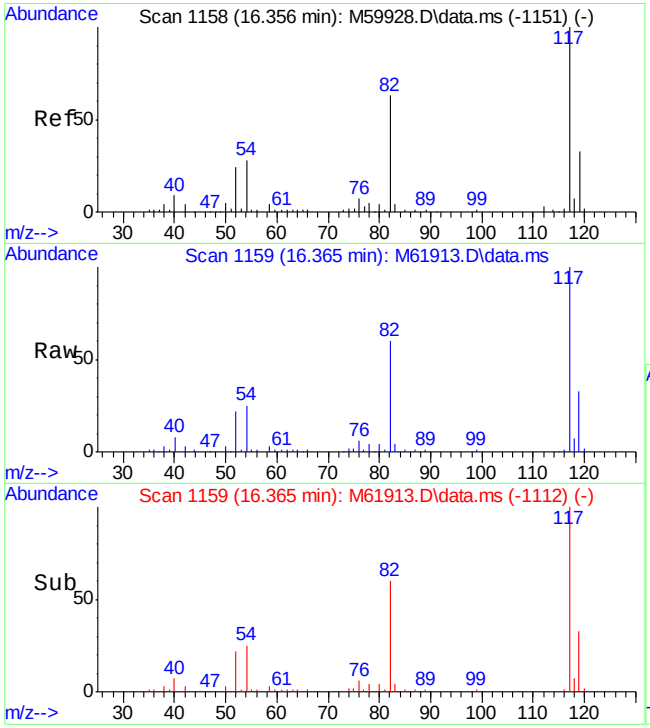





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:114 Resp: 244448

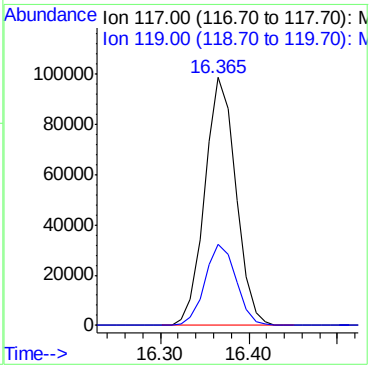


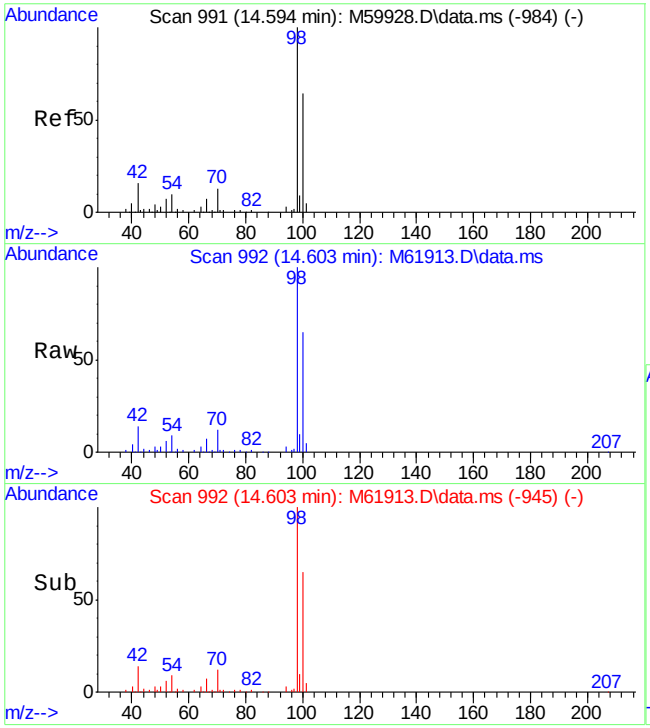




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:117 Resp: 241467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.7 | 11.2 | 51.2 |

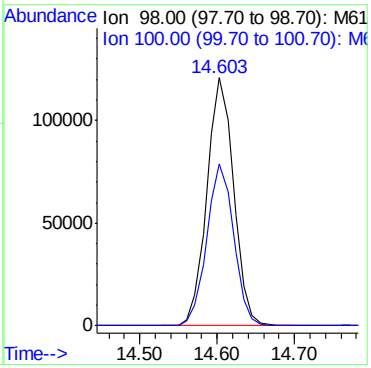


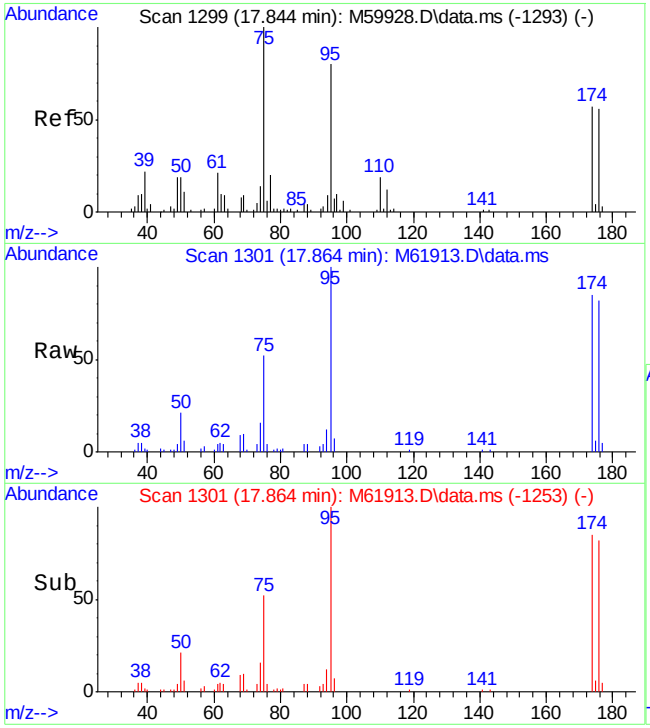



#56
Toluene-d8
Concen: 19.70 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion: 98 Resp: 289959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

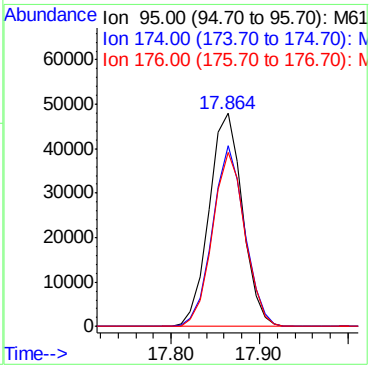


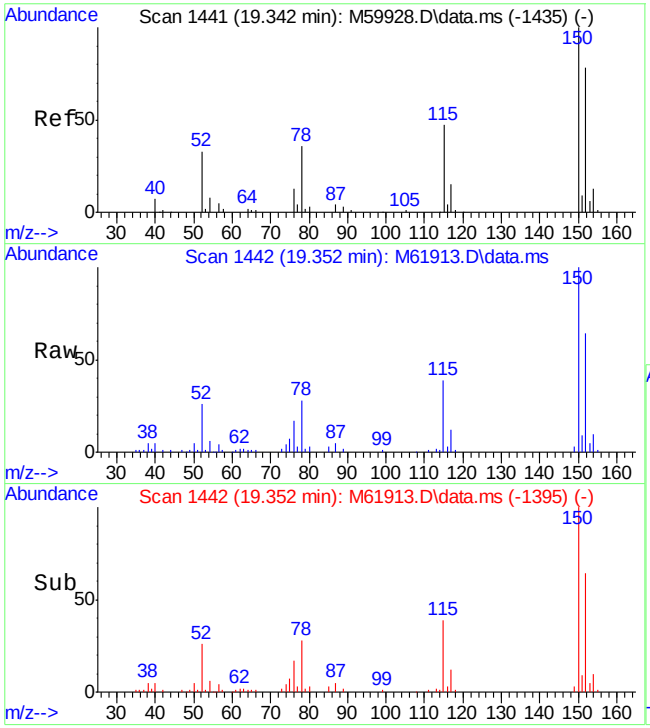




#74
4-Bromofluorobenzene
Concen: 20.59 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion: 95 Resp: 125901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 81.8 | 54.3 | 94.3 |
| 176 | 79.4 | 51.5 | 91.5 |

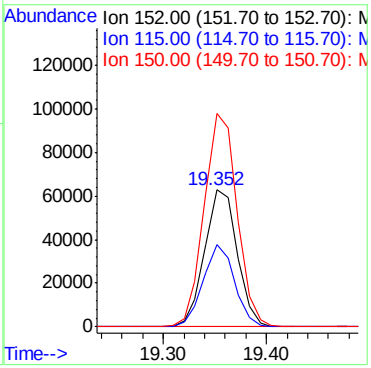


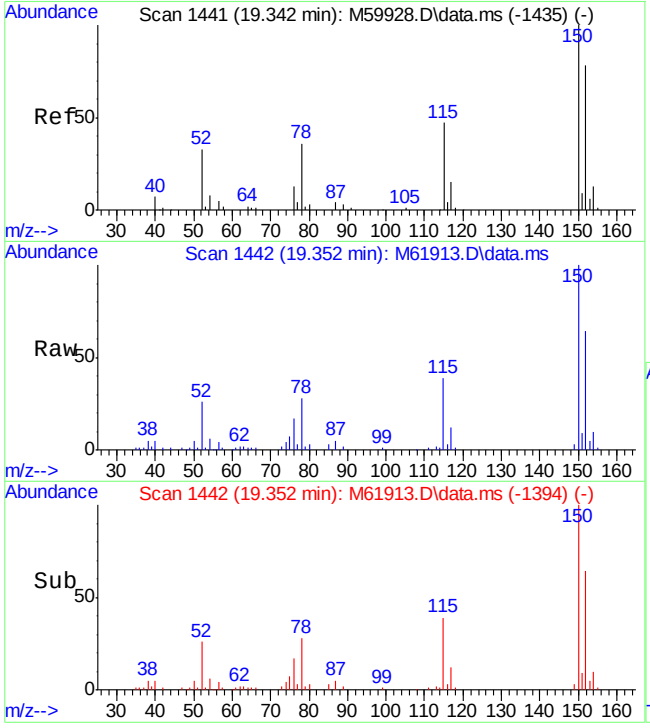



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:152 Resp: 137692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.7 | 40.9 | 80.9 |
| 150 | 156.8 | 178.6 | 218.6# |

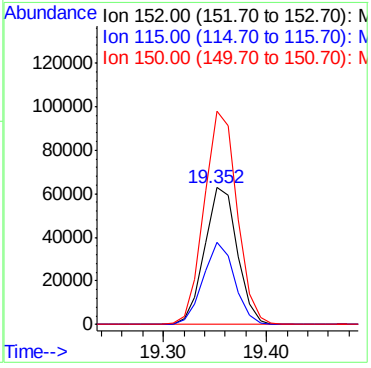


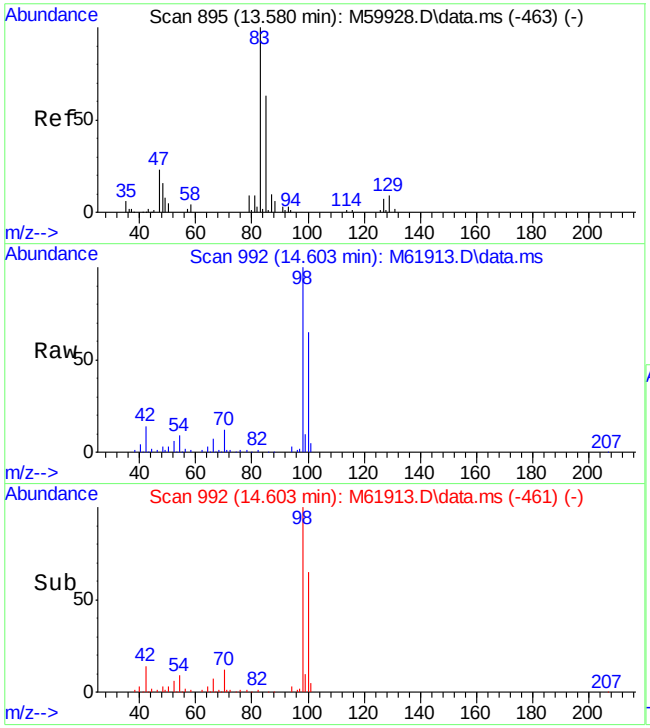




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:152 Resp: 137692

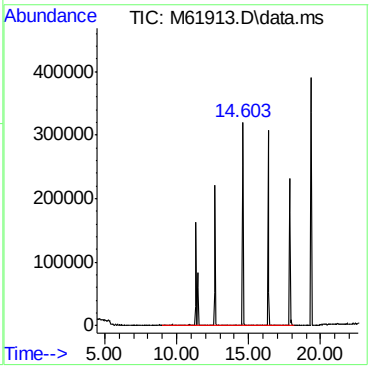
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.7 | 37.3 | 77.3 |
| 150 | 156.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 34.74 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:TIC Resp: 3662668



## GC Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14613-MB | BB5187.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 1.65 | 3.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 630-01-3 | Hexacosane | 77% | 38-146% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14613-BS | BB5188.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |
| OP14613-BSD | BB5189.D | 1 | 07/09/16 | MT | 07/08/16 | OP14613 | GBB170 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

| CAS No. | Compound | Spike mg/kg | BSP mg/kg | BSP % | BSD mg/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 33.3 | 31.5 | 95 | 30.0 | 90 | 5 | 53-107/12 |
| | TPH (> C28-C40) | 33.3 | 30.3 | 91 | 29.8 | 89 | 2 | 59-120/14 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 77% | 76% | 38-146% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46435
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14613-MS | BB5263.D | 10 | 07/11/16 | NN | 07/08/16 | OP14613 | GBB172 |
| OP14613-MSD | BB5264.D | 10 | 07/12/16 | NN | 07/08/16 | OP14613 | GBB172 |
| C46435-1 | BB5209.D | 2 | 07/10/16 | MT | 07/08/16 | OP14613 | GBB170 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

| CAS No. | Compound | C46435-1 mg/kg | Q | Spike mg/kg | MS mg/kg | MS % | Spike mg/kg | MSD mg/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 74.0 | | 33.2 | 213 | 418* [a] | 33.2 | 228 | 463* [a] | 7 | 53-107/12 |
| | TPH (> C28-C40) | 113 | | 33.2 | 390 | 833* [a] | 33.2 | 401 | 867* [a] | 3 | 59-120/14 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46435-1 | Limits |
|---|---|---|---|---|---|
| 630-01-3 | Hexacosane | 77% | 77% | 79% | 38-146% |

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
James Rhudy 07/12/16 10:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5209.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:03 am
Operator : MAIT
Sample : C46435-1
Misc : OP14613,GBB170,30.16,,,1,2,S
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:43:44 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|
| System Monitoring Compounds | | | | | |
| 1) S Hexacosane | 8.205 | 39294122 | 39.562 | ppm | m |
| Spiked Amount 100.000 | | Recovery = 39.56% | | | |
| Target Compounds | | | | | |
| 2) H TPH (C10-C28) | 4.817 | 1098421556 | 1115.916 | ppm | |
| 3) H TPH (>C28-C40) | 9.372 | 924270091 | 1698.299 | ppm | |
| 6) H TPH (Diesel) | 4.817 | 1098937989 | 1116.824 | ppm | |
| 7) H TPH (Motor Oil) | 9.372 | 922218502 | 1693.375 | ppm | |

(f)=RT Delta > 1/2 Window (m)=manual int.

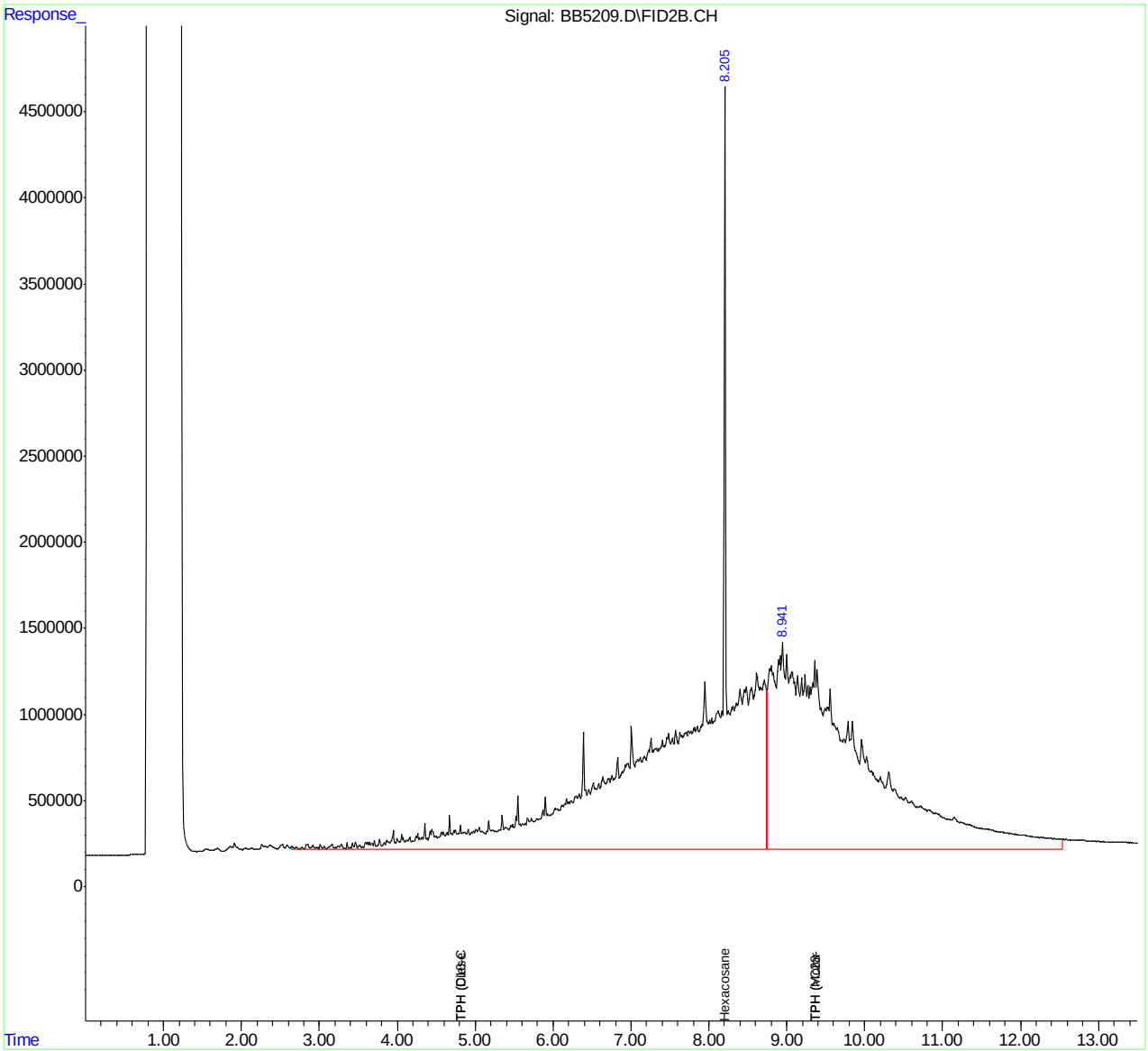
8.1.1
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5209.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:03 am
Operator : MAIT
Sample : C46435-1
Misc : OP14613,GBB170,30.16,,,1,2,S
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:43:44 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5190.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 9:43 pm
Operator : MAIT
Sample : C46435-2
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 88 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:16:21 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.205 | 78307344 | 78.841 ppm |
| Spiked Amount 100.000 | | Recovery = | 78.84% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 224193508 | 227.764 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 218587945 | 401.644 ppm |
| 6) H TPH (Diesel) | 4.817 | 223611495 | 227.251 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 219741272 | 403.488 ppm |

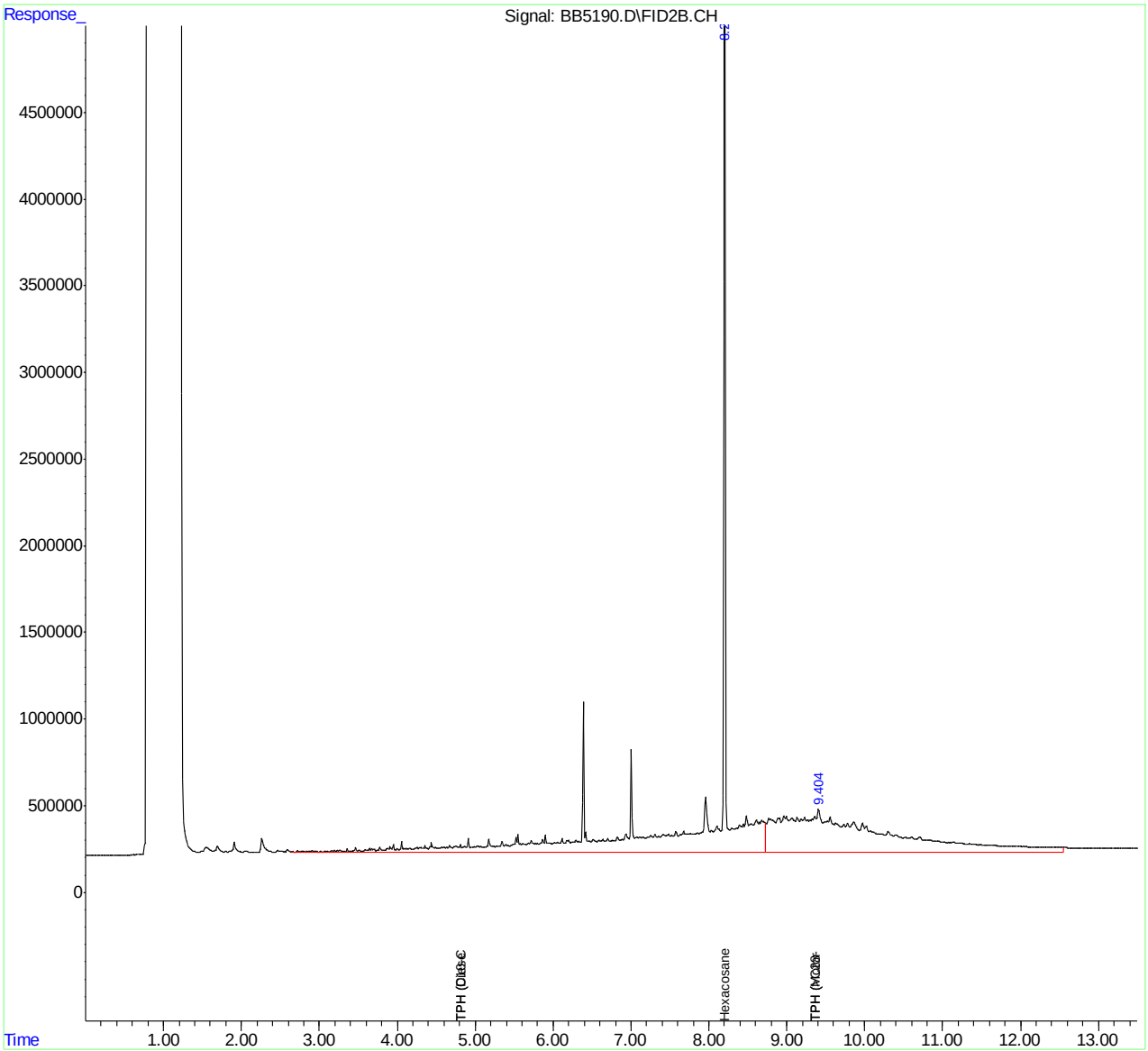
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5190.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 9:43 pm
Operator : MAIT
Sample : C46435-2
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 88 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:16:21 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5191.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 10:03 pm
Operator : MAIT
Sample : C46435-3
Misc : OP14613,GBB170,30.05,,,1,1,S
ALS Vial : 89 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:18:22 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 70519422 | 71.000 ppm |
| Spiked Amount 100.000 | | Recovery = | 71.00% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 340657150 | 346.083 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 149022221 | 273.821 ppm |
| 6) H TPH (Diesel) | 4.817 | 342728026 | 348.306 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 149371730 | 274.276 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

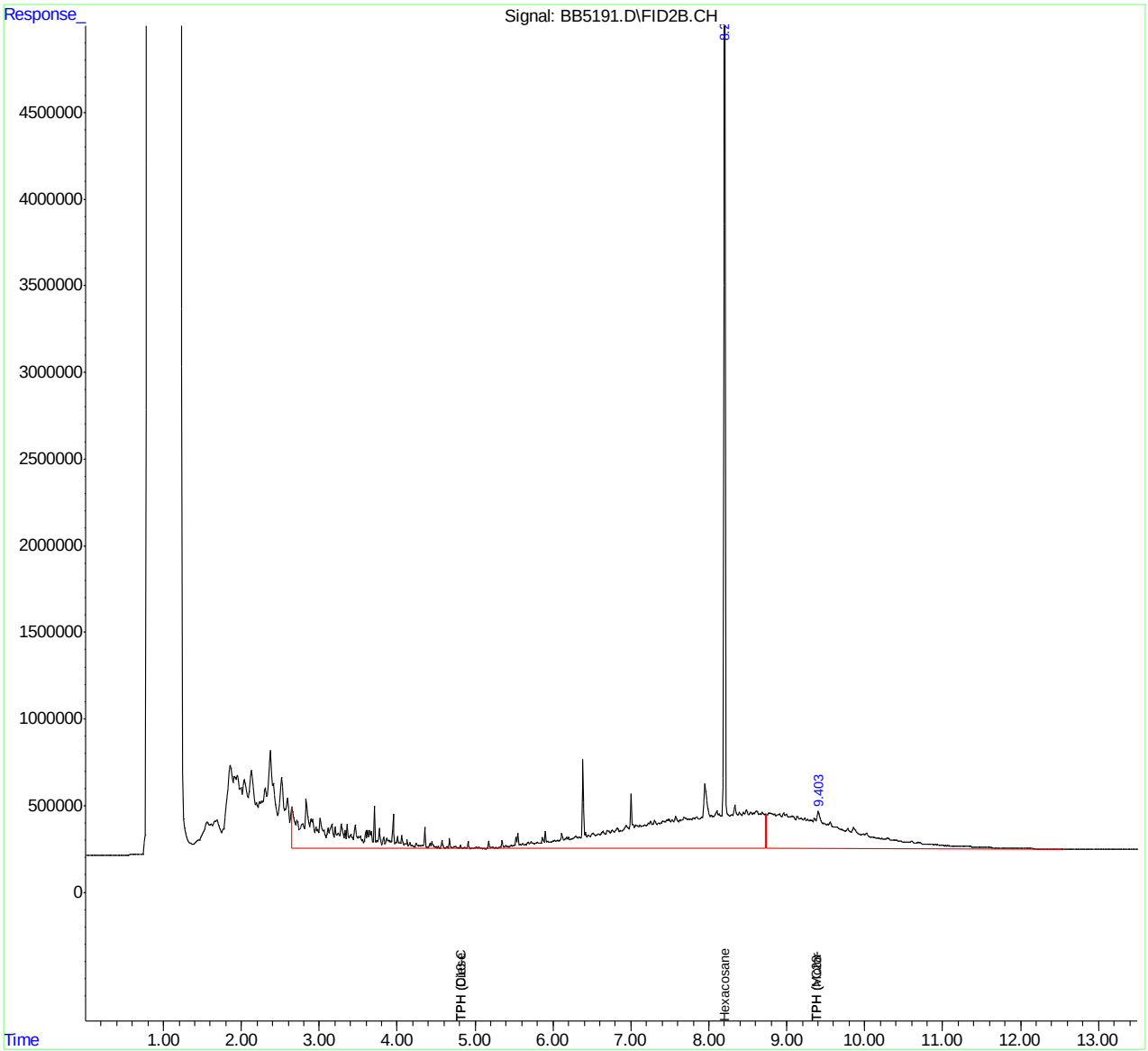
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5191.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 10:03 pm
Operator : MAIT
Sample : C46435-3
Misc : OP14613,GBB170,30.05,,,1,1,S
ALS Vial : 89 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:18:22 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5192.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 10:23 pm
Operator : MAIT
Sample : C46435-4
Misc : OP14613,GBB170,30.27,,,1,1,S
ALS Vial : 90 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:18:51 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 75828761 | 76.345 ppm |
| Spiked Amount 100.000 | | Recovery = | 76.34% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 43877164 | 44.576 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 42031845 | 77.231 ppm |
| 6) H TPH (Diesel) | 4.817 | 43877164 | 44.591 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 42031845 | 77.179 ppm |

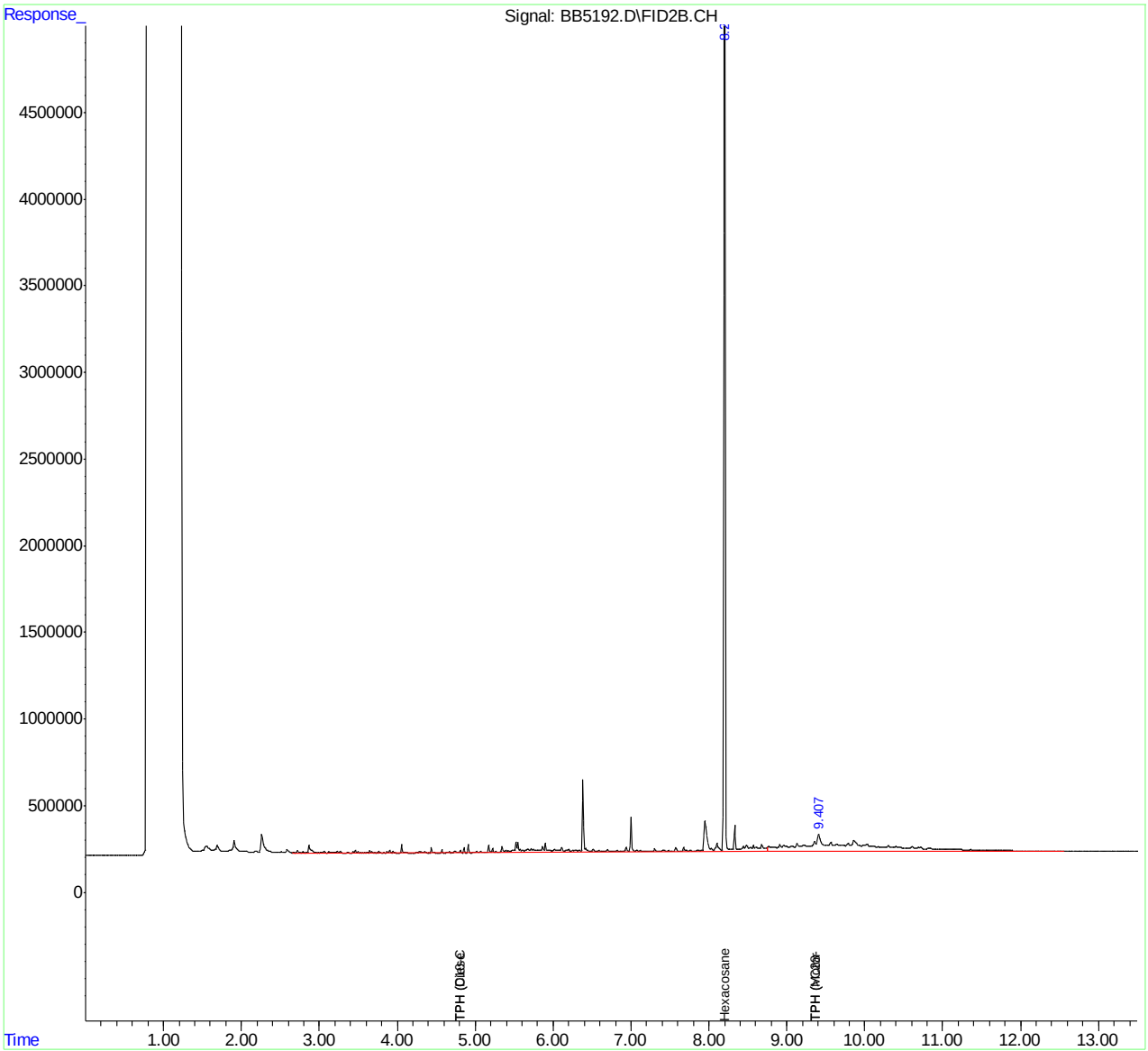
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5192.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 10:23 pm
Operator : MAIT
Sample : C46435-4
Misc : OP14613,GBB170,30.27,,,1,1,S
ALS Vial : 90 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:18:51 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5210.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:22 am
Operator : MAIT
Sample : C46435-7
Misc : OP14613,GBB170,30.24,,,1,2,S
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:46:12 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | System Monitoring Compounds | | | |
| 1) S | Hexacosane | 8.202 | 42220269 | 42.508 ppm |
| Spiked Amount | 100.000 | | Recovery = | 42.51% |
| | Target Compounds | | | |
| 2) H | TPH (C10-C28) | 4.817 | 493570398 | 501.431 ppm |
| 3) H | TPH (>C28-C40) | 9.372 | 667923625 | 1227.276 ppm |
| 6) H | TPH (Diesel) | 4.817 | 496441167 | 504.521 ppm |
| 7) H | TPH (Motor Oil) | 9.372 | 672708723 | 1235.226 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

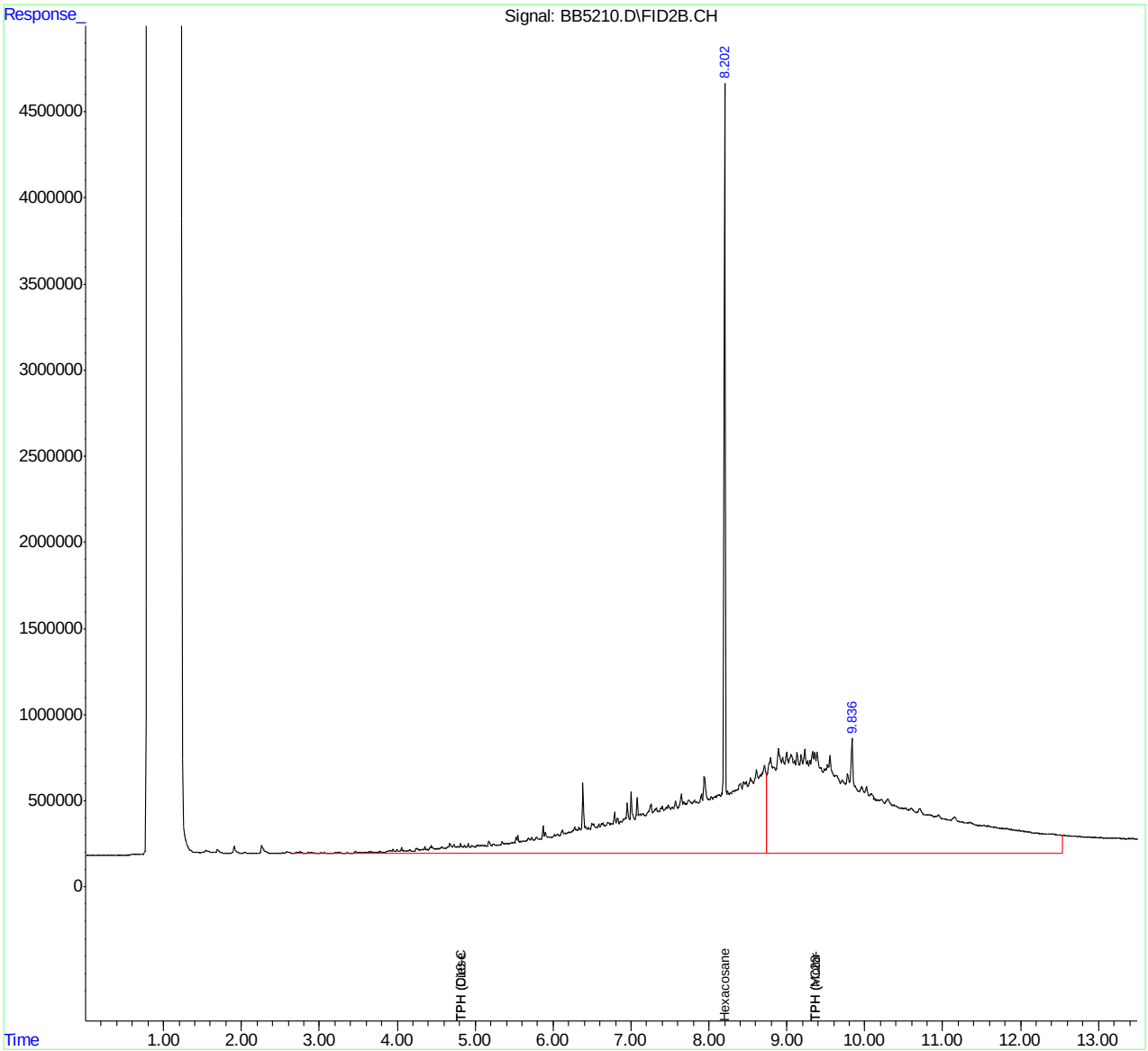
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5210.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:22 am
Operator : MAIT
Sample : C46435-7
Misc : OP14613,GBB170,30.24,,,1,2,S
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:46:12 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5211.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:42 am
Operator : MAIT
Sample : C46435-8
Misc : OP14613,GBB170,30.12,,,1,2,S
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:49:01 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.200 | 39957855 | 40.230 ppm |
| Spiked Amount 100.000 | | Recovery = | 40.23% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 80337134 | 81.617 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 206308883 | 379.082 ppm |
| 6) H TPH (Diesel) | 4.817 | 78948707 | 80.234 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 204194479 | 374.941 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

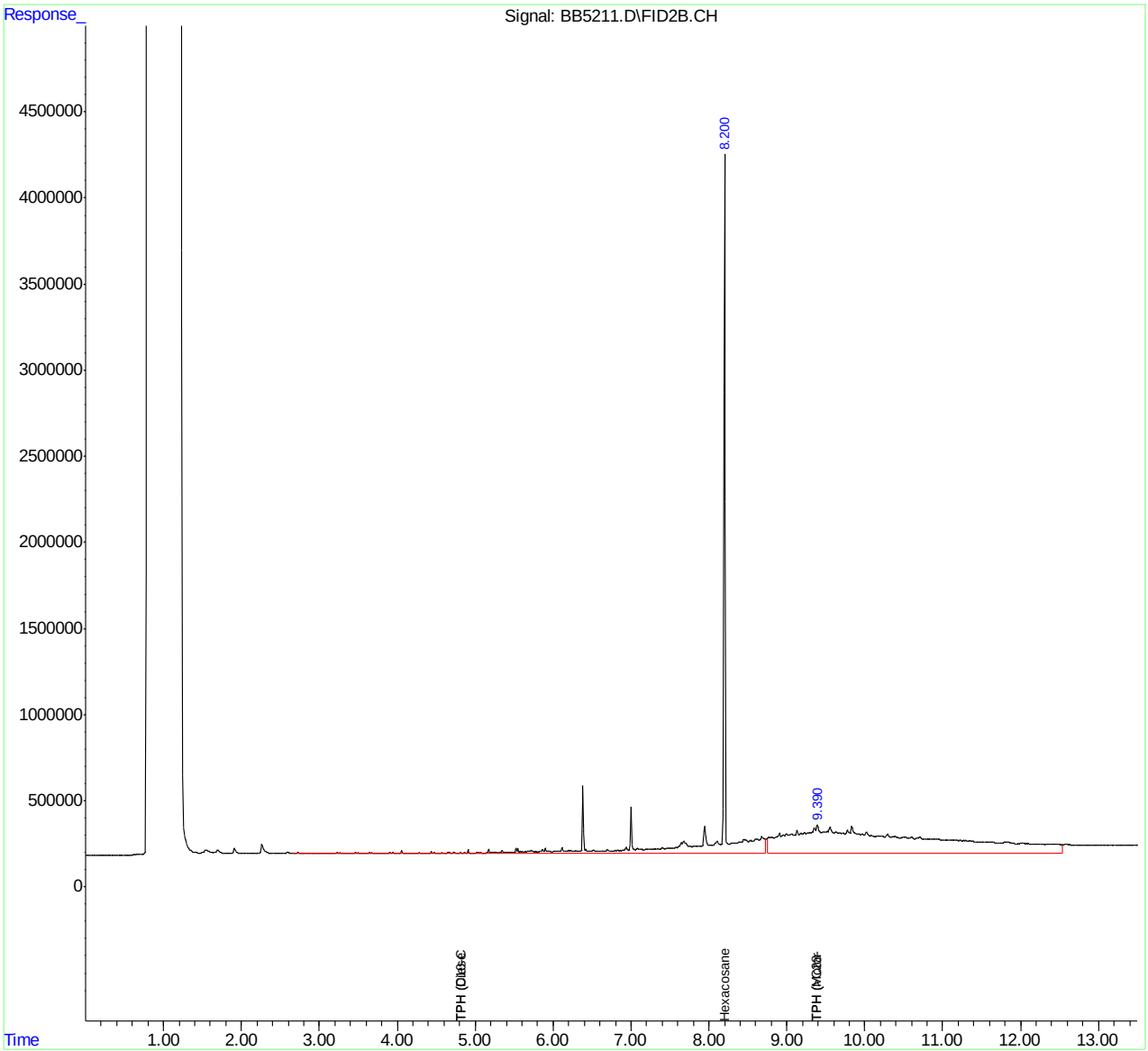
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5211.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 4:42 am
Operator : MAIT
Sample : C46435-8
Misc : OP14613,GBB170,30.12,,,1,2,S
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:49:01 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5195.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 11:23 pm
Operator : MAIT
Sample : C46435-9
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 93 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:19:51 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 71558752 | 72.046 ppm |
| Spiked Amount 100.000 | | Recovery = | 72.05% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 30395290 | 30.879 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 25677544 | 47.181 ppm |
| 6) H TPH (Diesel) | 4.817 | 30395290 | 30.890 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 25677544 | 47.149 ppm |

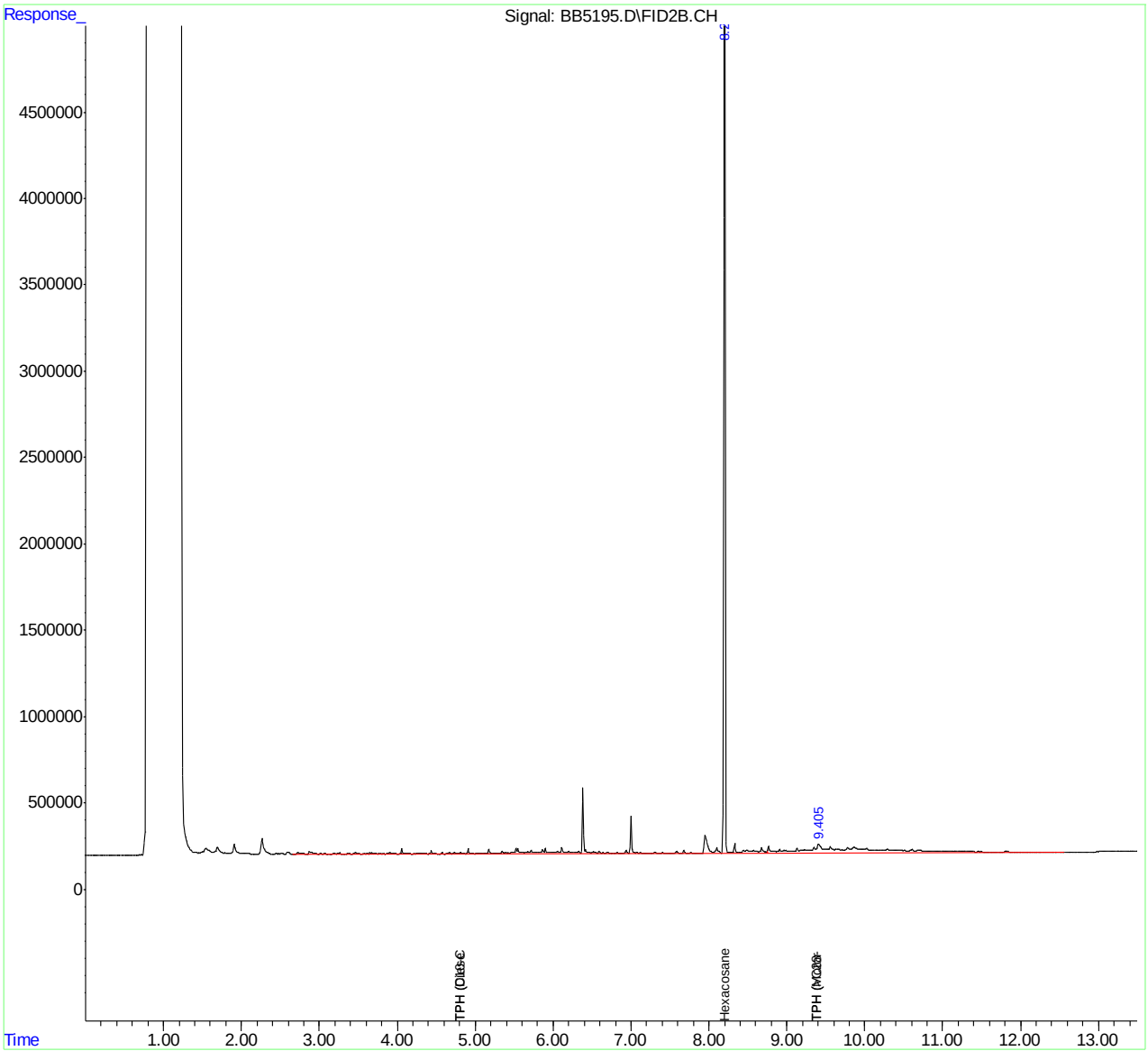
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5195.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 11:23 pm
Operator : MAIT
Sample : C46435-9
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 93 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:19:51 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5196.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 11:43 pm
Operator : MAIT
Sample : C46435-10
Misc : OP14613,GBB170,30.23,,,1,1,S
ALS Vial : 94 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:03 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 72548735 | 73.043 ppm |
| Spiked Amount 100.000 | | Recovery = | 73.04% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 33522010 | 34.056 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 24028644 | 44.151 ppm |
| 6) H TPH (Diesel) | 4.817 | 33522010 | 34.068 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 24028644 | 44.121 ppm |

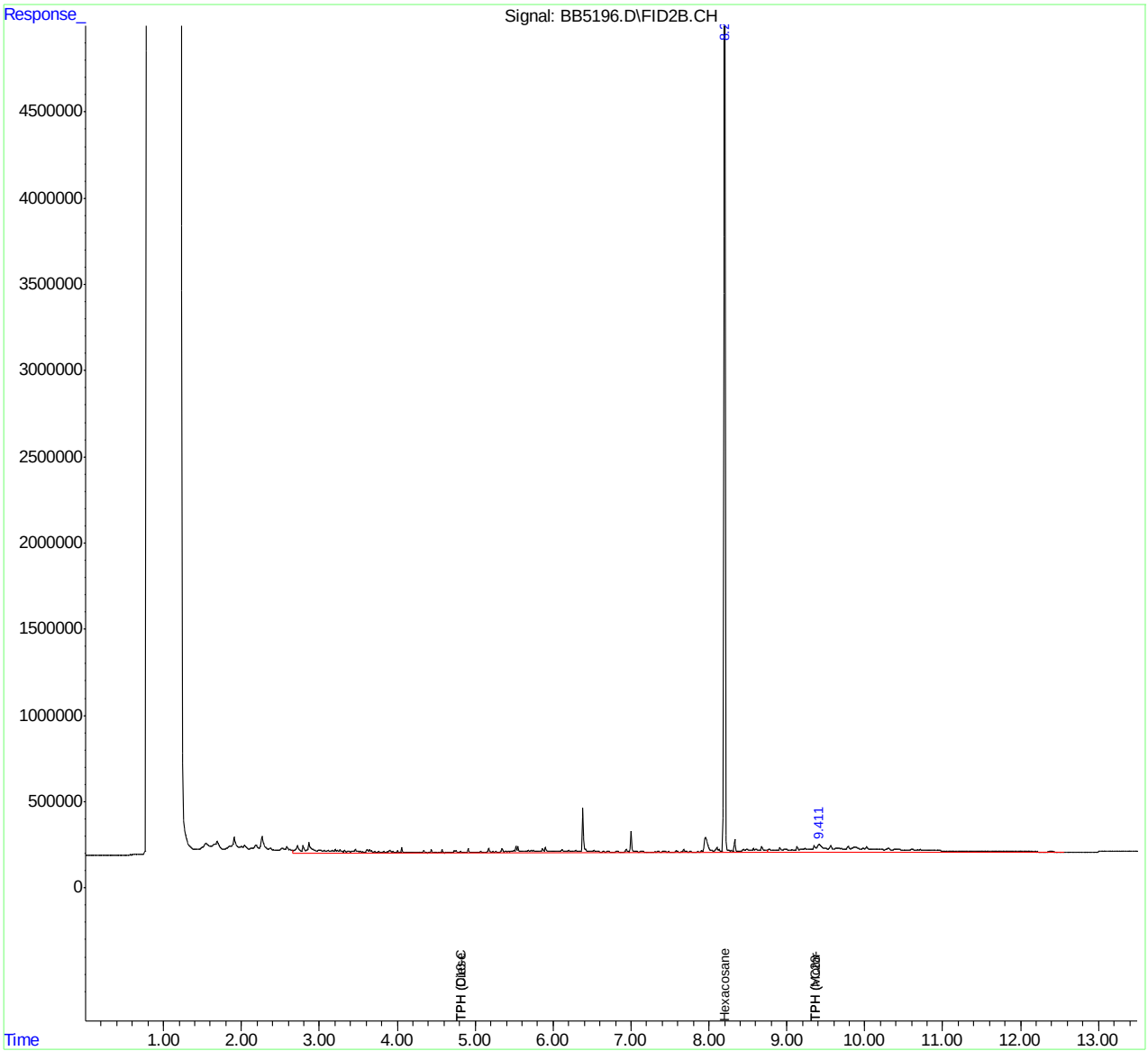
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5196.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 11:43 pm
Operator : MAIT
Sample : C46435-10
Misc : OP14613,GBB170,30.23,,,1,1,S
ALS Vial : 94 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:03 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5198.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 12:23 am
Operator : MAIT
Sample : C46435-11
Misc : OP14613,GBB170,30.07,,,1,1,S
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:35 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 74218844 | 74.725 ppm |
| Spiked Amount 100.000 | | Recovery = | 74.72% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 30883251 | 31.375 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 31411515 | 57.717 ppm |
| 6) H TPH (Diesel) | 4.817 | 30883251 | 31.386 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 31411515 | 57.678 ppm |

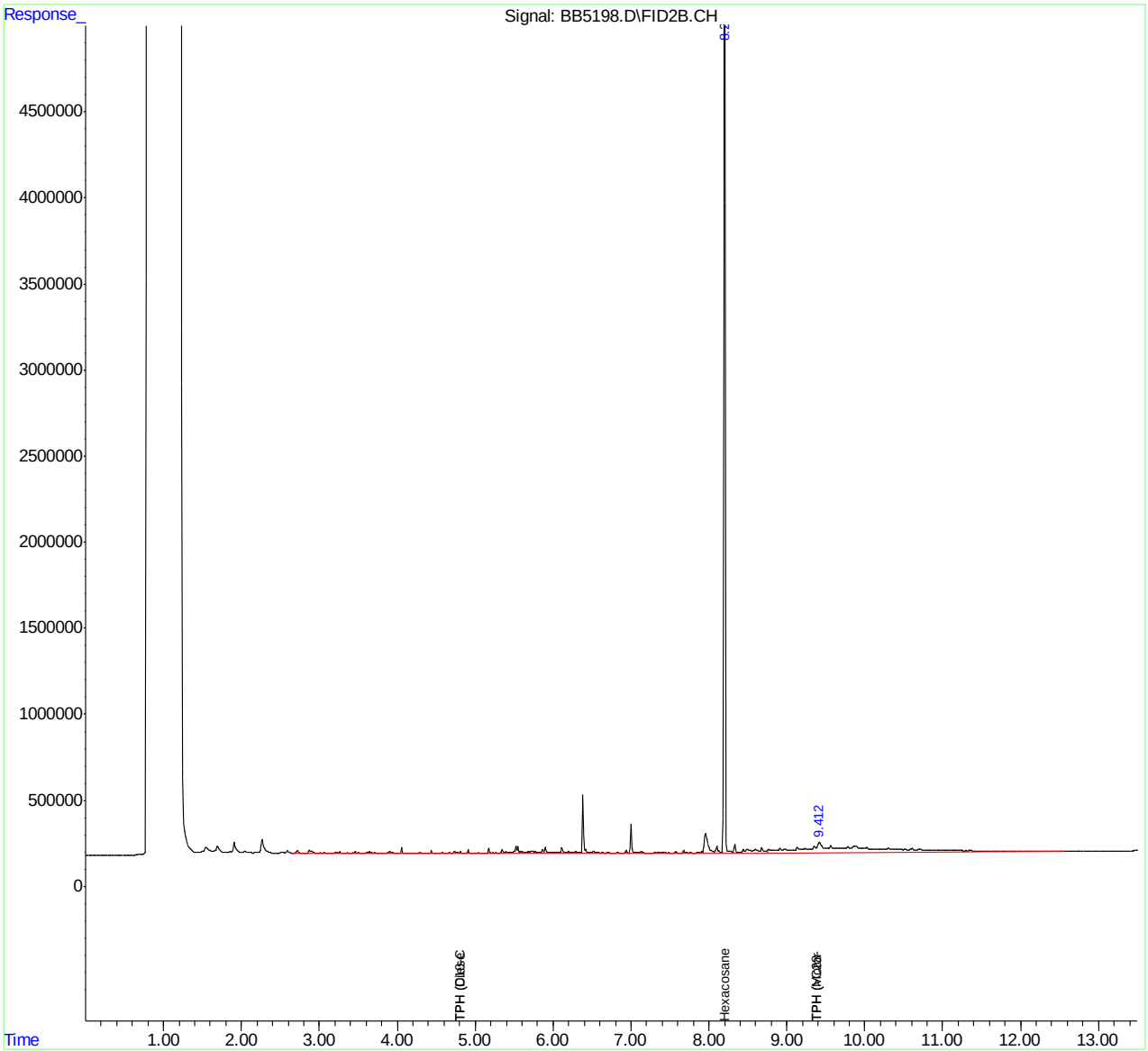
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5198.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 12:23 am
Operator : MAIT
Sample : C46435-11
Misc : OP14613,GBB170,30.07,,,1,1,S
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:35 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5199.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 12:43 am
Operator : MAIT
Sample : C46435-12
Misc : OP14613,GBB170,30.11,,,1,1,S
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:46 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 74750906 | 75.260 ppm |
| Spiked Amount 100.000 | | Recovery = | 75.26% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 31298782 | 31.797 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 43137353 | 79.263 ppm |
| 6) H TPH (Diesel) | 4.817 | 31298782 | 31.808 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 43137353 | 79.209 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

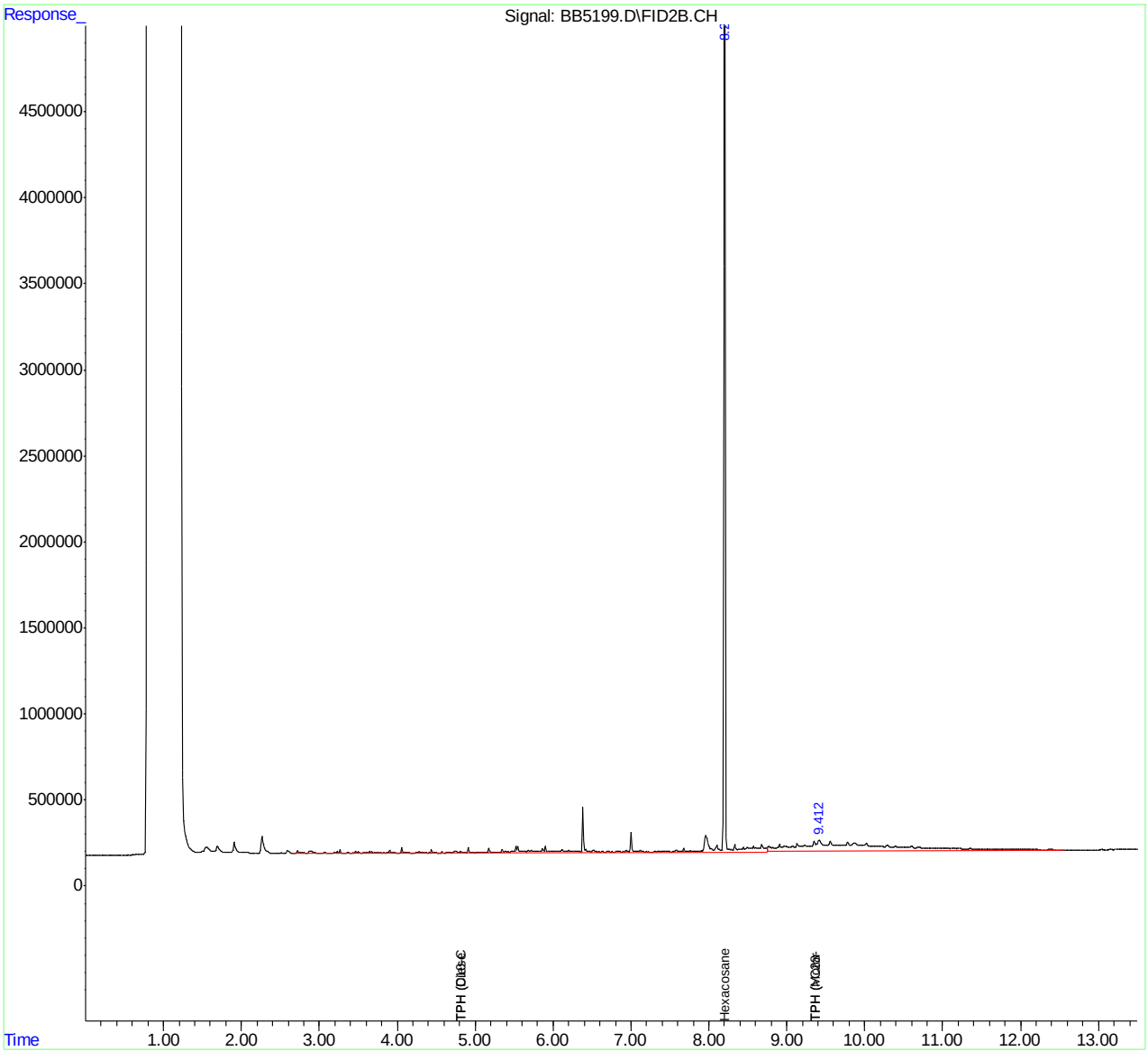
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5199.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 12:43 am
Operator : MAIT
Sample : C46435-12
Misc : OP14613,GBB170,30.11,,,1,1,S
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:20:46 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5200.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:03 am
Operator : MAIT
Sample : C46435-13
Misc : OP14613,GBB170,30.19,,,1,1,S
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:25:10 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.208 | 78739921 | 79.276 ppm |
| Spiked Amount 100.000 | | Recovery = | 79.28% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 1051380714 | 1068.126 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 601512063 | 1105.248 ppm |
| 5) H TPH (Kerosene) | 4.060 | 753204960 | 895.121 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 1029199748 | 1889.814 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

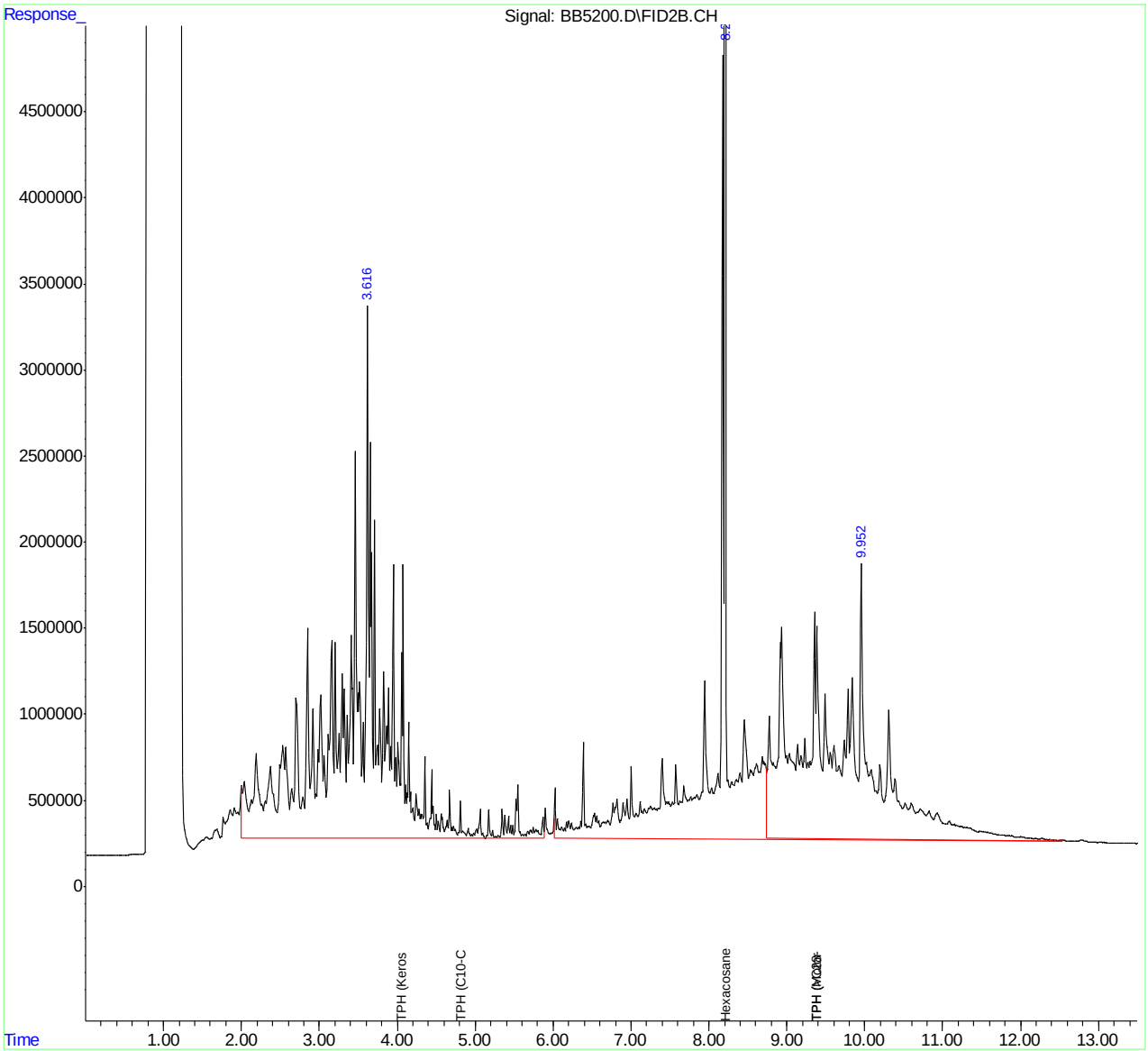
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5200.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:03 am
Operator : MAIT
Sample : C46435-13
Misc : OP14613,GBB170,30.19,,,1,1,S
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:25:10 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5212.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 5:02 am
Operator : MAIT
Sample : C46435-14
Misc : OP14613,GBB170,30.11,,,1,2,S
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:51:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.202 | 40306442 | 40.581 ppm |
| Spiked Amount 100.000 | | Recovery = | 40.58% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 604392340 | 614.018 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 442334638 | 812.767 ppm |
| 5) H TPH (Kerosene) | 4.060 | 276491387 | 328.587 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 821571595 | 1508.567 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

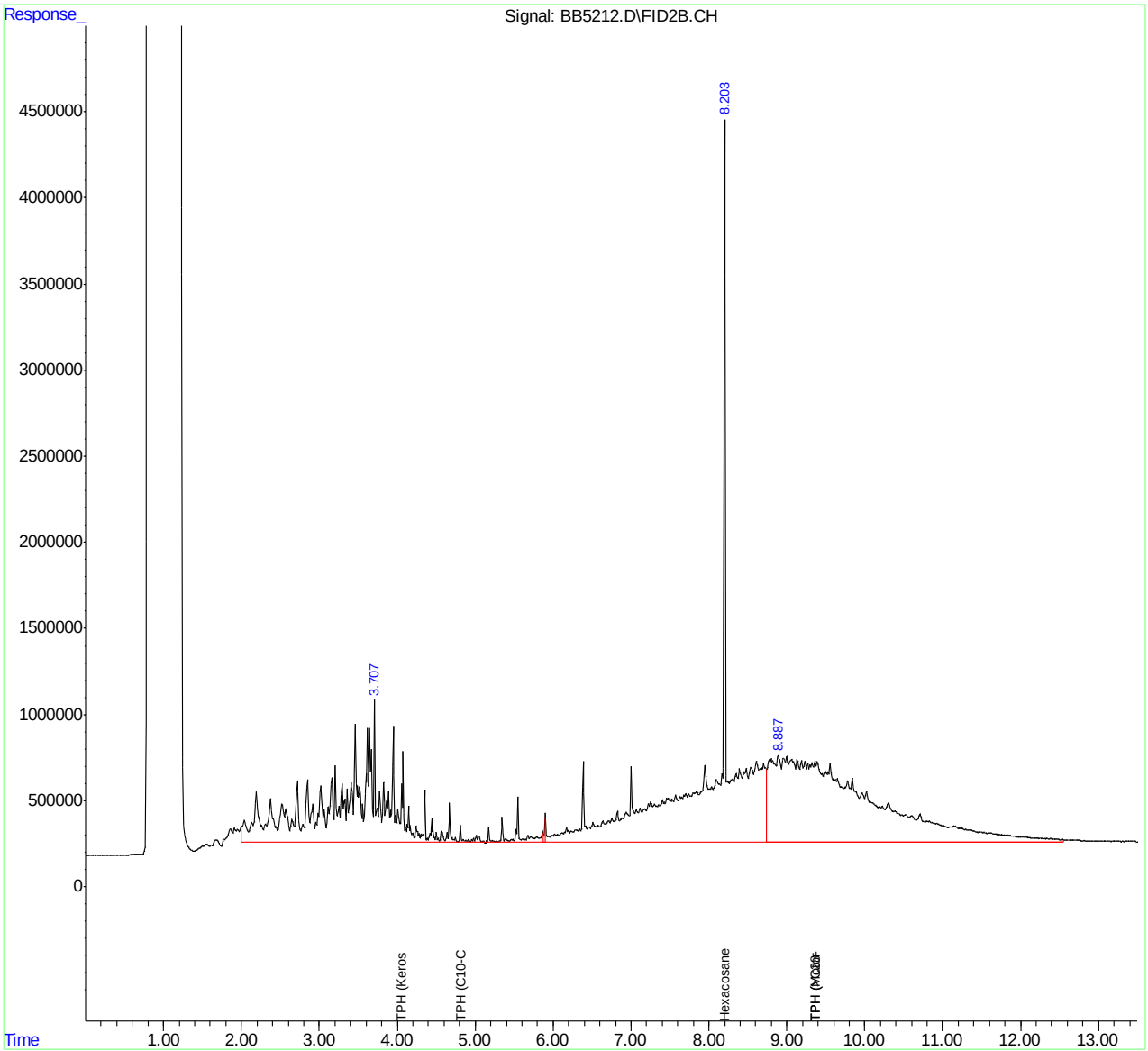
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5212.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 5:02 am
Operator : MAIT
Sample : C46435-14
Misc : OP14613,GBB170,30.11,,,1,2,S
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:51:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5201.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:23 am
Operator : MAIT
Sample : C46435-15
Misc : OP14613,GBB170,30.07,,,1,1,S
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:25:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 74350036 | 74.857 ppm |
| Spiked Amount 100.000 | | Recovery = | 74.86% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 508382003 | 516.479 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 42644236 | 78.357 ppm |
| 6) H TPH (Diesel) | 4.817 | 508382003 | 516.656 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 42644236 | 78.303 ppm |

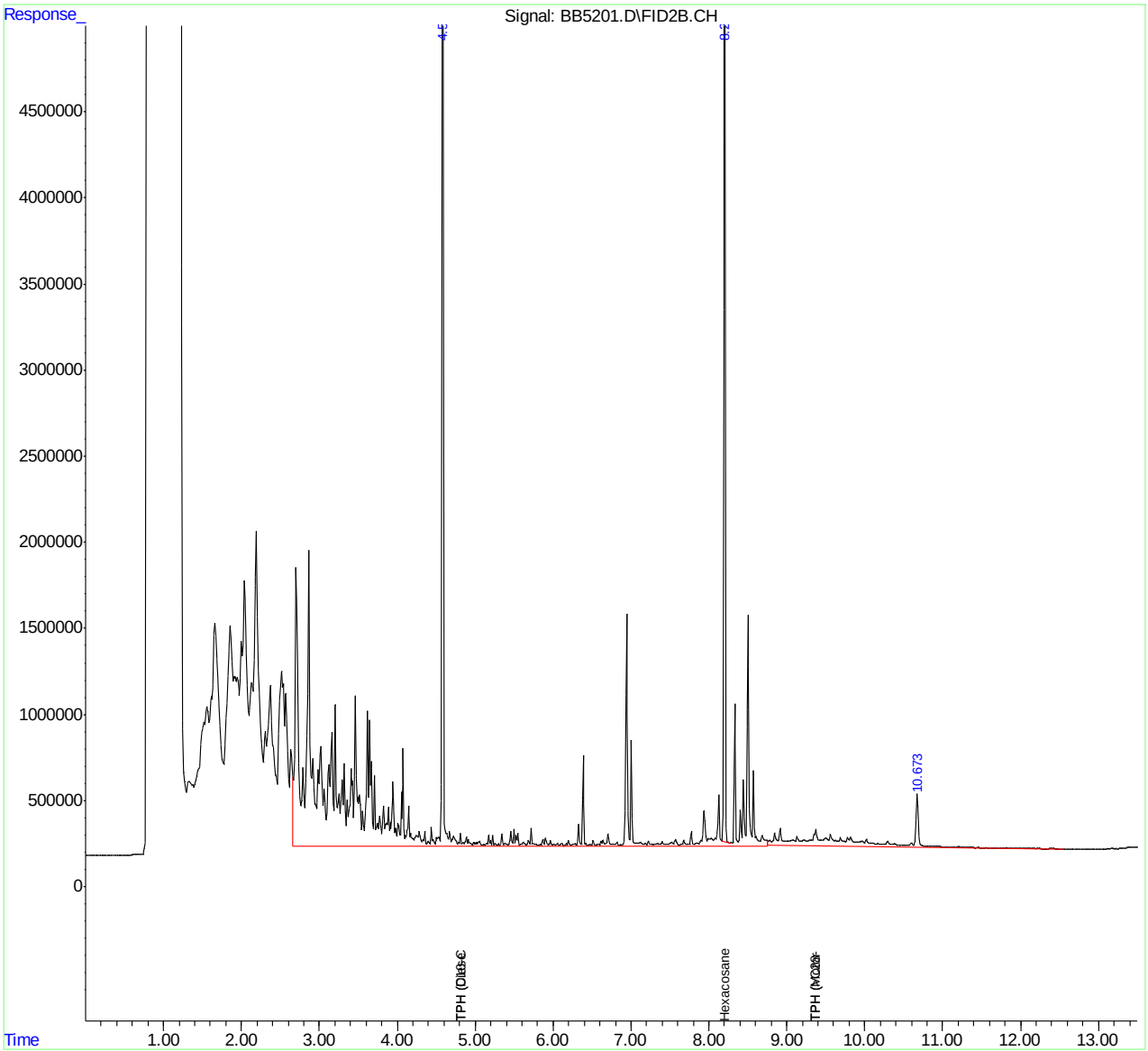
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5201.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:23 am
Operator : MAIT
Sample : C46435-15
Misc : OP14613,GBB170,30.07,,,1,1,S
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:25:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5202.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:43 am
Operator : MAIT
Sample : C46435-16
Misc : OP14613,GBB170,30.28,,,1,1,S
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:26:25 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 75289563 | 75.803 ppm |
| Spiked Amount 100.000 | | Recovery = | 75.80% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 43900669 | 44.600 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 33217231 | 61.035 ppm |
| 6) H TPH (Diesel) | 4.817 | 43900669 | 44.615 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 33217231 | 60.993 ppm |

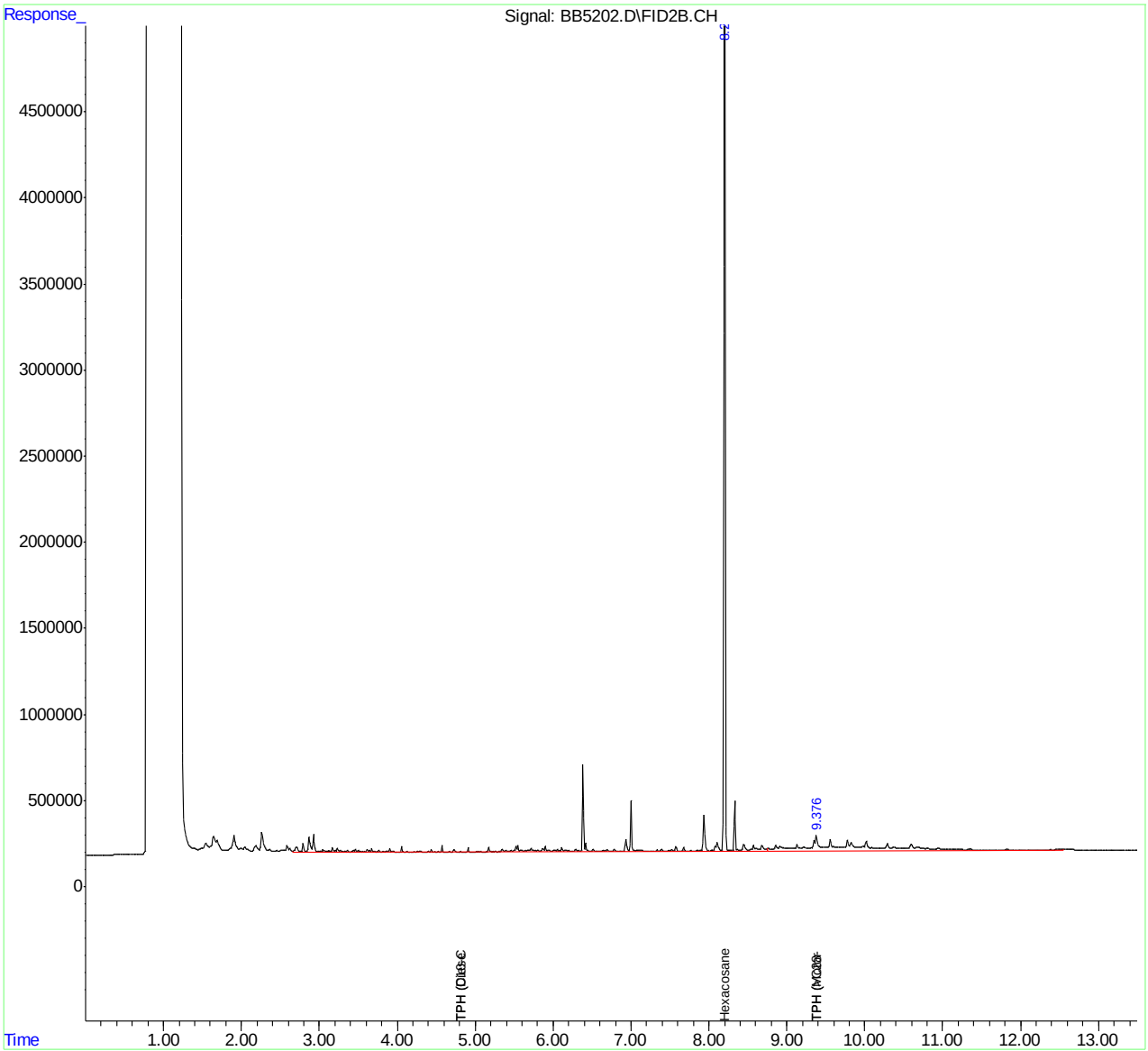
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5202.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 1:43 am
Operator : MAIT
Sample : C46435-16
Misc : OP14613,GBB170,30.28,,,1,1,S
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:26:25 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5203.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 2:03 am
Operator : MAIT
Sample : C46435-17
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:26:39 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.205 | 76806454 | 77.330 ppm |
| Spiked Amount 100.000 | | Recovery = | 77.33% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 190923723 | 193.965 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 29658795 | 54.497 ppm |
| 6) H TPH (Diesel) | 4.817 | 190923723 | 194.031 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 29658795 | 54.459 ppm |

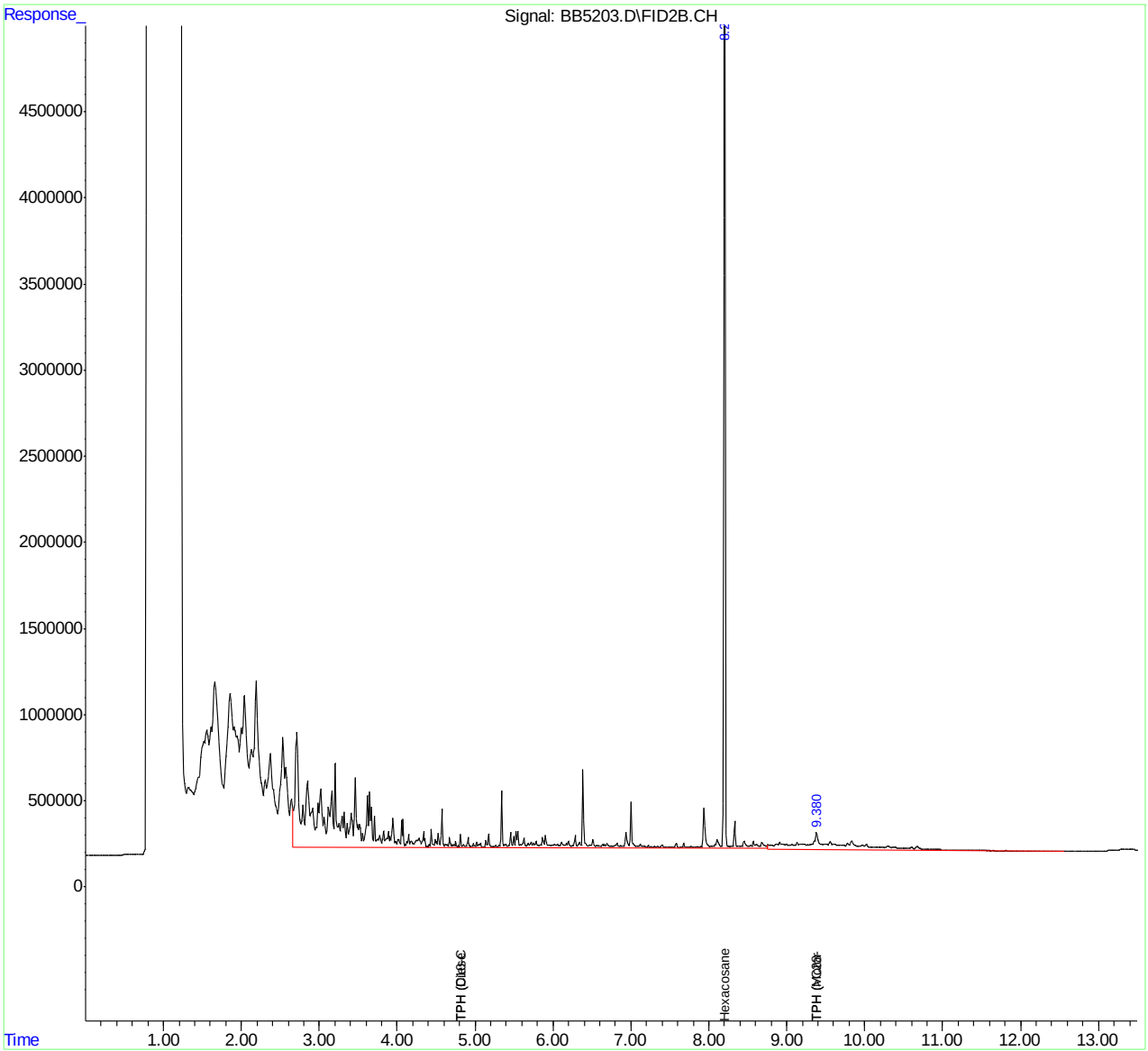
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5203.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 2:03 am
Operator : MAIT
Sample : C46435-17
Misc : OP14613,GBB170,30.17,,,1,1,S
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:26:39 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5204.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 2:23 am
Operator : MAIT
Sample : C46435-18
Misc : OP14613,GBB170,30.16,,,1,1,S
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:27:23 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.203 | 73394565 | 73.895 ppm |
| Spiked Amount 100.000 | | Recovery = | 73.89% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 23603756 | 23.980 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 15467646 | 28.421 ppm |
| 6) H TPH (Diesel) | 4.817 | 23603756 | 23.988 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 15781477 | 28.978 ppm |

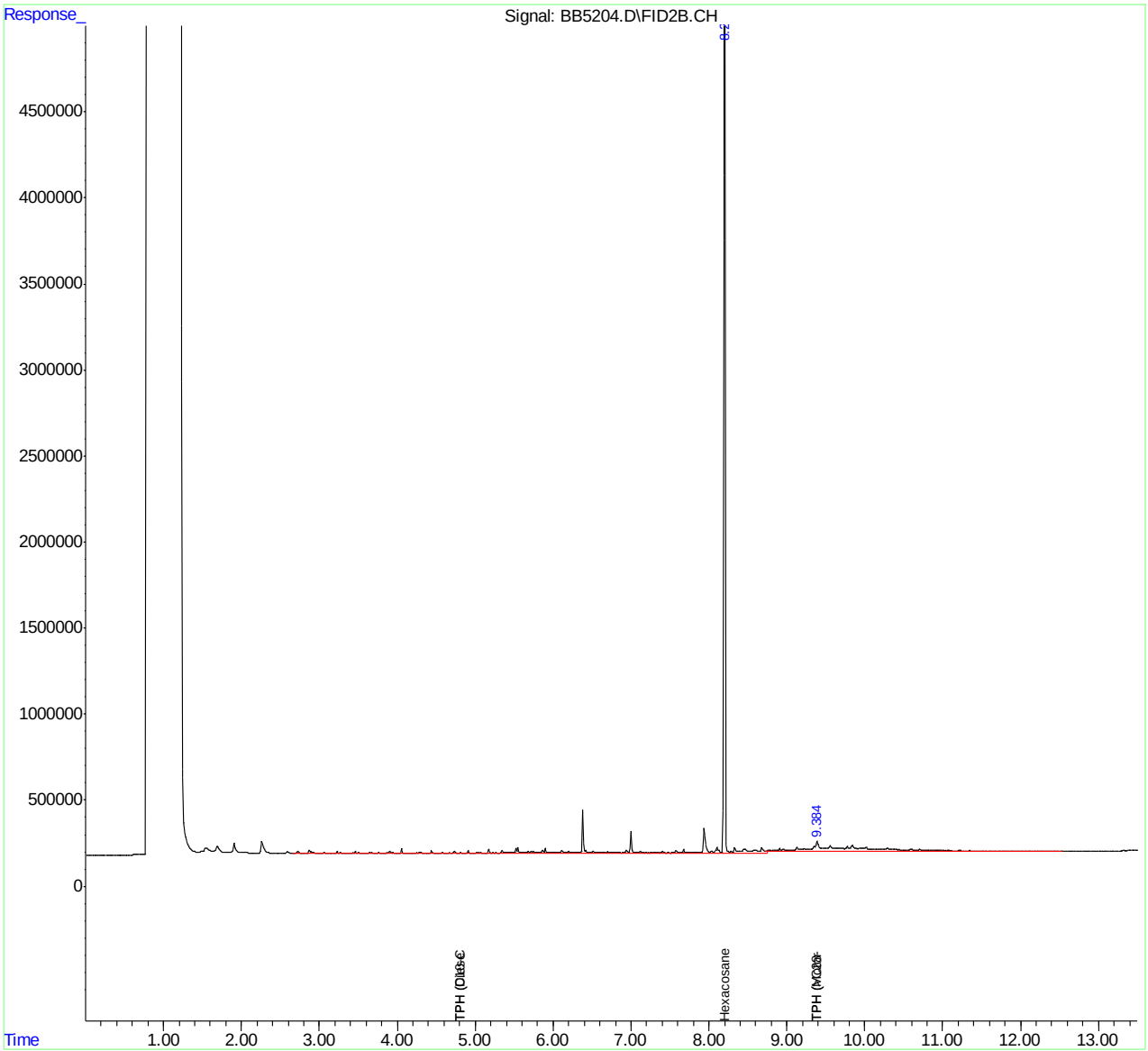
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5204.D
Signal(s) : FID2B.CH
Acq On : 10 Jul 2016 2:23 am
Operator : MAIT
Sample : C46435-18
Misc : OP14613,GBB170,30.16,,,1,1,S
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:27:23 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5187.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 8:43 pm
Operator : MAIT
Sample : OP14613-MB
Misc : OP14613,GBB170,30.00,,,1,1,S
ALS Vial : 85 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:07:52 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.204 | 76272052 | 76.792 ppm |
| Spiked Amount 100.000 | | Recovery = | 76.79% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 21727536 | 22.074 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 26970826 | 49.558 ppm |
| 6) H TPH (Diesel) | 4.817 | 21727536 | 22.081 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 26970826 | 49.524 ppm |

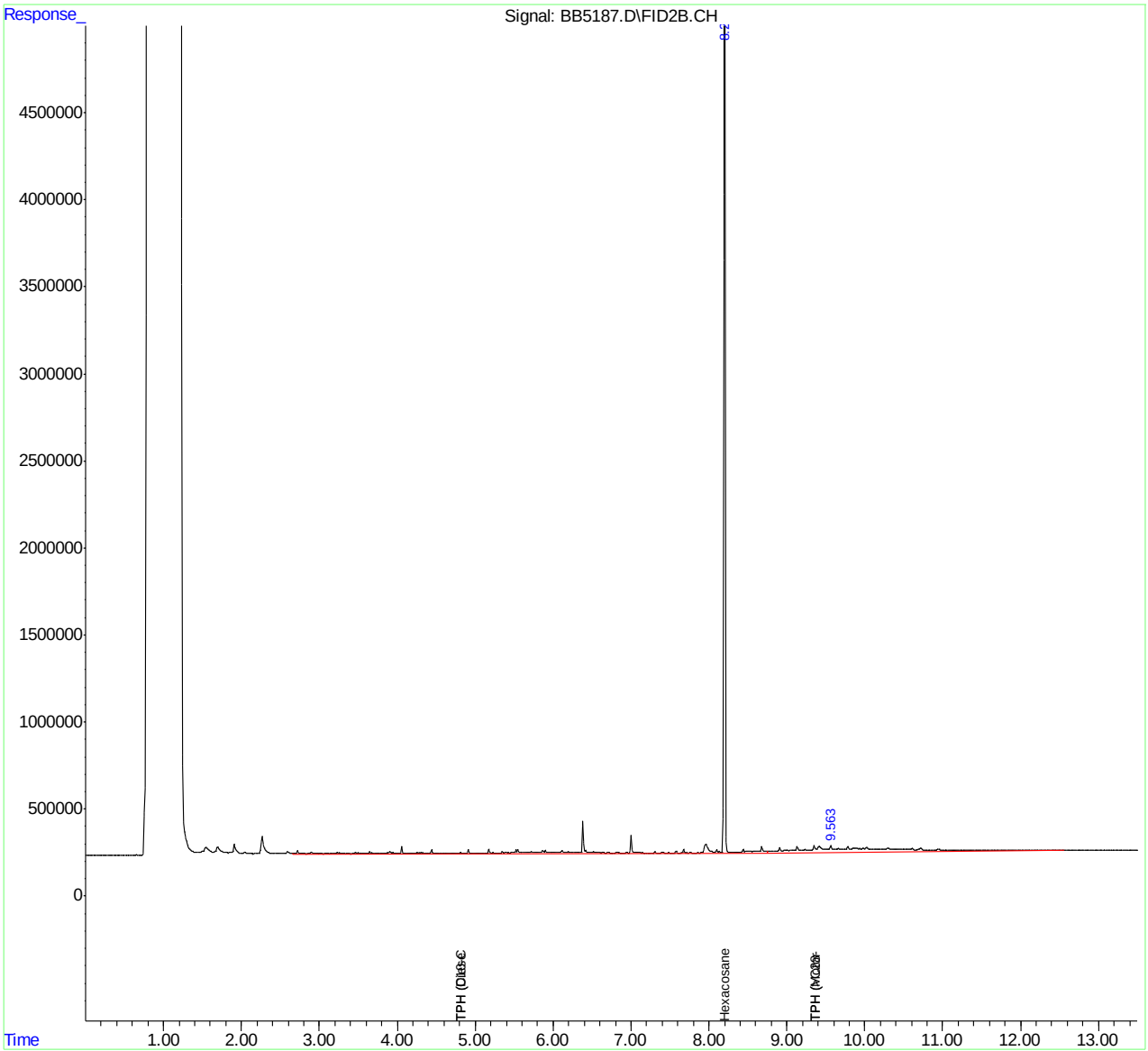
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB170\
Data File : BB5187.D
Signal(s) : FID2B.CH
Acq On : 09 Jul 2016 8:43 pm
Operator : MAIT
Sample : OP14613-MB
Misc : OP14613,GBB170,30.00,,,1,1,S
ALS Vial : 85 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 11 17:07:52 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46435
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Aluminum | 20 | .54 | 1.5 | | |
| Antimony | 2.0 | .16 | .18 | | |
| Arsenic | 2.0 | .17 | .17 | | |
| Barium | 20 | .025 | .09 | | |
| Beryllium | 1.0 | .019 | .01 | | |
| Boron | 10 | .27 | .15 | | |
| Cadmium | 1.0 | .032 | .031 | | |
| Calcium | 500 | 1.9 | 4.5 | | |
| Chromium | 1.0 | .12 | .054 | | |
| Cobalt | 1.0 | .049 | .025 | | |
| Copper | 2.5 | .1 | .15 | | |
| Iron | 20 | .51 | .76 | | |
| Lead | 2.0 | .11 | .14 | 0.050 | <2.0 |
| Magnesium | 500 | 3.7 | 2.1 | | |
| Manganese | 1.5 | .021 | .026 | | |
| Molybdenum | 2.0 | .11 | .04 | | |
| Nickel | 1.0 | .045 | .047 | | |
| Potassium | 1000 | 2.9 | 4.6 | | |
| Selenium | 2.0 | .49 | .33 | | |
| Silicon | 20 | .22 | .43 | | |
| Silver | 1.0 | .089 | .067 | | |
| Sodium | 1000 | 2.6 | 1.2 | | |
| Strontium | 1.0 | .014 | .018 | | |
| Thallium | 2.0 | .39 | .12 | | |
| Tin | 50 | .3 | .28 | | |
| Titanium | 1.0 | .076 | .13 | | |
| Vanadium | 1.0 | .043 | .074 | | |
| Zinc | 2.0 | .11 | .22 | | |

Associated samples MP11595: C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46435
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | C46435-18 Original | MS | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Aluminum | | | | | |
| Antimony | anr | | | | |
| Arsenic | anr | | | | |
| Barium | anr | | | | |
| Beryllium | anr | | | | |
| Boron | | | | | |
| Cadmium | anr | | | | |
| Calcium | | | | | |
| Chromium | anr | | | | |
| Cobalt | anr | | | | |
| Copper | anr | | | | |
| Iron | | | | | |
| Lead | 3.1 | 44.3 | 45.9 | 89.8 | 75-125 |
| Magnesium | | | | | |
| Manganese | | | | | |
| Molybdenum | anr | | | | |
| Nickel | anr | | | | |
| Potassium | | | | | |
| Selenium | anr | | | | |
| Silicon | | | | | |
| Silver | anr | | | | |
| Sodium | | | | | |
| Strontium | | | | | |
| Thallium | anr | | | | |
| Tin | | | | | |
| Titanium | | | | | |
| Vanadium | anr | | | | |
| Zinc | anr | | | | |

Associated samples MP11595: C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46435
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 07/11/16

| Metal | C46435-18 Original | MSD | Spikelot MPIR5 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Aluminum | | | | | | |
| Antimony | anr | | | | | |
| Arsenic | anr | | | | | |
| Barium | anr | | | | | |
| Beryllium | anr | | | | | |
| Boron | | | | | | |
| Cadmium | anr | | | | | |
| Calcium | | | | | | |
| Chromium | anr | | | | | |
| Cobalt | anr | | | | | |
| Copper | anr | | | | | |
| Iron | | | | | | |
| Lead | 3.1 | 45.5 | 46.3 | 91.6 | 2.7 | 20 |
| Magnesium | | | | | | |
| Manganese | | | | | | |
| Molybdenum | anr | | | | | |
| Nickel | anr | | | | | |
| Potassium | | | | | | |
| Selenium | anr | | | | | |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Thallium | anr | | | | | |
| Tin | | | | | | |
| Titanium | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | anr | | | | | |

Associated samples MP11595: C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46435
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | BSP Result | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 44.2 | 50 | 88.4 | 80-120 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11595: C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46435
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11595
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/11/16

| Metal | C46435-18 Original | SDL 1:5 | %DIF | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 31.9 | 37.9 | 18.8 (a) | 0-10 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11595: C46435-1, C46435-2, C46435-3, C46435-4, C46435-7, C46435-8, C46435-9, C46435-10, C46435-11, C46435-12, C46435-13, C46435-14, C46435-15, C46435-16, C46435-17, C46435-18

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

*e-Hardcopy 2.0*
*Automated Report*

Technical Report for

ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46436

Sampling Date: 07/07/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: 35

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46436

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46436-1 | 07/07/16 | 12:00 | JK | 07/07/16 | AQ | Ground Water | B27W |
| C46436-2 | 07/07/16 | 12:10 | JK | 07/07/16 | AQ | Ground Water | B29W |

# Summary of Hits

**Job Number:** C46436
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/07/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46436-1** | **B27W** | | | | | |
| Acetone [a] | | 88.9 | 20 | 4.0 | ug/l | SW846 8260B |
| Benzene [a] | | 11.4 | 1.0 | 0.20 | ug/l | SW846 8260B |
| n-Butylbenzene [a] | | 1.8 J | 2.0 | 0.20 | ug/l | SW846 8260B |
| sec-Butylbenzene [a] | | 2.1 | 2.0 | 0.20 | ug/l | SW846 8260B |
| Chloroethane [a] | | 0.80 J | 1.0 | 0.20 | ug/l | SW846 8260B |
| Chloroform [a] | | 1.0 | 1.0 | 0.20 | ug/l | SW846 8260B |
| cis-1,2-Dichloroethylene [a] | | 1.0 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Ethylbenzene [a] | | 65.5 | 1.0 | 0.20 | ug/l | SW846 8260B |
| 2-Hexanone [a] | | 2.4 J | 10 | 2.0 | ug/l | SW846 8260B |
| Isopropylbenzene [a] | | 19.0 | 1.0 | 0.20 | ug/l | SW846 8260B |
| p-Isopropyltoluene [a] | | 2.5 | 2.0 | 0.20 | ug/l | SW846 8260B |
| Methyl chloride [a] | | 0.32 J | 1.0 | 0.30 | ug/l | SW846 8260B |
| Methyl ethyl ketone [a] | | 20.1 | 10 | 2.0 | ug/l | SW846 8260B |
| Naphthalene [a] | | 8.3 | 5.0 | 0.50 | ug/l | SW846 8260B |
| n-Propylbenzene [a] | | 22.7 | 2.0 | 0.20 | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene [a] | | 5.1 | 2.0 | 0.20 | ug/l | SW846 8260B |
| 1,3,5-Trimethylbenzene [a] | | 14.2 | 2.0 | 0.20 | ug/l | SW846 8260B |
| Tetrachloroethylene [a] | | 0.31 J | 1.0 | 0.30 | ug/l | SW846 8260B |
| Toluene [a] | | 1.8 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Trichloroethylene [a] | | 53.1 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Xylene (total) [a] | | 18.3 | 2.0 | 0.46 | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) [a] | | 5710 | 500 | 250 | ug/l | SW846 8260B |
| **C46436-2** | **B29W** | | | | | |
| Benzene [a] | | 2820 | 100 | 20 | ug/l | SW846 8260B |
| 1,2-Dichloroethane [a] | | 60.1 J | 100 | 20 | ug/l | SW846 8260B |
| Ethylbenzene [a] | | 1390 | 100 | 20 | ug/l | SW846 8260B |
| Isopropylbenzene [a] | | 110 | 100 | 20 | ug/l | SW846 8260B |
| Naphthalene [a] | | 104 J | 500 | 50 | ug/l | SW846 8260B |
| n-Propylbenzene [a] | | 142 J | 200 | 20 | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene [a] | | 713 | 200 | 20 | ug/l | SW846 8260B |
| 1,3,5-Trimethylbenzene [a] | | 239 | 200 | 20 | ug/l | SW846 8260B |
| Toluene [a] | | 4160 | 100 | 20 | ug/l | SW846 8260B |
| Xylene (total) [a] | | 6800 | 200 | 46 | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) [a] | | 96700 | 5000 | 2500 | ug/l | SW846 8260B |

(a) Sample vial contained more than 0.5cm of sediment.

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27W | | |
| **Lab Sample ID:** | C46436-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | R40972.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| Run #2 [a] | R41030.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 88.9 | 20 | 4.0 | ug/l | |
| 71-43-2 | Benzene | 11.4 | 1.0 | 0.20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | 1.8 | 2.0 | 0.20 | ug/l | J |
| 135-98-8 | sec-Butylbenzene | 2.1 | 2.0 | 0.20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | 0.80 | 1.0 | 0.20 | ug/l | J |
| 67-66-3 | Chloroform | 1.0 | 1.0 | 0.20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | 0.22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 1.0 | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27W | | |
| **Lab Sample ID:** | C46436-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | 65.5 | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | 2.4 | 10 | 2.0 | ug/l | J |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | 19.0 | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | 2.5 | 2.0 | 0.20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | 0.32 | 1.0 | 0.30 | ug/l | J |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 20.1 | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | 8.3 | 5.0 | 0.50 | ug/l | |
| 103-65-1 | n-Propylbenzene | 22.7 | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | 2.4 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 5.1 | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 14.2 | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 0.31 | 1.0 | 0.30 | ug/l | J |
| 108-88-3 | Toluene | 1.8 | 1.0 | 0.20 | ug/l | |
| 79-01-6 | Trichloroethylene | 53.1 | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | 18.3 | 2.0 | 0.46 | ug/l | |
| | TPH-GRO (C6-C10) | 5710 [b] | 500 | 250 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 108% | 80-123% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B27W | | |
| **Lab Sample ID:** | C46436-1 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 99% | 102% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 95% | 79-114% |

(a) Sample vial contained more than 0.5cm of sediment.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29W | | |
| **Lab Sample ID:** | C46436-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | R41031.D | 100 | 07/12/16 | CV | n/a | n/a | VR1581 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 2000 | 400 | ug/l | |
| 71-43-2 | Benzene | 2820 | 100 | 20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 100 | 20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 100 | 20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 100 | 20 | ug/l | |
| 75-25-2 | Bromoform | ND | 100 | 22 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 200 | 20 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 200 | 20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 200 | 28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 100 | 20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 100 | 20 | ug/l | |
| 67-66-3 | Chloroform | ND | 100 | 20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 200 | 20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 200 | 26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 100 | 20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 100 | 20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 100 | 20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 100 | 20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 200 | 40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 100 | 20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 60.1 | 100 | 20 | ug/l | J |
| 78-87-5 | 1,2-Dichloropropane | ND | 100 | 20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 100 | 20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 200 | 22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 100 | 20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 100 | 20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 100 | 20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 100 | 20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 100 | 20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 100 | 20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 100 | 20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 100 | 20 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29W | | |
| **Lab Sample ID:** | C46436-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 100 | 20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 100 | 30 | ug/l | |
| 100-41-4 | Ethylbenzene | 1390 | 100 | 20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 200 | 22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 1000 | 200 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 200 | 20 | ug/l | |
| 98-82-8 | Isopropylbenzene | 110 | 100 | 20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 200 | 20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1000 | 100 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 200 | 20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 100 | 30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 100 | 20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 1000 | 200 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 1000 | 200 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 100 | 20 | ug/l | |
| 91-20-3 | Naphthalene | 104 | 500 | 50 | ug/l | J |
| 103-65-1 | n-Propylbenzene | 142 | 200 | 20 | ug/l | J |
| 100-42-5 | Styrene | ND | 100 | 20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 200 | 40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 1000 | 240 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 100 | 30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 100 | 20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 100 | 20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 100 | 22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 200 | 20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 200 | 20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 200 | 20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 713 | 200 | 20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 239 | 200 | 20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 100 | 30 | ug/l | |
| 108-88-3 | Toluene | 4160 | 100 | 20 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 100 | 20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 100 | 20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 100 | 20 | ug/l | |
| 1330-20-7 | Xylene (total) | 6800 | 200 | 46 | ug/l | |
| | TPH-GRO (C6-C10) | 96700 | 5000 | 2500 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 114% | | 80-123% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B29W | | |
| **Lab Sample ID:** | C46436-2 | **Date Sampled:** | 07/07/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/07/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 102% | | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | | 79-114% |

(a) Sample vial contained more than 0.5cm of sediment.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: C46436

Date 7-7-16 Page 1 of 1

## Report To

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Ste 250, Roseville
Email: gabe.stivala@atcassociates.com
Bill To:
Sampled By: K/MJ
Attn:
Phone: 916-724-5247

## Analysis Request

| Sample ID | Date | Time | Mat rix | Preserv | Volatile Organics GC/MS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___ | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAHs by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___ | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___ | W.E.T (STLC) W.E.T (DI) ☐ TCLP ☐ ☐ | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Sample # | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B27W | 7-7-16 | 1200 | W | HCl | X | | | | | | | | | | | | | | | | | | 1 | | 3 |
| B29W | 7-7-16 | 1210 | W | HCl | X | | | | | | | | | | | | | | | | | | 2 | | 3 |

## Project Info.

Project Name/ #: Premier Hyundai
PO#:
Credit Card Y/N:

## Sample Receipt

# of Containers:
Head Space:
Temp: 3.4/4.4
If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other: Hold

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

| 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|
| Signature: [signature] Time: 1430 | Signature: [signature] Time: 1535 | Signature: Time: |
| Printed Name: Kim Kundert Date: 7-7-16 | Printed Name: Mike Moorefield Date: 7/7/16 | Printed Name: Date: |
| Company: ATC | Company: SGS Accutest | Company: |

| 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|
| Signature: [signature] Time: 1430 | Signature: [signature] Time: 1535 | Signature: Time: |
| Printed Name: Mike Moorefield Date: 7/7/16 | Printed Name: Tomu Ishihara Date: 7/7/16 | Printed Name: Date: AZ |
| Company: SGS Accutest | Company: SGS Accutest | Company: T |

Rev.10/2012

**C46436: Chain of Custody**
**Page 1 of 2**

# SGS Accutest Sample Receipt Summary

**Job Number:** C46436 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/7/2016 3:35:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.4/4.4);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☑ | ☐ |
| 2. Trip Blank listed on COC: | ☐ | | ☑ | ☐ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☑ | | ☐ | ☐ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments Sample #2 ID: B29W on COC is Labeled as B27W on sample label. Sample is lined up with the time "12:10"

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.20 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | 0.22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |

# Method Blank Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | 0.30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.50 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | 2.4 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 0.46 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 80-123% |

# Method Blank Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 106% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 94% | 79-114% |

# Method Blank Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-MB | R41021.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.20 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | 0.22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |

# Method Blank Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-MB | R41021.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | 0.30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.50 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | 2.4 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 0.46 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | 25 | ug/l | |

# Method Blank Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-MB | R41021.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 80-123% |
| 2037-26-5 | Toluene-D8 | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | 79-114% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 88.0 | 110 | 88.3 | 110 | 0 | 55-147/17 |
| 71-43-2 | Benzene | 20 | 20.5 | 103 | 20.2 | 101 | 1 | 76-120/10 |
| 108-86-1 | Bromobenzene | 20 | 19.6 | 98 | 19.4 | 97 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 20.1 | 101 | 20.1 | 101 | 0 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 20.7 | 104 | 20.4 | 102 | 1 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 15.7 | 79 | 15.6 | 78 | 1 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 22.4 | 112 | 21.6 | 108 | 4 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 21.6 | 108 | 20.8 | 104 | 4 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 19.4 | 97 | 18.8 | 94 | 3 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 19.7 | 99 | 19.1 | 96 | 3 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 22.3 | 112 | 21.9 | 110 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 21.6 | 108 | 21.5 | 108 | 0 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 20.7 | 104 | 20.1 | 101 | 3 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 21.6 | 108 | 21.2 | 106 | 2 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 20.2 | 101 | 19.7 | 99 | 3 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 22.2 | 111 | 21.9 | 110 | 1 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 20.0 | 100 | 19.1 | 96 | 5 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 21.0 | 105 | 20.1 | 101 | 4 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 17.1 | 86 | 17.1 | 86 | 0 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 20.0 | 100 | 19.9 | 100 | 1 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 21.1 | 106 | 20.9 | 105 | 1 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 21.0 | 105 | 20.8 | 104 | 1 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 21.3 | 107 | 21.1 | 106 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 21.5 | 108 | 21.3 | 107 | 1 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 19.5 | 98 | 19.5 | 98 | 0 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 16.7 | 84 | 16.6 | 83 | 1 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 20.5 | 103 | 19.1 | 96 | 7 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 21.5 | 108 | 21.2 | 106 | 1 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 21.2 | 106 | 20.9 | 105 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 19.9 | 100 | 19.5 | 98 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 19.5 | 98 | 19.1 | 96 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 19.7 | 99 | 19.4 | 97 | 2 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 18.9 | 95 | 18.6 | 93 | 2 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 20.6 | 103 | 20.6 | 103 | 0 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 21.1 | 106 | 20.3 | 102 | 4 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 20.4 | 102 | 20.7 | 104 | 1 | 75-126/11 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 80 | 94.8 | 119 | 95.0 | 119 | 0 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | 20 | 18.1 | 91 | 17.9 | 90 | 1 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 20.6 | 103 | 19.8 | 99 | 4 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 21.1 | 106 | 20.3 | 102 | 4 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 89.4 | 112 | 90.2 | 113 | 1 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 21.1 | 106 | 21.0 | 105 | 0 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 18.1 | 91 | 17.4 | 87 | 4 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 20.9 | 105 | 20.7 | 104 | 1 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 20.7 | 104 | 20.7 | 104 | 0 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 87.4 | 109 | 90.4 | 113 | 3 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 19.0 | 95 | 19.2 | 96 | 1 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 18.8 | 94 | 18.8 | 94 | 0 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 21.5 | 108 | 20.7 | 104 | 4 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 20.3 | 102 | 19.9 | 100 | 2 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 20.4 | 102 | 20.6 | 103 | 1 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 94.7 | 95 | 102 | 102 | 7 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 19.6 | 98 | 19.3 | 97 | 2 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 21.5 | 108 | 21.0 | 105 | 2 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 21.9 | 110 | 21.8 | 109 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 21.3 | 107 | 21.0 | 105 | 1 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 17.9 | 90 | 17.6 | 88 | 2 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 19.2 | 96 | 19.3 | 97 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 18.2 | 91 | 17.9 | 90 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 20.6 | 103 | 19.9 | 100 | 3 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 20.8 | 104 | 20.2 | 101 | 3 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 19.3 | 97 | 18.7 | 94 | 3 | 72-124/13 |
| 108-88-3 | Toluene | 20 | 20.4 | 102 | 19.7 | 99 | 3 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 20 | 20.8 | 104 | 20.2 | 101 | 3 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 22.5 | 113 | 21.9 | 110 | 3 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 24.6 | 123 | 23.6 | 118 | 4 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 60 | 60.7 | 101 | 58.8 | 98 | 3 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 108% | 110% | 80-123% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 103% | 102% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 99% | 79-114% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-BS | R41018.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |
| VR1581-BSD | R41019.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 84.6 | 106 | 78.7 | 98 | 7 | 55-147/17 |
| 71-43-2 | Benzene | 20 | 19.3 | 97 | 18.5 | 93 | 4 | 76-120/10 |
| 108-86-1 | Bromobenzene | 20 | 18.9 | 95 | 18.5 | 93 | 2 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 19.6 | 98 | 19.0 | 95 | 3 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 19.9 | 100 | 19.4 | 97 | 3 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 15.5 | 78 | 15.4 | 77 | 1 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 20.3 | 102 | 19.1 | 96 | 6 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 19.5 | 98 | 18.5 | 93 | 5 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 17.7 | 89 | 17.0 | 85 | 4 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 18.6 | 93 | 18.1 | 91 | 3 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 20.9 | 105 | 20.1 | 101 | 4 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 20.5 | 103 | 19.7 | 99 | 4 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 19.9 | 100 | 18.5 | 93 | 7 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 19.6 | 98 | 18.7 | 94 | 5 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 19.0 | 95 | 17.6 | 88 | 8 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 20.4 | 102 | 19.6 | 98 | 4 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 18.0 | 90 | 16.4 | 82 | 9 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 19.0 | 95 | 17.4 | 87 | 9 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 16.5 | 83 | 16.4 | 82 | 1 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 19.2 | 96 | 19.0 | 95 | 1 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 20.2 | 101 | 19.7 | 99 | 3 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 19.9 | 100 | 19.2 | 96 | 4 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 20.2 | 101 | 19.9 | 100 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 20.1 | 101 | 19.4 | 97 | 4 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 18.3 | 92 | 17.0 | 85 | 7 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 16.2 | 81 | 16.0 | 80 | 1 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 18.4 | 92 | 16.2 | 81 | 13 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 20.4 | 102 | 19.6 | 98 | 4 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 20.4 | 102 | 19.7 | 99 | 3 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 18.8 | 94 | 18.4 | 92 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 18.6 | 93 | 18.2 | 91 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 18.7 | 94 | 18.3 | 92 | 2 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 17.6 | 88 | 16.7 | 84 | 5 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 19.8 | 99 | 19.5 | 98 | 2 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 19.3 | 97 | 18.5 | 93 | 4 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 19.8 | 99 | 19.3 | 97 | 3 | 75-126/11 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-BS | R41018.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |
| VR1581-BSD | R41019.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 80 | 88.8 | 111 | 89.9 | 112 | 1 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | 20 | 16.9 | 85 | 16.1 | 81 | 5 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 18.7 | 94 | 17.8 | 89 | 5 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 19.2 | 96 | 18.3 | 92 | 5 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 84.5 | 106 | 84.4 | 106 | 0 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 20.3 | 102 | 19.4 | 97 | 5 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 19.1 | 96 | 17.4 | 87 | 9 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 20.1 | 101 | 19.7 | 99 | 2 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 19.7 | 99 | 19.0 | 95 | 4 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 85.1 | 106 | 85.8 | 107 | 1 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 18.4 | 92 | 18.1 | 91 | 2 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 18.2 | 91 | 18.2 | 91 | 0 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 19.5 | 98 | 18.5 | 93 | 5 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 19.1 | 96 | 18.6 | 93 | 3 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 19.8 | 99 | 19.4 | 97 | 2 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 92.7 | 93 | 98.3 | 98 | 6 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 18.9 | 95 | 18.5 | 93 | 2 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 20.0 | 100 | 18.7 | 94 | 7 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 20.8 | 104 | 20.8 | 104 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 20.0 | 100 | 19.8 | 99 | 1 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 17.2 | 86 | 17.1 | 86 | 1 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 18.6 | 93 | 18.7 | 94 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 17.5 | 88 | 17.2 | 86 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 19.2 | 96 | 18.6 | 93 | 3 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 19.3 | 97 | 18.5 | 93 | 4 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 17.9 | 90 | 17.2 | 86 | 4 | 72-124/13 |
| 108-88-3 | Toluene | 20 | 18.9 | 95 | 18.3 | 92 | 3 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 20 | 19.4 | 97 | 18.3 | 92 | 6 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 21.2 | 106 | 19.8 | 99 | 7 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 22.6 | 113 | 21.3 | 107 | 6 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 60 | 56.2 | 94 | 54.0 | 90 | 4 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 108% | 107% | 80-123% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-BS | R41018.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |
| VR1581-BSD | R41019.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 101% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 99% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-LCS | R40958.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | 80-123% |
| 2037-26-5 | Toluene-D8 | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-LCS | R41020.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 125 | 140 | 112 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | 80-123% |
| 2037-26-5 | Toluene-D8 | 103% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | 79-114% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | C46413-8 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 16000 | 15900 | 99 | 16000 | 15600 | 98 | 2 | 55-147/17 |
| 71-43-2 | Benzene | 511 | | 4000 | 4560 | 101 | 4000 | 4410 | 97 | 3 | 76-120/10 |
| 108-86-1 | Bromobenzene | ND | | 4000 | 4090 | 102 | 4000 | 4040 | 101 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 4000 | 4150 | 104 | 4000 | 4020 | 101 | 3 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 4000 | 3900 | 98 | 4000 | 3900 | 98 | 0 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 4000 | 2770 | 69 | 4000 | 3030 | 76 | 9 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | ND | | 4000 | 4010 | 100 | 4000 | 3970 | 99 | 1 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | ND | | 4000 | 4020 | 101 | 4000 | 3980 | 100 | 1 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 4000 | 3810 | 95 | 4000 | 3760 | 94 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 4000 | 3970 | 99 | 4000 | 3900 | 98 | 2 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 4000 | 4110 | 103 | 4000 | 4180 | 105 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | ND | | 4000 | 4080 | 102 | 4000 | 3960 | 99 | 3 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 4000 | 4130 | 103 | 4000 | 4140 | 104 | 0 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 4000 | 3980 | 100 | 4000 | 3950 | 99 | 1 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 4000 | 3970 | 99 | 4000 | 3930 | 98 | 1 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 4000 | 4060 | 102 | 4000 | 3940 | 99 | 3 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 4000 | 3790 | 95 | 4000 | 3570 | 89 | 6 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 4000 | 3910 | 98 | 4000 | 3780 | 95 | 3 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 4000 | 3310 | 83 | 4000 | 3370 | 84 | 2 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 4000 | 4070 | 102 | 4000 | 3990 | 100 | 2 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 4000 | 3970 | 99 | 4000 | 3910 | 98 | 2 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 4000 | 4060 | 102 | 4000 | 3950 | 99 | 3 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 4000 | 4150 | 104 | 4000 | 4110 | 103 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 4000 | 3900 | 98 | 4000 | 3780 | 95 | 3 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 4000 | 3600 | 90 | 4000 | 3470 | 87 | 4 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 4000 | 3170 | 79 | 4000 | 3320 | 83 | 5 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 4000 | 2890 | 72 | 4000 | 3290 | 82 | 13 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 4000 | 4180 | 105 | 4000 | 4030 | 101 | 4 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 4000 | 4090 | 102 | 4000 | 4040 | 101 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 4000 | 4050 | 101 | 4000 | 3980 | 100 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 4000 | 4030 | 101 | 4000 | 3940 | 99 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 4000 | 4010 | 100 | 4000 | 3960 | 99 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 4000 | 3680 | 92 | 4000 | 3530 | 88 | 4 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 4000 | 3950 | 99 | 4000 | 3970 | 99 | 1 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 141 | J | 4000 | 4280 | 103 | 4000 | 4160 | 100 | 3 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 4000 | 3980 | 100 | 4000 | 3870 | 97 | 3 | 75-126/11 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Compound | C46413-8 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 16000 | 17500 | 109 | 16000 | 17700 | 111 | 1 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | ND | | 4000 | 3490 | 87 | 4000 | 3420 | 86 | 2 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | ND | | 4000 | 3960 | 99 | 4000 | 3890 | 97 | 2 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | ND | | 4000 | 4020 | 101 | 4000 | 3980 | 100 | 1 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 16000 | 16700 | 104 | 16000 | 16600 | 104 | 1 | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 4000 | 4100 | 103 | 4000 | 4090 | 102 | 0 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 4000 | 3120 | 78 | 4000 | 3780 | 95 | 19 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 4000 | 4140 | 104 | 4000 | 4030 | 101 | 3 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 4000 | 4020 | 101 | 4000 | 3850 | 96 | 4 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | ND | | 16000 | 17000 | 106 | 16000 | 16900 | 106 | 1 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 14600 | | 4000 | 17700 | 78 | 4000 | 17500 | 73 | 1 | 73-120/10 |
| 91-20-3 | Naphthalene | ND | | 4000 | 4020 | 101 | 4000 | 3880 | 97 | 4 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | ND | | 4000 | 4060 | 102 | 4000 | 4000 | 100 | 1 | 75-125/10 |
| 100-42-5 | Styrene | ND | | 4000 | 4000 | 100 | 4000 | 3950 | 99 | 1 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 4000 | 4100 | 103 | 4000 | 3990 | 100 | 3 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 20000 | | 20000 | 41300 | 107 | 20000 | 41300 | 107 | 0 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 4000 | 4070 | 102 | 4000 | 4010 | 100 | 1 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 4000 | 4100 | 103 | 4000 | 4010 | 100 | 2 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 4000 | 4240 | 106 | 4000 | 4230 | 106 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 4000 | 4140 | 104 | 4000 | 4060 | 102 | 2 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 4000 | 3630 | 91 | 4000 | 3600 | 90 | 1 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 4000 | 3910 | 98 | 4000 | 3910 | 98 | 0 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 4000 | 3670 | 92 | 4000 | 3620 | 91 | 1 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 98.1 | J | 4000 | 4220 | 103 | 4000 | 4100 | 100 | 3 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 4000 | 4140 | 104 | 4000 | 4080 | 102 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 4000 | 3880 | 97 | 4000 | 3740 | 94 | 4 | 72-124/13 |
| 108-88-3 | Toluene | ND | | 4000 | 4130 | 103 | 4000 | 3970 | 99 | 4 | 78-121/10 |
| 79-01-6 | Trichloroethylene | ND | | 4000 | 4060 | 102 | 4000 | 3940 | 99 | 3 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 4000 | 3870 | 97 | 4000 | 4310 | 108 | 11 | 68-130/19 |
| 75-01-4 | Vinyl chloride | ND | | 4000 | 4060 | 102 | 4000 | 4420 | 111 | 8 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 316 | J | 12000 | 12700 | 103 | 12000 | 12200 | 99 | 4 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-8 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 102% | 108% | 80-123% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-8 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 100% | 100% | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 98% | 95% | 79-114% |

(a) Sample vial contained more than 0.5cm of sediment.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-1MS | R41041.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1MSD | R41042.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1 [a] | R41028.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | C46447-1 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 71.2 | J | 800 | 977 | 113 | 800 | 884 | 102 | 10 | 55-147/17 |
| 71-43-2 | Benzene | 555 | | 200 | 709 | 77 | 200 | 672 | 59* [b] | 5 | 76-120/10 |
| 108-86-1 | Bromobenzene | ND | | 200 | 195 | 98 | 200 | 193 | 97 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 200 | 209 | 105 | 200 | 196 | 98 | 6 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 200 | 199 | 100 | 200 | 193 | 97 | 3 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 200 | 128 | 64 | 200 | 121 | 61* [c] | 6 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | ND | | 200 | 206 | 103 | 200 | 205 | 103 | 0 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | ND | | 200 | 201 | 101 | 200 | 201 | 101 | 0 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 200 | 185 | 93 | 200 | 186 | 93 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 200 | 190 | 95 | 200 | 191 | 96 | 1 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 200 | 225 | 113 | 200 | 216 | 108 | 4 | 60-115/14 |
| 67-66-3 | Chloroform | ND | | 200 | 225 | 113 | 200 | 212 | 106 | 6 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 200 | 196 | 98 | 200 | 202 | 101 | 3 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 200 | 203 | 102 | 200 | 210 | 105 | 3 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 200 | 189 | 95 | 200 | 195 | 98 | 3 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 200 | 229 | 115 | 200 | 216 | 108 | 6 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 200 | 195 | 98 | 200 | 189 | 95 | 3 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 200 | 198 | 99 | 200 | 200 | 100 | 1 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 200 | 171 | 86 | 200 | 160 | 80 | 7 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 200 | 197 | 99 | 200 | 193 | 97 | 2 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 7.9 | J | 200 | 219 | 106 | 200 | 211 | 102 | 4 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 200 | 213 | 107 | 200 | 207 | 104 | 3 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 200 | 210 | 105 | 200 | 207 | 104 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 200 | 228 | 114 | 200 | 213 | 107 | 7 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 200 | 177 | 89 | 200 | 168 | 84 | 5 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 200 | 150 | 75* [c] | 200 | 146 | 73* [c] | 3 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 200 | 187 | 94 | 200 | 187 | 94 | 0 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 3.9 | J | 200 | 224 | 110 | 200 | 212 | 104 | 6 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 200 | 203 | 102 | 200 | 197 | 99 | 3 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 200 | 193 | 97 | 200 | 191 | 96 | 1 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 200 | 191 | 96 | 200 | 189 | 95 | 1 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 200 | 193 | 97 | 200 | 191 | 96 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 200 | 190 | 95 | 200 | 183 | 92 | 4 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 200 | 194 | 97 | 200 | 192 | 96 | 1 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 58.6 | | 200 | 256 | 99 | 200 | 255 | 98 | 0 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 200 | 217 | 109 | 200 | 204 | 102 | 6 | 75-126/11 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-1MS | R41041.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1MSD | R41042.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1 [a] | R41028.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Compound | C46447-1 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 800 | 967 | 121 | 800 | 923 | 115 | 5 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | ND | | 200 | 155 | 78 | 200 | 159 | 80 | 3 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 4.0 | J | 200 | 194 | 95 | 200 | 195 | 96 | 1 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | ND | | 200 | 195 | 98 | 200 | 195 | 98 | 0 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 800 | 910 | 114 | 800 | 852 | 107 | 7 | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 200 | 215 | 108 | 200 | 204 | 102 | 5 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 200 | 206 | 103 | 200 | 183 | 92 | 12 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 200 | 210 | 105 | 200 | 202 | 101 | 4 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 200 | 218 | 109 | 200 | 205 | 103 | 6 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | ND | | 800 | 948 | 119 | 800 | 852 | 107 | 11 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 200 | 198 | 99 | 200 | 187 | 94 | 6 | 73-120/10 |
| 91-20-3 | Naphthalene | ND | | 200 | 189 | 95 | 200 | 182 | 91 | 4 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 4.1 | J | 200 | 208 | 102 | 200 | 208 | 102 | 0 | 75-125/10 |
| 100-42-5 | Styrene | ND | | 200 | 195 | 98 | 200 | 193 | 97 | 1 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 200 | 213 | 107 | 200 | 201 | 101 | 6 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 1000 | 1030 | 103 | 1000 | 961 | 96 | 7 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 200 | 191 | 96 | 200 | 191 | 96 | 0 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 200 | 214 | 107 | 200 | 208 | 104 | 3 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 200 | 225 | 113 | 200 | 217 | 109 | 4 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 200 | 212 | 106 | 200 | 207 | 104 | 2 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 200 | 165 | 83 | 200 | 161 | 81 | 2 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 200 | 190 | 95 | 200 | 186 | 93 | 2 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 200 | 167 | 84 | 200 | 164 | 82 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 15.2 | J | 200 | 215 | 100 | 200 | 212 | 98 | 1 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 4.6 | J | 200 | 216 | 106 | 200 | 214 | 105 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 200 | 174 | 87 | 200 | 179 | 90 | 3 | 72-124/13 |
| 108-88-3 | Toluene | 83.9 | | 200 | 272 | 94 | 200 | 272 | 94 | 0 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 84.3 | | 200 | 278 | 97 | 200 | 277 | 96 | 0 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 200 | 211 | 106 | 200 | 210 | 105 | 0 | 68-130/19 |
| 75-01-4 | Vinyl chloride | ND | | 200 | 232 | 116 | 200 | 226 | 113 | 3 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 125 | | 600 | 698 | 96 | 600 | 699 | 96 | 0 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46447-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 115% | 108% | 116% | 80-123% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46436
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-1MS | R41041.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1MSD | R41042.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1 [a] | R41028.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46436-1, C46436-2

| CAS No. | Surrogate Recoveries | MS | MSD | C46447-1 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 102% | 102% | 102% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 99% | 96% | 79-114% |

(a) Sample vail cantained more than 0.5cm of sediment.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside laboratory control limits.

* = Outside of Control Limits.

*e-Hardcopy 2.0*
*Automated Report*

Technical Report for

ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46446

Sampling Date: 07/08/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: 76

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5 6 7

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46446

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46446-1 | 07/08/16 | 09:40 | | 07/08/16 | SO | Soil | B30-2' |
| C46446-2 | 07/08/16 | 09:45 | | 07/08/16 | SO | Soil | B30-4' |
| C46446-3 | 07/08/16 | 09:50 | | 07/08/16 | SO | Soil | B30-5' |
| C46446-4 | 07/08/16 | 10:00 | | 07/08/16 | SO | Soil | B30-10' |
| C46446-5 | 07/08/16 | 10:05 | | 07/08/16 | SO | Soil | B30-15' |
| C46446-8 | 07/08/16 | 11:35 | | 07/08/16 | SO | Soil | B31-2' |
| C46446-9 | 07/08/16 | 11:40 | | 07/08/16 | SO | Soil | B31-4' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Summary of Hits



**Job Number:** C46446
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46446-1** | **B30-2'** | | | | | |
| TPH (C10-C28) | | 89.8 | 66 | 29 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 221 | 66 | 26 | mg/kg | SW846 8015B M |
| Lead | | 87.1 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-2** | **B30-4'** | | | | | |
| TPH (C10-C28) | | 4.16 | 3.3 | 1.5 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 9.40 | 3.3 | 1.3 | mg/kg | SW846 8015B M |
| Lead | | 12.4 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-3** | **B30-5'** | | | | | |
| TPH (C10-C28) | | 23.9 | 13 | 5.8 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 67.5 | 13 | 5.2 | mg/kg | SW846 8015B M |
| Lead | | 26.9 | 1.8 | | mg/kg | SW846 6010B |
| **C46446-4** | **B30-10'** | | | | | |
| TPH (C10-C28) | | 3.89 | 3.3 | 1.5 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 3.98 | 3.3 | 1.3 | mg/kg | SW846 8015B M |
| Lead | | 6.5 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-5** | **B30-15'** | | | | | |
| n-Butylbenzene | | 152 J | 210 | 21 | ug/kg | SW846 8260B |
| sec-Butylbenzene | | 642 | 210 | 21 | ug/kg | SW846 8260B |
| tert-Butylbenzene | | 36.6 J | 210 | 21 | ug/kg | SW846 8260B |
| Isopropylbenzene | | 264 | 210 | 21 | ug/kg | SW846 8260B |
| Naphthalene | | 244 | 210 | 42 | ug/kg | SW846 8260B |
| n-Propylbenzene | | 175 J | 210 | 21 | ug/kg | SW846 8260B |
| TPH (C10-C28) | | 363 | 33 | 14 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 149 | 33 | 13 | mg/kg | SW846 8015B M |
| Lead | | 7.6 | 1.8 | | mg/kg | SW846 6010B |
| **C46446-8** | **B31-2'** | | | | | |
| TPH (C10-C28) | | 80.8 | 66 | 29 | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 231 | 66 | 26 | mg/kg | SW846 8015B M |
| Lead | | 580 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-9** | **B31-4'** | | | | | |
| TPH (> C28-C40) | | 3.67 | 3.3 | 1.3 | mg/kg | SW846 8015B M |

# Summary of Hits

**Job Number:** C46446
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID<br>Analyte | Client Sample ID | Result/<br>Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| Lead | | 4.3 | 1.9 | | mg/kg | SW846 6010B |

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61839.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.04 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 9.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 0.99 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.99 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 0.99 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 0.99 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 0.99 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 0.99 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.99 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 9.9 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.99 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 0.99 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 0.99 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 0.99 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 0.99 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | 0.99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5273.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 89.8 | 66 | 29 | mg/kg | |
| | TPH (> C28-C40) | 221 | 66 | 26 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 73% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 87.1 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61840.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.17 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | 9.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.97 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | 0.97 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.97 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.97 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.97 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.97 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.97 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | 9.7 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.97 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.97 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.97 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.58 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.97 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.97 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.7 | 0.97 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5298.D | 1 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 4.16 | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 9.40 | 3.3 | 1.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 70% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 12.4 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61838.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.06 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 9.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | 0.49 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | 0.99 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | 0.49 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | 0.49 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | 0.49 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | 0.49 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | 0.49 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | 0.49 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | 0.49 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.9 | 0.99 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | 0.49 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | 0.99 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | 0.49 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | 0.99 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | 0.99 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | 0.49 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 4.9 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | 0.99 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | 0.99 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | 0.49 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | 0.49 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | 0.49 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 9.9 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | 0.49 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | 0.99 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | 0.49 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | 0.99 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | 0.99 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | 0.59 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | 0.49 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | 0.49 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | 0.99 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | 0.99 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | 0.99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 94% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 103% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5300.D | 4 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.4 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 23.9 | 13 | 5.8 | mg/kg | |
| | TPH (> C28-C40) | 67.5 | 13 | 5.2 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 71% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 26.9 | 1.8 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.59 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1800 | 450 | ug/kg | |
| 71-43-2 | Benzene | ND | 220 | 22 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 220 | 22 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 220 | 22 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 220 | 22 | ug/kg | |
| 75-25-2 | Bromoform | ND | 220 | 22 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 220 | 22 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 220 | 22 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 220 | 45 | ug/kg | |
| 67-66-3 | Chloroform | ND | 220 | 22 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 220 | 22 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 220 | 22 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 220 | 22 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 220 | 22 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 220 | 22 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 220 | 63 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 220 | 22 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 220 | 22 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 220 | 22 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 220 | 22 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 220 | 22 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 220 | 45 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 220 | 49 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 220 | 22 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 220 | 22 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 220 | 22 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 220 | 22 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 220 | 22 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 220 | 22 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 220 | 22 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 890 | 89 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 220 | 45 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 220 | 22 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 220 | 22 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 890 | 89 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 220 | 45 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 220 | 45 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 220 | 22 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 890 | 220 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 890 | 89 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 220 | 45 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 220 | 45 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 220 | 22 | ug/kg | |
| 100-42-5 | Styrene | ND | 220 | 22 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 220 | 22 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1800 | 450 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 220 | 22 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 220 | 22 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 220 | 22 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 220 | 22 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 220 | 22 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 220 | 45 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 220 | 22 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 220 | 45 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 220 | 45 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 220 | 27 | ug/kg | |
| 108-88-3 | Toluene | ND | 220 | 22 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 220 | 22 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 220 | 45 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 220 | 45 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 450 | 45 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5266.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 3.89 | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 3.98 | 3.3 | 1.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 68% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 6.5 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61849.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.92 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1700 | 420 | ug/kg | |
| 71-43-2 | Benzene | ND | 210 | 21 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 210 | 21 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 210 | 21 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 210 | 21 | ug/kg | |
| 75-25-2 | Bromoform | ND | 210 | 21 | ug/kg | |
| 104-51-8 | n-Butylbenzene | 152 | 210 | 21 | ug/kg | J |
| 135-98-8 | sec-Butylbenzene | 642 | 210 | 21 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | 36.6 | 210 | 21 | ug/kg | J |
| 108-90-7 | Chlorobenzene | ND | 210 | 21 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 210 | 42 | ug/kg | |
| 67-66-3 | Chloroform | ND | 210 | 21 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 210 | 21 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 210 | 21 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 210 | 21 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 210 | 21 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 210 | 21 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 210 | 59 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 210 | 21 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 210 | 21 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 210 | 21 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 210 | 21 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 210 | 21 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 210 | 42 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 210 | 46 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 210 | 21 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 210 | 21 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 210 | 21 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 210 | 21 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 210 | 21 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 210 | 21 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 210 | 21 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 840 | 84 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 210 | 42 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 264 | 210 | 21 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 210 | 21 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 840 | 84 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 210 | 42 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 210 | 42 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 210 | 21 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 840 | 210 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 840 | 84 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 210 | 42 | ug/kg | |
| 91-20-3 | Naphthalene | 244 | 210 | 42 | ug/kg | |
| 103-65-1 | n-Propylbenzene | 175 | 210 | 21 | ug/kg | J |
| 100-42-5 | Styrene | ND | 210 | 21 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 210 | 21 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1700 | 420 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 210 | 21 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 210 | 21 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 210 | 21 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 210 | 21 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 210 | 21 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 210 | 42 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 210 | 21 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 210 | 42 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 210 | 42 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 210 | 25 | ug/kg | |
| 108-88-3 | Toluene | ND | 210 | 21 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 210 | 21 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 210 | 42 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 210 | 42 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 420 | 42 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5267.D | 10 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 363 | 33 | 14 | mg/kg | |
| | TPH (> C28-C40) | 149 | 33 | 13 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 66% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 7.6 | 1.8 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61841.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.25 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.95 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | 0.95 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.95 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.95 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.95 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.95 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.95 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.5 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.95 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.57 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.95 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.95 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.5 | 0.95 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5275.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 80.8 | 66 | 29 | mg/kg | |
| | TPH (> C28-C40) | 231 | 66 | 26 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 68% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 580 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61837.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.24 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | 9.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | 0.48 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | 0.95 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | 0.48 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | 0.48 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | 0.48 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | 1.3 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | 0.48 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | 0.48 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | 0.95 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | 1.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | 0.48 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | 1.9 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | 0.95 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | 0.48 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | 1.9 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | 0.95 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | 0.95 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | 0.48 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | 4.8 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | 1.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | 0.95 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | 0.95 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | 0.48 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | 0.48 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | 0.48 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | 9.5 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | 0.48 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | 0.95 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | 0.48 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | 0.95 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | 0.57 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | 0.48 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | 0.48 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | 0.95 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | 0.95 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.5 | 0.95 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5299.D | 1 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | 1.4 | mg/kg | |
| | TPH (> C28-C40) | 3.67 | 3.3 | 1.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 90% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.3 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: C46446

Date 7-8-16 Page _____ of _____

## Report To

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Ste 250, Roseville
Email: gabe.stivala@atcassociates.com
Bill To:
Sampled By: JK
Attn:
Phone: 916-729-5247

## Analysis Request

| Sample ID | Date | Time | Matrix | Preserv | Volatile Organics GC/MS (VOCs) X EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH: EPA 8015B ☐ Silica Gel X Diesel X Motor Oil ☐ Other | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Total Lead | Sample # | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B30-2' | 7-8-16 | 0940 | Soil | No | X | | | X | | | | | | | | | | | | | | | | | 1 | |
| B30-4' | | 0945 | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| B30-5' | | 0950 | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| B30-10' | | 1000 | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| B30-15' | | 1005 | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| B30-20' | | 1010 | | | | | | | | | | | | | | | | | | | | | | | 6 | |
| B30-25' | | 1015 | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| B31-2' | | 1135 | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| B31-4' | | 1140 | | | | | | | | | | | | | | | | | | | | | | | 9 | |

## Project Info.

Project Name/ #:
PO#:
Credit Card Y/N:

## Sample Receipt

# of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

*See Terms and Conditions on reverse*

1) Relinquished by:
Signature: [signature] Time: 1215
Printed Name: Jim Kundert Date: 7-8-16
Company: ATC

1) Received by:
Signature: [signature] Time: 1217
Printed Name: [signature] Date: 7/8/16
Company: Acculabs

2) Relinquished by:
Signature: [signature] Time: 1305
Printed Name: [signature] Date: 7/8/16
Company: Acculabs

2) Received by:
Signature: [signature] Time: 1305
Printed Name: [signature] Date: 7/8/16
Company: SGS Accutest

3) Relinquished by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

3) Received by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

Rev.10/2012

Temp: 32/4.2

# SGS Accutest Sample Receipt Summary

**Job Number:** C46446 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/8/2016 1:05:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.2/4.2);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☐ | ☑ |
| 2. Trip Blank listed on COC: | ☐ | | ☐ | ☑ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☐ | | ☐ | ☑ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

**C46446: Chain of Custody**
**Page 2 of 3**

## Job Change Order: C46446

| | | | |
|---|---|---|---|
| **Requested Date:** | 7/8/2016 | **Received Date:** | 7/8/2016 |
| **Account Name:** | ATC Group Services | **Due Date:** | 7/13/2016 |
| **Project Description:** | Premier Hyundai 2820 Broadway Oakland | **Deliverable:** | COMMB |
| **CSR:** | nutank | **TAT (Days):** | 7 |

==========

**Sample #:** C46446-6 & 7

**Dept:**

**Change:**
Per client samples 6 & 7 are ON HOLD.

==========

**C46446: Chain of Custody**
**Page 3 of 3**

**Above Changes Per:** Gabe Stivala **Date/Time:** 7/8/2016 4:04:56 PM

To Client:This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 1.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 1.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 10 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 93% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 0.50 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 0.50 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | 0.50 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | 0.50 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 1.4 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 0.50 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | 0.50 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | 0.50 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 0.50 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.1 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 0.50 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | 0.50 | ug/kg | |

# Method Blank Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | 2.0 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 0.50 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | 2.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | 1.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | 0.50 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | 5.0 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | 2.0 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | 1.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | 0.50 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 0.50 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | 0.50 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | 10 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 0.50 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 1.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 0.50 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 0.60 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 0.50 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 0.50 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | 1.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | 1.0 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 72-140% |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 81-115% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 182 | 114 | 183 | 114 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 38.9 | 97 | 34.9 | 87 | 11 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 37.4 | 94 | 33.7 | 84 | 10 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 39.9 | 100 | 37.1 | 93 | 7 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 37.7 | 94 | 34.3 | 86 | 9 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 40.3 | 101 | 37.3 | 93 | 8 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 34.3 | 86 | 32.9 | 82 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 35.0 | 88 | 33.0 | 83 | 6 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 36.5 | 91 | 34.2 | 86 | 7 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.5 | 96 | 35.0 | 88 | 10 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 40.7 | 102 | 36.4 | 91 | 11 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 36.7 | 92 | 33.6 | 84 | 9 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 34.2 | 86 | 30.6 | 77 | 11 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 35.2 | 88 | 32.7 | 82 | 7 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 39.4 | 99 | 35.9 | 90 | 9 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 36.7 | 92 | 33.5 | 84 | 9 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 36.8 | 92 | 33.5 | 84 | 9 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 37.5 | 94 | 33.4 | 84 | 12 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 39.9 | 100 | 32.9 | 82 | 19 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.0 | 95 | 34.2 | 86 | 11 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 37.9 | 95 | 34.3 | 86 | 10 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 38.8 | 97 | 34.8 | 87 | 11 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 38.4 | 96 | 34.0 | 85 | 12 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 35.9 | 90 | 32.9 | 82 | 9 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 36.1 | 90 | 33.7 | 84 | 7 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.5 | 96 | 34.4 | 86 | 11 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 29.3 | 73 | 25.9 | 65 | 12 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 40.4 | 101 | 36.7 | 92 | 10 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.0 | 105 | 37.9 | 95 | 10 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.6 | 92 | 33.8 | 85 | 8 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 37.5 | 94 | 35.1 | 88 | 7 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.6 | 92 | 33.9 | 85 | 8 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 35.0 | 88 | 32.3 | 81 | 8 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 37.1 | 93 | 32.9 | 82 | 12 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 37.3 | 93 | 34.2 | 86 | 9 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 38.2 | 96 | 34.7 | 87 | 10 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 183 | 114 | 151 | 94 | 19 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 34.6 | 87 | 32.7 | 82 | 6 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 37.4 | 94 | 35.8 | 90 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 36.1 | 90 | 34.0 | 85 | 6 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 161 | 101 | 138 | 86 | 15 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 39.5 | 99 | 35.0 | 88 | 12 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 29.4 | 74 | 25.6 | 64 | 14 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.8 | 100 | 35.9 | 90 | 10 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 38.2 | 96 | 34.8 | 87 | 9 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 163 | 102 | 160 | 100 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 37.8 | 95 | 35.3 | 88 | 7 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 38.4 | 96 | 34.5 | 86 | 11 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 34.4 | 86 | 31.7 | 79 | 8 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 38.8 | 97 | 36.0 | 90 | 7 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 40.3 | 101 | 37.6 | 94 | 7 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 194 | 97 | 213 | 107 | 9 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.0 | 98 | 36.0 | 90 | 8 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 38.3 | 96 | 35.1 | 88 | 9 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 37.6 | 94 | 33.2 | 83 | 12 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 37.3 | 93 | 32.9 | 82 | 13 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 35.0 | 88 | 33.1 | 83 | 6 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.4 | 101 | 37.1 | 93 | 9 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 36.4 | 91 | 34.6 | 87 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 35.2 | 88 | 32.9 | 82 | 7 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 35.9 | 90 | 33.1 | 83 | 8 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.3 | 98 | 35.9 | 90 | 9 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 37.1 | 93 | 33.5 | 84 | 10 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 41.4 | 104 | 37.8 | 95 | 9 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 41.0 | 103 | 36.2 | 91 | 12 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 33.8 | 85 | 29.8 | 75 | 13 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 113 | 94 | 105 | 88 | 7 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 96% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 93% | 92% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 102% | 81-115% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 184 | 115 | 196 | 123 | 6 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 39.6 | 99 | 38.9 | 97 | 2 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 41.5 | 104 | 40.6 | 102 | 2 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 39.2 | 98 | 38.2 | 96 | 3 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 39.4 | 99 | 38.0 | 95 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 39.4 | 99 | 38.2 | 96 | 3 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 40.3 | 101 | 38.9 | 97 | 4 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.4 | 96 | 38.4 | 96 | 0 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 44.0 | 110 | 41.9 | 105 | 5 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 40.3 | 101 | 39.2 | 98 | 3 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 40.5 | 101 | 39.8 | 100 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 37.5 | 94 | 35.9 | 90 | 4 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 40.4 | 101 | 39.0 | 98 | 4 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 40.8 | 102 | 39.4 | 99 | 3 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 39.1 | 98 | 38.0 | 95 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 39.0 | 98 | 37.7 | 94 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 40.6 | 102 | 39.0 | 98 | 4 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.8 | 97 | 39.0 | 98 | 1 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 39.9 | 100 | 38.8 | 97 | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 40.4 | 101 | 39.4 | 99 | 3 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 40.1 | 100 | 40.0 | 100 | 0 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 40.2 | 101 | 39.4 | 99 | 2 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 41.9 | 105 | 38.8 | 97 | 8 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.9 | 97 | 38.6 | 97 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 31.0 | 78 | 28.6 | 72 | 8 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 42.8 | 107 | 42.3 | 106 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.1 | 105 | 41.6 | 104 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 39.2 | 98 | 38.5 | 96 | 2 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 39.4 | 99 | 38.8 | 97 | 2 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 39.6 | 99 | 38.6 | 97 | 3 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 37.9 | 95 | 36.9 | 92 | 3 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 38.2 | 96 | 37.9 | 95 | 1 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 39.6 | 99 | 39.0 | 98 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 41.3 | 103 | 39.9 | 100 | 3 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 193 | 121 | 180 | 113 | 7 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 38.6 | 97 | 36.0 | 90 | 7 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 39.6 | 99 | 38.1 | 95 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 40.2 | 101 | 38.6 | 97 | 4 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 160 | 100 | 156 | 98 | 3 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 42.0 | 105 | 40.3 | 101 | 4 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 36.9 | 92 | 33.8 | 85 | 9 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.6 | 99 | 39.5 | 99 | 0 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 39.0 | 98 | 38.0 | 95 | 3 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 196 | 123 | 191 | 119 | 3 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 39.7 | 99 | 39.1 | 98 | 2 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 41.0 | 103 | 39.7 | 99 | 3 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 38.6 | 97 | 37.3 | 93 | 3 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 40.3 | 101 | 39.6 | 99 | 2 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 41.7 | 104 | 41.1 | 103 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 273 | 137 | 207 | 104 | 28 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.1 | 98 | 39.1 | 98 | 0 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 42.5 | 106 | 40.4 | 101 | 5 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 39.8 | 100 | 39.4 | 99 | 1 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 38.5 | 96 | 38.2 | 96 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 39.1 | 98 | 37.5 | 94 | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.3 | 101 | 39.3 | 98 | 3 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 39.5 | 99 | 37.6 | 94 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 39.1 | 98 | 37.9 | 95 | 3 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 39.6 | 99 | 38.8 | 97 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 38.6 | 97 | 38.1 | 95 | 1 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 38.7 | 97 | 38.8 | 97 | 0 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 40.5 | 101 | 39.3 | 98 | 3 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 45.1 | 113 | 41.9 | 105 | 7 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 44.8 | 112 | 41.8 | 105 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 118 | 98 | 116 | 97 | 2 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 98% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-LCS | M61833.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-LCS | M61912.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 81-115% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 40 U | | 160 | 173 | 108 | 160 | 175 | 110 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 5.0 U | | 39.9 | 31.8 | 80 | 39.9 | 33.2 | 83 | 4 | 72-122/18 |
| 108-86-1 | Bromobenzene | 5.0 U | | 39.9 | 27.0 | 68 | 39.9 | 28.8 | 72 | 6 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 31.7 | 79 | 5 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.9 | 70 | 4 | 68-122/18 |
| 75-25-2 | Bromoform | 5.0 U | | 39.9 | 27.0 | 68* [a] | 39.9 | 28.1 | 70 | 4 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 5.0 U | | 39.9 | 24.9 | 62* [a] | 39.9 | 25.2 | 63* [a] | 1 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 5.0 U | | 39.9 | 28.1 | 70 | 39.9 | 29.2 | 73 | 4 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.0 | 78 | 2 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 5.0 U | | 39.9 | 29.4 | 74 | 39.9 | 30.5 | 76 | 4 | 68-117/17 |
| 75-00-3 | Chloroethane | 5.0 U | | 39.9 | 34.2 | 86 | 39.9 | 34.2 | 86 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | 5.0 U | | 39.9 | 28.5 | 71 | 39.9 | 28.8 | 72 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 5.0 U | | 39.9 | 25.0 | 63* [a] | 39.9 | 27.1 | 68 | 8 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 5.0 U | | 39.9 | 25.9 | 65 | 39.9 | 26.1 | 65 | 1 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 5.0 U | | 39.9 | 32.8 | 82 | 39.9 | 34.4 | 86 | 5 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 5.0 U | | 39.9 | 30.0 | 75 | 39.9 | 30.4 | 76 | 1 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 34.2 | 86 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 5.0 U | | 39.9 | 32.1 | 80 | 39.9 | 33.2 | 83 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 U | | 39.9 | 25.1 | 63* [a] | 39.9 | 26.5 | 66 | 5 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 5.0 U | | 39.9 | 27.5 | 69* [a] | 39.9 | 28.1 | 70 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 5.0 U | | 39.9 | 25.5 | 64* [a] | 39.9 | 26.3 | 66* [a] | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 5.0 U | | 39.9 | 29.8 | 75 | 39.9 | 31.1 | 78 | 4 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 5.0 U | | 39.9 | 27.6 | 69* [a] | 39.9 | 28.4 | 71* [a] | 3 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.2 | 68* [a] | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 5.0 U | | 39.9 | 29.2 | 73 | 39.9 | 28.9 | 72 | 1 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 5.0 U | | 39.9 | 26.6 | 67* [a] | 39.9 | 27.9 | 70 | 5 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 5.0 U | | 39.9 | 24.7 | 62 | 39.9 | 24.4 | 61 | 1 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 5.0 U | | 39.9 | 33.1 | 83 | 39.9 | 33.3 | 83 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 U | | 39.9 | 29.0 | 73 | 39.9 | 30.6 | 77 | 5 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 5.0 U | | 39.9 | 24.3 | 61* [a] | 39.9 | 25.2 | 63* [a] | 4 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 5.0 U | | 39.9 | 24.6 | 62* [a] | 39.9 | 24.8 | 62* [a] | 1 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 5.0 U | | 39.9 | 24.1 | 60* [a] | 39.9 | 24.7 | 62* [a] | 2 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 5.0 U | | 39.9 | 30.7 | 77 | 39.9 | 31.0 | 78 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 U | | 39.9 | 24.4 | 61* [a] | 39.9 | 25.2 | 63* [a] | 3 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.2 | 78 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 5.0 U | | 39.9 | 27.9 | 70 | 39.9 | 28.4 | 71 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 20 | U | 160 | 124 | 78 | 160 | 126 | 79 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 5.0 | U | 39.9 | 18.4 | 46* [a] | 39.9 | 19.3 | 48* [a] | 5 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 5.0 | U | 39.9 | 32.2 | 81 | 39.9 | 31.2 | 78 | 3 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 5.0 | U | 39.9 | 28.3 | 71 | 39.9 | 28.6 | 72 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 20 | U | 160 | 104 | 65 | 160 | 111 | 70 | 7 | 60-145/26 |
| 74-83-9 | Methyl bromide | 5.0 | U | 39.9 | 31.6 | 79 | 39.9 | 31.5 | 79 | 0 | 66-130/18 |
| 74-87-3 | Methyl chloride | 5.0 | U | 39.9 | 22.4 | 56 | 39.9 | 22.4 | 56 | 0 | 50-140/25 |
| 74-95-3 | Methylene bromide | 5.0 | U | 39.9 | 28.3 | 71* [a] | 39.9 | 29.2 | 73 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | 20 | U | 39.9 | 32.2 | 81 | 39.9 | 32.5 | 81 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 20 | U | 160 | 122 | 76 | 160 | 120 | 75 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.0 | U | 39.9 | 27.5 | 69 | 39.9 | 26.8 | 67* [a] | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | 5.0 | U | 39.9 | 19.1 | 48* [a] | 39.9 | 20.3 | 51* [a] | 6 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 5.0 | U | 39.9 | 27.8 | 70 | 39.9 | 29.0 | 73 | 4 | 67-116/20 |
| 100-42-5 | Styrene | 5.0 | U | 39.9 | 28.6 | 72 | 39.9 | 28.7 | 72 | 0 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 5.0 | U | 39.9 | 29.7 | 74 | 39.9 | 29.7 | 74 | 0 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 40 | U | 200 | 142 | 71 | 200 | 141 | 71 | 1 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 5.0 | U | 39.9 | 30.4 | 76 | 39.9 | 30.7 | 77 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U | 39.9 | 32.0 | 80 | 39.9 | 32.4 | 81 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U | 39.9 | 23.6 | 59* [a] | 39.9 | 25.4 | 64* [a] | 7 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U | 39.9 | 27.0 | 68* [a] | 39.9 | 27.9 | 70 | 3 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 | U | 39.9 | 15.0 | 38* [a] | 39.9 | 15.6 | 39* [a] | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 5.0 | U | 39.9 | 28.4 | 71 | 39.9 | 28.7 | 72 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U | 39.9 | 16.1 | 40* [a] | 39.9 | 16.7 | 42* [a] | 4 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 5.0 | U | 39.9 | 26.9 | 67 | 39.9 | 27.2 | 68 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 5.0 | U | 39.9 | 28.7 | 72 | 39.9 | 28.9 | 72 | 1 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 5.0 | U | 39.9 | 53.6 | 134* [a] | 39.9 | 55.8 | 140* [a] | 4 | 66-125/18 |
| 108-88-3 | Toluene | 5.0 | U | 39.9 | 31.0 | 78 | 39.9 | 31.9 | 80 | 3 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 5.0 | U | 39.9 | 38.2 | 96 | 39.9 | 39.8 | 100 | 4 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U | 39.9 | 32.9 | 82 | 39.9 | 33.2 | 83 | 1 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 5.0 | U | 39.9 | 26.8 | 67 | 39.9 | 28.6 | 72 | 6 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 9.9 | U | 120 | 93.2 | 78 | 120 | 93.8 | 78 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 89% | 100% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 94% | 94% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 94% | 101% | 81-115% |

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 7160 | 6010 | 84 | 7160 | 4940 | 69 | 20 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 1790 | 1800 | 101 | 1790 | 1780 | 100 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 1790 | 1610 | 90 | 1790 | 1580 | 88 | 2 | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 1790 | 1570 | 88 | 1790 | 1600 | 89 | 2 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 1790 | 1670 | 93 | 1790 | 1690 | 94 | 1 | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 1790 | 1810 | 101 | 1790 | 1810 | 101 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 1790 | 1580 | 88 | 1790 | 1600 | 89 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 1790 | 1700 | 95 | 1790 | 1650 | 92 | 3 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 1790 | 1380 | 77 | 1790 | 1500 | 84 | 8 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 1790 | 1600 | 89 | 1790 | 1580 | 88 | 1 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1640 | 92 | 0 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 1790 | 1650 | 92 | 1790 | 1640 | 92 | 1 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 1790 | 1630 | 91 | 1790 | 1600 | 89 | 2 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 1790 | 1630 | 91 | 1790 | 1620 | 91 | 1 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 1790 | 1730 | 97 | 1790 | 1700 | 95 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 1790 | 1600 | 89 | 1790 | 1600 | 89 | 0 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 1790 | 1770 | 99 | 1790 | 1740 | 97 | 2 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 1790 | 1740 | 97 | 1790 | 1700 | 95 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 1790 | 1650 | 92 | 1790 | 1660 | 93 | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 1790 | 1330 | 74 | 1790 | 1370 | 77 | 3 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 1790 | 1120 | 63 | 1790 | 1100 | 61 | 2 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 1790 | 1800 | 101 | 1790 | 1810 | 101 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 1790 | 1570 | 88 | 1790 | 1580 | 88 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 1790 | 1520 | 85 | 1790 | 1520 | 85 | 0 | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 1790 | 1670 | 93 | 1790 | 1680 | 94 | 1 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 7160 | 6990 | 98 | 7160 | 6860 | 96 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1790 | 1690 | 94 | 1790 | 1710 | 96 | 1 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 7160 | 6900 | 96 | 7160 | 6820 | 95 | 1 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 1790 | 1620 | 91 | 1790 | 1580 | 88 | 3 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 1790 | 1360 | 76 | 1790 | 1380 | 77 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 1790 | 1750 | 98 | 1790 | 1690 | 94 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 7160 | 6170 | 86 | 7160 | 5470 | 76 | 12 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 1790 | 1580 | 88 | 1790 | 1530 | 86 | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 1790 | 1990 | 111 | 1790 | 2010 | 112 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 1790 | 1550 | 87 | 1790 | 1570 | 88 | 1 | 67-116/20 |
| 100-42-5 | Styrene | ND | | 1790 | 1780 | 100 | 1790 | 1790 | 100 | 1 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 1790 | 1740 | 97 | 1790 | 1730 | 97 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | ND | | 8940 | 10100 | 113 | 8940 | 9840 | 110 | 3 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 1790 | 1570 | 88 | 1790 | 1590 | 89 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1670 | 93 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 1790 | 1780 | 100 | 1790 | 1770 | 99 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 1790 | 1950 | 109 | 1790 | 1980 | 111 | 2 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 1790 | 2020 | 113 | 1790 | 2000 | 112 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 1790 | 1830 | 102 | 1790 | 1820 | 102 | 1 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1790 | 1620 | 91 | 1790 | 1630 | 91 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 1790 | 1850 | 103 | 1790 | 1750 | 98 | 6 | 66-125/18 |
| 108-88-3 | Toluene | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 1790 | 1810 | 101 | 1790 | 1770 | 99 | 2 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1790 | 1580 | 88 | 1790 | 1580 | 88 | 0 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 1790 | 945 | 53* [a] | 1790 | 966 | 54* [a] | 2 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 5370 | 5110 | 95 | 5370 | 5160 | 96 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | 91% | 95% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 95% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 103% | 111% | 81-115% |

(a) Outside control limits due to matrix interference. AZ:M2

* = Outside of Control Limits.

## GC Semi-volatiles

6

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-MB | BB5271.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | 1.5 | mg/kg | |
| | TPH (> C28-C40) | 1.36 | 3.3 | 1.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 630-01-3 | Hexacosane | 76% | 38-146% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-BS | BB5269.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| OP14620-BSD | BB5270.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Spike mg/kg | BSP mg/kg | BSP % | BSD mg/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 33.3 | 34.8 | 104 | 35.8 | 107 | 3 | 53-107/12 |
| | TPH (> C28-C40) | 33.3 | 32.6 | 98 | 34.8 | 104 | 7 | 59-120/14 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 75% | 75% | 38-146% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-MS | BB5278.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| OP14620-MSD | BB5279.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| C46446-3 | BB5300.D | 4 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | C46446-3 mg/kg | Q | Spike mg/kg | MS mg/kg | MS % | Spike mg/kg | MSD mg/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 23.9 | | 33 | 69.2 | 155* [a] | 33 | 80.0 | 188* [a] | 14* [a] | 53-107/12 |
| | TPH (> C28-C40) | 67.5 | | 33 | 192 | 480* [a] | 33 | 191 | 477* [a] | 1 | 59-120/14 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-3 | Limits |
|---|---|---|---|---|---|
| 630-01-3 | Hexacosane | 74% | 123% | 71% | 38-146% |

(a) Outside laboratory control limits.

* = Outside of Control Limits.

## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Aluminum | 20 | .54 | 1.5 | | |
| Antimony | 2.0 | .16 | .18 | | |
| Arsenic | 2.0 | .17 | .17 | | |
| Barium | 20 | .025 | .09 | | |
| Beryllium | 1.0 | .019 | .01 | | |
| Boron | 10 | .27 | .15 | | |
| Cadmium | 1.0 | .032 | .031 | | |
| Calcium | 500 | 1.9 | 4.5 | | |
| Chromium | 1.0 | .12 | .054 | | |
| Cobalt | 1.0 | .049 | .025 | | |
| Copper | 2.5 | .1 | .15 | | |
| Iron | 20 | .51 | .76 | | |
| Lead | 2.0 | .11 | .14 | -0.030 | <2.0 |
| Magnesium | 500 | 3.7 | 2.1 | | |
| Manganese | 1.5 | .021 | .026 | | |
| Molybdenum | 2.0 | .11 | .04 | | |
| Nickel | 1.0 | .045 | .047 | | |
| Potassium | 1000 | 2.9 | 4.6 | | |
| Selenium | 2.0 | .49 | .33 | | |
| Silicon | 20 | .22 | .43 | | |
| Silver | 1.0 | .089 | .067 | | |
| Sodium | 1000 | 2.6 | 1.2 | | |
| Strontium | 1.0 | .014 | .018 | | |
| Thallium | 2.0 | .39 | .12 | | |
| Tin | 50 | .3 | .28 | | |
| Titanium | 1.0 | .076 | .13 | | |
| Vanadium | 1.0 | .043 | .074 | | |
| Zinc | 2.0 | .11 | .22 | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | C46446-9 Original | MS | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Aluminum | | | | | |
| Antimony | anr | | | | |
| Arsenic | anr | | | | |
| Barium | anr | | | | |
| Beryllium | anr | | | | |
| Boron | | | | | |
| Cadmium | anr | | | | |
| Calcium | | | | | |
| Chromium | anr | | | | |
| Cobalt | anr | | | | |
| Copper | anr | | | | |
| Iron | | | | | |
| Lead | 4.3 | 47.5 | 46.3 | 93.3 | 75-125 |
| Magnesium | | | | | |
| Manganese | | | | | |
| Molybdenum | anr | | | | |
| Nickel | anr | | | | |
| Potassium | | | | | |
| Selenium | anr | | | | |
| Silicon | | | | | |
| Silver | anr | | | | |
| Sodium | | | | | |
| Strontium | | | | | |
| Thallium | anr | | | | |
| Tin | | | | | |
| Titanium | | | | | |
| Vanadium | anr | | | | |
| Zinc | anr | | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 07/11/16

| Metal | C46446-9 Original | MSD | Spikelot MPIR5 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Aluminum | | | | | | |
| Antimony | anr | | | | | |
| Arsenic | anr | | | | | |
| Barium | anr | | | | | |
| Beryllium | anr | | | | | |
| Boron | | | | | | |
| Cadmium | anr | | | | | |
| Calcium | | | | | | |
| Chromium | anr | | | | | |
| Cobalt | anr | | | | | |
| Copper | anr | | | | | |
| Iron | | | | | | |
| Lead | 4.3 | 46.8 | 47.2 | 90.1 | 1.5 | 20 |
| Magnesium | | | | | | |
| Manganese | | | | | | |
| Molybdenum | anr | | | | | |
| Nickel | anr | | | | | |
| Potassium | | | | | | |
| Selenium | anr | | | | | |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Thallium | anr | | | | | |
| Tin | | | | | | |
| Titanium | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | anr | | | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | BSP Result | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 45.3 | 50 | 90.6 | 80-120 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/11/16

| Metal | C46446-9 Original | SDL 1:5 | %DIF | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 46.0 | 48.4 | 5.2 | 0-10 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

*e-Hardcopy 2.0*
*Automated Report*

Technical Report for

ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46446

Sampling Date: 07/08/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: **215**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

August 3, 2016

Gabe Stivala
ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA

**Re: SGS Accutest Job # C46446 Reissue**

Dear Mr. Stivala,

This is a reissued report for SGS Accutest Job # **C46446**, original report dated 7/25/2016.

Additional results for *TPH-GRO* have been retrieved as per your request. Revised result pages and associated QC summary pages have been incorporated into this revised report.

Please contact us at 408-588-0200 if we can be of further assistance in this matter, or if you have any questions regarding this data report.

Sincerely,

SGS Accutest Inc.

Sections: 1 2 3 4 5 6 7 8 9

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46446

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46446-1 | 07/08/16 | 09:40 | | 07/08/16 | SO | Soil | B30-2' |
| C46446-1R | 07/08/16 | 09:40 | | 07/08/16 | SO | Soil | B30-2' |
| C46446-2 | 07/08/16 | 09:45 | | 07/08/16 | SO | Soil | B30-4' |
| C46446-2R | 07/08/16 | 09:45 | | 07/08/16 | SO | Soil | B30-4' |
| C46446-3 | 07/08/16 | 09:50 | | 07/08/16 | SO | Soil | B30-5' |
| C46446-3R | 07/08/16 | 09:50 | | 07/08/16 | SO | Soil | B30-5' |
| C46446-4 | 07/08/16 | 10:00 | | 07/08/16 | SO | Soil | B30-10' |
| C46446-4R | 07/08/16 | 10:00 | | 07/08/16 | SO | Soil | B30-10' |
| C46446-5 | 07/08/16 | 10:05 | | 07/08/16 | SO | Soil | B30-15' |
| C46446-5R | 07/08/16 | 10:05 | | 07/08/16 | SO | Soil | B30-15' |
| C46446-8 | 07/08/16 | 11:35 | | 07/08/16 | SO | Soil | B31-2' |
| C46446-8R | 07/08/16 | 11:35 | | 07/08/16 | SO | Soil | B31-2' |
| C46446-9 | 07/08/16 | 11:40 | | 07/08/16 | SO | Soil | B31-4' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Sample Summary
(continued)

ATC Group Services

**Job No:** C46446

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46446-9R | 07/08/16 | 11:40 | | 07/08/16 | SO | Soil | B31-4' |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# Summary of Hits

**Job Number:** C46446
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46446-1** | **B30-2'** | | | | | |
| TPH (C10-C28) | | 89.8 | 66 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 221 | 66 | | mg/kg | SW846 8015B M |
| Lead | | 87.1 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-1R** | **B30-2'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46446-2** | **B30-4'** | | | | | |
| TPH (C10-C28) | | 4.16 | 3.3 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 9.40 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 12.4 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-2R** | **B30-4'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46446-3** | **B30-5'** | | | | | |
| TPH (C10-C28) | | 23.9 | 13 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 67.5 | 13 | | mg/kg | SW846 8015B M |
| Lead | | 26.9 | 1.8 | | mg/kg | SW846 6010B |
| **C46446-3R** | **B30-5'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46446-4** | **B30-10'** | | | | | |
| TPH (C10-C28) | | 3.89 | 3.3 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 3.98 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 6.5 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-4R** | **B30-10'** | | | | | |
| TPH-GRO (C6-C10) | | 13000 | 4500 | | ug/kg | SW846 8260B |
| **C46446-5** | **B30-15'** | | | | | |
| sec-Butylbenzene | | 642 | 210 | | ug/kg | SW846 8260B |
| Isopropylbenzene | | 264 | 210 | | ug/kg | SW846 8260B |
| Naphthalene | | 244 | 210 | | ug/kg | SW846 8260B |

# Summary of Hits

**Job Number:** C46446
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| TPH (C10-C28) | | 363 | 33 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 149 | 33 | | mg/kg | SW846 8015B M |
| Lead | | 7.6 | 1.8 | | mg/kg | SW846 6010B |
| **C46446-5R** | **B30-15'** | | | | | |
| TPH-GRO (C6-C10) | | 61800 | 4200 | | ug/kg | SW846 8260B |
| **C46446-8** | **B31-2'** | | | | | |
| TPH (C10-C28) | | 80.8 | 66 | | mg/kg | SW846 8015B M |
| TPH (> C28-C40) | | 231 | 66 | | mg/kg | SW846 8015B M |
| Lead | | 580 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-8R** | **B31-2'** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46446-9** | **B31-4'** | | | | | |
| TPH (> C28-C40) | | 3.67 | 3.3 | | mg/kg | SW846 8015B M |
| Lead | | 4.3 | 1.9 | | mg/kg | SW846 6010B |
| **C46446-9R** | **B31-4'** | | | | | |
| No hits reported in this sample. | | | | | | |

## Sample Results

Report of Analysis

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61839.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.04 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5273.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 89.8 | 66 | mg/kg | |
| | TPH (> C28-C40) | 221 | 66 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 73% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 87.1 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-2' | | |
| **Lab Sample ID:** | C46446-1R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61839.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.04 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61840.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.17 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 39 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 39 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5298.D | 1 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 4.16 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 9.40 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 70% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 12.4 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-4' | | |
| **Lab Sample ID:** | C46446-2R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61840.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.17 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 97 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61838.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.06 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.9 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.9 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.9 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.9 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.9 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.9 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.9 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.9 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.9 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.9 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.9 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.9 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.9 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.9 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.9 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.9 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.9 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.9 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.9 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.9 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.9 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.9 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.9 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.9 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.9 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.9 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.9 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.9 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.9 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.9 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.9 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.9 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.9 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.9 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.9 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 94% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 103% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5300.D | 4 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.4 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 23.9 | 13 | mg/kg | |
| | TPH (> C28-C40) | 67.5 | 13 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 71% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 26.9 | 1.8 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-5' | | |
| **Lab Sample ID:** | C46446-3R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61838.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.06 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 99 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 94% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.59 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1800 | ug/kg | |
| 71-43-2 | Benzene | ND | 220 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 220 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 220 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 220 | ug/kg | |
| 75-25-2 | Bromoform | ND | 220 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 220 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 220 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 220 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 220 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 220 | ug/kg | |
| 67-66-3 | Chloroform | ND | 220 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 220 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 220 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 220 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 220 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 220 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 220 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 220 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 220 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 220 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 220 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 220 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 220 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 220 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 220 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 220 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 220 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 220 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 220 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 220 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 220 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 220 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 220 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 220 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 220 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 890 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 220 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 220 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 220 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 890 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 220 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 220 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 220 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 890 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 890 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 220 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 220 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 220 | ug/kg | |
| 100-42-5 | Styrene | ND | 220 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 220 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1800 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 220 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 220 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 220 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 220 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 220 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 220 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 220 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 220 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 220 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 220 | ug/kg | |
| 108-88-3 | Toluene | ND | 220 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 220 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 220 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 220 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 450 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5266.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 3.89 | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 3.98 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 68% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 6.5 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-10' | | |
| **Lab Sample ID:** | C46446-4R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.59 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 13000 | 4500 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 97% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61849.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.92 g | 5.0 ml | 100 ul |
| Run #2 | | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 1700 | ug/kg | |
| 71-43-2 | Benzene | ND | 210 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 210 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 210 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 210 | ug/kg | |
| 75-25-2 | Bromoform | ND | 210 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 210 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | 642 | 210 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 210 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 210 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 210 | ug/kg | |
| 67-66-3 | Chloroform | ND | 210 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 210 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 210 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 210 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 210 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 210 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 210 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 210 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 210 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 210 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 210 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 210 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 210 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 210 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 210 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 210 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 210 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 210 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 210 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 210 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 210 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 210 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 210 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 210 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 210 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 840 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 210 | ug/kg | |
| 98-82-8 | Isopropylbenzene | 264 | 210 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 210 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 840 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 210 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 210 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 210 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 840 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 840 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 210 | ug/kg | |
| 91-20-3 | Naphthalene | 244 | 210 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 210 | ug/kg | |
| 100-42-5 | Styrene | ND | 210 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 210 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 1700 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 210 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 210 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 210 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 210 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 210 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 210 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 210 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 210 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 210 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 210 | ug/kg | |
| 108-88-3 | Toluene | ND | 210 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 210 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 210 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 210 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 420 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5267.D | 10 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 363 | 33 | mg/kg | |
| | TPH (> C28-C40) | 149 | 33 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 66% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 7.6 | 1.8 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30-15' | | |
| **Lab Sample ID:** | C46446-5R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61849.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume | Methanol Aliquot |
|---|---|---|---|
| Run #1 | 5.92 g | 5.0 ml | 100 ul |
| Run #2 | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 61800 | 4200 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 111% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61841.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.25 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.5 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5275.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.1 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | 80.8 | 66 | mg/kg | |
| | TPH (> C28-C40) | 231 | 66 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 68% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 580 | 1.9 | mg/kg | 1 | 07/11/16 | 07/19/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6017
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-2' | | |
| **Lab Sample ID:** | C46446-8R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61841.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.25 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 95 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61837.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.24 g |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 38 | ug/kg | |
| 71-43-2 | Benzene | ND | 4.8 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 4.8 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.8 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.8 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.8 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 4.8 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 4.8 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 4.8 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.8 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.8 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.8 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 4.8 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 4.8 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.8 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.8 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 4.8 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 4.8 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.8 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 4.8 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 4.8 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 4.8 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 4.8 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 4.8 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.8 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.8 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 4.8 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 4.8 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 4.8 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.8 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 4.8 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 4.8 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 4.8 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.8 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 4.8 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 19 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 4.8 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 4.8 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 4.8 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 19 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 4.8 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 4.8 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 4.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.8 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 4.8 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 38 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.8 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.8 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.8 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 4.8 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.8 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 4.8 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 4.8 | ug/kg | |
| 108-88-3 | Toluene | ND | 4.8 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 4.8 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.8 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.8 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 9.5 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8015B M SW846 3550B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB5299.D | 1 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.3 g | 1.0 ml |
| Run #2 | | |

**TPH Extractable**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 3.67 | 3.3 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 90% | | 38-146% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| | | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.3 | 1.9 | mg/kg | 1 | 07/11/16 | 07/13/16 | RS | SW846 6010B [1] | SW846 3050B [2] |

(1) Instrument QC Batch: MA6001
(2) Prep QC Batch: MP11596

(a) All results reported on a wet weight basis.

RL = Reporting Limit

SGS Accutest



# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | B31-4' | | |
| **Lab Sample ID:** | C46446-9R | **Date Sampled:** | 07/08/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a [a] |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M61837.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.24 g |
| Run #2 | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | ND | 95 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 81-115% |

(a) All results reported on a wet weight basis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: C46446

Date 7-8-16 Page ____ of ____

## Report To

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Ste 250, Roseville
Email: gabe.stivala@atcassociates.com
Bill To:
Sampled By: JK
Attn:
Phone: 916-729-5247

## Analysis Request

| Sample ID | Date | Time | Matrix | Preserv | Volatile Organics GC/MS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 | COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity | Total Lead | Sample # | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B30-2' | 7-8-16 | 0940 | Soil | No | X | | | X | | | | | | | | | | | | | | | | | 1 | |
| B30-4' | | 0945 | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| B30-5' | | 0950 | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| B30-10' | | 1000 | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| B30-15' | | 1005 | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| B30-20' | | 1010 | | | | | | | | | | | | | | | | | | | | | | | 6 | |
| B30-25' | | 1015 | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| B31-2' | | 1135 | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| B31-4' | | 1140 | | | | | | | | | | | | | | | | | | | | | | | 9 | |

## Project Info.

Project Name/ #:
PO#:
Credit Card Y/N:

## Sample Receipt

# of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ____

*See Terms and Conditions on reverse*

1) Relinquished by:
Signature: [signature] Time: 1215
Printed Name: Jim Kundart Date: 7-8-16
Company: ATC

1) Received by:
Signature: [signature] Time: 1217
Printed Name: [signature] Date: 7/8/16
Company: Accutest

2) Relinquished by:
Signature: [signature] Time: 1305
Printed Name: [signature] Date: 7/8/16
Company: Accutest

2) Received by:
Signature: [signature] Time: 1305
Printed Name: [signature] Date: 7/8/16
Company: SGS Accutest

3) Relinquished by:
Signature: Time:
Printed Name: Date:
Company:

3) Received by:
Signature: Time:
Printed Name: Date:
Company:

Rev.10/2012

Temp: 32/4.2

**C46446: Chain of Custody**
**Page 1 of 3**

# SGS Accutest Sample Receipt Summary

**Job Number:** C46446 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/8/2016 1:05:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.2/4.2);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☐ | ☑ |
| 2. Trip Blank listed on COC: | ☐ | | ☐ | ☑ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☐ | | ☐ | ☑ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

**C46446: Chain of Custody**
**Page 2 of 3**

## Job Change Order: C46446

| | | | |
|---|---|---|---|
| **Requested Date:** | 7/8/2016 | **Received Date:** | 7/8/2016 |
| **Account Name:** | ATC Group Services | **Due Date:** | 7/13/2016 |
| **Project Description:** | Premier Hyundai 2820 Broadway Oakland | **Deliverable:** | COMMB |
| **CSR:** | nutank | **TAT (Days):** | 7 |

==========

**Sample #:** C46446-6 & 7

**Dept:**

**Change:**
Per client samples 6 & 7 are ON HOLD.

==========

**C46446: Chain of Custody**
**Page 3 of 3**

**Above Changes Per:** Gabe Stivala **Date/Time:** 7/8/2016 4:04:56 PM

To Client:This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 100 | ug/kg | |

# Method Blank Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-MB | M61834.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |
| 2037-26-5 | Toluene-D8 | 93% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 40 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 108-86-1 | Bromobenzene | ND | 5.0 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 104-51-8 | n-Butylbenzene | ND | 5.0 | ug/kg | |
| 135-98-8 | sec-Butylbenzene | ND | 5.0 | ug/kg | |
| 98-06-6 | tert-Butylbenzene | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 95-49-8 | o-Chlorotoluene | ND | 5.0 | ug/kg | |
| 106-43-4 | p-Chlorotoluene | ND | 5.0 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 563-58-6 | 1,1-Dichloropropene | ND | 5.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 142-28-9 | 1,3-Dichloropropane | ND | 5.0 | ug/kg | |
| 108-20-3 | Di-Isopropyl ether | ND | 5.0 | ug/kg | |
| 594-20-7 | 2,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | 5.0 | ug/kg | |

# Method Blank Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 5.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 20 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 74-95-3 | Methylene bromide | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 20 | ug/kg | |
| 78-93-3 | Methyl ethyl ketone | ND | 20 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/kg | |
| 103-65-1 | n-Propylbenzene | ND | 5.0 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | ug/kg | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 5.0 | ug/kg | |
| 75-65-0 | Tert Butyl Alcohol | ND | 40 | ug/kg | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 10 | ug/kg | |
| | TPH-GRO (C6-C10) | ND | 100 | ug/kg | |

# Method Blank Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-MB | M61913.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 72-140% |
| 2037-26-5 | Toluene-D8 | 98% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 81-115% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 182 | 114 | 183 | 114 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 38.9 | 97 | 34.9 | 87 | 11 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 37.4 | 94 | 33.7 | 84 | 10 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 39.9 | 100 | 37.1 | 93 | 7 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 37.7 | 94 | 34.3 | 86 | 9 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 40.3 | 101 | 37.3 | 93 | 8 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 34.3 | 86 | 32.9 | 82 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 35.0 | 88 | 33.0 | 83 | 6 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 36.5 | 91 | 34.2 | 86 | 7 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.5 | 96 | 35.0 | 88 | 10 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 40.7 | 102 | 36.4 | 91 | 11 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 36.7 | 92 | 33.6 | 84 | 9 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 34.2 | 86 | 30.6 | 77 | 11 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 35.2 | 88 | 32.7 | 82 | 7 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 39.4 | 99 | 35.9 | 90 | 9 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 36.7 | 92 | 33.5 | 84 | 9 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 36.8 | 92 | 33.5 | 84 | 9 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 37.5 | 94 | 33.4 | 84 | 12 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 39.9 | 100 | 32.9 | 82 | 19 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.0 | 95 | 34.2 | 86 | 11 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 37.9 | 95 | 34.3 | 86 | 10 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 38.8 | 97 | 34.8 | 87 | 11 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 38.4 | 96 | 34.0 | 85 | 12 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 35.9 | 90 | 32.9 | 82 | 9 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 36.1 | 90 | 33.7 | 84 | 7 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.5 | 96 | 34.4 | 86 | 11 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 29.3 | 73 | 25.9 | 65 | 12 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 40.4 | 101 | 36.7 | 92 | 10 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.0 | 105 | 37.9 | 95 | 10 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 36.6 | 92 | 33.8 | 85 | 8 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 37.5 | 94 | 35.1 | 88 | 7 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 36.6 | 92 | 33.9 | 85 | 8 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 35.0 | 88 | 32.3 | 81 | 8 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 37.1 | 93 | 32.9 | 82 | 12 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 37.3 | 93 | 34.2 | 86 | 9 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 38.2 | 96 | 34.7 | 87 | 10 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 183 | 114 | 151 | 94 | 19 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 34.6 | 87 | 32.7 | 82 | 6 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 37.4 | 94 | 35.8 | 90 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 36.1 | 90 | 34.0 | 85 | 6 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 161 | 101 | 138 | 86 | 15 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 39.5 | 99 | 35.0 | 88 | 12 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 29.4 | 74 | 25.6 | 64 | 14 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.8 | 100 | 35.9 | 90 | 10 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 38.2 | 96 | 34.8 | 87 | 9 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 163 | 102 | 160 | 100 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 37.8 | 95 | 35.3 | 88 | 7 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 38.4 | 96 | 34.5 | 86 | 11 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 34.4 | 86 | 31.7 | 79 | 8 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 38.8 | 97 | 36.0 | 90 | 7 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 40.3 | 101 | 37.6 | 94 | 7 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 194 | 97 | 213 | 107 | 9 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.0 | 98 | 36.0 | 90 | 8 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 38.3 | 96 | 35.1 | 88 | 9 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 37.6 | 94 | 33.2 | 83 | 12 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 37.3 | 93 | 32.9 | 82 | 13 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 35.0 | 88 | 33.1 | 83 | 6 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.4 | 101 | 37.1 | 93 | 9 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 36.4 | 91 | 34.6 | 87 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 35.2 | 88 | 32.9 | 82 | 7 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 35.9 | 90 | 33.1 | 83 | 8 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 39.3 | 98 | 35.9 | 90 | 9 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 37.1 | 93 | 33.5 | 84 | 10 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 41.4 | 104 | 37.8 | 95 | 9 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 41.0 | 103 | 36.2 | 91 | 12 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 33.8 | 85 | 29.8 | 75 | 13 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 113 | 94 | 105 | 88 | 7 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 96% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-BS | M61830.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| VM1859-BSD | M61831.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 93% | 92% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 102% | 81-115% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 160 | 184 | 115 | 196 | 123 | 6 | 47-163/30 |
| 71-43-2 | Benzene | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 72-122/18 |
| 108-86-1 | Bromobenzene | 40 | 39.6 | 99 | 38.9 | 97 | 2 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 40 | 41.5 | 104 | 40.6 | 102 | 2 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 40 | 39.2 | 98 | 38.2 | 96 | 3 | 68-122/18 |
| 75-25-2 | Bromoform | 40 | 39.9 | 100 | 39.3 | 98 | 2 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 40 | 39.4 | 99 | 38.0 | 95 | 4 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 40 | 39.4 | 99 | 38.2 | 96 | 3 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 40 | 40.3 | 101 | 38.9 | 97 | 4 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 40 | 38.4 | 96 | 38.4 | 96 | 0 | 68-117/17 |
| 75-00-3 | Chloroethane | 40 | 44.0 | 110 | 41.9 | 105 | 5 | 66-134/18 |
| 67-66-3 | Chloroform | 40 | 40.3 | 101 | 39.2 | 98 | 3 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 40 | 40.5 | 101 | 39.8 | 100 | 2 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 40 | 37.5 | 94 | 35.9 | 90 | 4 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 40 | 40.4 | 101 | 39.0 | 98 | 4 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 40 | 40.8 | 102 | 39.4 | 99 | 3 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 40 | 39.1 | 98 | 38.0 | 95 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 40 | 39.0 | 98 | 37.7 | 94 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 40 | 40.6 | 102 | 39.0 | 98 | 4 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 40 | 38.8 | 97 | 39.0 | 98 | 1 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 40 | 39.9 | 100 | 38.8 | 97 | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 40 | 40.4 | 101 | 39.4 | 99 | 3 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 40 | 40.1 | 100 | 40.0 | 100 | 0 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 40 | 40.2 | 101 | 39.4 | 99 | 2 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 40 | 41.9 | 105 | 38.8 | 97 | 8 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 40 | 38.9 | 97 | 38.6 | 97 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 40 | 31.0 | 78 | 28.6 | 72 | 8 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 40 | 42.8 | 107 | 42.3 | 106 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 40 | 42.1 | 105 | 41.6 | 104 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 40 | 39.2 | 98 | 38.5 | 96 | 2 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 40 | 39.4 | 99 | 38.8 | 97 | 2 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 40 | 39.6 | 99 | 38.6 | 97 | 3 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 40 | 37.9 | 95 | 36.9 | 92 | 3 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 40 | 38.2 | 96 | 37.9 | 95 | 1 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 40 | 39.6 | 99 | 39.0 | 98 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 40 | 41.3 | 103 | 39.9 | 100 | 3 | 69-125/19 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 160 | 193 | 121 | 180 | 113 | 7 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 40 | 38.6 | 97 | 36.0 | 90 | 7 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 40 | 39.6 | 99 | 38.1 | 95 | 4 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 40 | 40.2 | 101 | 38.6 | 97 | 4 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 160 | 160 | 100 | 156 | 98 | 3 | 60-145/26 |
| 74-83-9 | Methyl bromide | 40 | 42.0 | 105 | 40.3 | 101 | 4 | 66-130/18 |
| 74-87-3 | Methyl chloride | 40 | 36.9 | 92 | 33.8 | 85 | 9 | 50-140/25 |
| 74-95-3 | Methylene bromide | 40 | 39.6 | 99 | 39.5 | 99 | 0 | 72-127/17 |
| 75-09-2 | Methylene chloride | 40 | 39.0 | 98 | 38.0 | 95 | 3 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 160 | 196 | 123 | 191 | 119 | 3 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 40 | 39.7 | 99 | 39.1 | 98 | 2 | 68-121/19 |
| 91-20-3 | Naphthalene | 40 | 41.0 | 103 | 39.7 | 99 | 3 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 40 | 38.6 | 97 | 37.3 | 93 | 3 | 67-116/20 |
| 100-42-5 | Styrene | 40 | 40.3 | 101 | 39.6 | 99 | 2 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 40 | 41.7 | 104 | 41.1 | 103 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 200 | 273 | 137 | 207 | 104 | 28 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 40 | 39.1 | 98 | 39.1 | 98 | 0 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 40 | 42.5 | 106 | 40.4 | 101 | 5 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40 | 39.8 | 100 | 39.4 | 99 | 1 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 40 | 38.5 | 96 | 38.2 | 96 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40 | 39.1 | 98 | 37.5 | 94 | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 40 | 40.3 | 101 | 39.3 | 98 | 3 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40 | 39.5 | 99 | 37.6 | 94 | 5 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 40 | 39.1 | 98 | 37.9 | 95 | 3 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 40 | 39.6 | 99 | 38.8 | 97 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 40 | 38.6 | 97 | 38.1 | 95 | 1 | 66-125/18 |
| 108-88-3 | Toluene | 40 | 38.7 | 97 | 38.8 | 97 | 0 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 40 | 40.5 | 101 | 39.3 | 98 | 3 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 40 | 45.1 | 113 | 41.9 | 105 | 7 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 40 | 44.8 | 112 | 41.8 | 105 | 7 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 120 | 118 | 98 | 116 | 97 | 2 | 68-118/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 98% | 72-140% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-BS | M61910.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |
| VM1861-BSD | M61911.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 97% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1859-LCS | M61833.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 210 | 84 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 72-140% |
| 2037-26-5 | Toluene-D8 | 95% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 81-115% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VM1861-LCS | M61912.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | Spike ug/kg | LCS ug/kg | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 250 | 296 | 118 | 70-123 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | 72-140% |
| 2037-26-5 | Toluene-D8 | 100% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 81-115% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 40 U | | 160 | 173 | 108 | 160 | 175 | 110 | 1 | 47-163/30 |
| 71-43-2 | Benzene | 5.0 U | | 39.9 | 31.8 | 80 | 39.9 | 33.2 | 83 | 4 | 72-122/18 |
| 108-86-1 | Bromobenzene | 5.0 U | | 39.9 | 27.0 | 68 | 39.9 | 28.8 | 72 | 6 | 68-122/19 |
| 74-97-5 | Bromochloromethane | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 31.7 | 79 | 5 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.9 | 70 | 4 | 68-122/18 |
| 75-25-2 | Bromoform | 5.0 U | | 39.9 | 27.0 | 68* [a] | 39.9 | 28.1 | 70 | 4 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | 5.0 U | | 39.9 | 24.9 | 62* [a] | 39.9 | 25.2 | 63* [a] | 1 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | 5.0 U | | 39.9 | 28.1 | 70 | 39.9 | 29.2 | 73 | 4 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.0 | 78 | 2 | 69-117/20 |
| 108-90-7 | Chlorobenzene | 5.0 U | | 39.9 | 29.4 | 74 | 39.9 | 30.5 | 76 | 4 | 68-117/17 |
| 75-00-3 | Chloroethane | 5.0 U | | 39.9 | 34.2 | 86 | 39.9 | 34.2 | 86 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | 5.0 U | | 39.9 | 28.5 | 71 | 39.9 | 28.8 | 72 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | 5.0 U | | 39.9 | 25.0 | 63* [a] | 39.9 | 27.1 | 68 | 8 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | 5.0 U | | 39.9 | 25.9 | 65 | 39.9 | 26.1 | 65 | 1 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | 5.0 U | | 39.9 | 32.8 | 82 | 39.9 | 34.4 | 86 | 5 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | 5.0 U | | 39.9 | 30.0 | 75 | 39.9 | 30.4 | 76 | 1 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | 5.0 U | | 39.9 | 33.3 | 83 | 39.9 | 34.2 | 86 | 3 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | 5.0 U | | 39.9 | 32.1 | 80 | 39.9 | 33.2 | 83 | 3 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 U | | 39.9 | 25.1 | 63* [a] | 39.9 | 26.5 | 66 | 5 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | 5.0 U | | 39.9 | 27.5 | 69* [a] | 39.9 | 28.1 | 70 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | 5.0 U | | 39.9 | 25.5 | 64* [a] | 39.9 | 26.3 | 66* [a] | 3 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | 5.0 U | | 39.9 | 29.8 | 75 | 39.9 | 31.1 | 78 | 4 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | 5.0 U | | 39.9 | 27.6 | 69* [a] | 39.9 | 28.4 | 71* [a] | 3 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | 5.0 U | | 39.9 | 26.9 | 67* [a] | 39.9 | 27.2 | 68* [a] | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | 5.0 U | | 39.9 | 29.2 | 73 | 39.9 | 28.9 | 72 | 1 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | 5.0 U | | 39.9 | 26.6 | 67* [a] | 39.9 | 27.9 | 70 | 5 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | 5.0 U | | 39.9 | 24.7 | 62 | 39.9 | 24.4 | 61 | 1 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | 5.0 U | | 39.9 | 33.1 | 83 | 39.9 | 33.3 | 83 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 U | | 39.9 | 29.0 | 73 | 39.9 | 30.6 | 77 | 5 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | 5.0 U | | 39.9 | 24.3 | 61* [a] | 39.9 | 25.2 | 63* [a] | 4 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | 5.0 U | | 39.9 | 24.6 | 62* [a] | 39.9 | 24.8 | 62* [a] | 1 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | 5.0 U | | 39.9 | 24.1 | 60* [a] | 39.9 | 24.7 | 62* [a] | 2 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | 5.0 U | | 39.9 | 30.7 | 77 | 39.9 | 31.0 | 78 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 U | | 39.9 | 24.4 | 61* [a] | 39.9 | 25.2 | 63* [a] | 3 | 70-118/17 |
| 100-41-4 | Ethylbenzene | 5.0 U | | 39.9 | 30.5 | 76 | 39.9 | 31.2 | 78 | 2 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | 5.0 U | | 39.9 | 27.9 | 70 | 39.9 | 28.4 | 71 | 2 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Compound | C46485-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 20 U | | 160 | 124 | 78 | 160 | 126 | 79 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | 5.0 U | | 39.9 | 18.4 | 46* [a] | 39.9 | 19.3 | 48* [a] | 5 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | 5.0 U | | 39.9 | 32.2 | 81 | 39.9 | 31.2 | 78 | 3 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | 5.0 U | | 39.9 | 28.3 | 71 | 39.9 | 28.6 | 72 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | 20 U | | 160 | 104 | 65 | 160 | 111 | 70 | 7 | 60-145/26 |
| 74-83-9 | Methyl bromide | 5.0 U | | 39.9 | 31.6 | 79 | 39.9 | 31.5 | 79 | 0 | 66-130/18 |
| 74-87-3 | Methyl chloride | 5.0 U | | 39.9 | 22.4 | 56 | 39.9 | 22.4 | 56 | 0 | 50-140/25 |
| 74-95-3 | Methylene bromide | 5.0 U | | 39.9 | 28.3 | 71* [a] | 39.9 | 29.2 | 73 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | 20 U | | 39.9 | 32.2 | 81 | 39.9 | 32.5 | 81 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | 20 U | | 160 | 122 | 76 | 160 | 120 | 75 | 2 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.0 U | | 39.9 | 27.5 | 69 | 39.9 | 26.8 | 67* [a] | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | 5.0 U | | 39.9 | 19.1 | 48* [a] | 39.9 | 20.3 | 51* [a] | 6 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | 5.0 U | | 39.9 | 27.8 | 70 | 39.9 | 29.0 | 73 | 4 | 67-116/20 |
| 100-42-5 | Styrene | 5.0 U | | 39.9 | 28.6 | 72 | 39.9 | 28.7 | 72 | 0 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | 5.0 U | | 39.9 | 29.7 | 74 | 39.9 | 29.7 | 74 | 0 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | 40 U | | 200 | 142 | 71 | 200 | 141 | 71 | 1 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 5.0 U | | 39.9 | 30.4 | 76 | 39.9 | 30.7 | 77 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 U | | 39.9 | 32.0 | 80 | 39.9 | 32.4 | 81 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 U | | 39.9 | 23.6 | 59* [a] | 39.9 | 25.4 | 64* [a] | 7 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 U | | 39.9 | 27.0 | 68* [a] | 39.9 | 27.9 | 70 | 3 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 5.0 U | | 39.9 | 15.0 | 38* [a] | 39.9 | 15.6 | 39* [a] | 4 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | 5.0 U | | 39.9 | 28.4 | 71 | 39.9 | 28.7 | 72 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 U | | 39.9 | 16.1 | 40* [a] | 39.9 | 16.7 | 42* [a] | 4 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 5.0 U | | 39.9 | 26.9 | 67 | 39.9 | 27.2 | 68 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 5.0 U | | 39.9 | 28.7 | 72 | 39.9 | 28.9 | 72 | 1 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | 5.0 U | | 39.9 | 53.6 | 134* [a] | 39.9 | 55.8 | 140* [a] | 4 | 66-125/18 |
| 108-88-3 | Toluene | 5.0 U | | 39.9 | 31.0 | 78 | 39.9 | 31.9 | 80 | 3 | 72-116/18 |
| 79-01-6 | Trichloroethylene | 5.0 U | | 39.9 | 38.2 | 96 | 39.9 | 39.8 | 100 | 4 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | 5.0 U | | 39.9 | 32.9 | 82 | 39.9 | 33.2 | 83 | 1 | 70-138/19 |
| 75-01-4 | Vinyl chloride | 5.0 U | | 39.9 | 26.8 | 67 | 39.9 | 28.6 | 72 | 6 | 55-146/22 |
| 1330-20-7 | Xylene (total) | 9.9 U | | 120 | 93.2 | 78 | 120 | 93.8 | 78 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 89% | 100% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46485-1MS | M61850.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1MSD | M61851.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |
| C46485-1 | M61836.D | 1 | 07/13/16 | JT | n/a | n/a | VM1859 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-1, C46446-2, C46446-3, C46446-5, C46446-8, C46446-9, C46446-1R, C46446-2R, C46446-3R, C46446-5R, C46446-8R, C46446-9R

| CAS No. | Surrogate Recoveries | MS | MSD | C46485-1 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 94% | 94% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 94% | 101% | 81-115% |

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 7160 | 6010 | 84 | 7160 | 4940 | 69 | 20 | 47-163/30 |
| 71-43-2 | Benzene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 72-122/18 |
| 108-86-1 | Bromobenzene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-122/19 |
| 74-97-5 | Bromochloromethane | ND | | 1790 | 1800 | 101 | 1790 | 1780 | 100 | 1 | 71-129/18 |
| 75-27-4 | Bromodichloromethane | ND | | 1790 | 1610 | 90 | 1790 | 1580 | 88 | 2 | 68-122/18 |
| 75-25-2 | Bromoform | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 69-126/18 |
| 104-51-8 | n-Butylbenzene | ND | | 1790 | 1570 | 88 | 1790 | 1600 | 89 | 2 | 66-121/20 |
| 135-98-8 | sec-Butylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 69-118/20 |
| 98-06-6 | tert-Butylbenzene | ND | | 1790 | 1670 | 93 | 1790 | 1690 | 94 | 1 | 69-117/20 |
| 108-90-7 | Chlorobenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 68-117/17 |
| 75-00-3 | Chloroethane | ND | | 1790 | 1810 | 101 | 1790 | 1810 | 101 | 0 | 66-134/18 |
| 67-66-3 | Chloroform | ND | | 1790 | 1580 | 88 | 1790 | 1600 | 89 | 1 | 68-124/18 |
| 95-49-8 | o-Chlorotoluene | ND | | 1790 | 1700 | 95 | 1790 | 1650 | 92 | 3 | 65-120/22 |
| 106-43-4 | p-Chlorotoluene | ND | | 1790 | 1380 | 77 | 1790 | 1500 | 84 | 8 | 64-123/24 |
| 56-23-5 | Carbon tetrachloride | ND | | 1790 | 1600 | 89 | 1790 | 1580 | 88 | 1 | 68-130/20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1640 | 92 | 0 | 69-122/19 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 1790 | 1650 | 92 | 1790 | 1640 | 92 | 1 | 69-120/20 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 1790 | 1630 | 91 | 1790 | 1600 | 89 | 2 | 69-120/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 1790 | 1630 | 91 | 1790 | 1620 | 91 | 1 | 64-132/25 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 1790 | 1730 | 97 | 1790 | 1700 | 95 | 2 | 70-122/17 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 1790 | 1600 | 89 | 1790 | 1600 | 89 | 0 | 69-125/18 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 1790 | 1770 | 99 | 1790 | 1740 | 97 | 2 | 71-122/18 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 1790 | 1740 | 97 | 1790 | 1700 | 95 | 2 | 74-123/17 |
| 108-20-3 | Di-Isopropyl ether | ND | | 1790 | 1650 | 92 | 1790 | 1660 | 93 | 1 | 69-122/19 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 1790 | 1330 | 74 | 1790 | 1370 | 77 | 3 | 63-132/24 |
| 124-48-1 | Dibromochloromethane | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 68-121/16 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 1790 | 1120 | 63 | 1790 | 1100 | 61 | 2 | 53-119/22 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 1790 | 1800 | 101 | 1790 | 1810 | 101 | 1 | 72-130/18 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 1790 | 1760 | 98 | 1790 | 1740 | 97 | 1 | 71-130/18 |
| 541-73-1 | m-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/18 |
| 95-50-1 | o-Dichlorobenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 68-119/17 |
| 106-46-7 | p-Dichlorobenzene | ND | | 1790 | 1630 | 91 | 1790 | 1650 | 92 | 1 | 67-119/17 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 1790 | 1570 | 88 | 1790 | 1580 | 88 | 1 | 66-113/19 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 1790 | 1520 | 85 | 1790 | 1520 | 85 | 0 | 70-118/17 |
| 100-41-4 | Ethylbenzene | ND | | 1790 | 1690 | 94 | 1790 | 1700 | 95 | 1 | 71-118/18 |
| 637-92-3 | Ethyl tert-Butyl Ether | ND | | 1790 | 1670 | 93 | 1790 | 1680 | 94 | 1 | 69-125/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Compound | C46446-4 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 7160 | 6990 | 98 | 7160 | 6860 | 96 | 2 | 53-153/27 |
| 87-68-3 | Hexachlorobutadiene | ND | | 1790 | 1690 | 94 | 1790 | 1710 | 96 | 1 | 65-125/22 |
| 98-82-8 | Isopropylbenzene | ND | | 1790 | 1720 | 96 | 1790 | 1720 | 96 | 0 | 70-119/19 |
| 99-87-6 | p-Isopropyltoluene | ND | | 1790 | 1660 | 93 | 1790 | 1670 | 93 | 1 | 68-120/20 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 7160 | 6900 | 96 | 7160 | 6820 | 95 | 1 | 60-145/26 |
| 74-83-9 | Methyl bromide | ND | | 1790 | 1620 | 91 | 1790 | 1580 | 88 | 3 | 66-130/18 |
| 74-87-3 | Methyl chloride | ND | | 1790 | 1360 | 76 | 1790 | 1380 | 77 | 1 | 50-140/25 |
| 74-95-3 | Methylene bromide | ND | | 1790 | 1750 | 98 | 1790 | 1690 | 94 | 3 | 72-127/17 |
| 75-09-2 | Methylene chloride | ND | | 1790 | 1640 | 92 | 1790 | 1620 | 91 | 1 | 69-121/18 |
| 78-93-3 | Methyl ethyl ketone | ND | | 7160 | 6170 | 86 | 7160 | 5470 | 76 | 12 | 59-147/30 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 1790 | 1580 | 88 | 1790 | 1530 | 86 | 3 | 68-121/19 |
| 91-20-3 | Naphthalene | ND | | 1790 | 1990 | 111 | 1790 | 2010 | 112 | 1 | 68-129/22 |
| 103-65-1 | n-Propylbenzene | ND | | 1790 | 1550 | 87 | 1790 | 1570 | 88 | 1 | 67-116/20 |
| 100-42-5 | Styrene | ND | | 1790 | 1780 | 100 | 1790 | 1790 | 100 | 1 | 68-120/17 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 1790 | 1740 | 97 | 1790 | 1730 | 97 | 1 | 70-129/20 |
| 75-65-0 | Tert Butyl Alcohol | ND | | 8940 | 10100 | 113 | 8940 | 9840 | 110 | 3 | 50-163/30 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 70-123/18 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 1790 | 1570 | 88 | 1790 | 1590 | 89 | 1 | 71-128/20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 1790 | 1640 | 92 | 1790 | 1670 | 93 | 2 | 69-126/18 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 1790 | 1780 | 100 | 1790 | 1770 | 99 | 1 | 70-120/17 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 1790 | 1950 | 109 | 1790 | 1980 | 111 | 2 | 65-125/23 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 1790 | 2020 | 113 | 1790 | 2000 | 112 | 1 | 69-128/18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 1790 | 1830 | 102 | 1790 | 1820 | 102 | 1 | 65-125/22 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 1790 | 1620 | 91 | 1790 | 1630 | 91 | 1 | 67-118/19 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 1790 | 1650 | 92 | 1790 | 1680 | 94 | 2 | 68-120/20 |
| 127-18-4 | Tetrachloroethylene | ND | | 1790 | 1850 | 103 | 1790 | 1750 | 98 | 6 | 66-125/18 |
| 108-88-3 | Toluene | ND | | 1790 | 1700 | 95 | 1790 | 1690 | 94 | 1 | 72-116/18 |
| 79-01-6 | Trichloroethylene | ND | | 1790 | 1810 | 101 | 1790 | 1770 | 99 | 2 | 70-126/18 |
| 75-69-4 | Trichlorofluoromethane | ND | | 1790 | 1580 | 88 | 1790 | 1580 | 88 | 0 | 70-138/19 |
| 75-01-4 | Vinyl chloride | ND | | 1790 | 945 | 53* [a] | 1790 | 966 | 54* [a] | 2 | 55-146/22 |
| 1330-20-7 | Xylene (total) | ND | | 5370 | 5110 | 95 | 5370 | 5160 | 96 | 1 | 68-118/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | 91% | 95% | 72-140% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46446-4MS | M61930.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4MSD | M61931.D | 1 | 07/19/16 | JT | n/a | n/a | VM1861 |
| C46446-4 | M61918.D | 1 | 07/18/16 | JT | n/a | n/a | VM1861 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46446-4, C46446-4R

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-4 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 94% | 95% | 97% | 87-113% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 103% | 111% | 81-115% |

(a) Outside control limits due to matrix interference. AZ:M2

* = Outside of Control Limits.

GC/MS Volatiles



Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61839.D
Acq On : 13 Jul 2016 4:31 pm
Operator : johannat
Sample : C46446-1
Misc : MS1912,VM1859,5.04,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 03 18:23:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

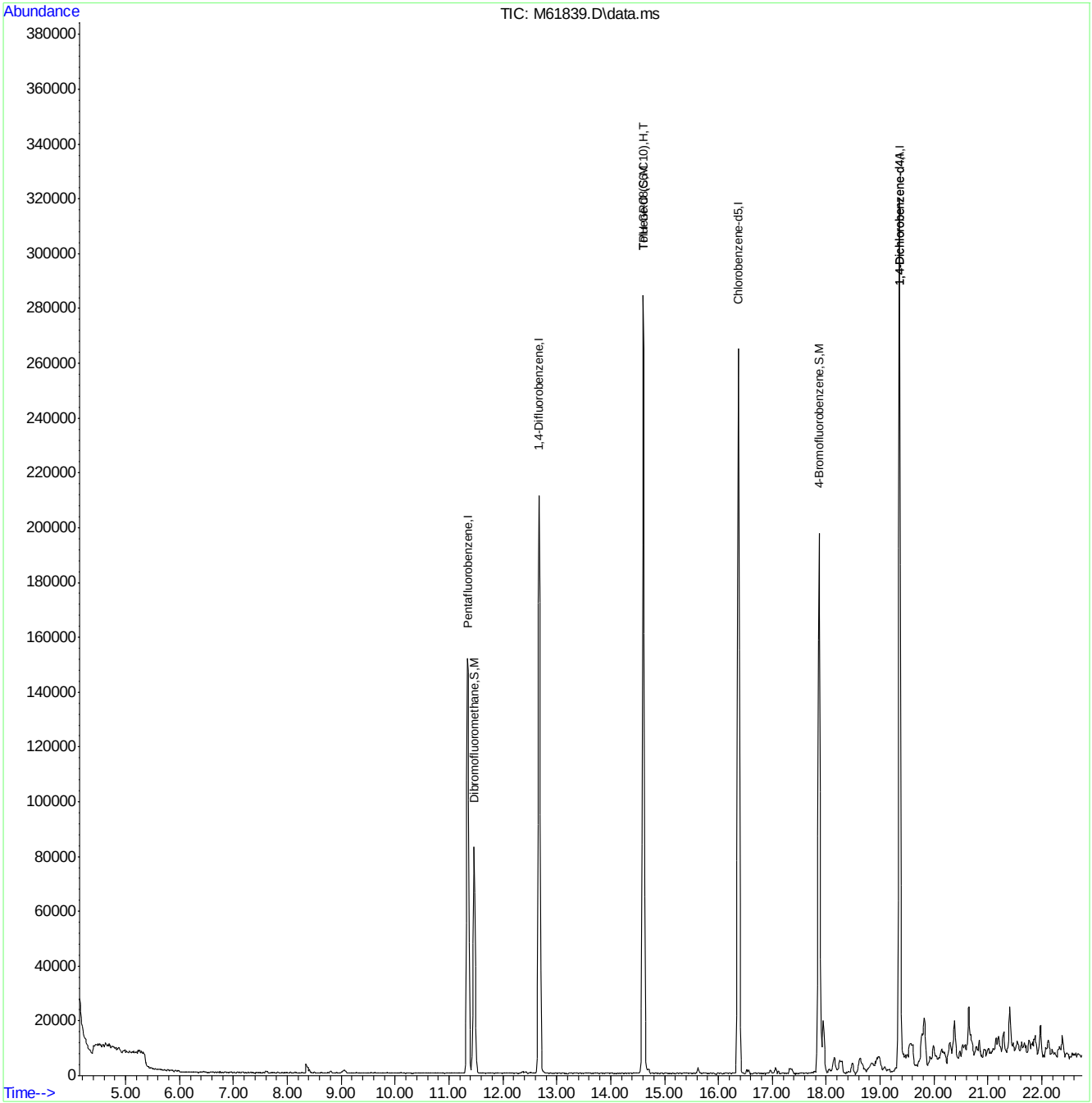
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.353 | 168 | 143919 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 219602 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 207335 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 109708 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 109708 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.469 | 111 | 74676 | 20.46 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 102.30% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 257614 | 19.04 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.20% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 110253 | 20.72 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 103.60% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 3405976m | 8.32 | ppb | |

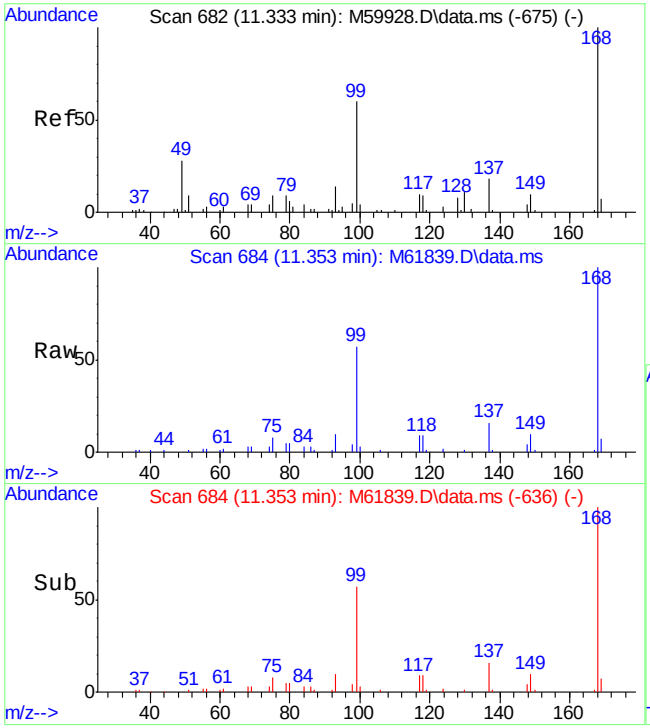
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61839.D
Acq On : 13 Jul 2016 4:31 pm
Operator : johannat
Sample : C46446-1
Misc : MS1912,VM1859,5.04,,,,1
ALS Vial : 13 Sample Multiplier: 1

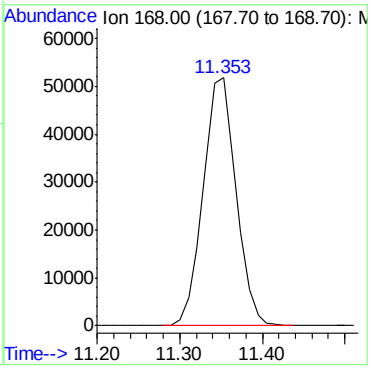
Quant Time: Aug 03 18:23:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

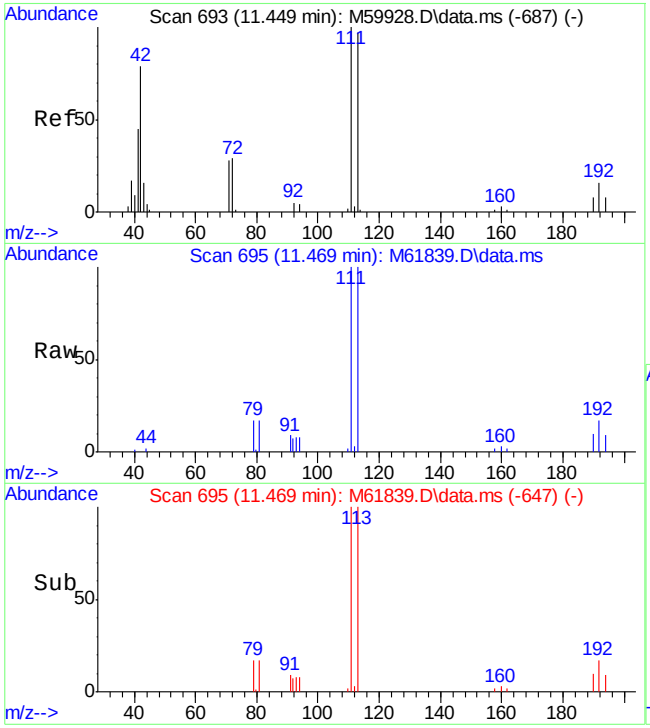





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.353 min Scan# 684
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:168 Resp: 143919

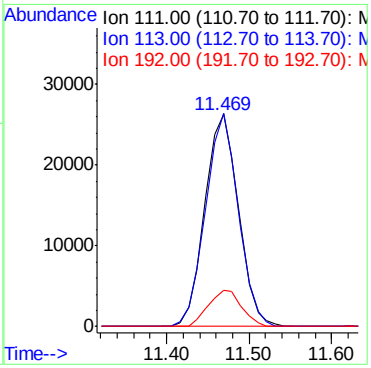


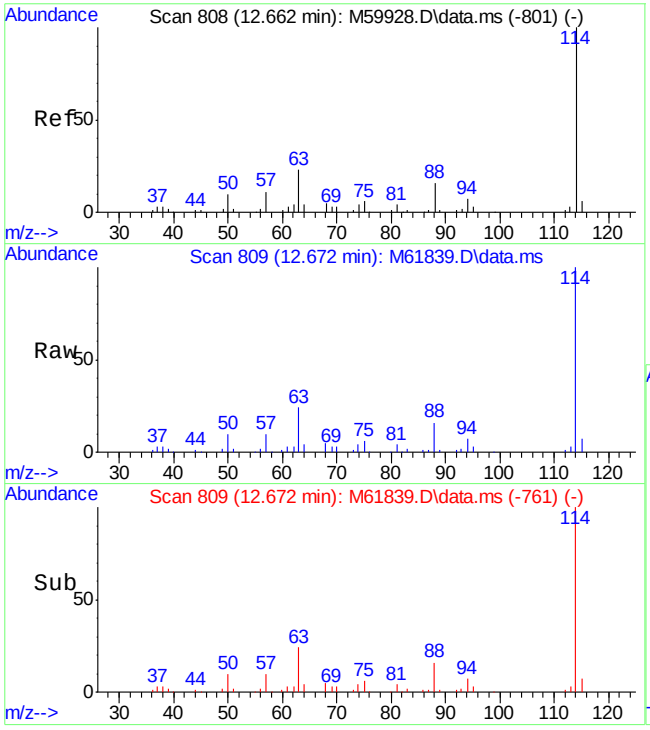




#36
Dibromofluoromethane
Concen: 20.46 ppb
RT: 11.469 min Scan# 695
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:111 Resp: 74676

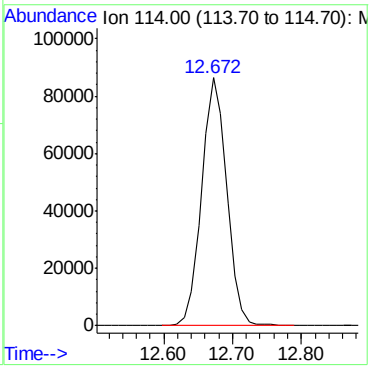
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.7 | 77.7 | 117.7 |
| 192 | 16.9 | 0.0 | 36.3 |

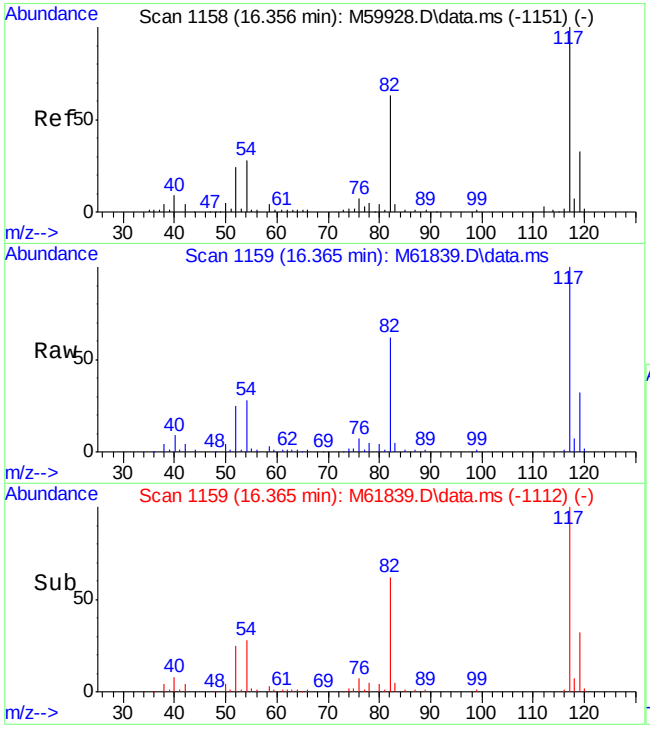





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:114 Resp: 219602

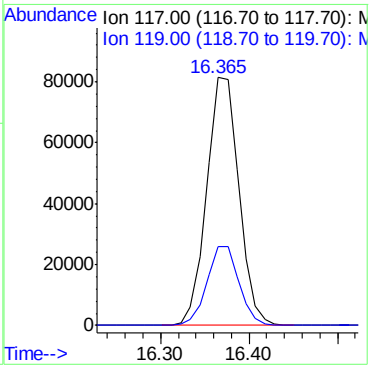


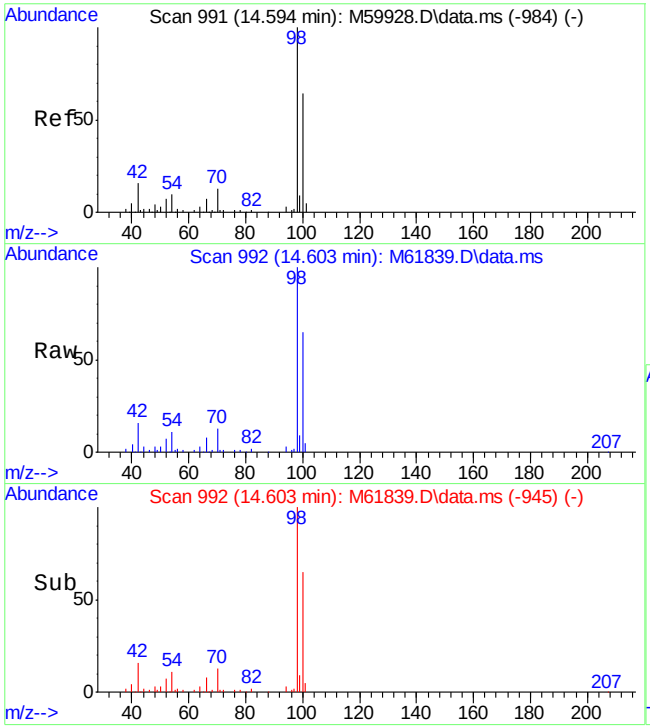




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:117 Resp: 207335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

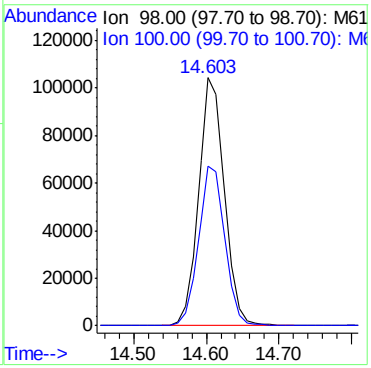


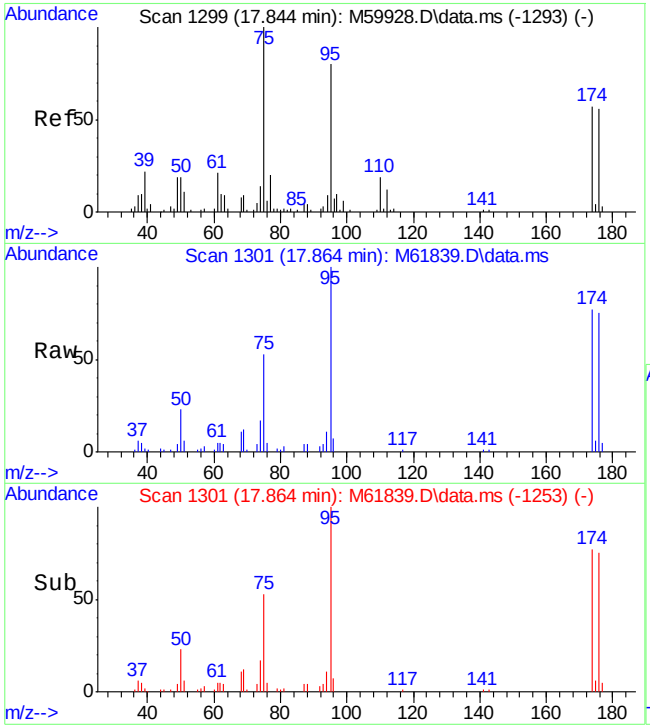



#56
Toluene-d8
Concen: 19.04 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion: 98 Resp: 257614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 44.3 | 84.3 |

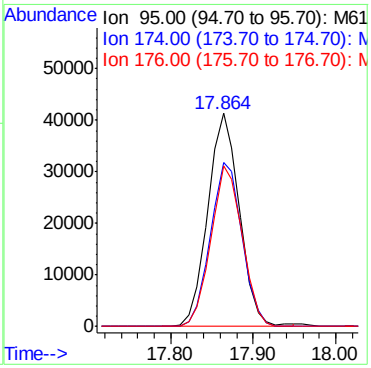


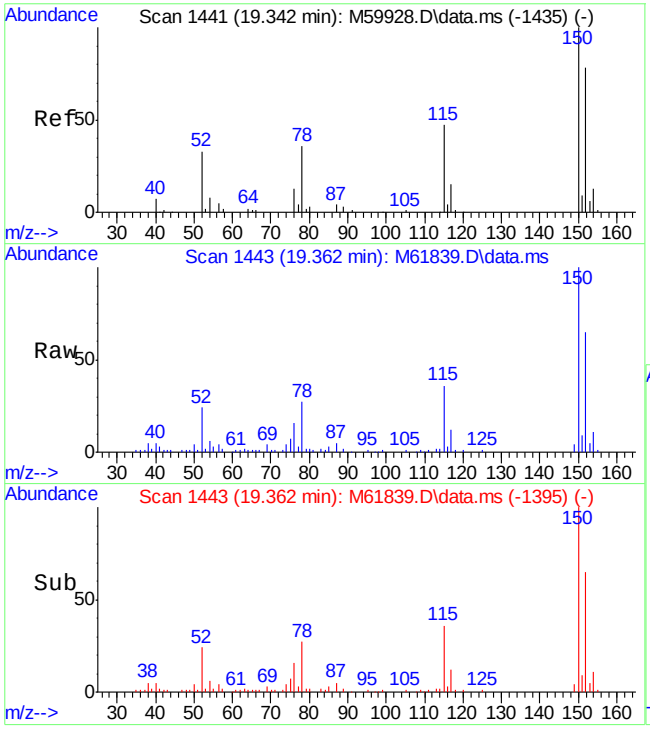




#74
4-Bromofluorobenzene
Concen: 20.72 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion: 95 Resp: 110253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.8 | 54.3 | 94.3 |
| 176 | 74.4 | 51.5 | 91.5 |

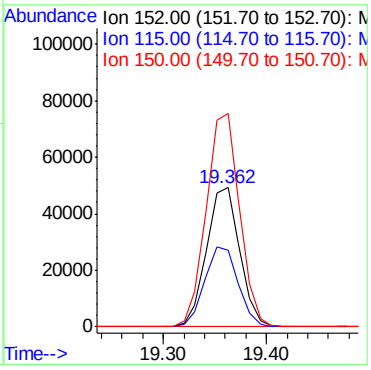


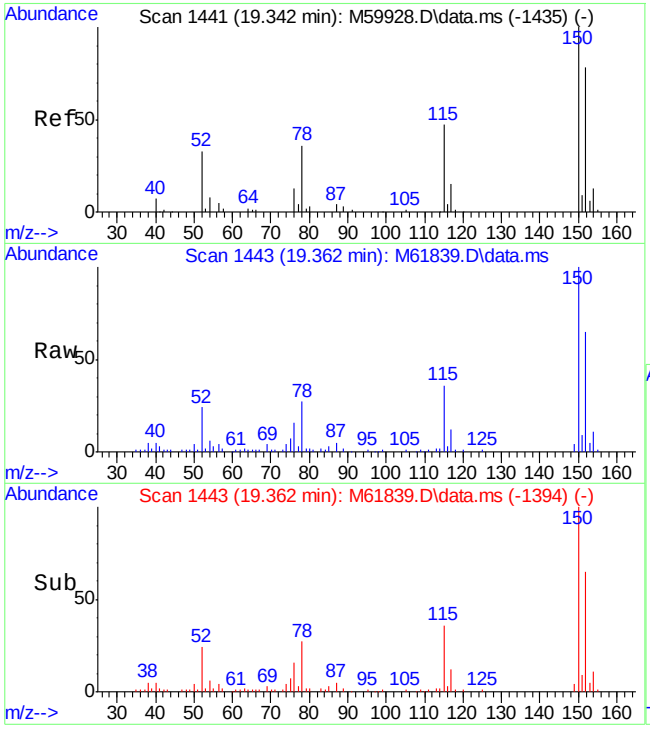



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:152 Resp: 109708

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.9 | 40.9 | 80.9 |
| 150 | 154.3 | 178.6 | 218.6# |

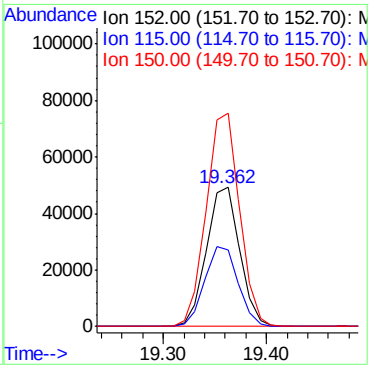


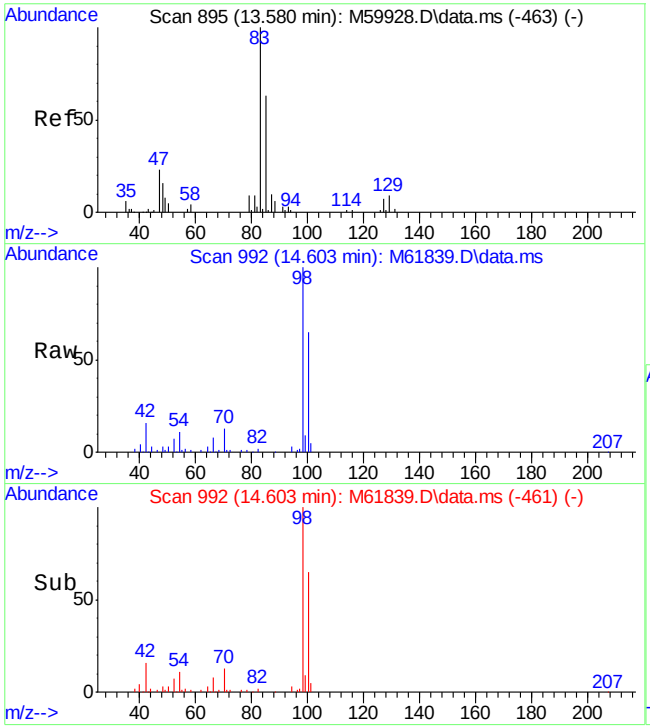




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:152 Resp: 109708

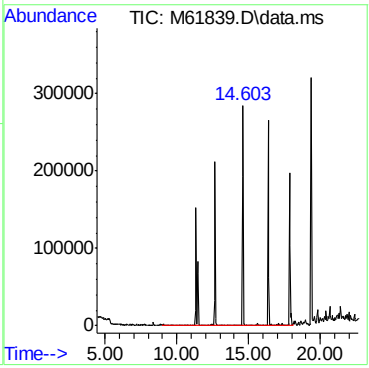
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.9 | 37.3 | 77.3 |
| 150 | 154.3 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 8.32 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:TIC Resp: 3405976



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61839.D
Acq On : 13 Jul 2016 4:31 pm
Operator : johannat
Sample : C46446-1
Misc : MS1912,VM1859,5.04,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 03 18:23:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

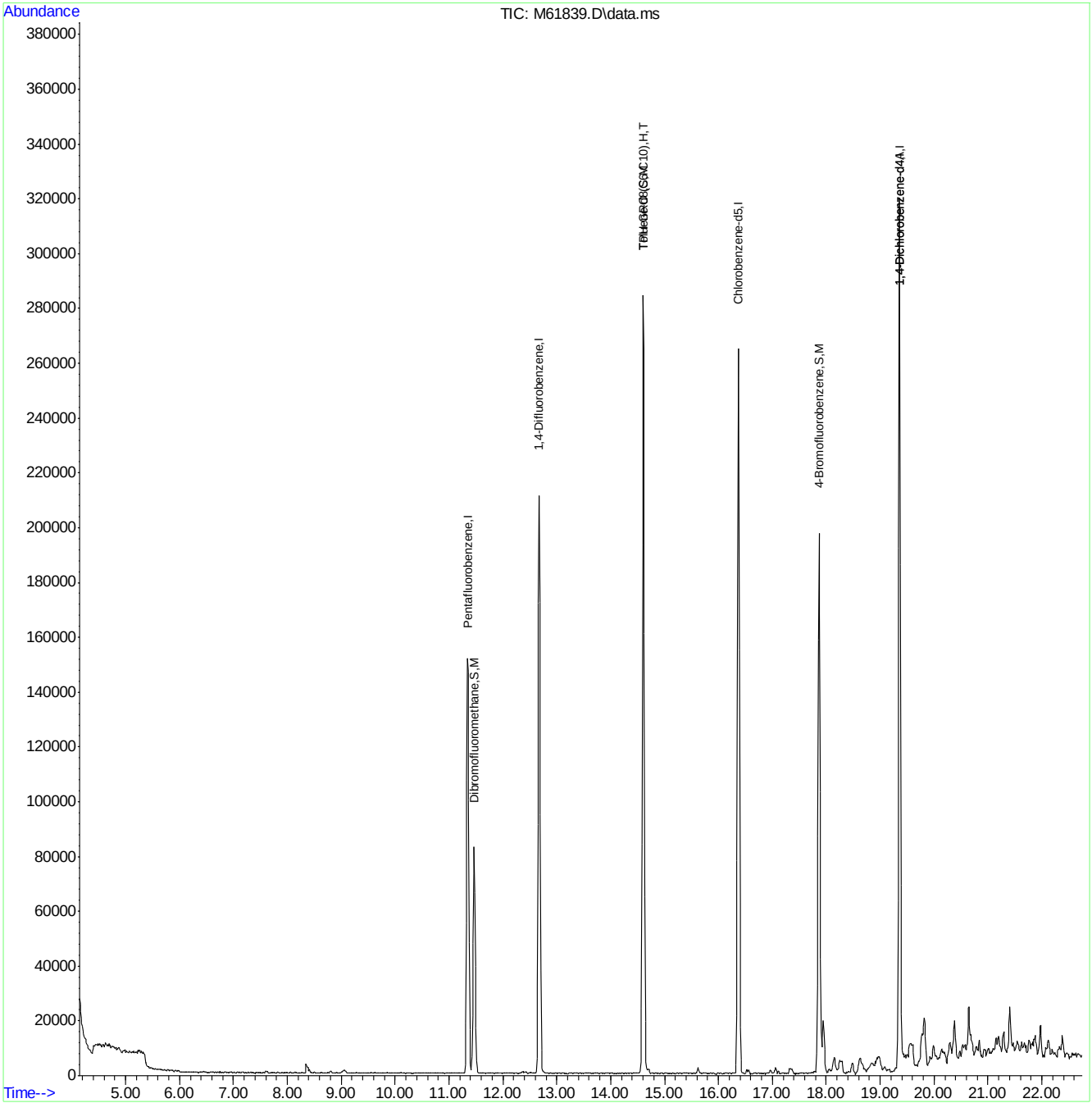
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.353 | 168 | 143919 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 219602 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 207335 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 109708 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 109708 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.469 | 111 | 74676 | 20.46 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 102.30% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 257614 | 19.04 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.20% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 110253 | 20.72 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 103.60% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 3405976m | 8.32 | ppb | |

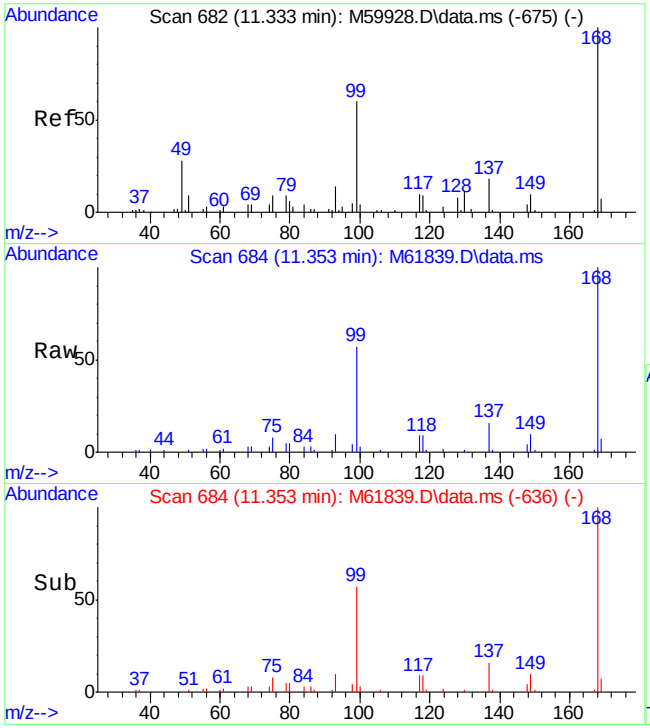
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61839.D
Acq On : 13 Jul 2016 4:31 pm
Operator : johannat
Sample : C46446-1
Misc : MS1912,VM1859,5.04,,,,1
ALS Vial : 13 Sample Multiplier: 1

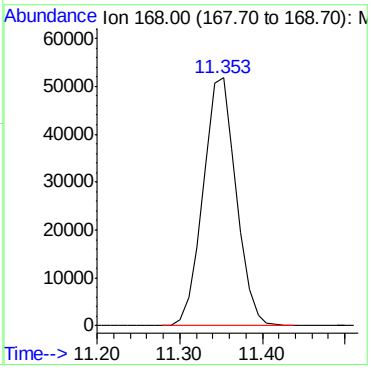
Quant Time: Aug 03 18:23:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

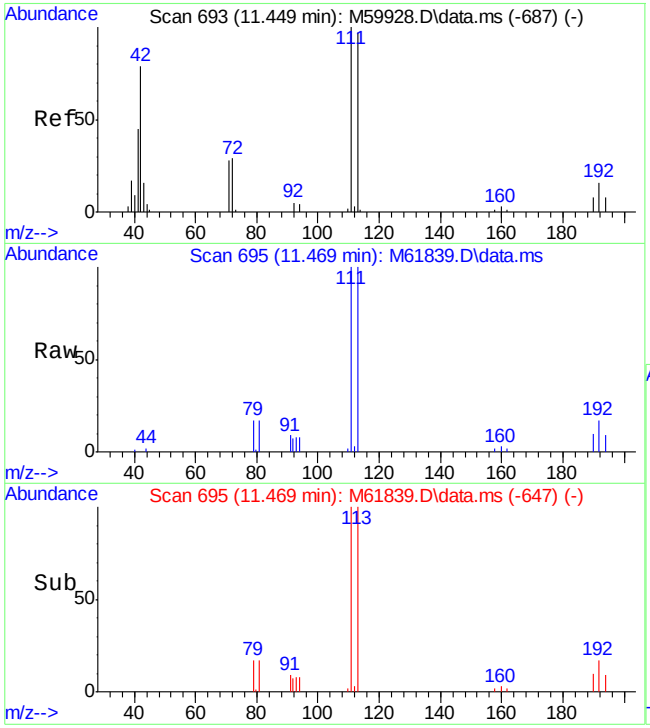





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.353 min Scan# 684
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:168 Resp: 143919

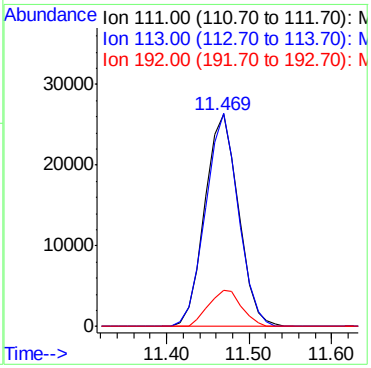


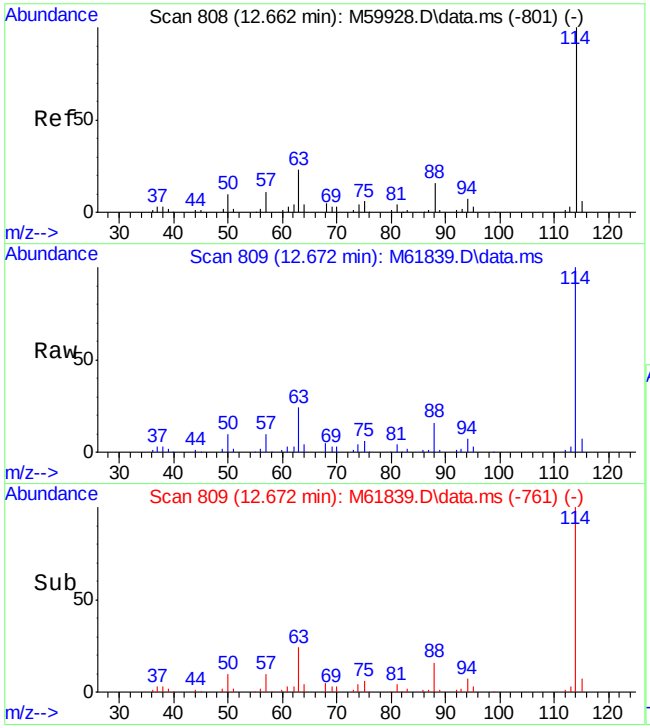




#36
Dibromofluoromethane
Concen: 20.46 ppb
RT: 11.469 min Scan# 695
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:111 Resp: 74676

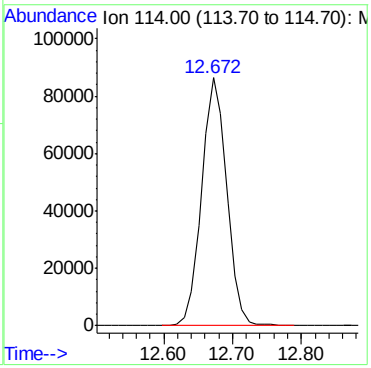
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.7 | 77.7 | 117.7 |
| 192 | 16.9 | 0.0 | 36.3 |

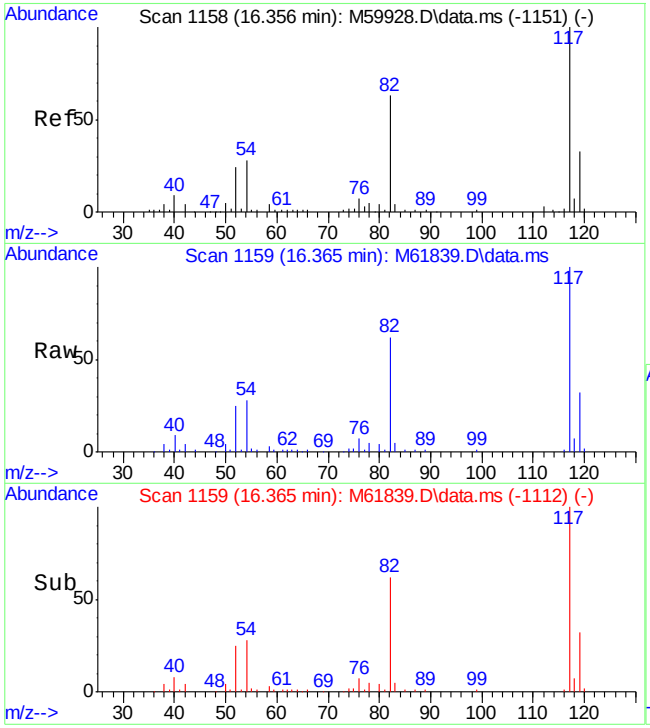





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:114 Resp: 219602

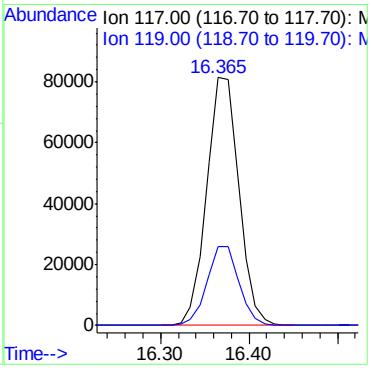


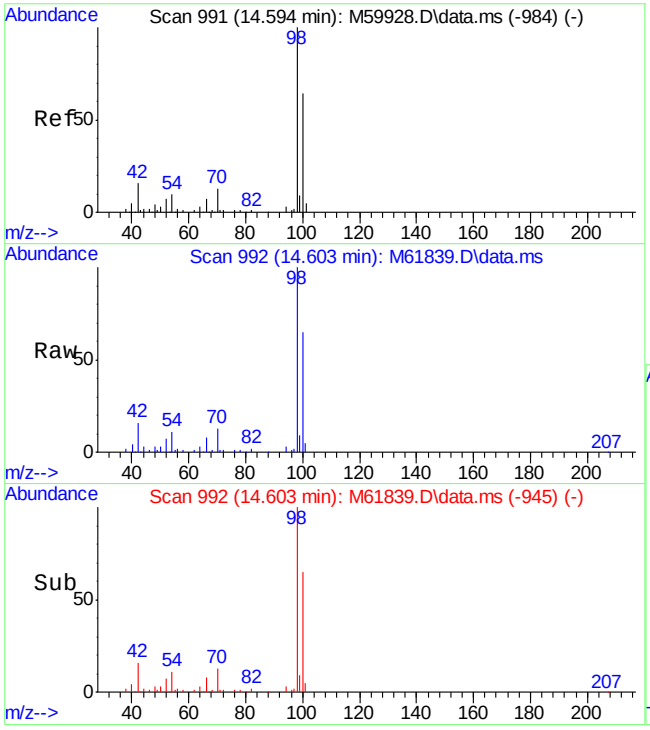




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:117 Resp: 207335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

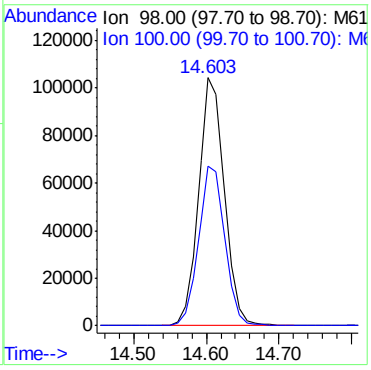


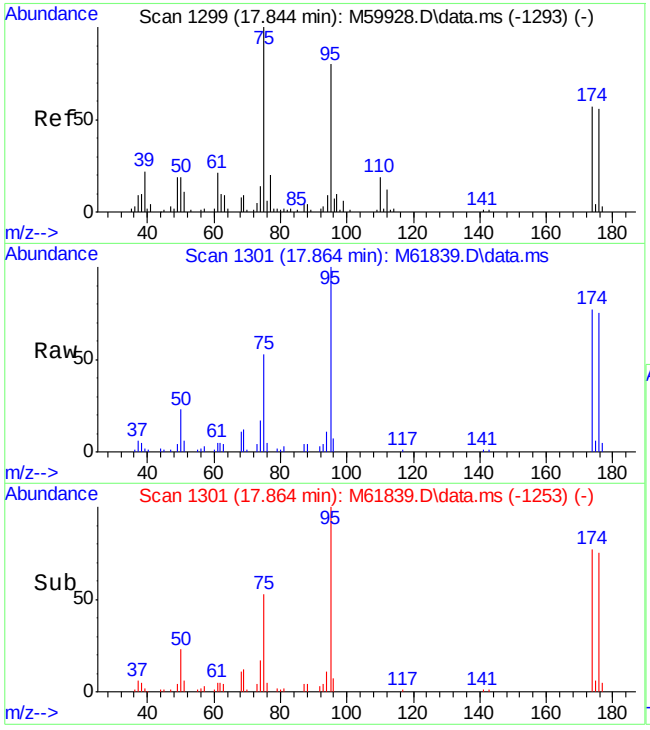



#56
Toluene-d8
Concen: 19.04 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion: 98 Resp: 257614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 44.3 | 84.3 |

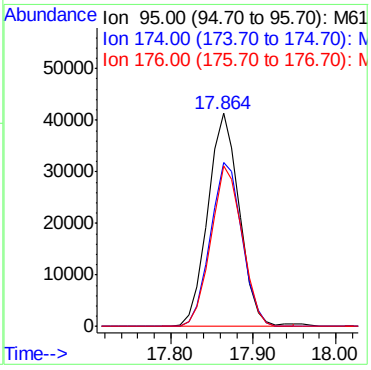


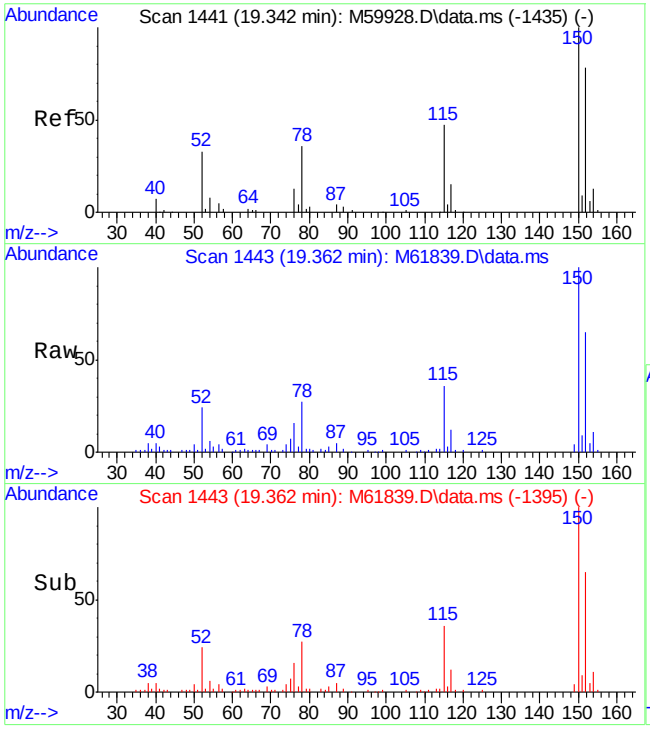




#74
4-Bromofluorobenzene
Concen: 20.72 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion: 95 Resp: 110253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.8 | 54.3 | 94.3 |
| 176 | 74.4 | 51.5 | 91.5 |

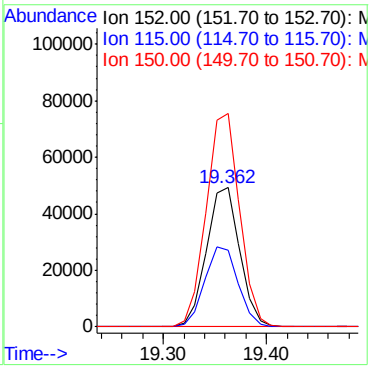


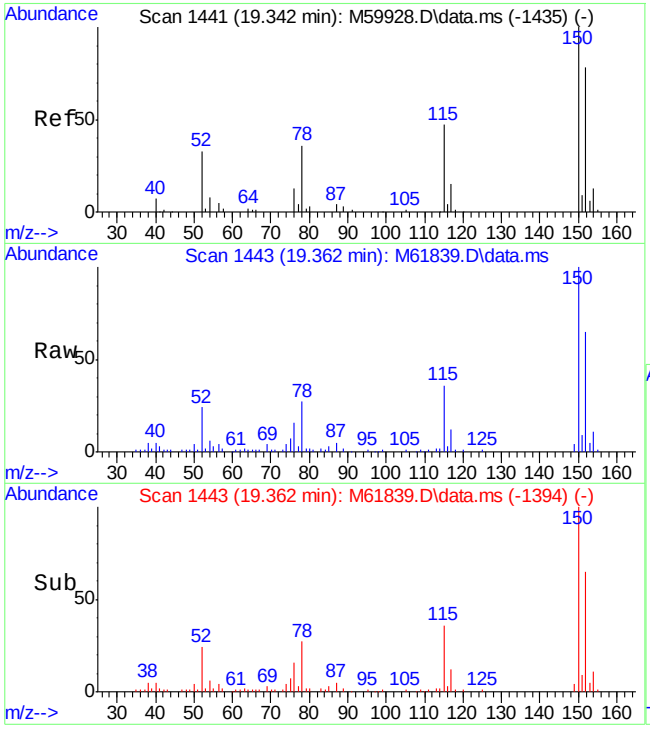



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:152 Resp: 109708

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.9 | 40.9 | 80.9 |
| 150 | 154.3 | 178.6 | 218.6# |

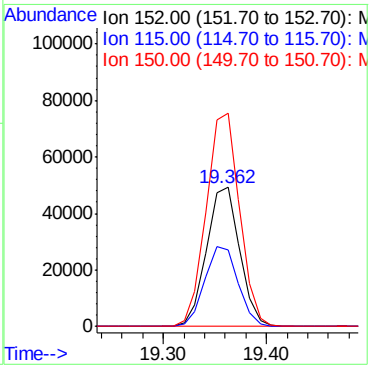


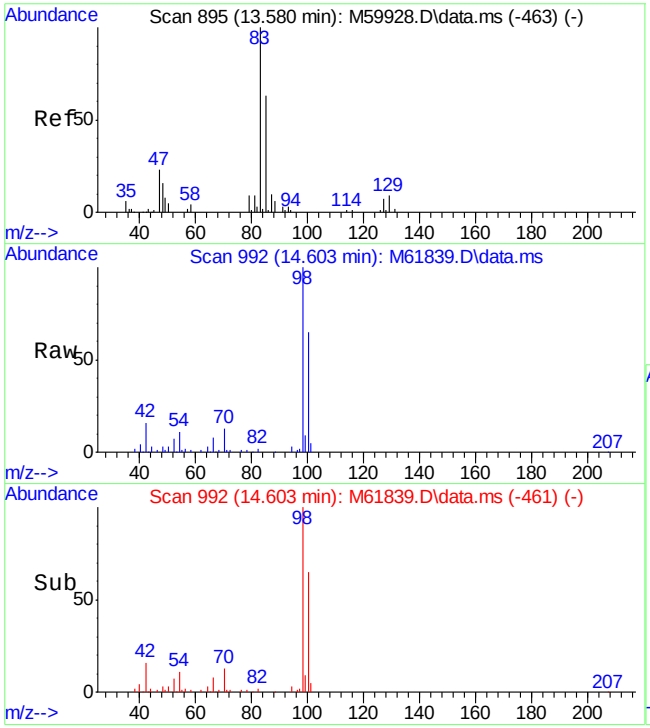




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:152 Resp: 109708

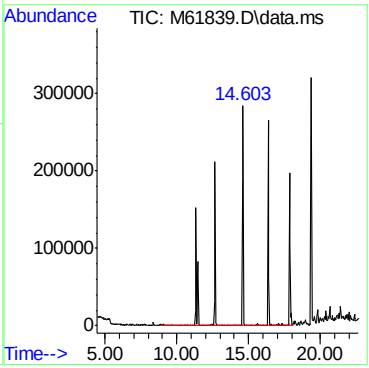
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.9 | 37.3 | 77.3 |
| 150 | 154.3 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 8.32 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61839.D
Acq: 13 Jul 2016 4:31 pm

Tgt Ion:TIC Resp: 3405976



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61840.D
Acq On : 13 Jul 2016 5:02 pm
Operator : johannat
Sample : C46446-2
Misc : MS1912,VM1859,5.17,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 03 18:23:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

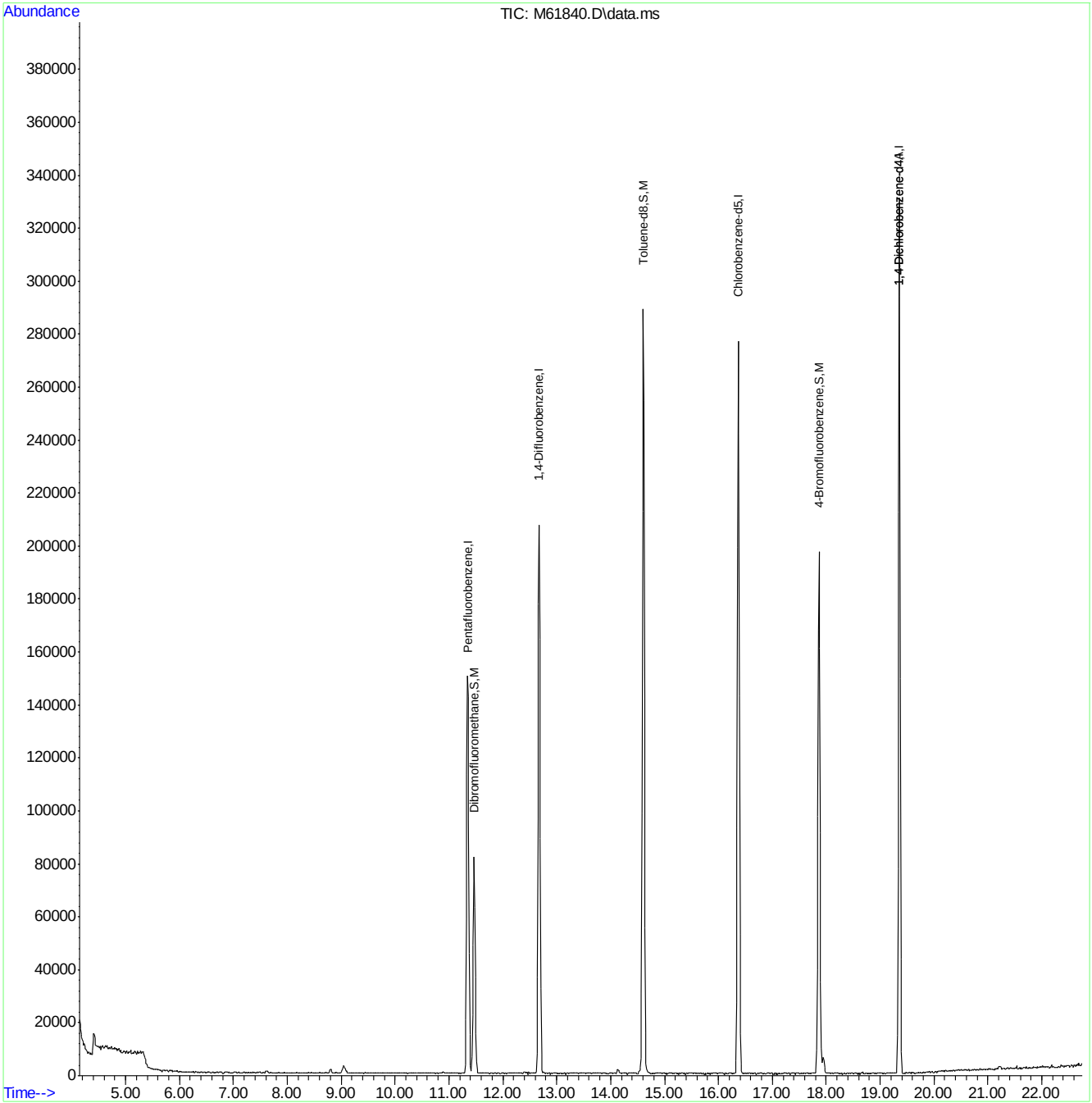
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.354 | 168 | 143381 | 20.00 | ppb | 0.01 |
| 40) 1,4-Difluorobenzene | 12.673 | 114 | 217868 | 20.00 | ppb | 0.01 |
| 55) Chlorobenzene-d5 | 16.367 | 117 | 209473 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.353 | 152 | 113339 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.353 | 152 | 113339 | 20.00 | ppb | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.470 | 111 | 72739 | 20.01 | ppb | 0.01 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 100.05% | | | |
| 56) Toluene-d8 | 14.604 | 98 | 258693 | 18.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | |
| 74) 4-Bromofluorobenzene | 17.865 | 95 | 108899 | 20.26 | ppb | 0.01 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.30% | | | |
| **Target Compounds** | | | | | | Qvalue |

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

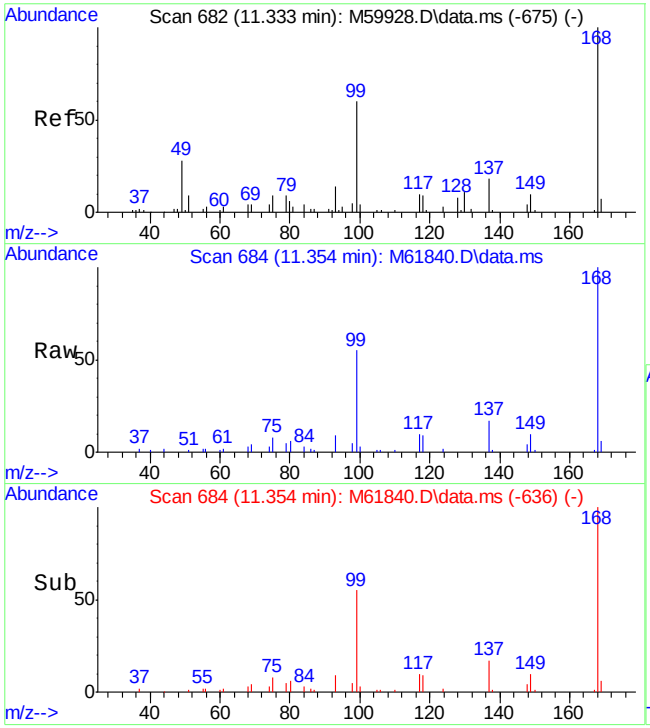
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61840.D
Acq On : 13 Jul 2016 5:02 pm
Operator : johannat
Sample : C46446-2
Misc : MS1912,VM1859,5.17,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 03 18:23:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

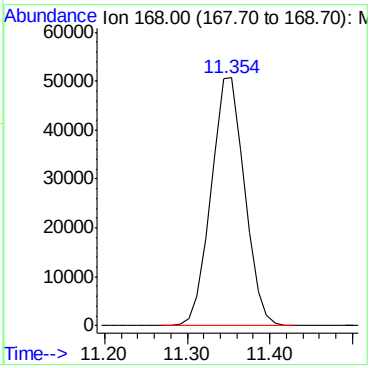


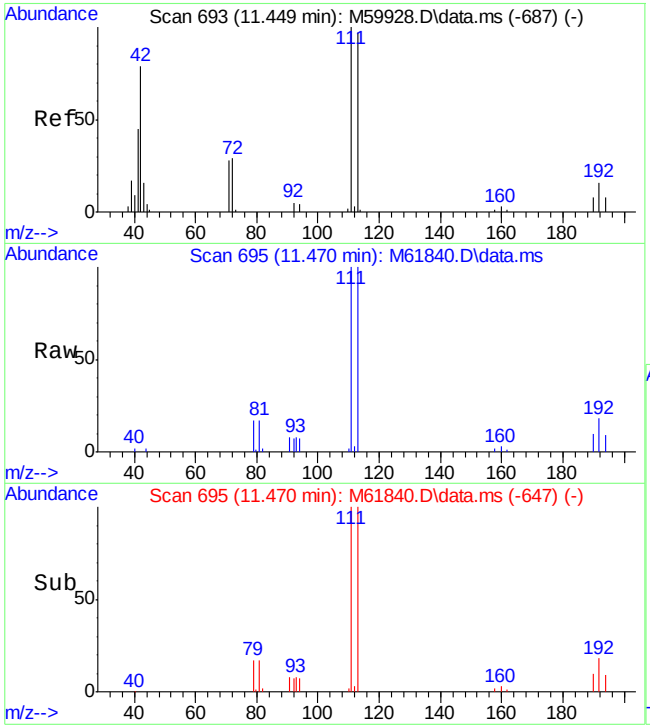

VM1848S.M Wed Aug 03 18:24:02 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.354 min Scan# 684
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:168 Resp: 143381

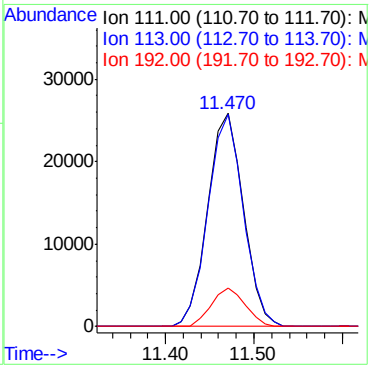


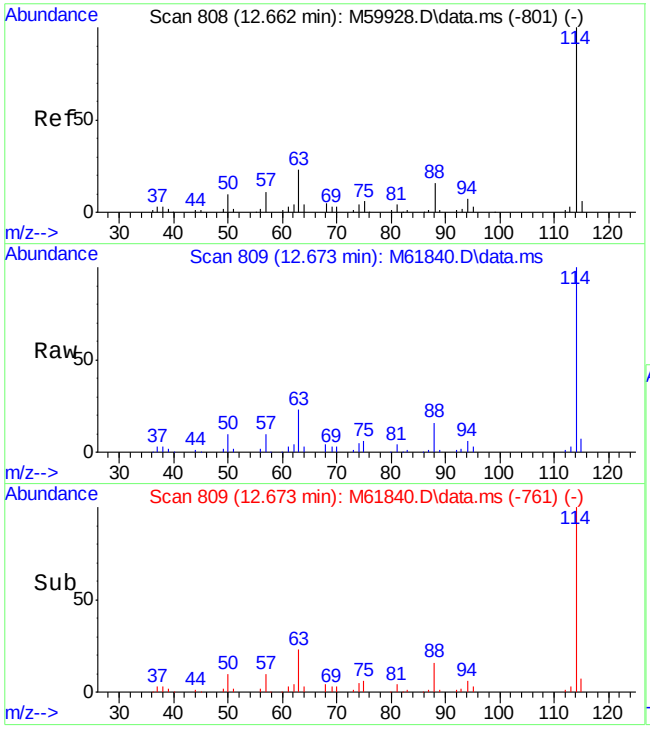




#36
Dibromofluoromethane
Concen: 20.01 ppb
RT: 11.470 min Scan# 695
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:111 Resp: 72739

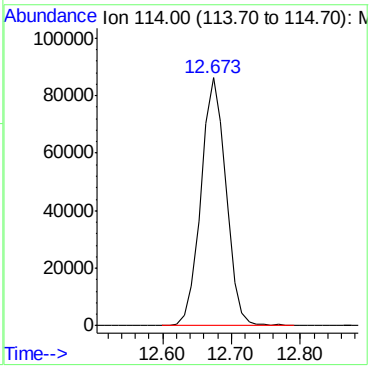
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.3 | 77.7 | 117.7 |
| 192 | 17.1 | 0.0 | 36.3 |

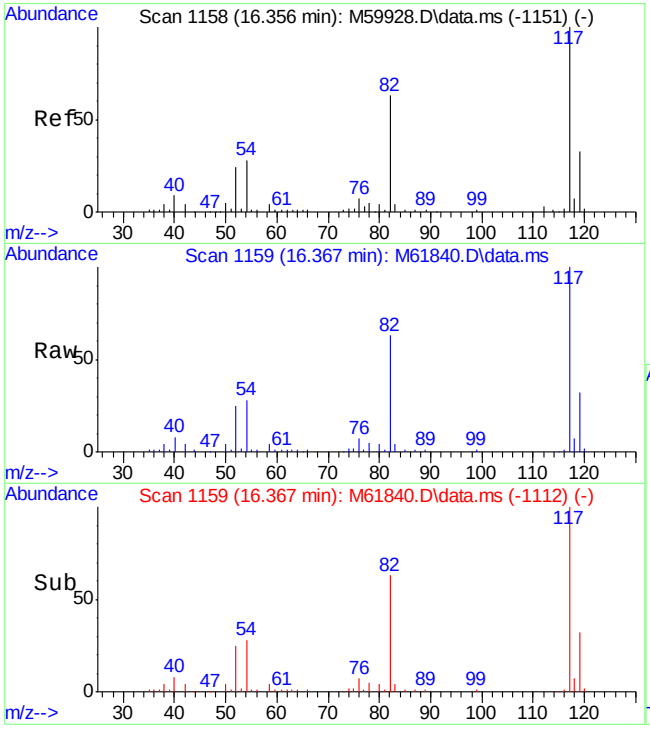





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.673 min Scan# 809
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:114 Resp: 217868

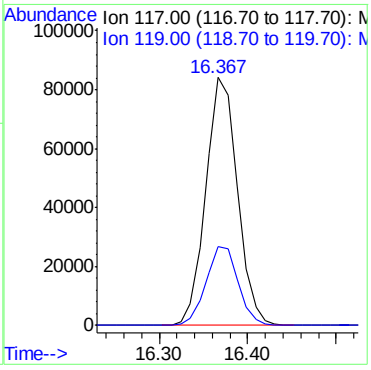


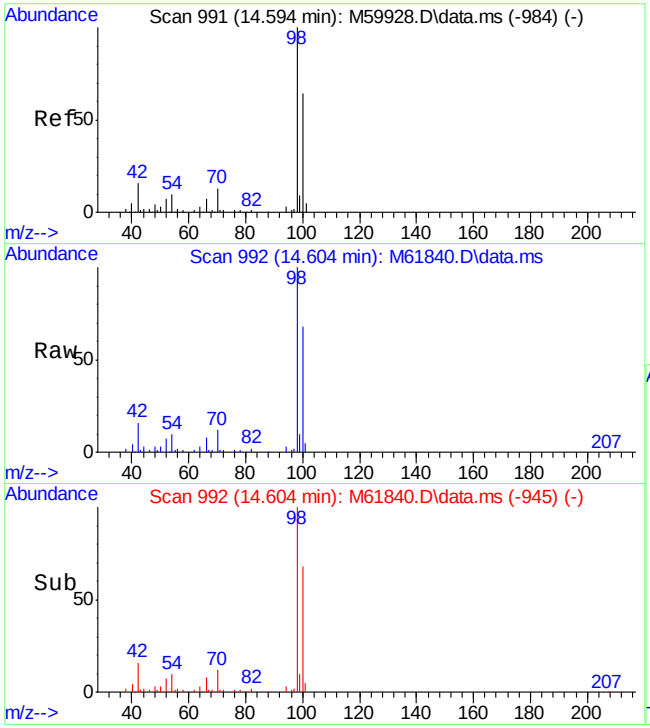




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.367 min Scan# 1159
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:117 Resp: 209473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

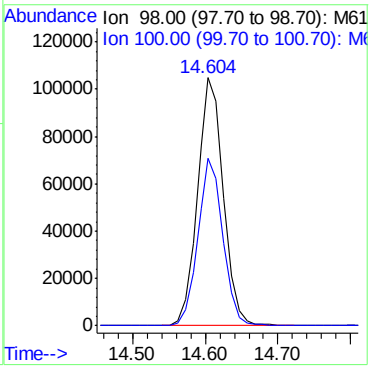


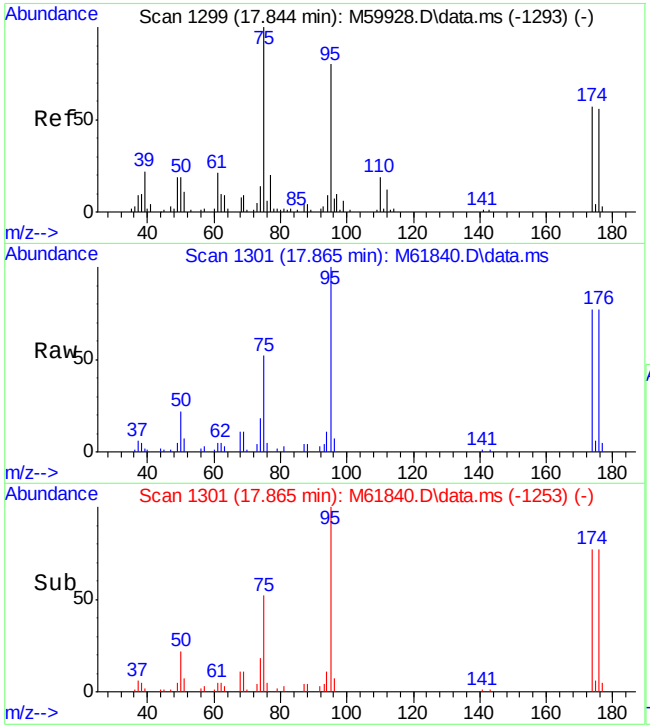



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.604 min Scan# 992
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion: 98 Resp: 258693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

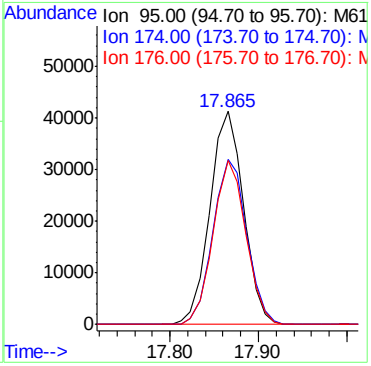


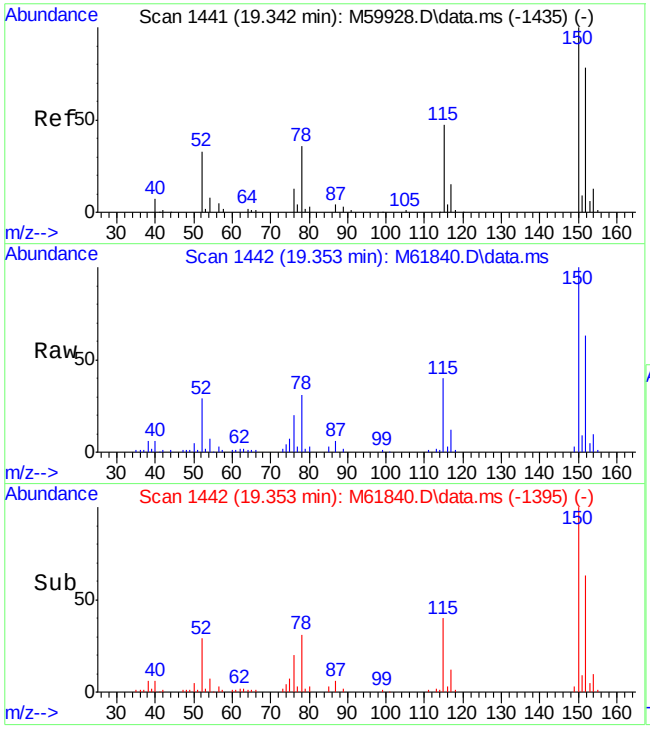




#74
4-Bromofluorobenzene
Concen: 20.26 ppb
RT: 17.865 min Scan# 1301
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion: 95 Resp: 108899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.9 | 54.3 | 94.3 |
| 176 | 75.3 | 51.5 | 91.5 |

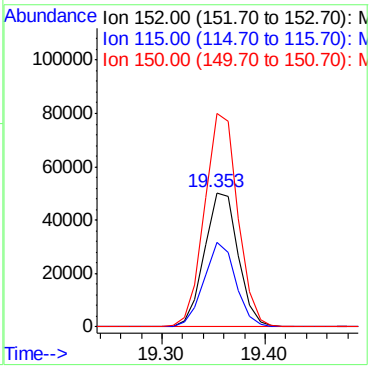


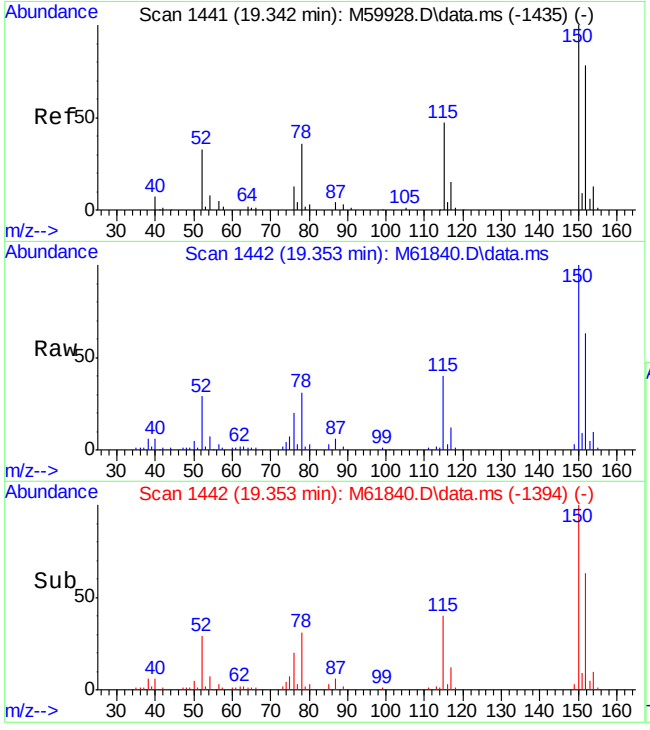



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.353 min Scan# 1442
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:152 Resp: 113339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.7 | 40.9 | 80.9 |
| 150 | 157.5 | 178.6 | 218.6# |

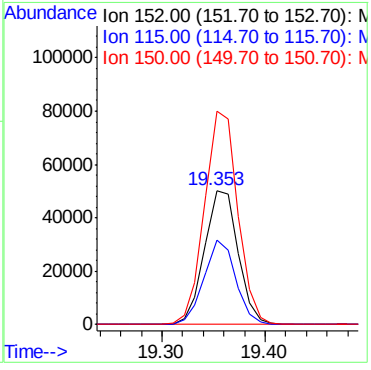



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.353 min Scan# 1442
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:152 Resp: 113339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.7 | 37.3 | 77.3 |
| 150 | 157.5 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61840.D
Acq On : 13 Jul 2016 5:02 pm
Operator : johannat
Sample : C46446-2
Misc : MS1912,VM1859,5.17,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 03 18:23:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

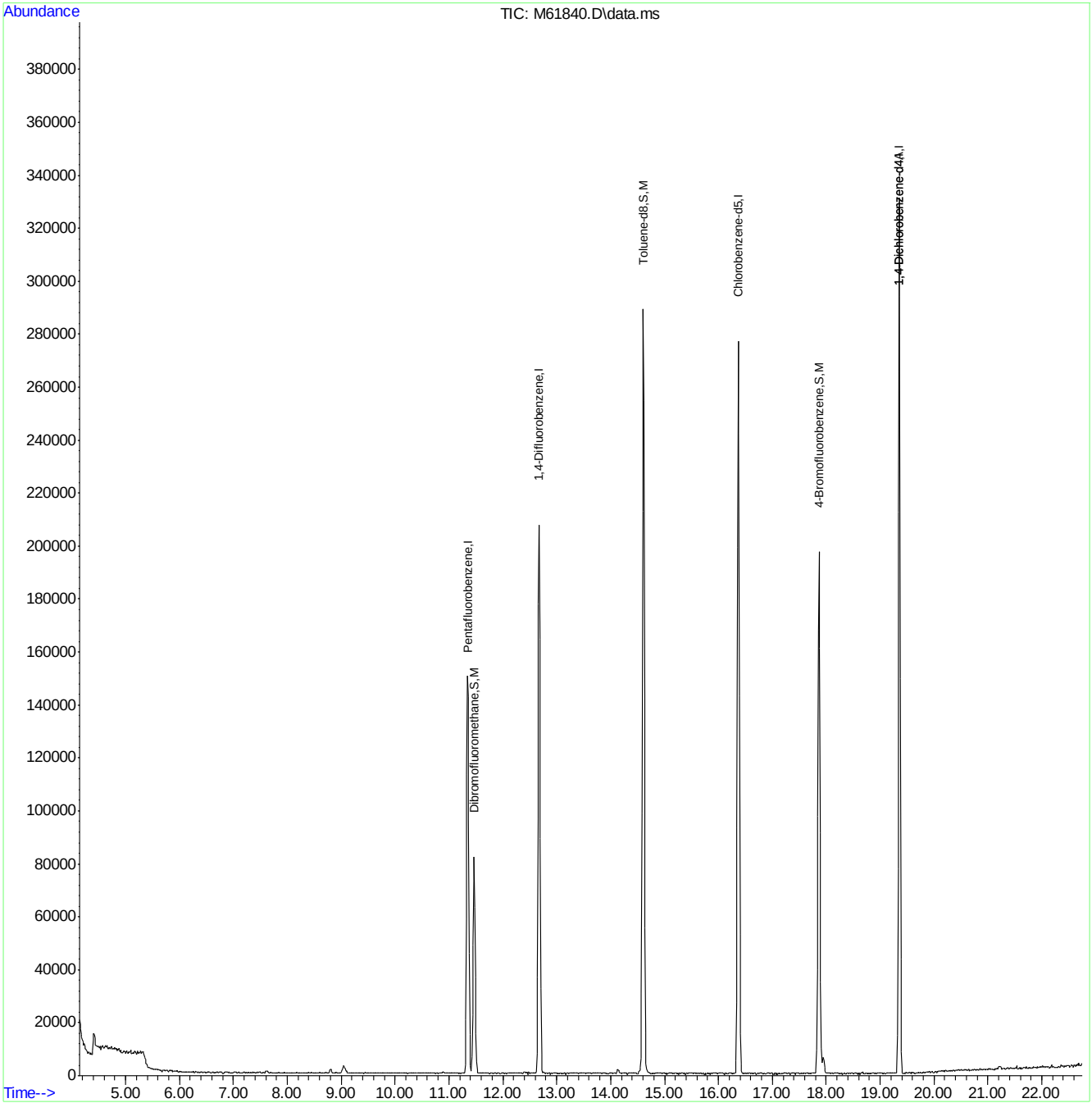
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.354 | 168 | 143381 | 20.00 | ppb | 0.01 |
| 40) 1,4-Difluorobenzene | 12.673 | 114 | 217868 | 20.00 | ppb | 0.01 |
| 55) Chlorobenzene-d5 | 16.367 | 117 | 209473 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.353 | 152 | 113339 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.353 | 152 | 113339 | 20.00 | ppb | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.470 | 111 | 72739 | 20.01 | ppb | 0.01 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 100.05% | | | |
| 56) Toluene-d8 | 14.604 | 98 | 258693 | 18.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | |
| 74) 4-Bromofluorobenzene | 17.865 | 95 | 108899 | 20.26 | ppb | 0.01 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.30% | | | |
| **Target Compounds** | | | | | | Qvalue |

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

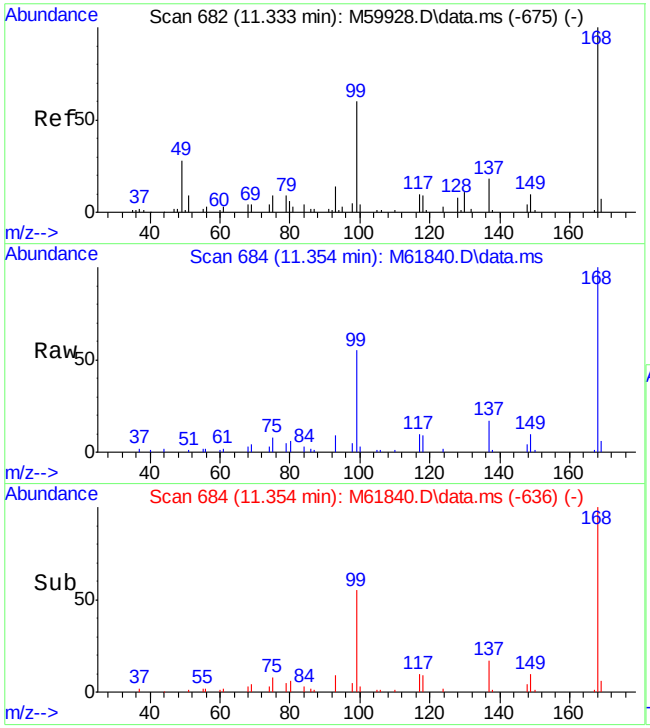
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61840.D
Acq On : 13 Jul 2016 5:02 pm
Operator : johannat
Sample : C46446-2
Misc : MS1912,VM1859,5.17,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 03 18:23:50 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

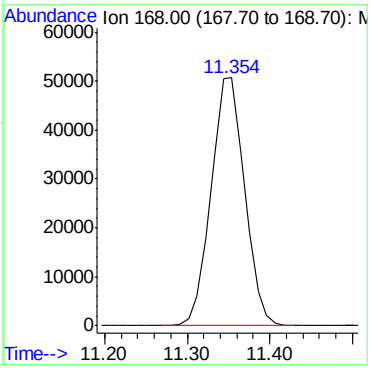


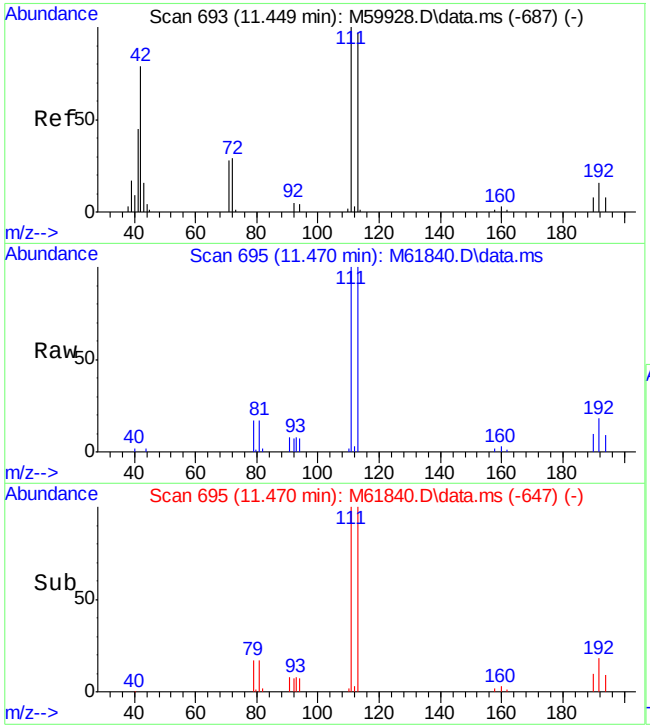

VM1848S.M Wed Aug 03 18:24:02 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.354 min Scan# 684
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:168 Resp: 143381

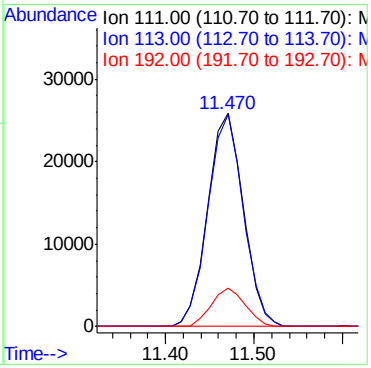


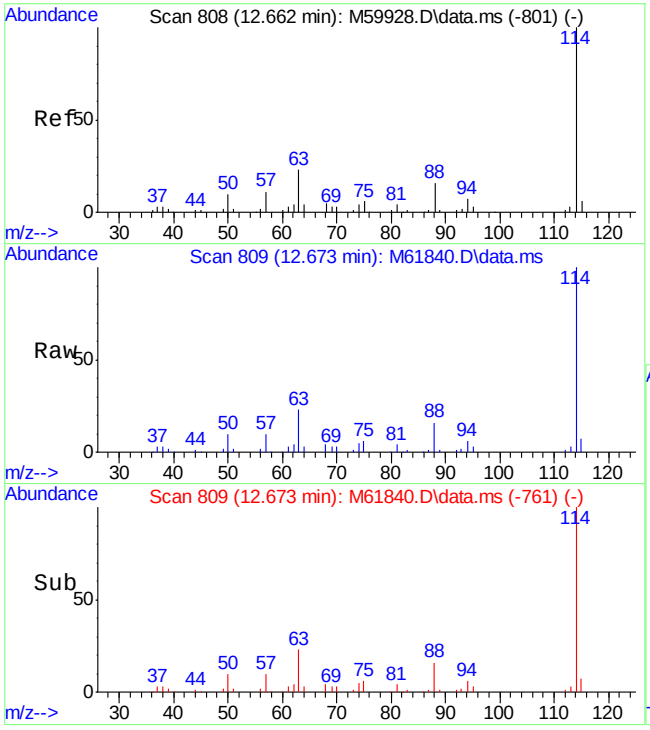




#36
Dibromofluoromethane
Concen: 20.01 ppb
RT: 11.470 min Scan# 695
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:111 Resp: 72739

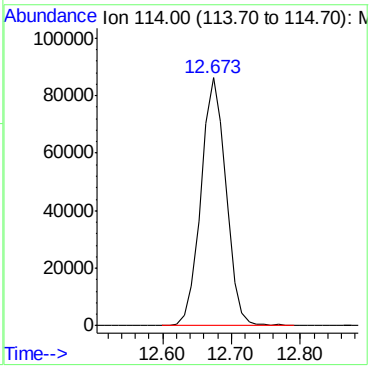
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.3 | 77.7 | 117.7 |
| 192 | 17.1 | 0.0 | 36.3 |

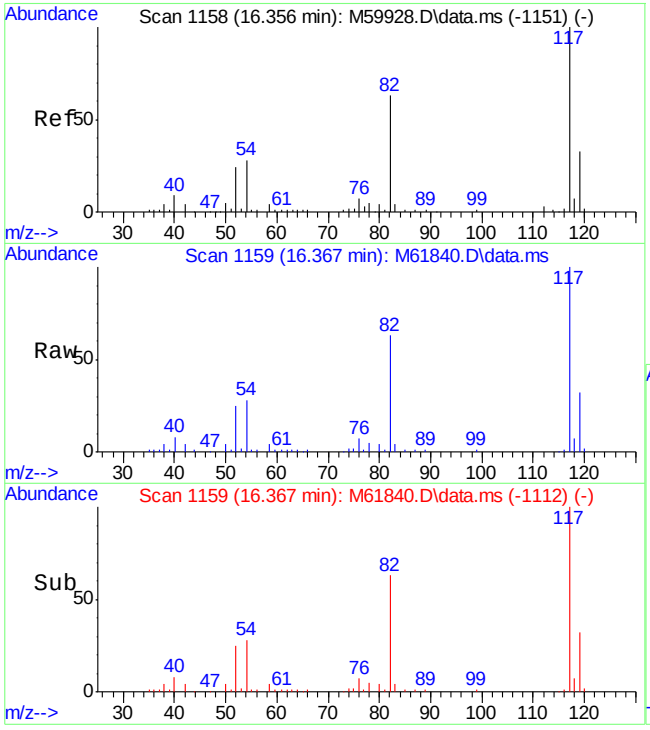





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.673 min Scan# 809
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:114 Resp: 217868

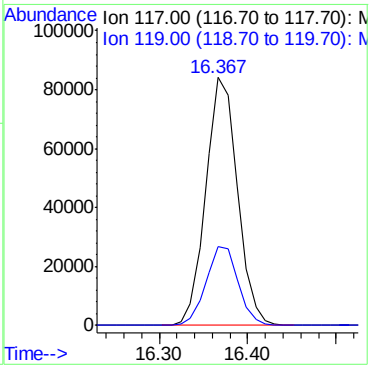


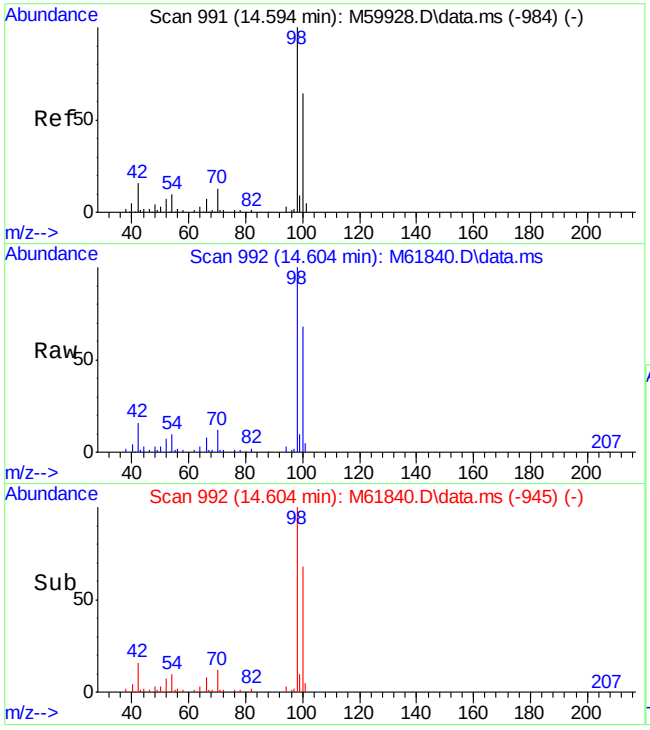




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.367 min Scan# 1159
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:117 Resp: 209473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

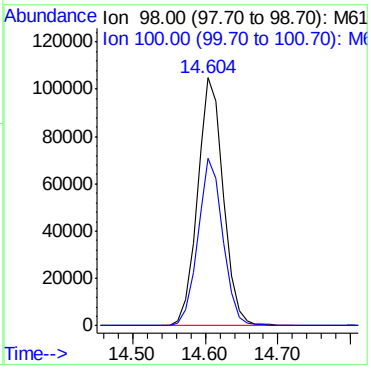


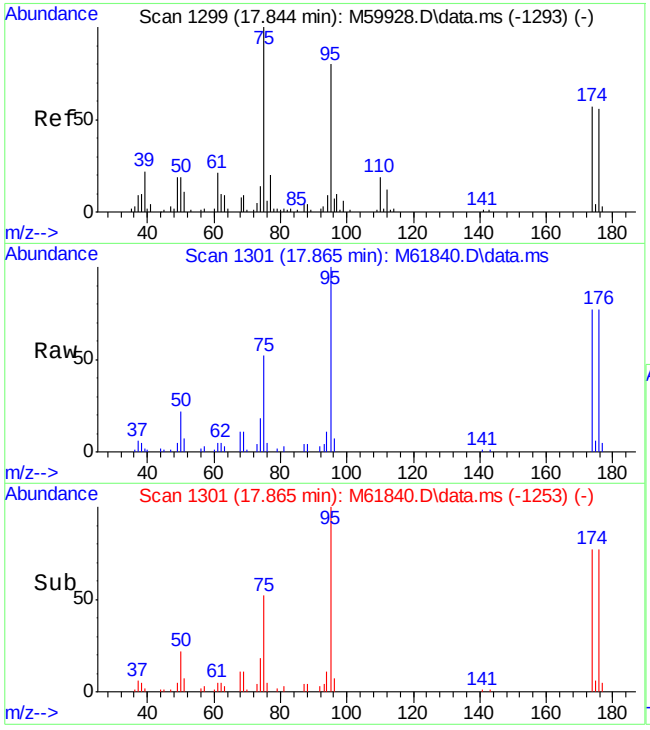



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.604 min Scan# 992
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion: 98 Resp: 258693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 44.3 | 84.3 |

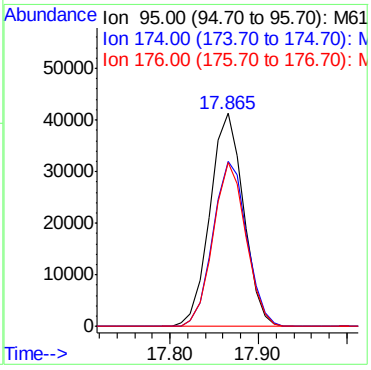


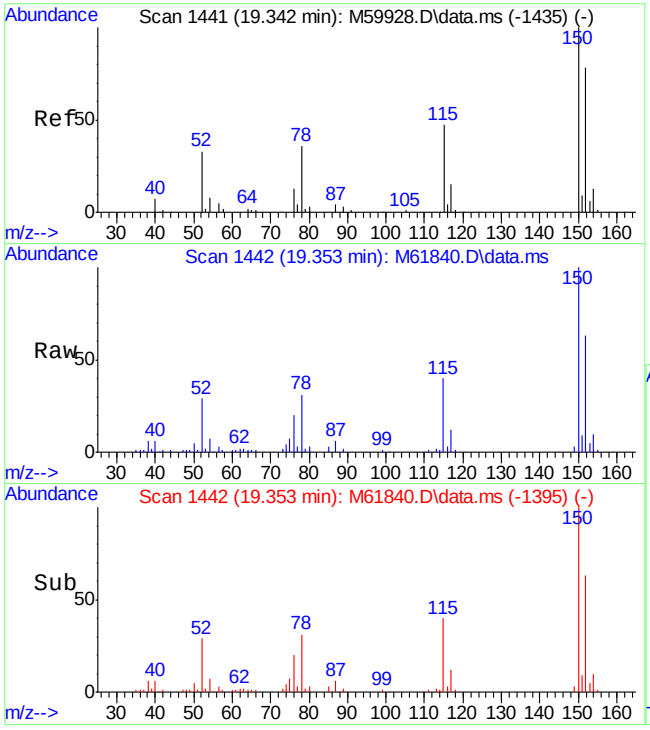




#74
4-Bromofluorobenzene
Concen: 20.26 ppb
RT: 17.865 min Scan# 1301
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion: 95 Resp: 108899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.9 | 54.3 | 94.3 |
| 176 | 75.3 | 51.5 | 91.5 |

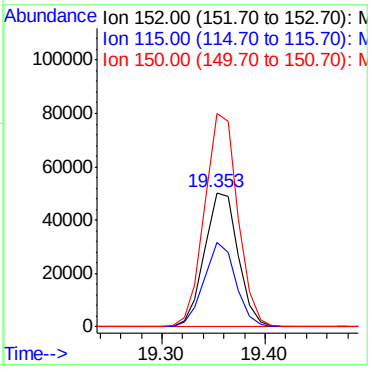


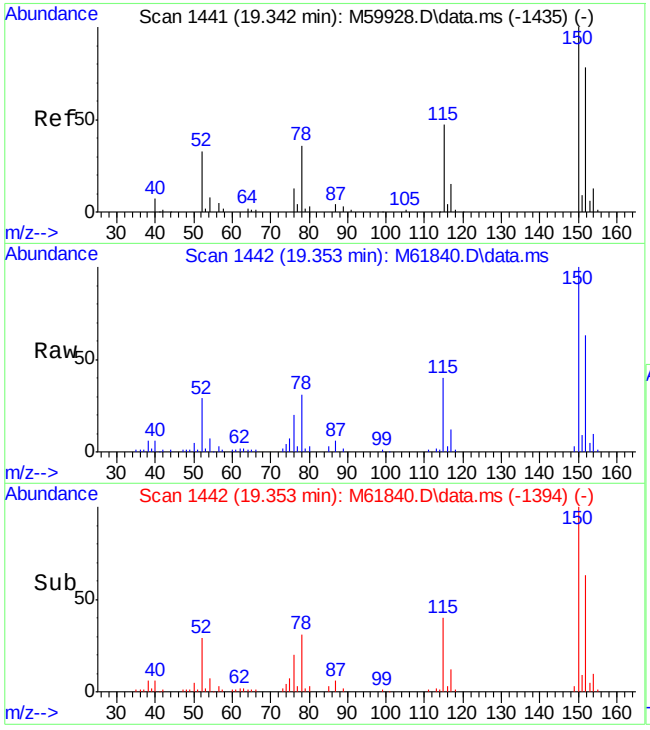



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.353 min Scan# 1442
Delta R.T. 0.000 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:152 Resp: 113339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.7 | 40.9 | 80.9 |
| 150 | 157.5 | 178.6 | 218.6# |

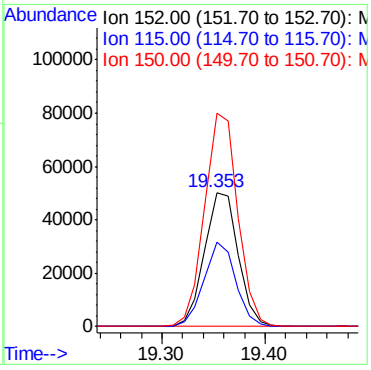



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.353 min Scan# 1442
Delta R.T. 0.011 min
Lab File: M61840.D
Acq: 13 Jul 2016 5:02 pm

Tgt Ion:152 Resp: 113339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.7 | 37.3 | 77.3 |
| 150 | 157.5 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61838.D
Acq On : 13 Jul 2016 4:02 pm
Operator : johannat
Sample : C46446-3
Misc : MS1912,VM1859,5.06,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 18:22:45 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

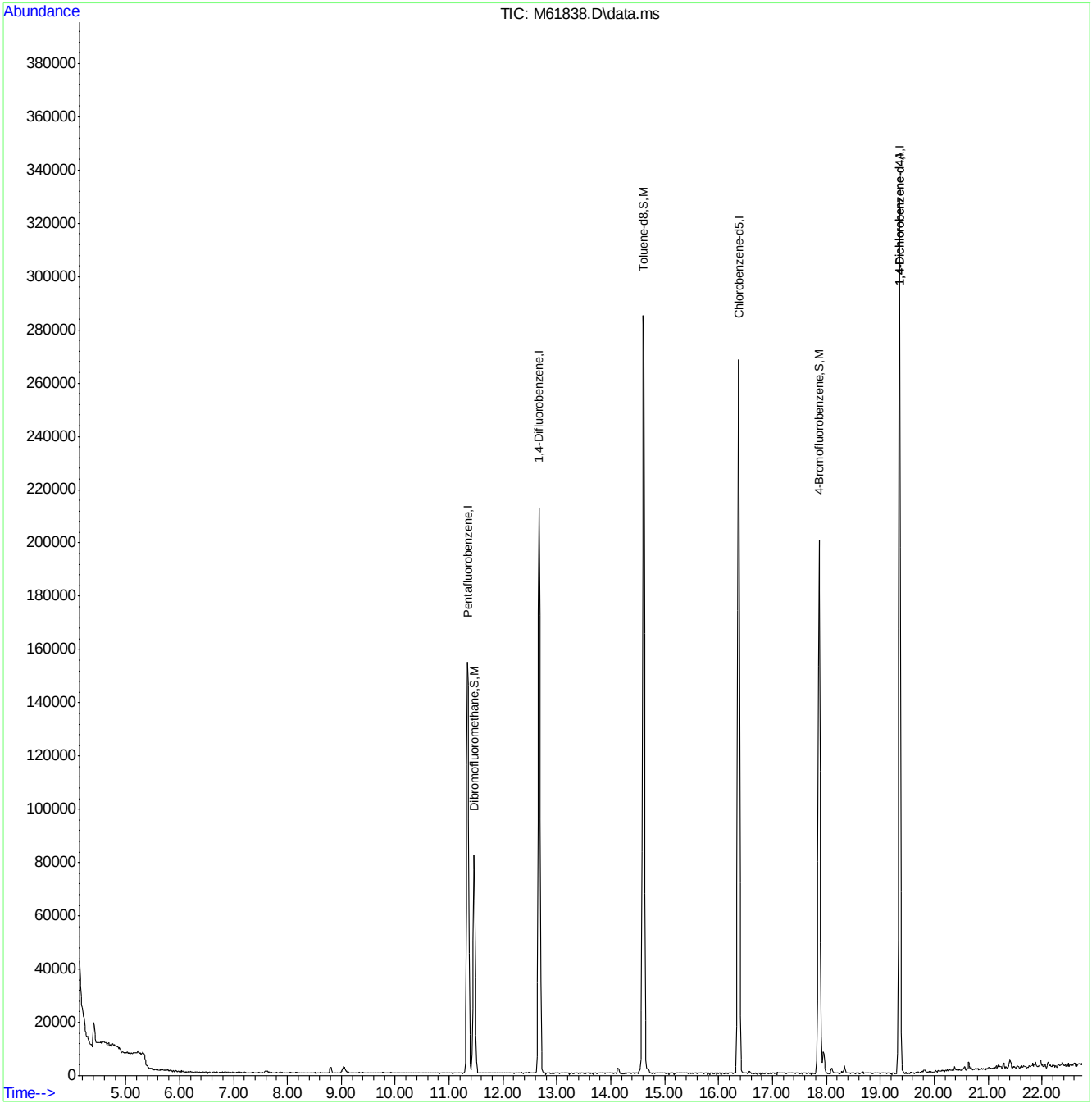
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 146892 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 220667 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 213253 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 117733 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 117733 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 74206 | 19.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 99.60% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 262925 | 18.89 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.45% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 112629 | 20.58 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 102.90% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.601 | TIC | 3410488m | Below Cal | | |

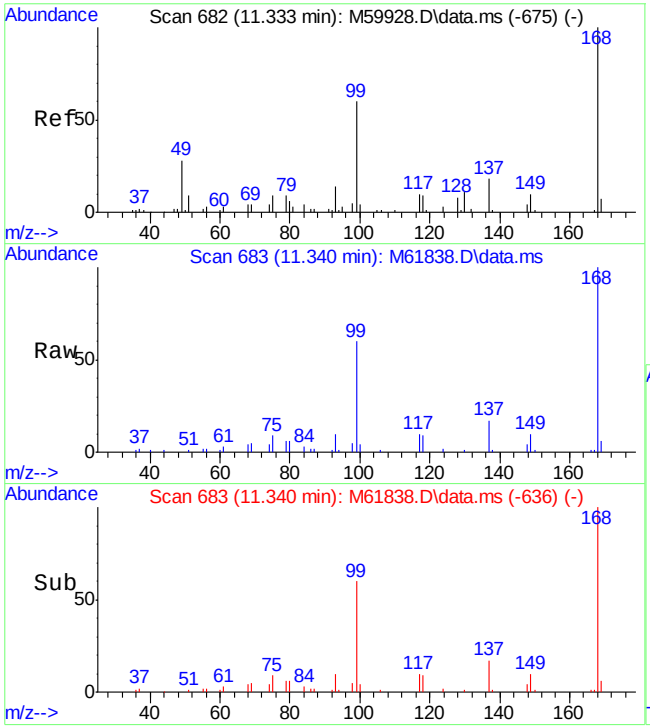
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61838.D
Acq On : 13 Jul 2016 4:02 pm
Operator : johannat
Sample : C46446-3
Misc : MS1912,VM1859,5.06,,,,1
ALS Vial : 12 Sample Multiplier: 1

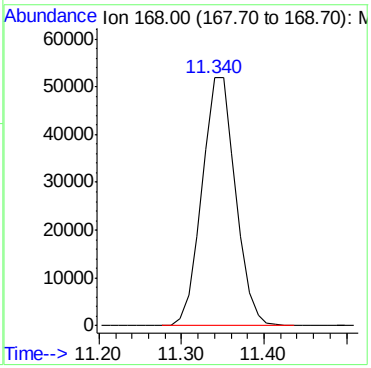
Quant Time: Aug 03 18:22:45 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

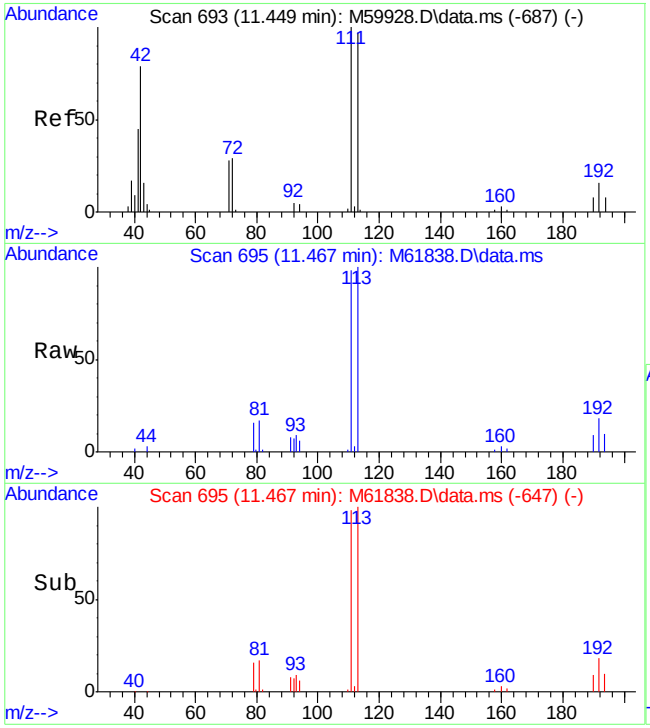





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:168 Resp: 146892

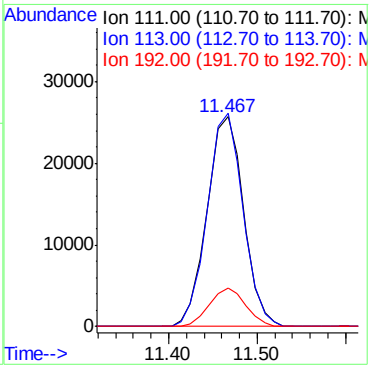


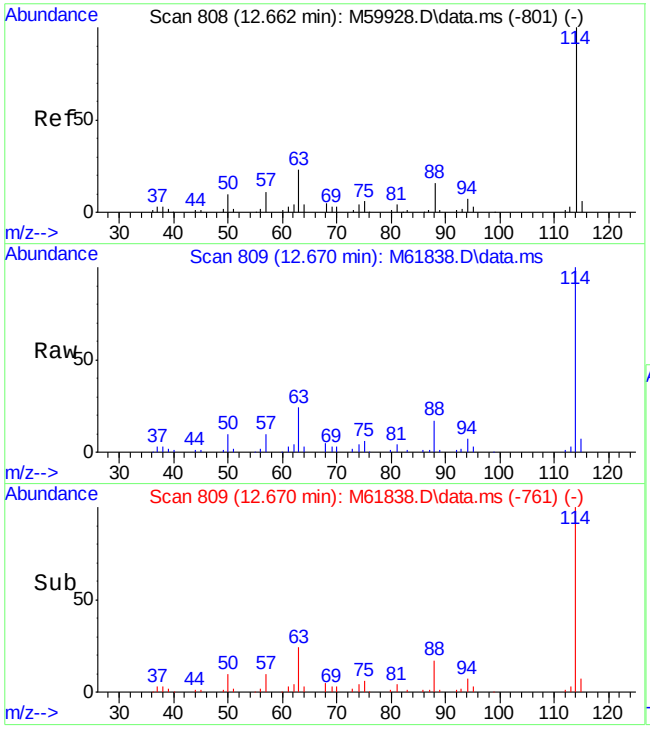




#36
Dibromofluoromethane
Concen: 19.92 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:111 Resp: 74206

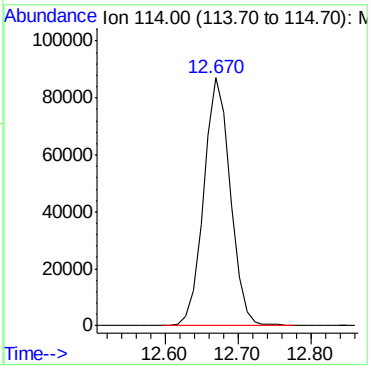
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.2 | 77.7 | 117.7 |
| 192 | 18.1 | 0.0 | 36.3 |

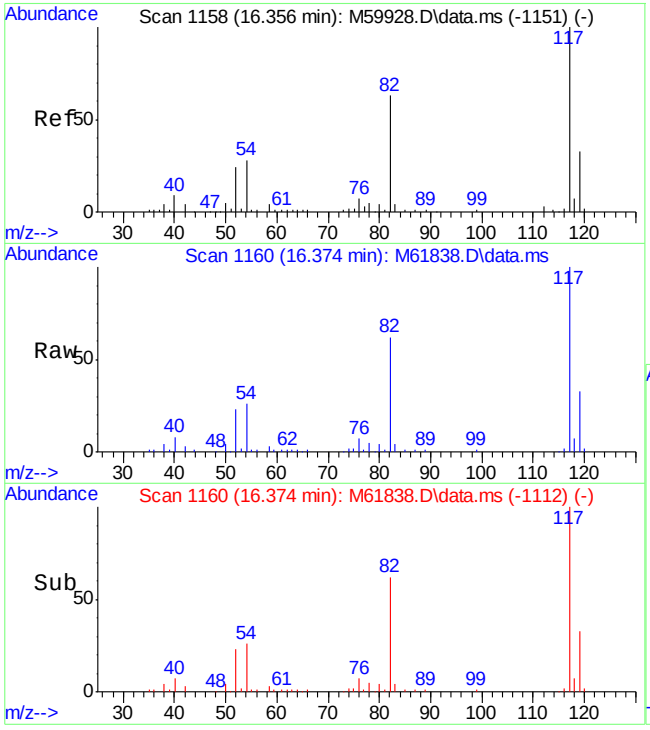





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:114 Resp: 220667

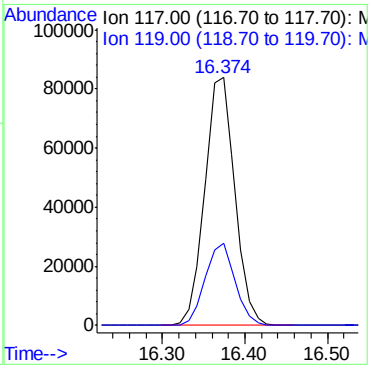


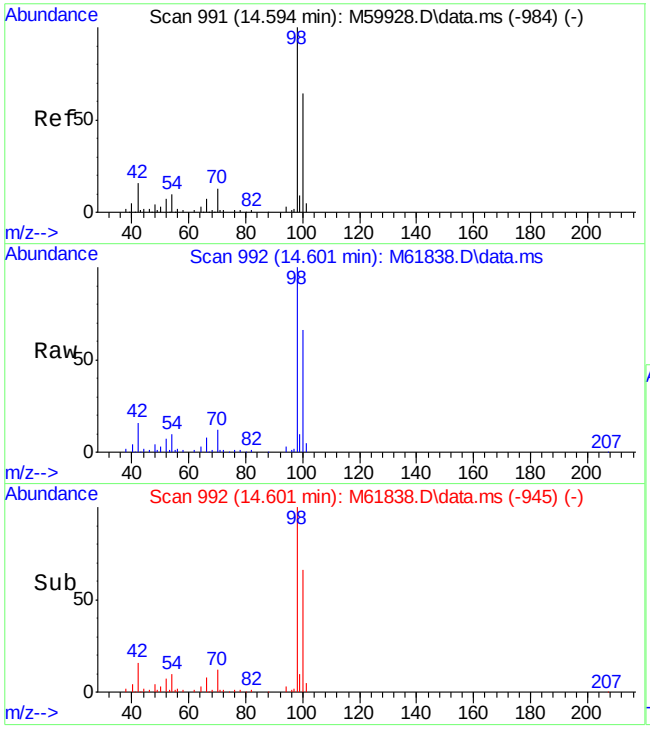




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:117 Resp: 213253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.6 | 11.2 | 51.2 |

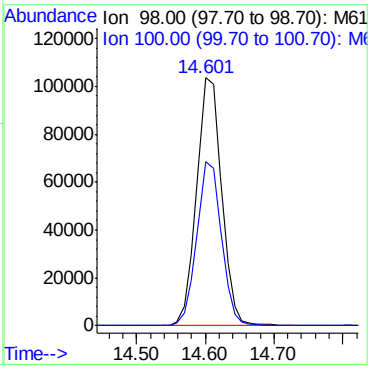


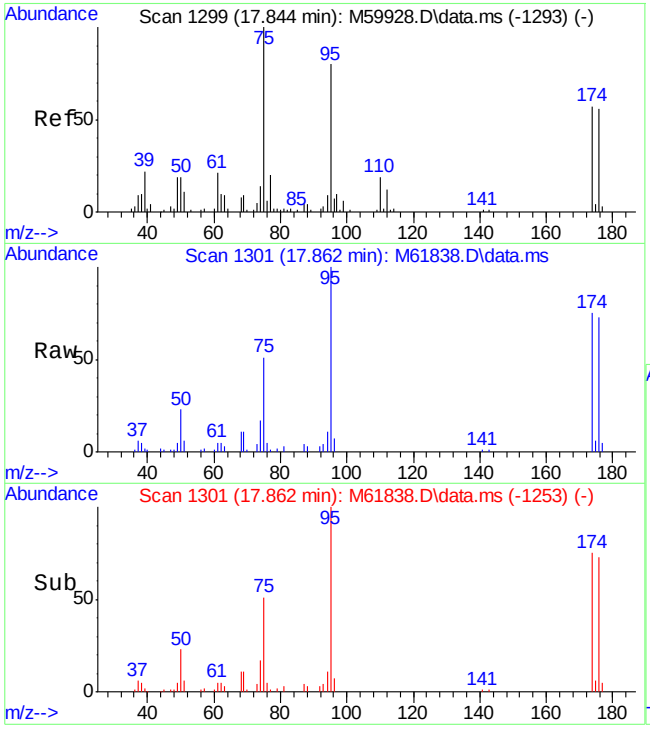



#56
Toluene-d8
Concen: 18.89 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion: 98 Resp: 262925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.1 | 44.3 | 84.3 |

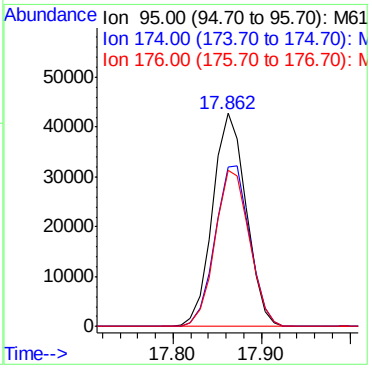


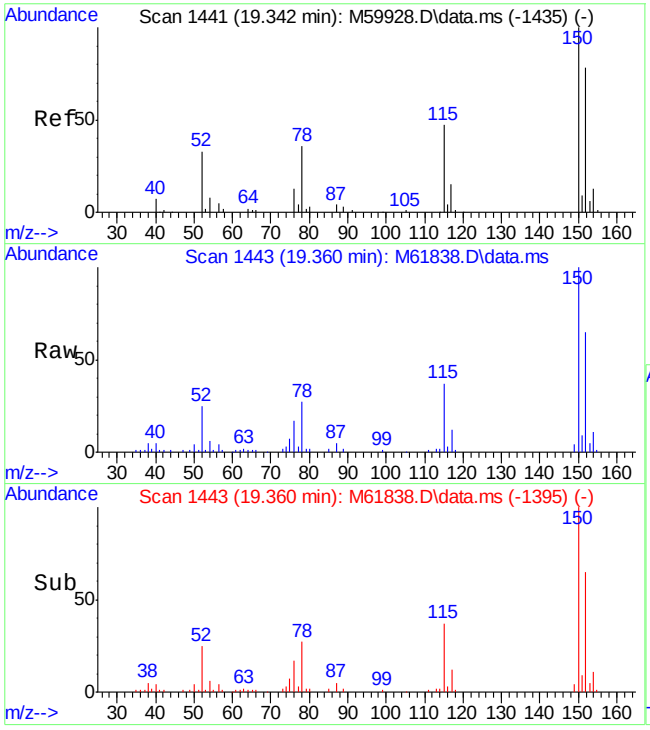




#74
4-Bromofluorobenzene
Concen: 20.58 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion: 95 Resp: 112629

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.8 | 54.3 | 94.3 |
| 176 | 75.0 | 51.5 | 91.5 |

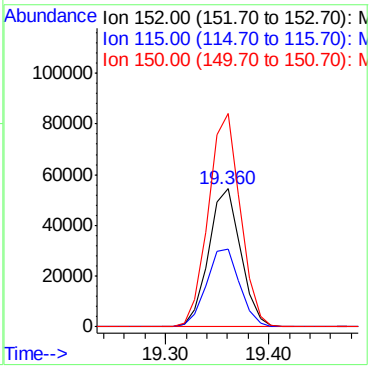


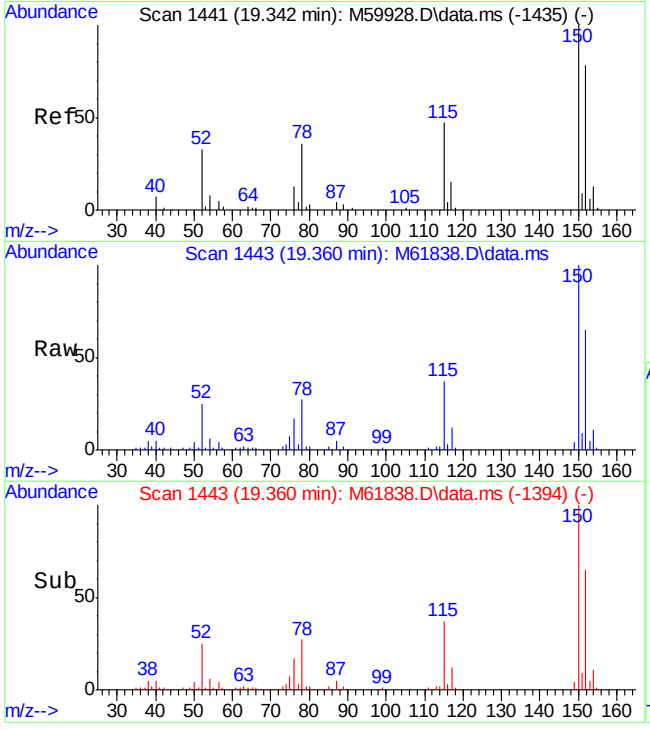



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:152 Resp: 117733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.3 | 40.9 | 80.9 |
| 150 | 153.7 | 178.6 | 218.6# |

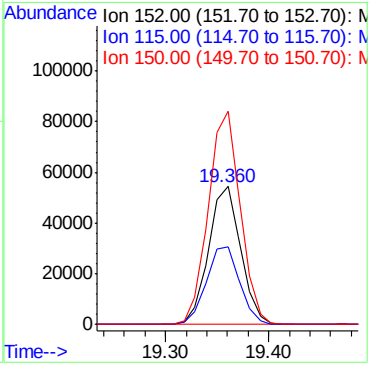



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:152 Resp: 117733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.3 | 37.3 | 77.3 |
| 150 | 153.7 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61838.D
Acq On : 13 Jul 2016 4:02 pm
Operator : johannat
Sample : C46446-3
Misc : MS1912,VM1859,5.06,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 18:22:45 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

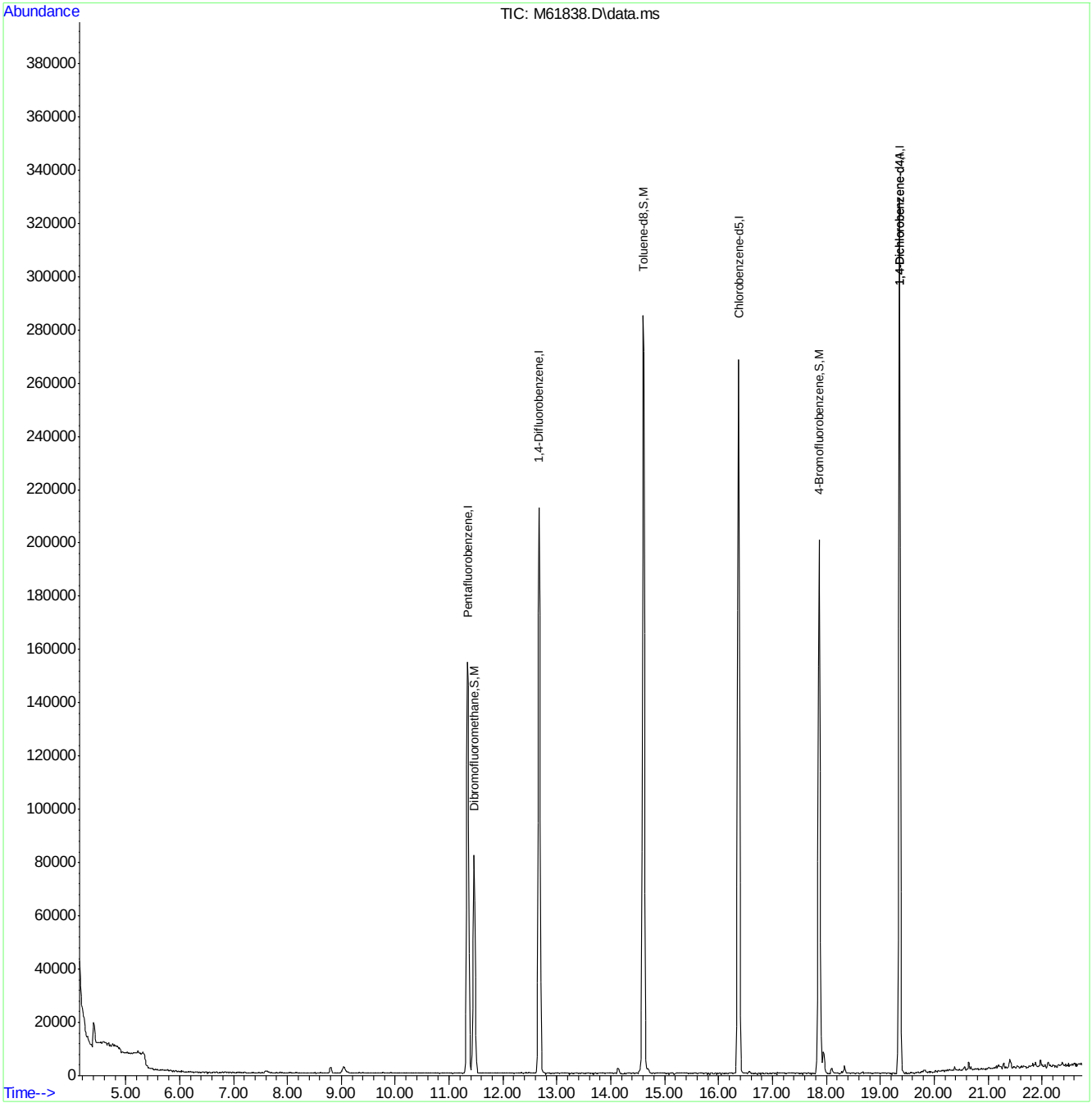
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 146892 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 220667 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 213253 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 117733 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 117733 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 74206 | 19.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 99.60% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 262925 | 18.89 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.45% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 112629 | 20.58 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 102.90% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.601 | TIC | 3410488m | Below Cal | | |

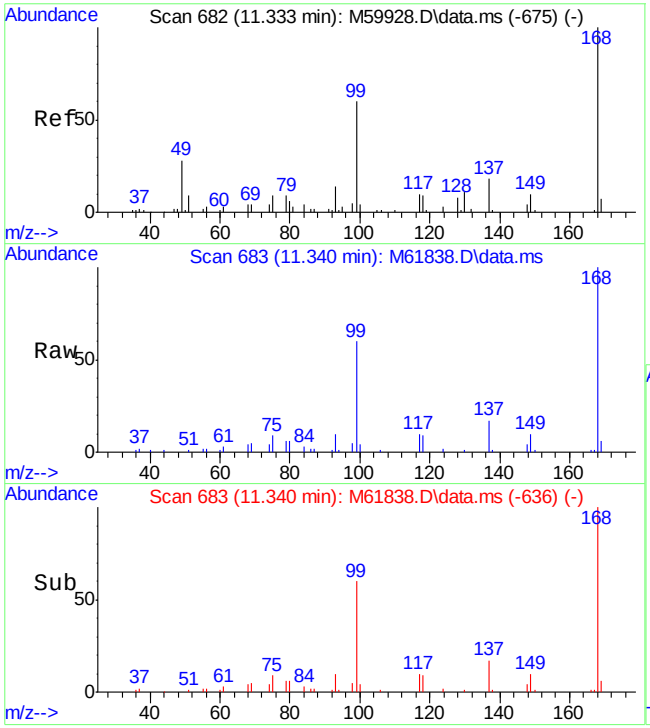
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61838.D
Acq On : 13 Jul 2016 4:02 pm
Operator : johannat
Sample : C46446-3
Misc : MS1912,VM1859,5.06,,,,1
ALS Vial : 12 Sample Multiplier: 1

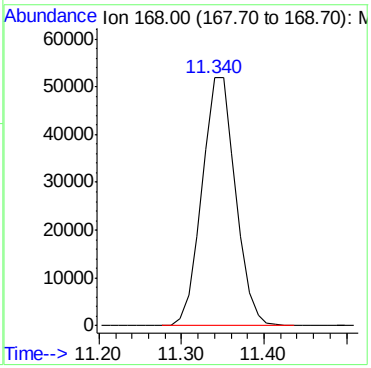
Quant Time: Aug 03 18:22:45 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

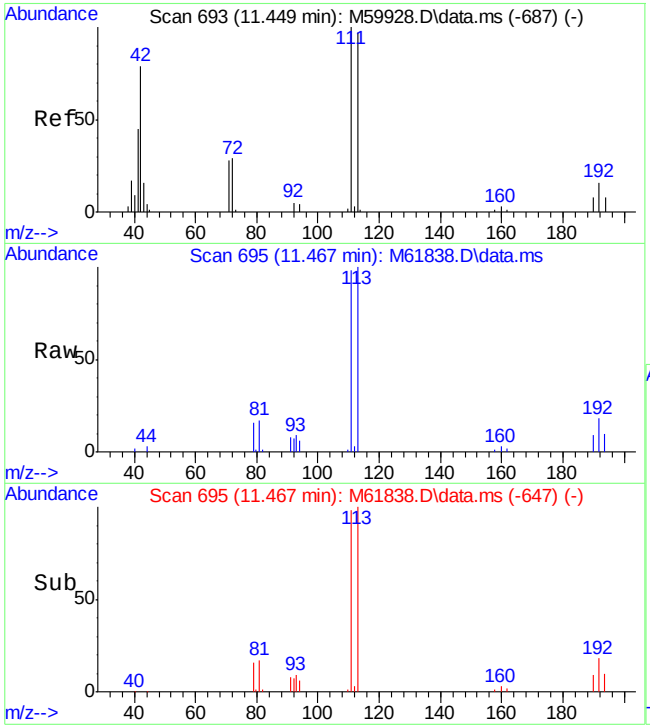





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:168 Resp: 146892

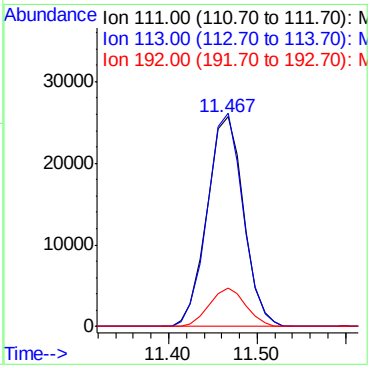


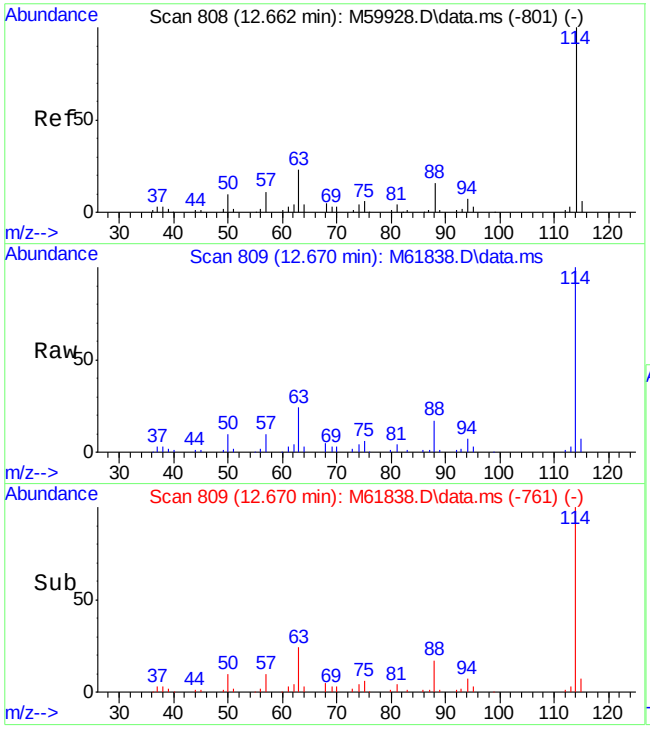




#36
Dibromofluoromethane
Concen: 19.92 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:111 Resp: 74206

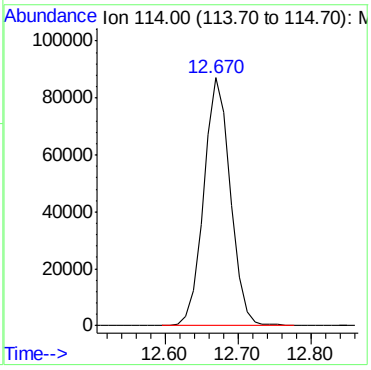
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 99.2 | 77.7 | 117.7 |
| 192 | 18.1 | 0.0 | 36.3 |

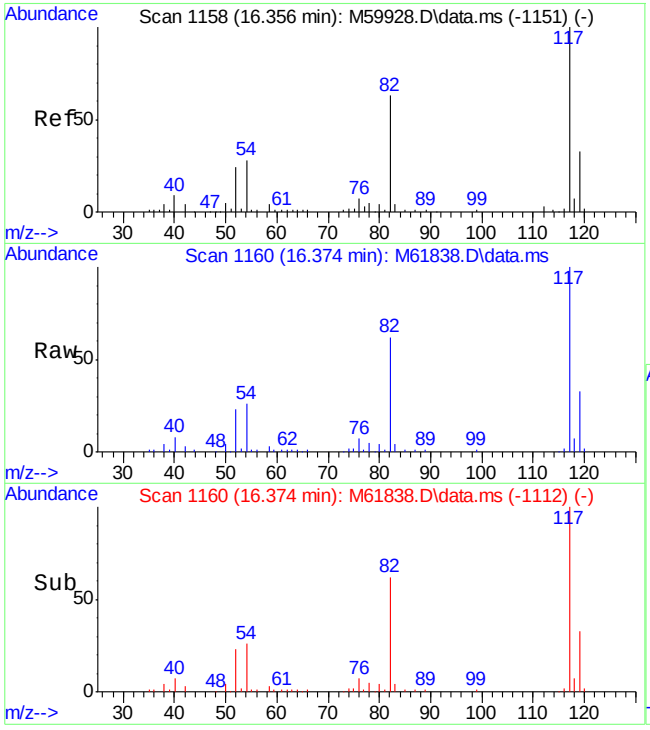





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:114 Resp: 220667

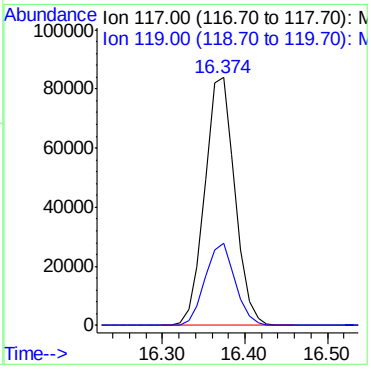


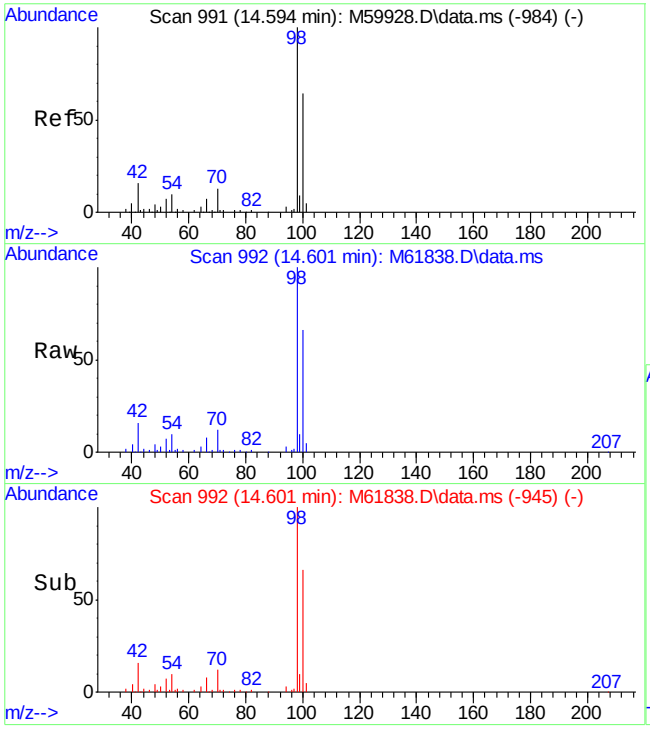




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:117 Resp: 213253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.6 | 11.2 | 51.2 |

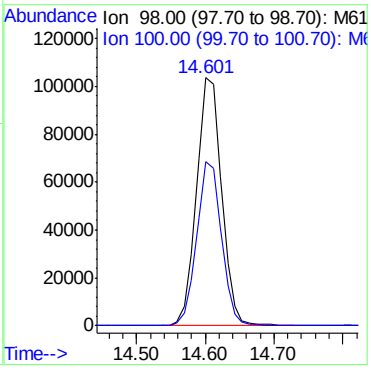


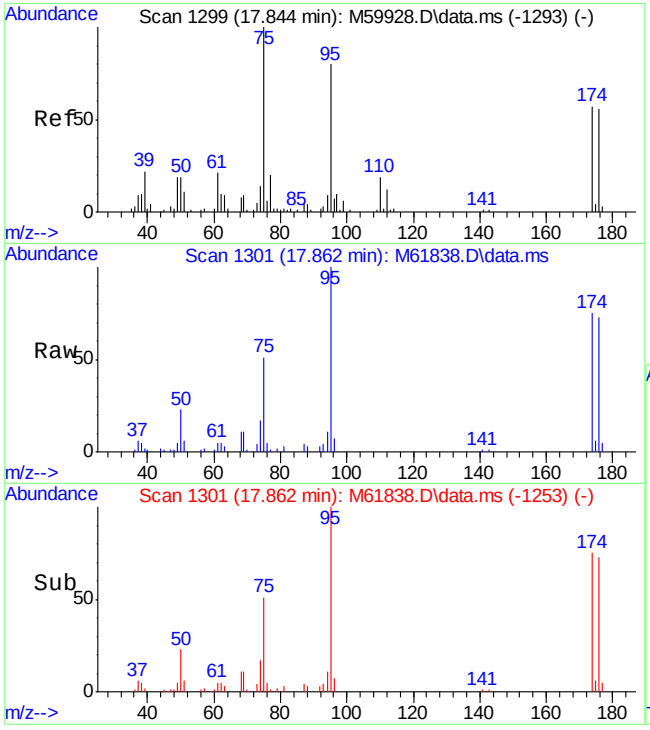



#56
Toluene-d8
Concen: 18.89 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion: 98 Resp: 262925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.1 | 44.3 | 84.3 |

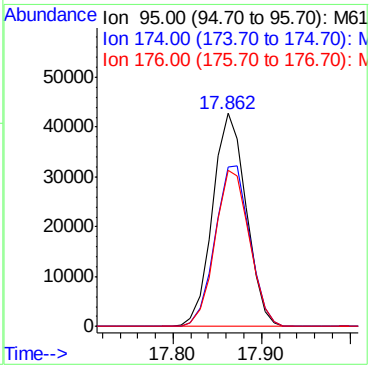


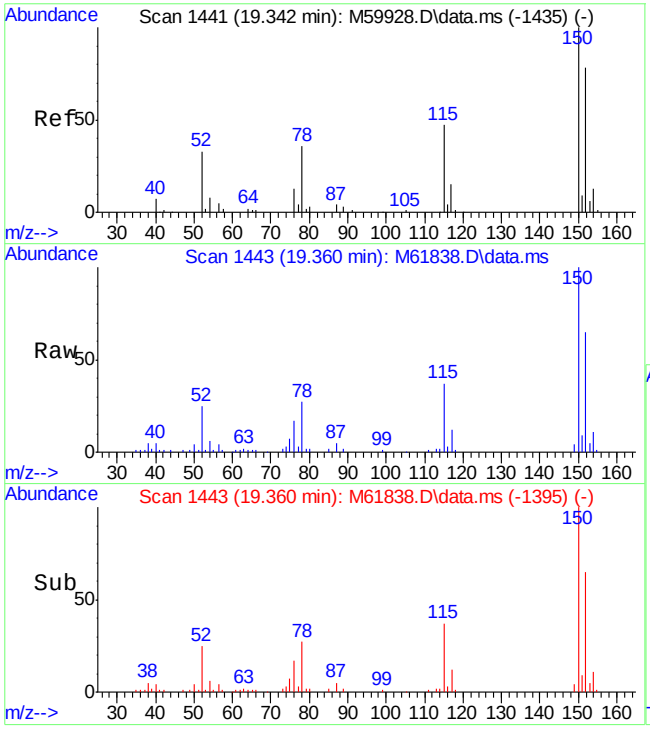




#74
4-Bromofluorobenzene
Concen: 20.58 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion: 95 Resp: 112629

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.8 | 54.3 | 94.3 |
| 176 | 75.0 | 51.5 | 91.5 |

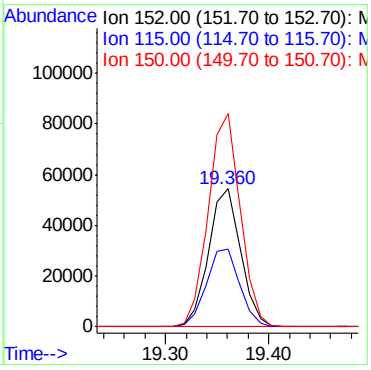


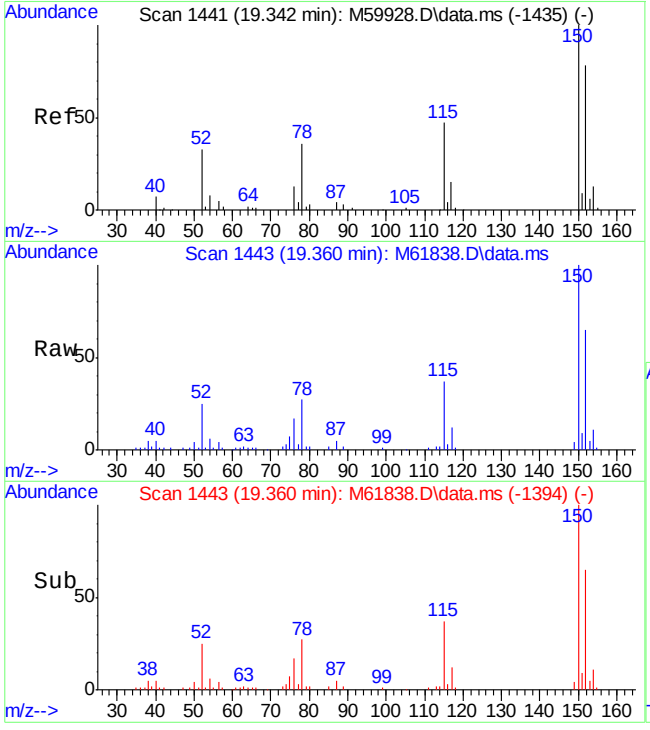



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:152 Resp: 117733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.3 | 40.9 | 80.9 |
| 150 | 153.7 | 178.6 | 218.6# |

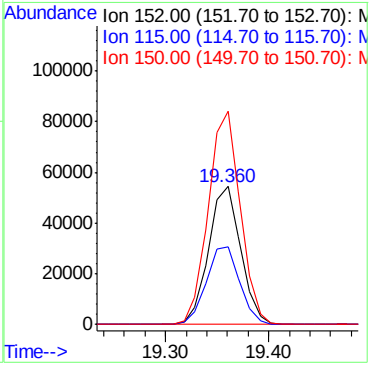



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61838.D
Acq: 13 Jul 2016 4:02 pm

Tgt Ion:152 Resp: 117733

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.3 | 37.3 | 77.3 |
| 150 | 153.7 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61918.D
Acq On : 18 Jul 2016 7:17 pm
Operator : johannat
Sample : C46446-4
Misc : MS1912,VM1861,5.59,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 18:26:29 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

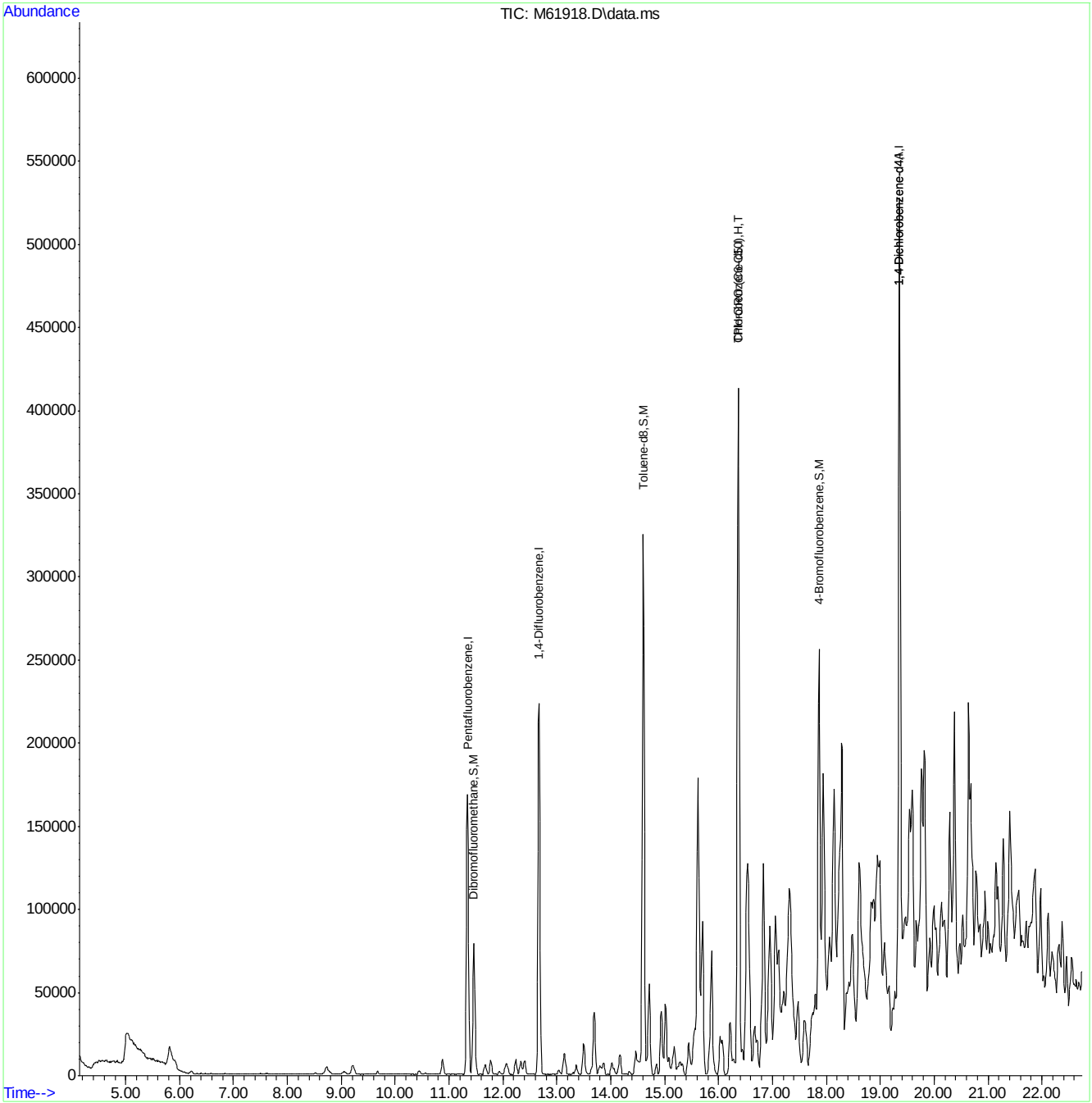
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 163153 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 244407 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 241025 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.350 | 152 | 143367 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.350 | 152 | 143367 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 73380 | 18.95 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 94.75% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 284531 | 19.36 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.80% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 135562 | 22.21 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 111.05% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 16.364 | TIC | 11410705m | 289.74 | ppb | |

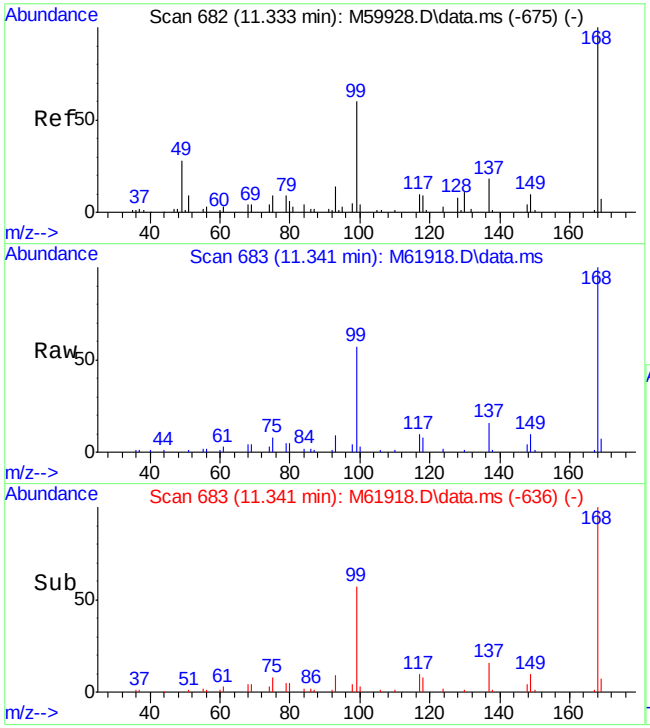
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61918.D
Acq On : 18 Jul 2016 7:17 pm
Operator : johannat
Sample : C46446-4
Misc : MS1912,VM1861,5.59,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

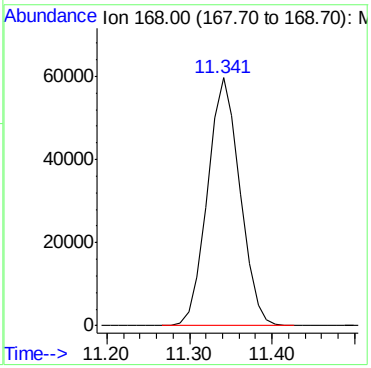
Quant Time: Aug 03 18:26:29 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

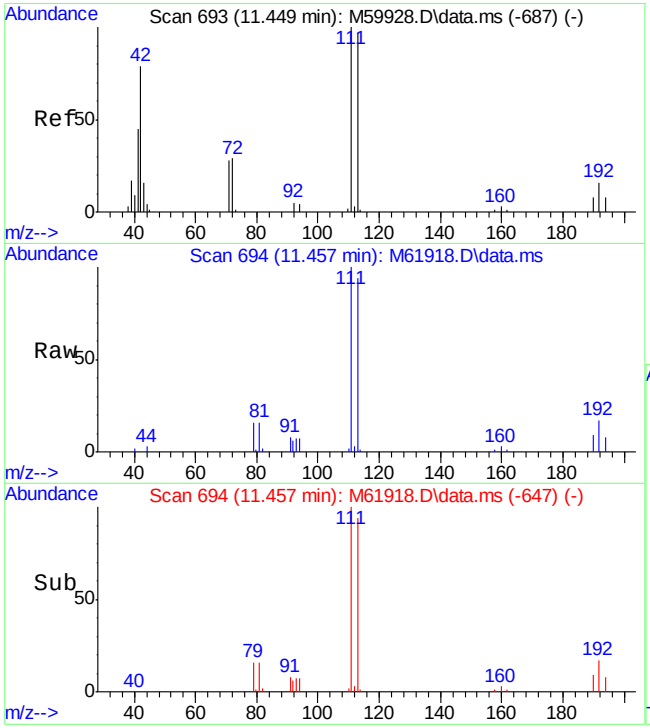





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:168 Resp: 163153

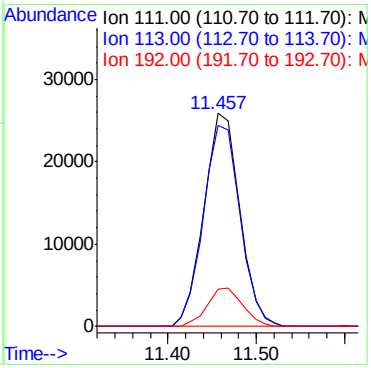


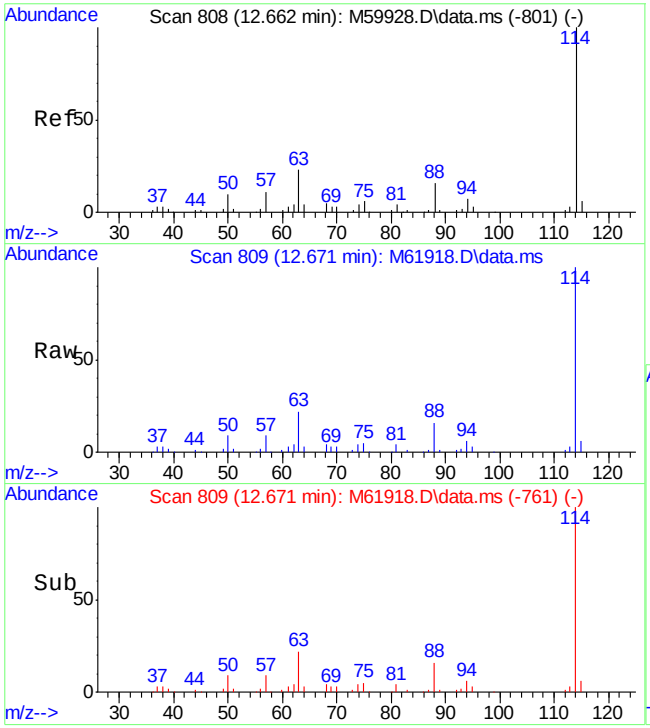




#36
Dibromofluoromethane
Concen: 18.95 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:111 Resp: 73380

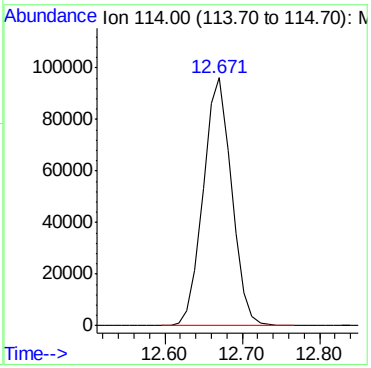
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.4 | 77.7 | 117.7 |
| 192 | 17.7 | 0.0 | 36.3 |

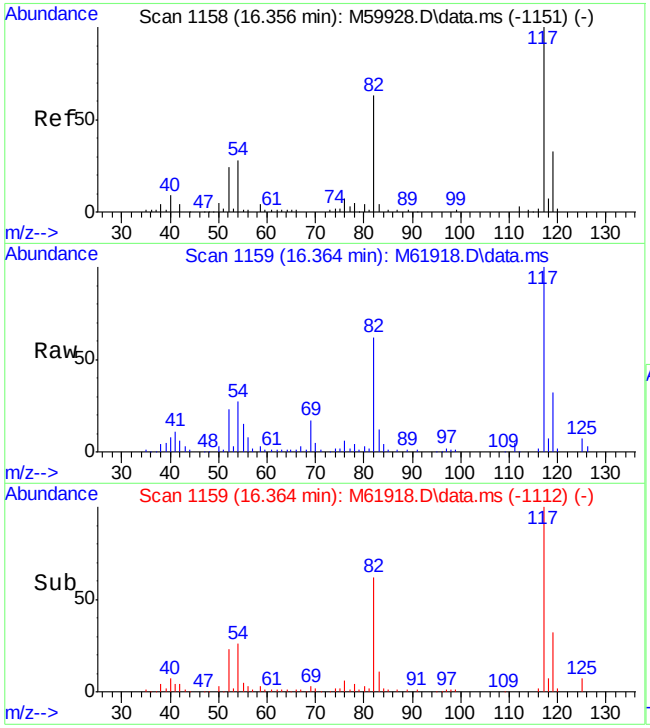





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:114 Resp: 244407

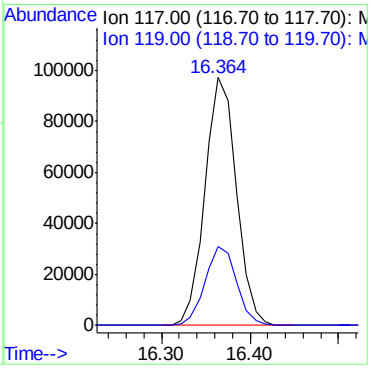


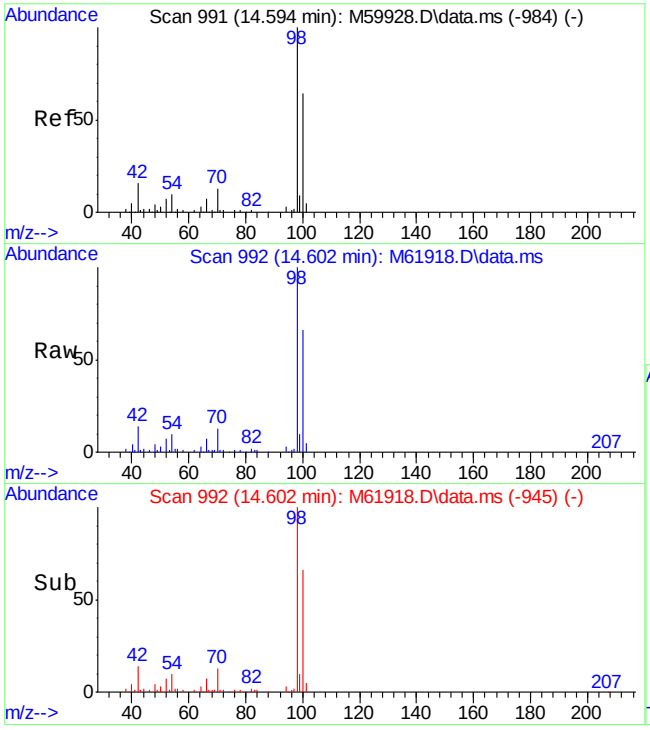




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:117 Resp: 241025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

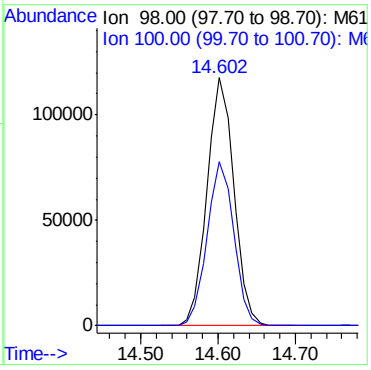


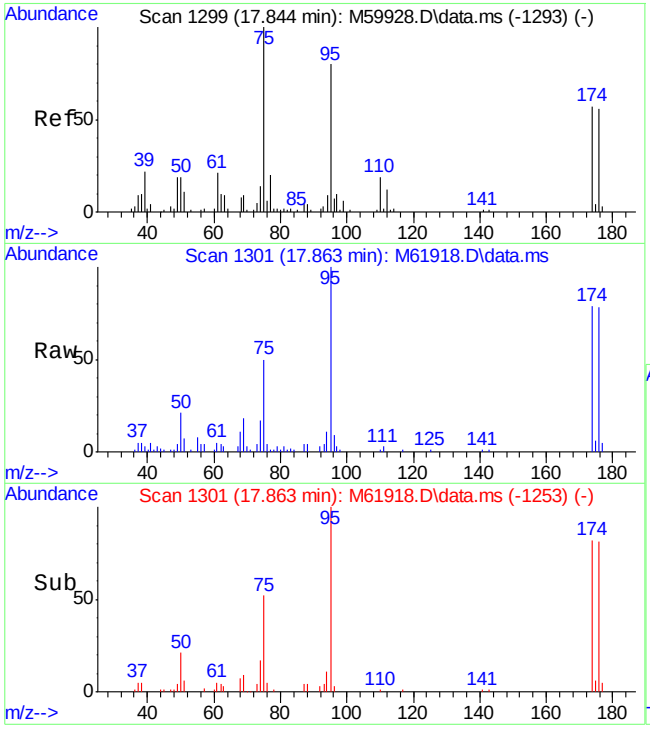



#56
Toluene-d8
Concen: 19.36 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion: 98 Resp: 284531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

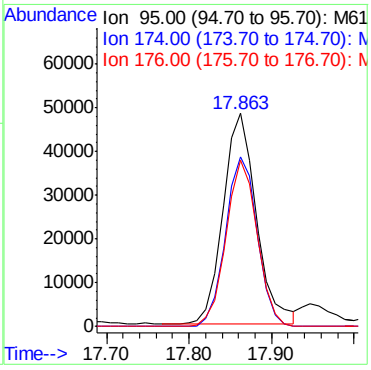


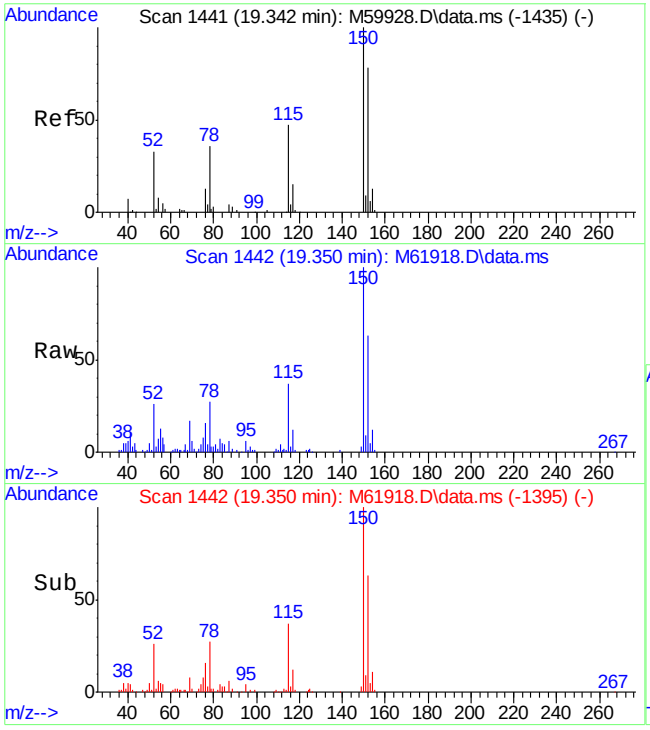




#74
4-Bromofluorobenzene
Concen: 22.21 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion: 95 Resp: 135562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.8 | 54.3 | 94.3 |
| 176 | 73.4 | 51.5 | 91.5 |

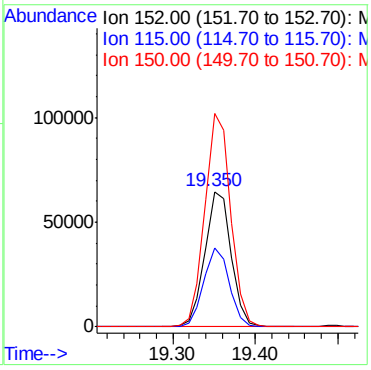


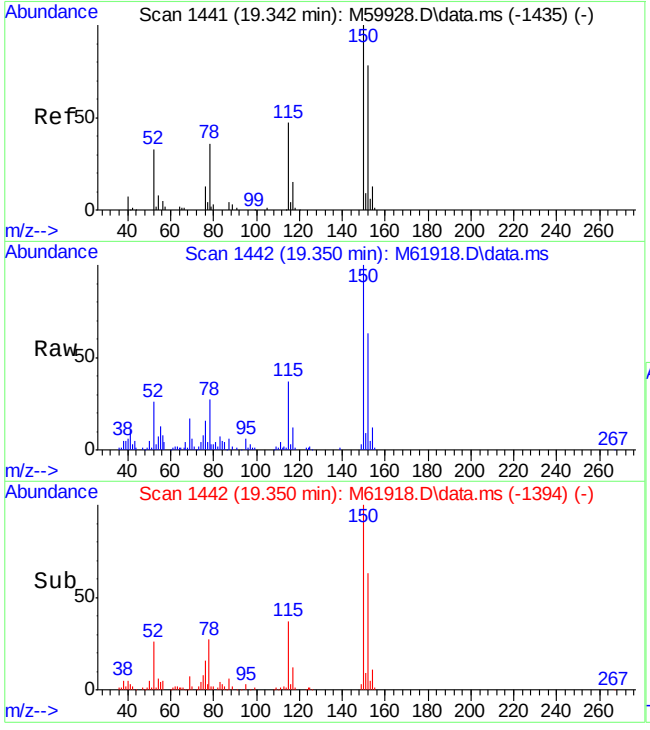



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:152 Resp: 143367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.0 | 40.9 | 80.9 |
| 150 | 154.9 | 178.6 | 218.6# |

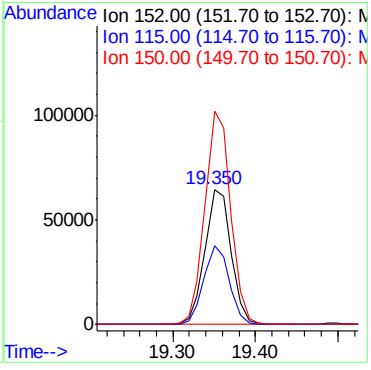


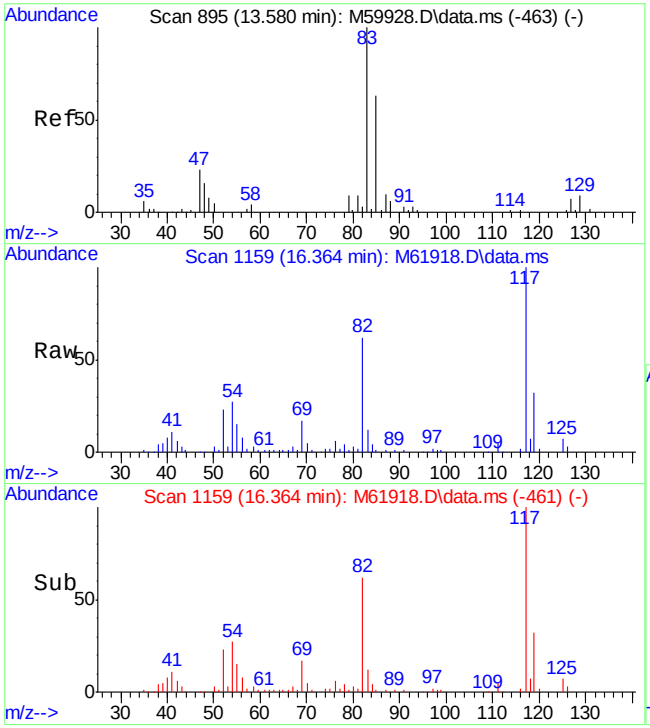




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:152 Resp: 143367

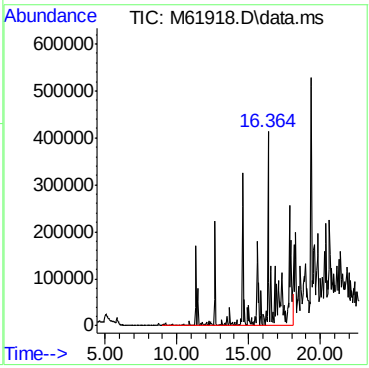
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.0 | 37.3 | 77.3 |
| 150 | 154.9 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 289.74 ppb m
RT: 16.364 min Scan# 1159
Delta R.T. 2.814 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:TIC Resp:11410705



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61918.D
Acq On : 18 Jul 2016 7:17 pm
Operator : johannat
Sample : C46446-4
Misc : MS1912,VM1861,5.59,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 18:26:29 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

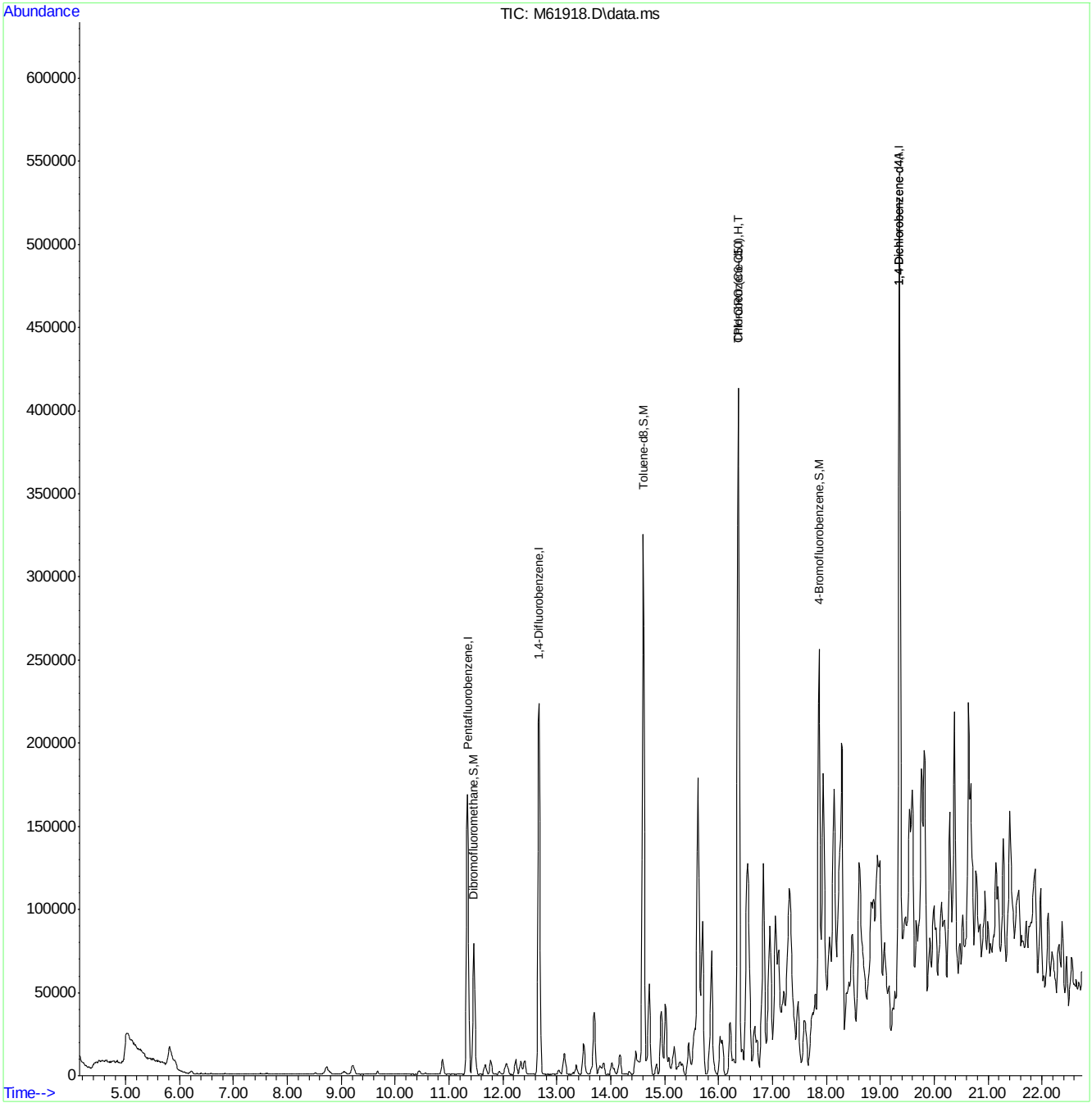
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.341 | 168 | 163153 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 244407 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.364 | 117 | 241025 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.350 | 152 | 143367 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.350 | 152 | 143367 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.457 | 111 | 73380 | 18.95 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 94.75% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 284531 | 19.36 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 96.80% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 135562 | 22.21 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 111.05% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 16.364 | TIC | 11410705m | 289.74 | ppb | |

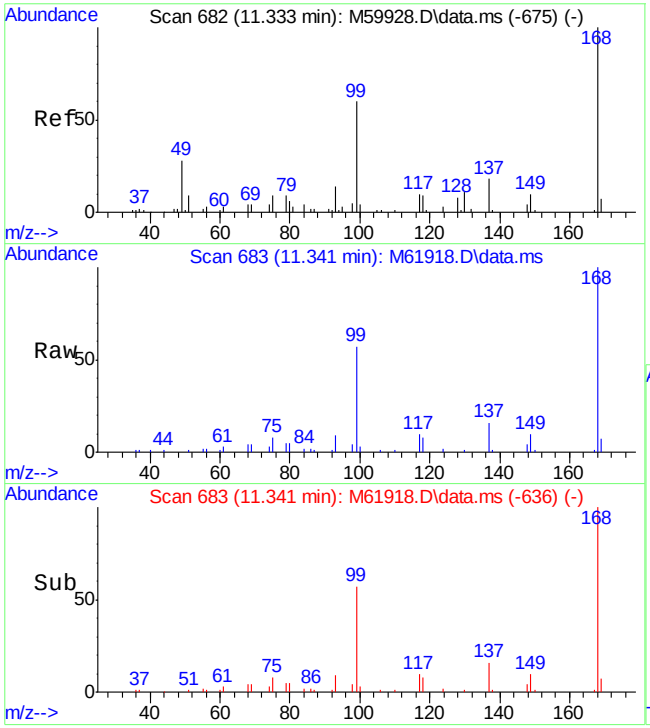
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61918.D
Acq On : 18 Jul 2016 7:17 pm
Operator : johannat
Sample : C46446-4
Misc : MS1912,VM1861,5.59,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

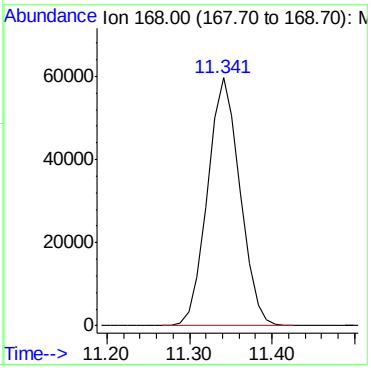
Quant Time: Aug 03 18:26:29 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

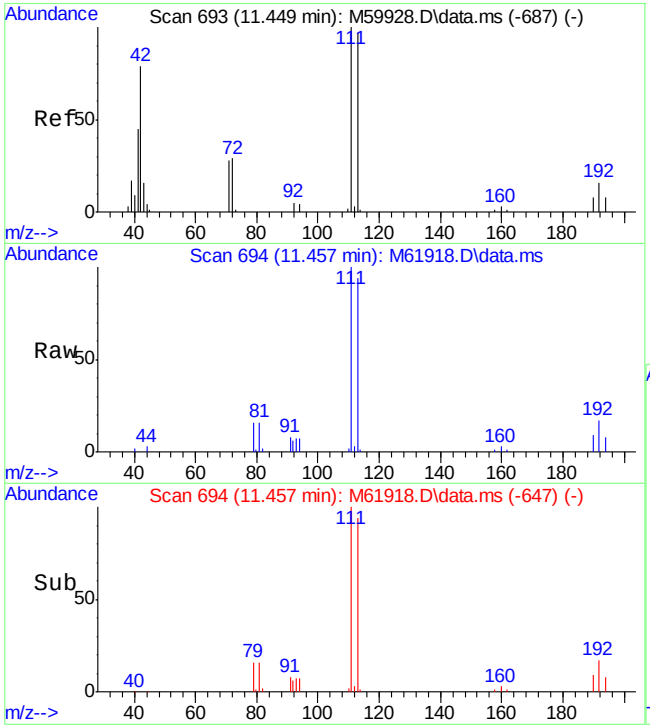





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.341 min Scan# 683
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:168 Resp: 163153

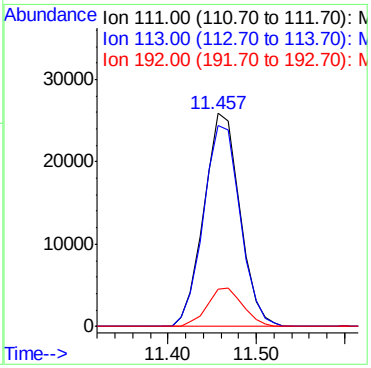


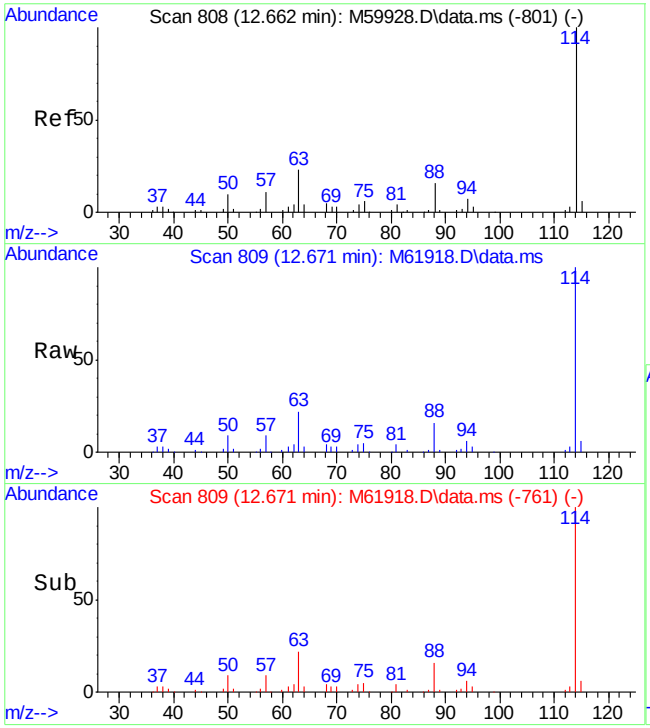




#36
Dibromofluoromethane
Concen: 18.95 ppb
RT: 11.457 min Scan# 694
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:111 Resp: 73380

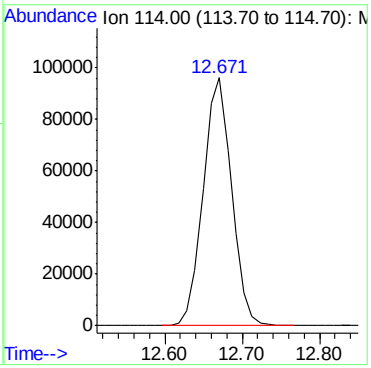
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.4 | 77.7 | 117.7 |
| 192 | 17.7 | 0.0 | 36.3 |

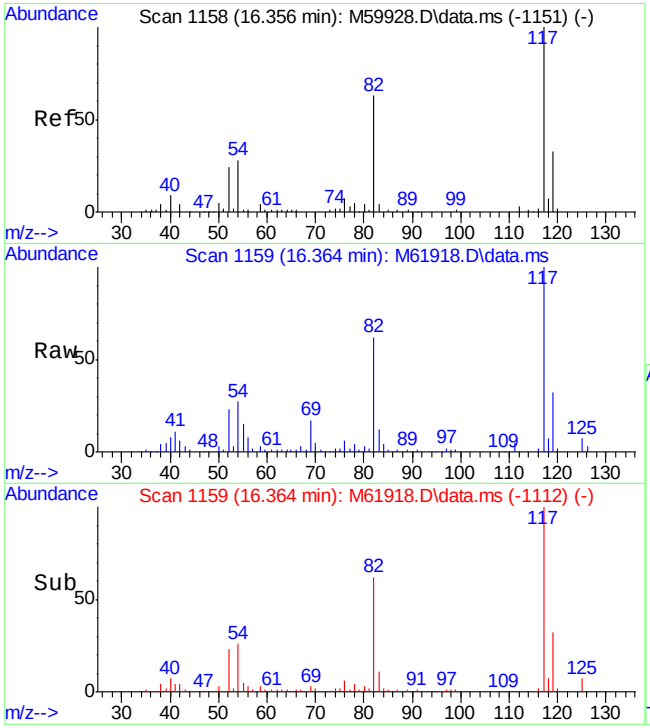





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:114 Resp: 244407

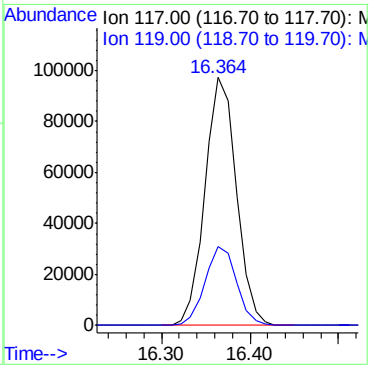


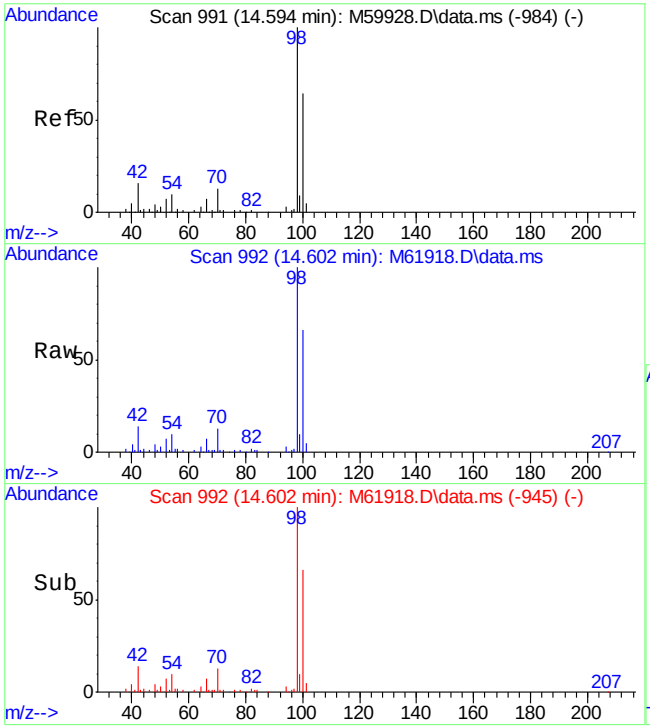




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.364 min Scan# 1159
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:117 Resp: 241025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.8 | 11.2 | 51.2 |

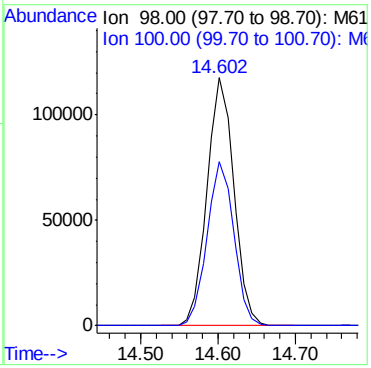


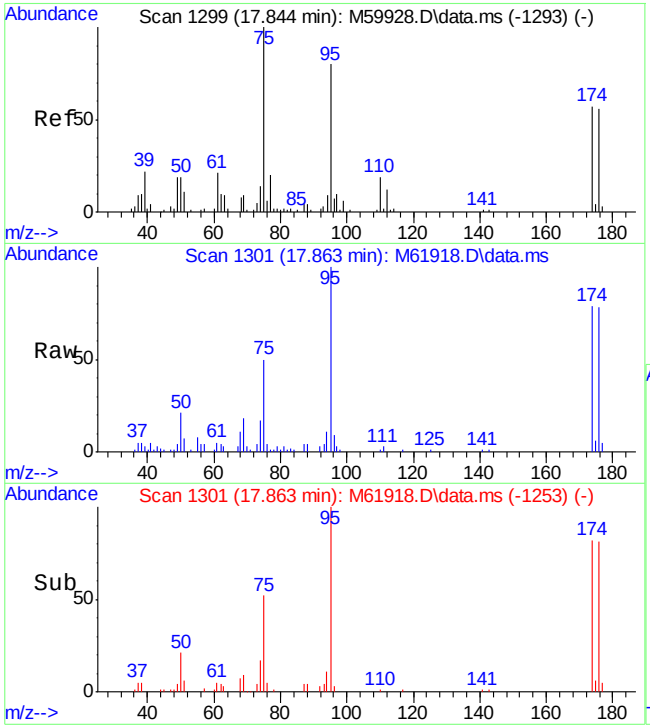



#56
Toluene-d8
Concen: 19.36 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion: 98 Resp: 284531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

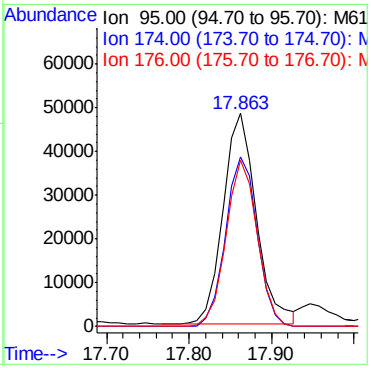


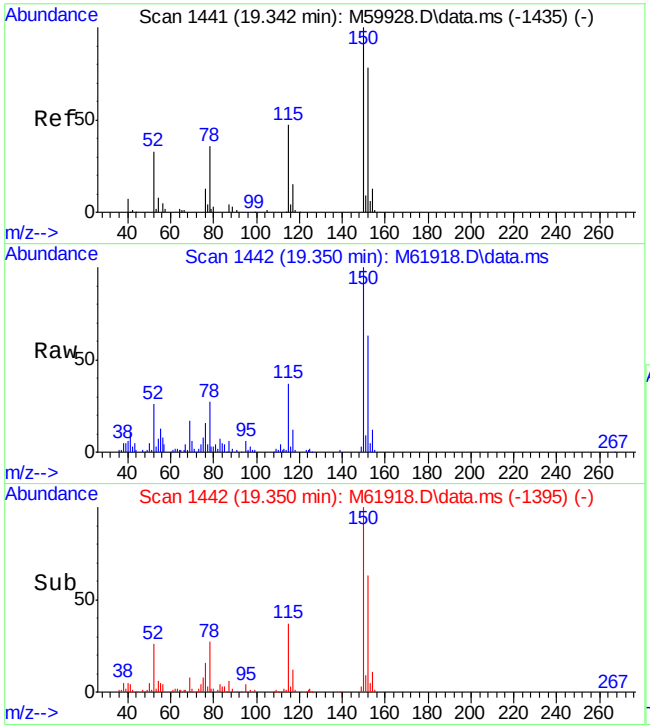




#74
4-Bromofluorobenzene
Concen: 22.21 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion: 95 Resp: 135562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.8 | 54.3 | 94.3 |
| 176 | 73.4 | 51.5 | 91.5 |

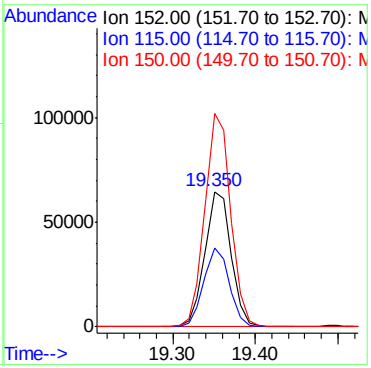


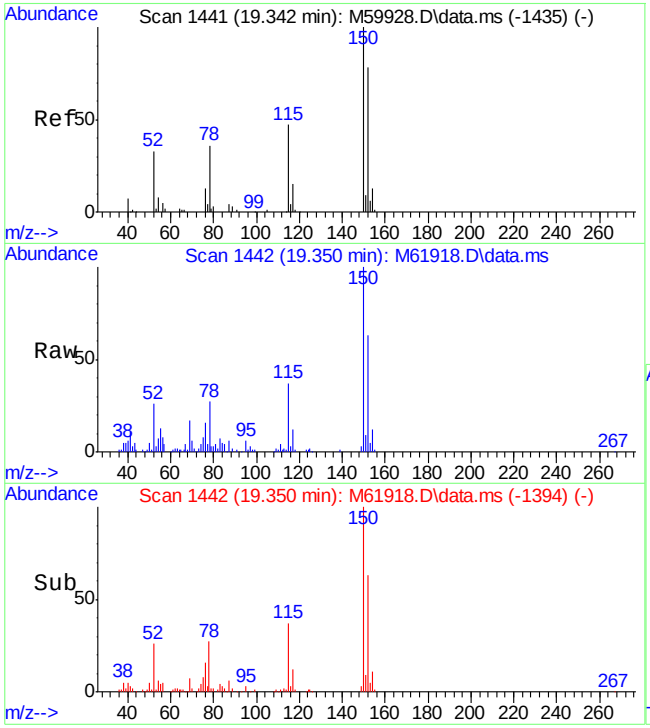



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. -0.002 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:152 Resp: 143367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.0 | 40.9 | 80.9 |
| 150 | 154.9 | 178.6 | 218.6# |

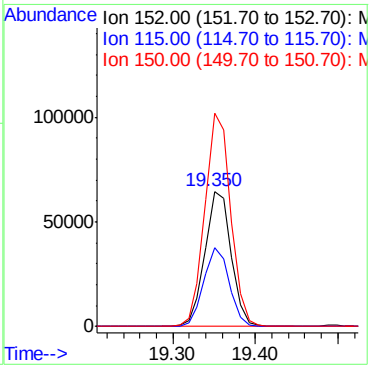


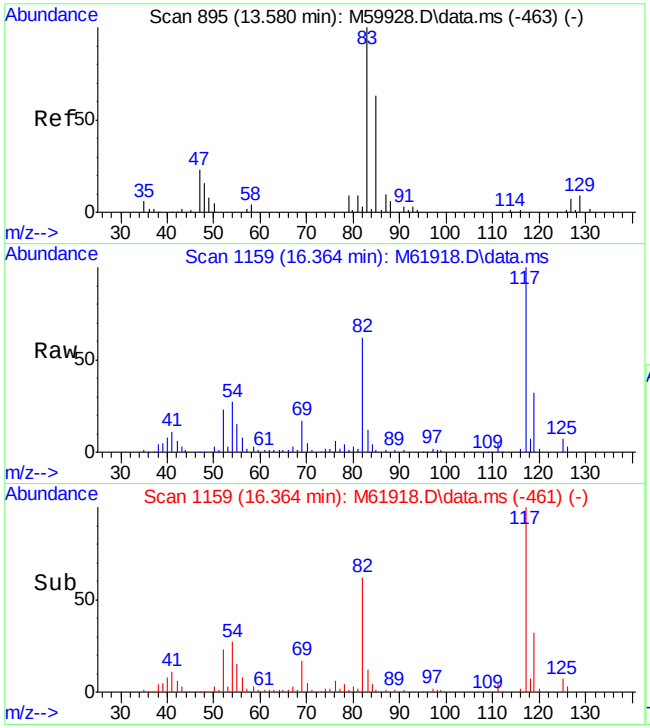




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.350 min Scan# 1442
Delta R.T. 0.008 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:152 Resp: 143367

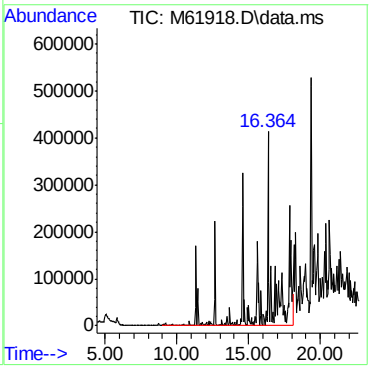
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.0 | 37.3 | 77.3 |
| 150 | 154.9 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 289.74 ppb m
RT: 16.364 min Scan# 1159
Delta R.T. 2.814 min
Lab File: M61918.D
Acq: 18 Jul 2016 7:17 pm

Tgt Ion:TIC Resp:11410705



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61849.D
Acq On : 13 Jul 2016 9:28 pm
Operator : johannat
Sample : C46446-5
Misc : MS1912,VM1859,5.92,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 03 18:24:57 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

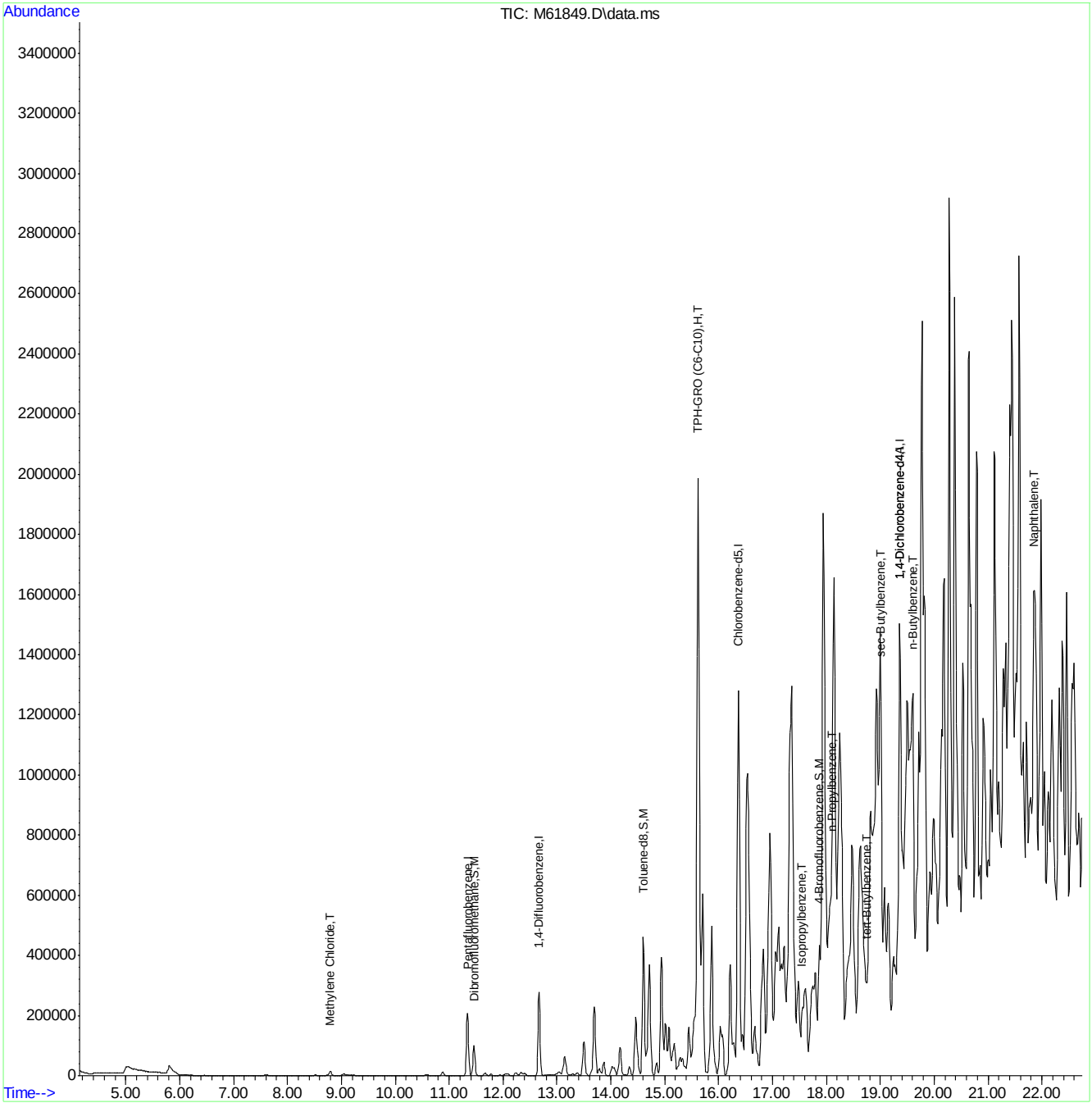
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 208853 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 310148 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.363 | 117 | 285879 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 175211 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 175211 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 92296 | 17.43 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 87.15% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 365527 | 19.59 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 97.95% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 162253 | 22.12 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 110.60% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.797 | 84 | 10730 | 1.45 | ppb | 93 |
| 73) Isopropylbenzene | 17.545 | 105 | 172710 | 6.24 | ppb | 97 |
| 79) n-Propylbenzene | 18.094 | 91 | 171798 | 4.15 | ppb | 98 |
| 84) tert-Butylbenzene | 18.748 | 119 | 23150 | 0.87 | ppb | 93 |
| 87) sec-Butylbenzene | 19.012 | 105 | 544470 | 15.19 | ppb | 97 |
| 92) n-Butylbenzene | 19.603 | 91 | 107531 | 3.60 | ppb | 88 |
| 97) Naphthalene | 21.851 | 128 | 132810 | 5.77 | ppb | 100 |
| 100) TPH-GRO (C6-C10) | 15.614 | TIC | 68552710m | 1463.76 | ppb | |

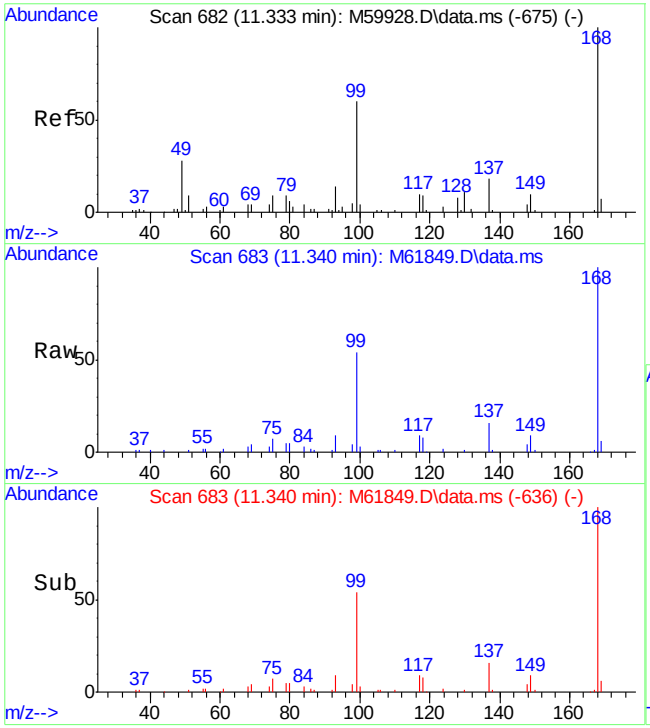
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61849.D
Acq On : 13 Jul 2016 9:28 pm
Operator : johannat
Sample : C46446-5
Misc : MS1912,VM1859,5.92,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

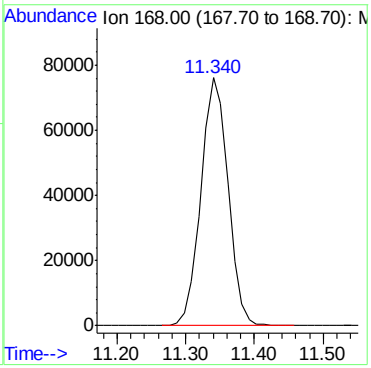
Quant Time: Aug 03 18:24:57 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

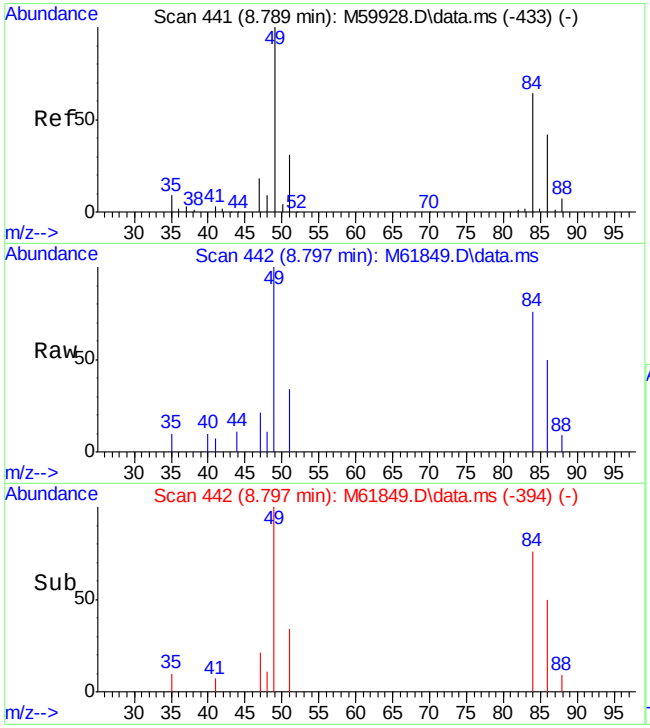





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:168 Resp: 208853

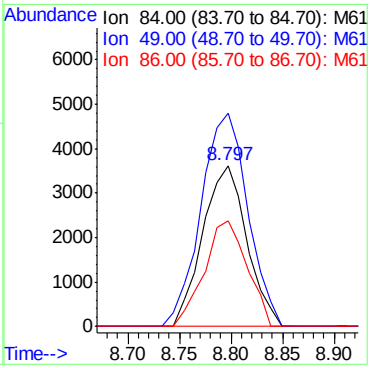


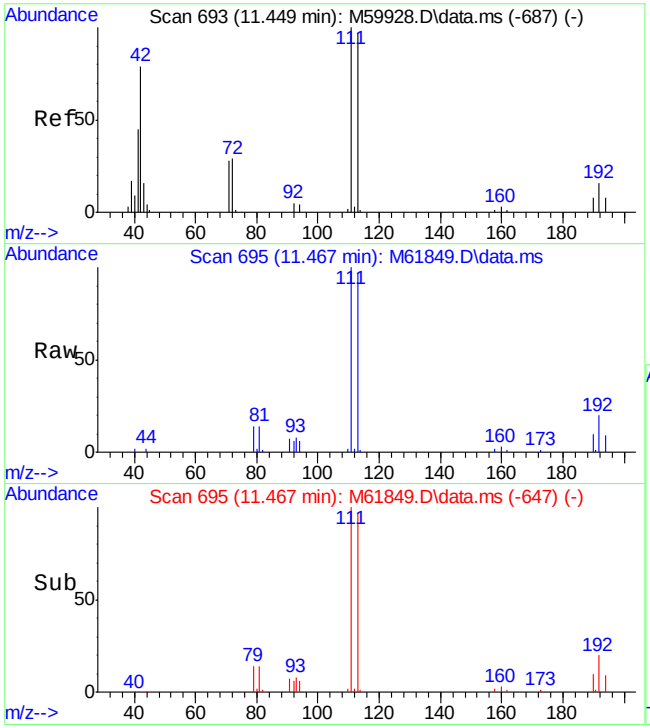




#19
Methylene Chloride
Concen: 1.45 ppb
RT: 8.797 min Scan# 442
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 84 Resp: 10730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 140.9 | 134.5 | 174.5 |
| 86 | 63.8 | 43.8 | 83.8 |

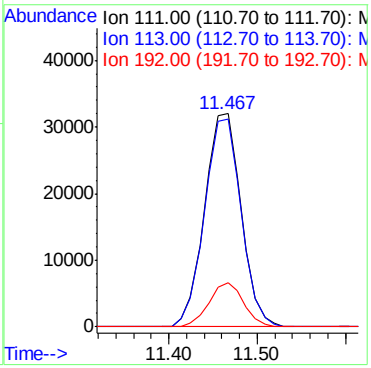


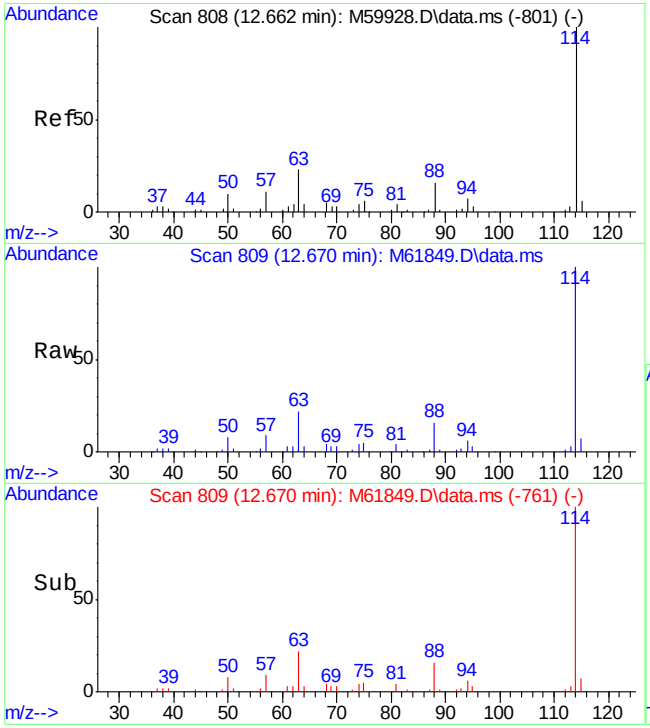



#36
Dibromofluoromethane
Concen: 17.43 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:111 Resp: 92296

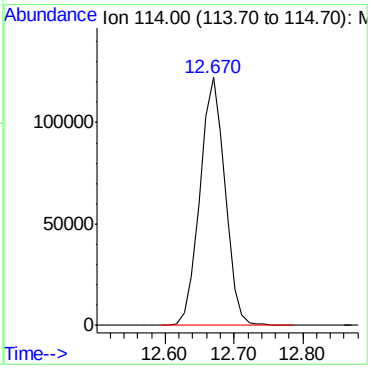
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.6 | 77.7 | 117.7 |
| 192 | 19.4 | 0.0 | 36.3 |

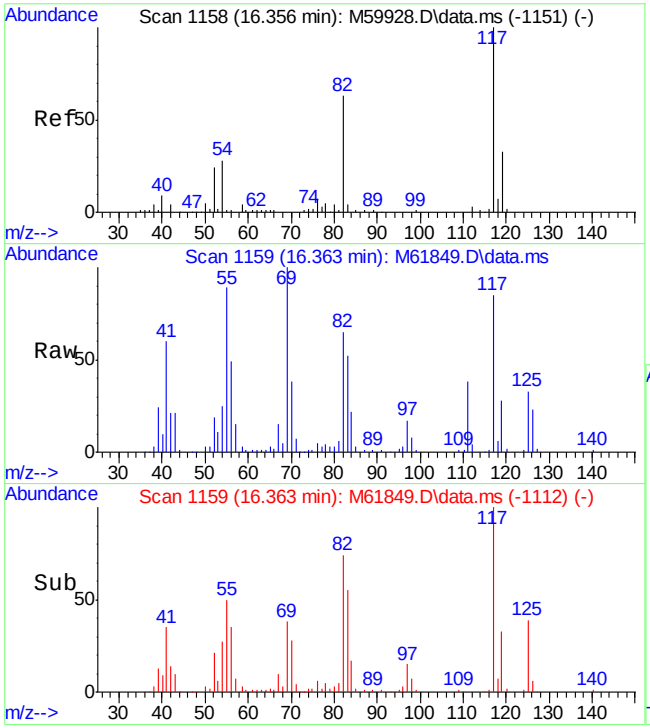



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:114 Resp: 310148

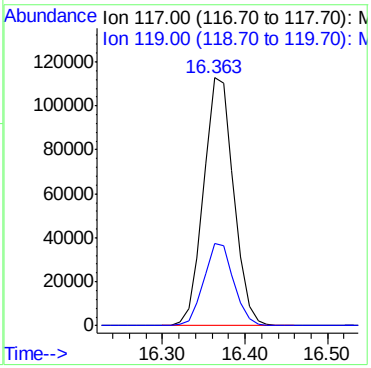


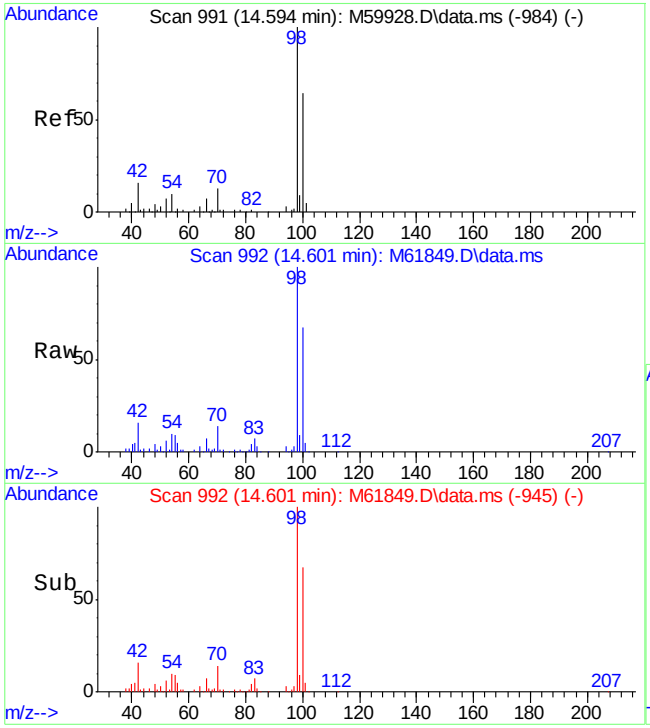



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.363 min Scan# 1159
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:117 Resp: 285879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.9 | 11.2 | 51.2 |

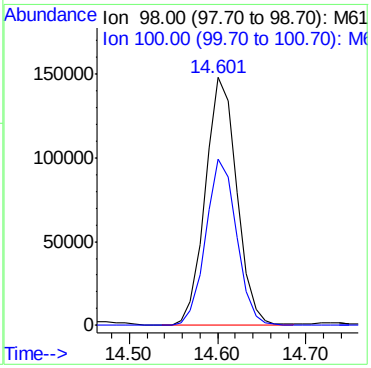


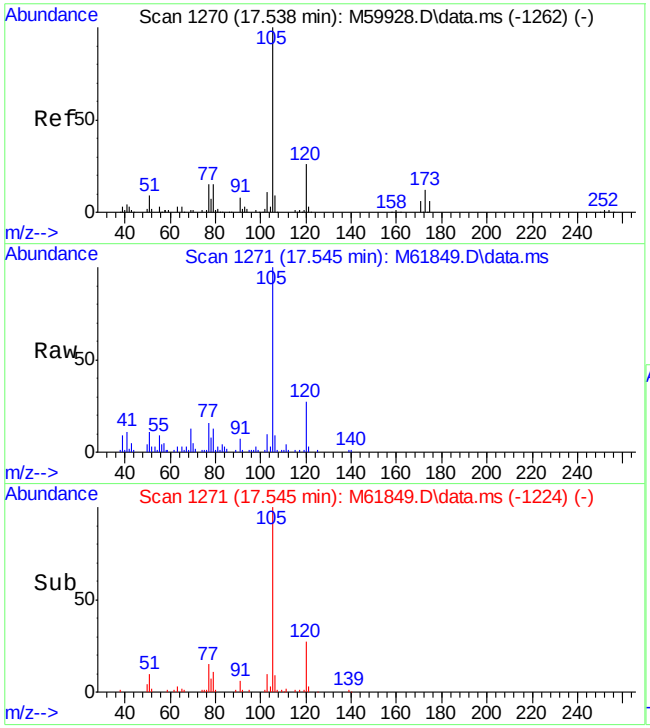




#56
Toluene-d8
Concen: 19.59 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 98 Resp: 365527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 44.3 | 84.3 |

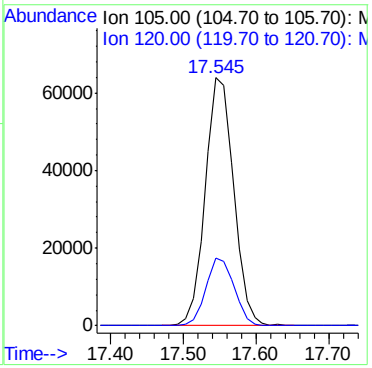


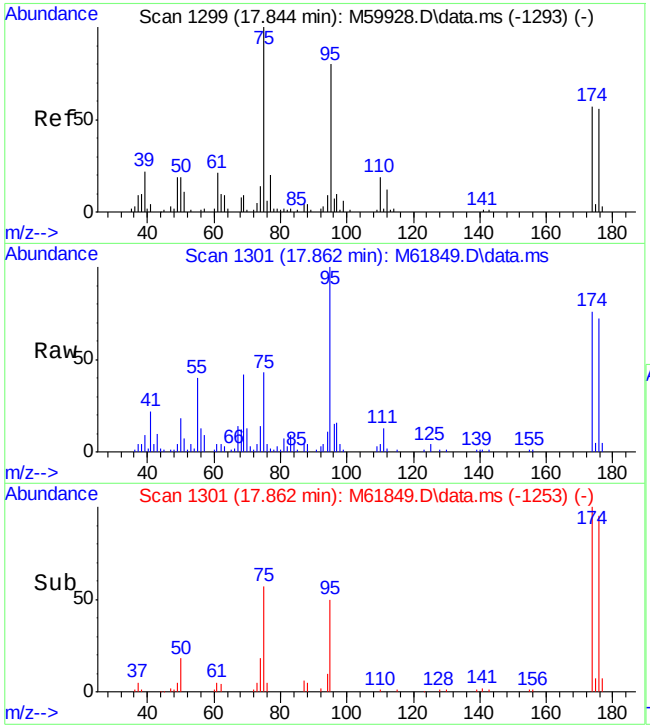



#73
Isopropylbenzene
Concen: 6.24 ppb
RT: 17.545 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:105 Resp: 172710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.1 | 5.7 | 45.7 |

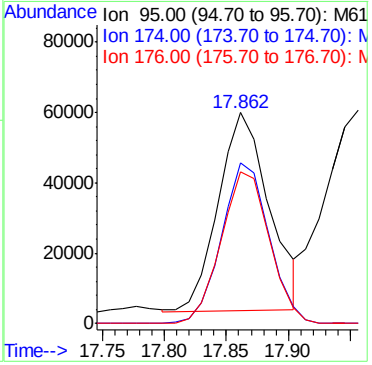


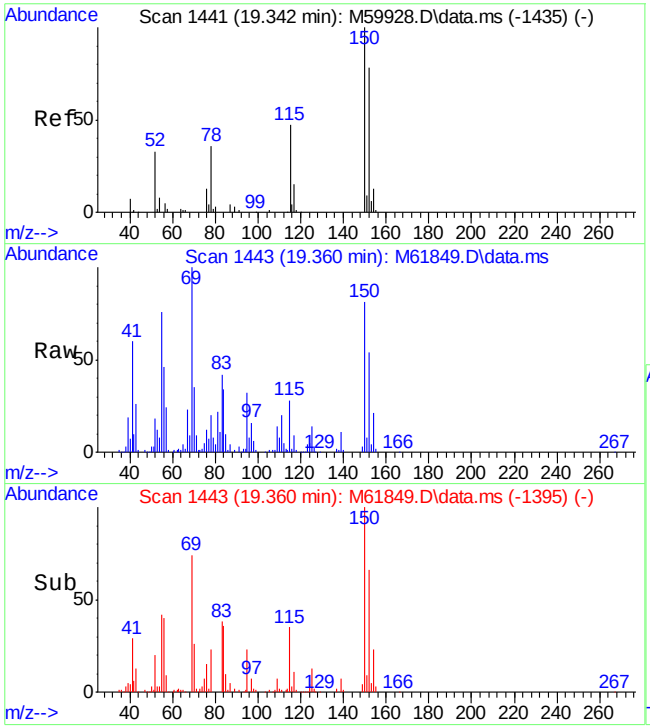




#74
4-Bromofluorobenzene
Concen: 22.12 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 95 Resp: 162253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.3 | 54.3 | 94.3 |
| 176 | 72.6 | 51.5 | 91.5 |

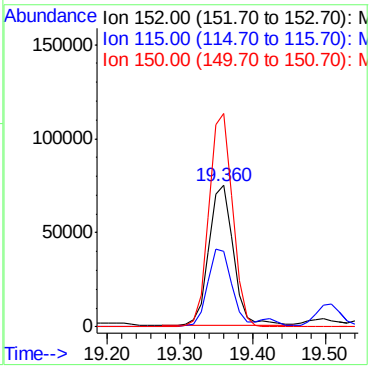


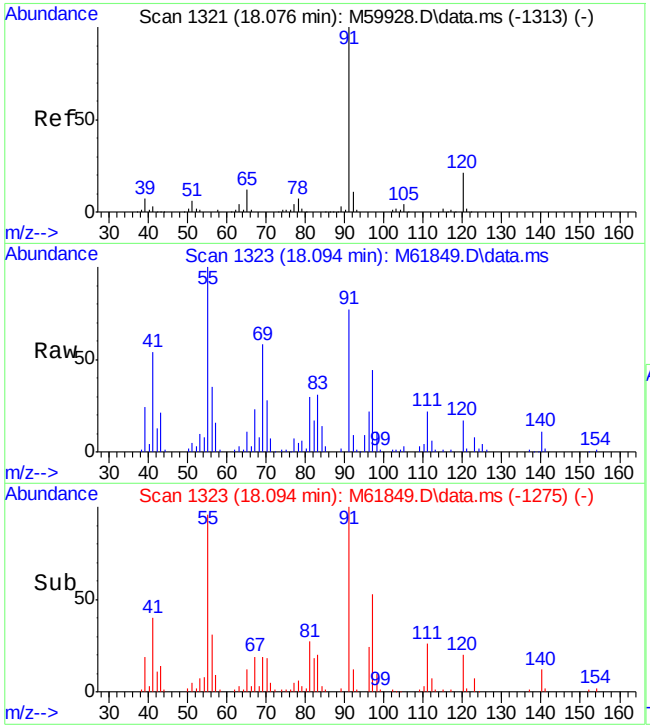



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:152 Resp: 175211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 55.0 | 40.9 | 80.9 |
| 150 | 144.8 | 178.6 | 218.6# |

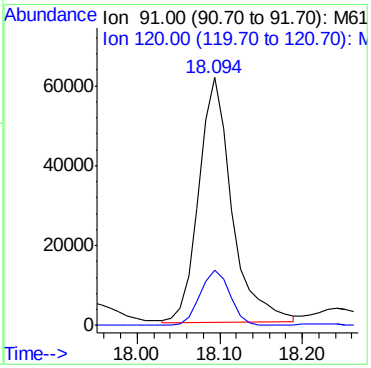


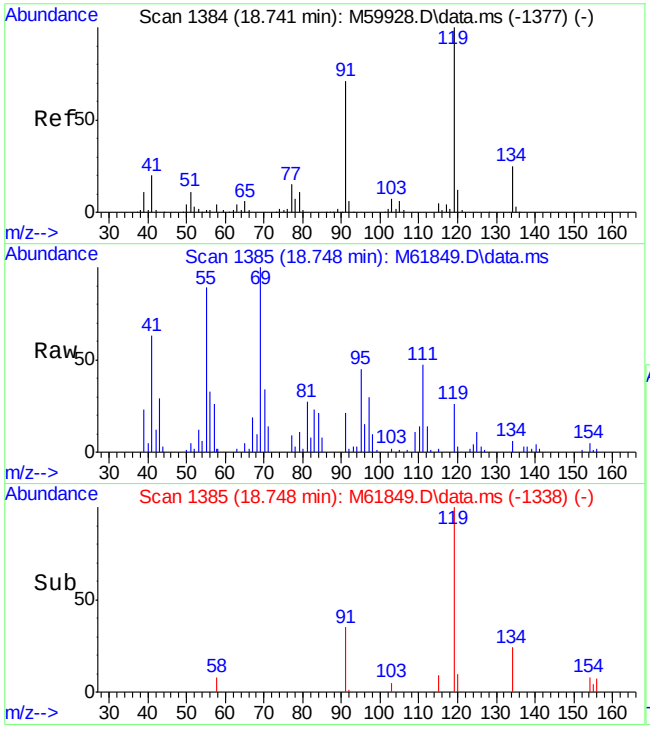




#79
n-Propylbenzene
Concen: 4.15 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 91 Resp: 171798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.3 | 1.3 | 41.3 |

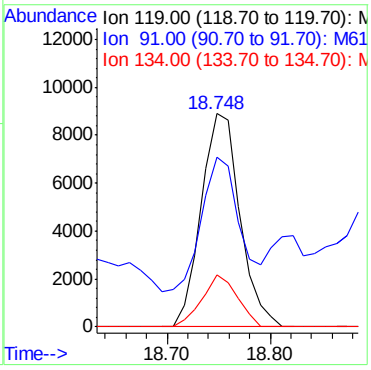


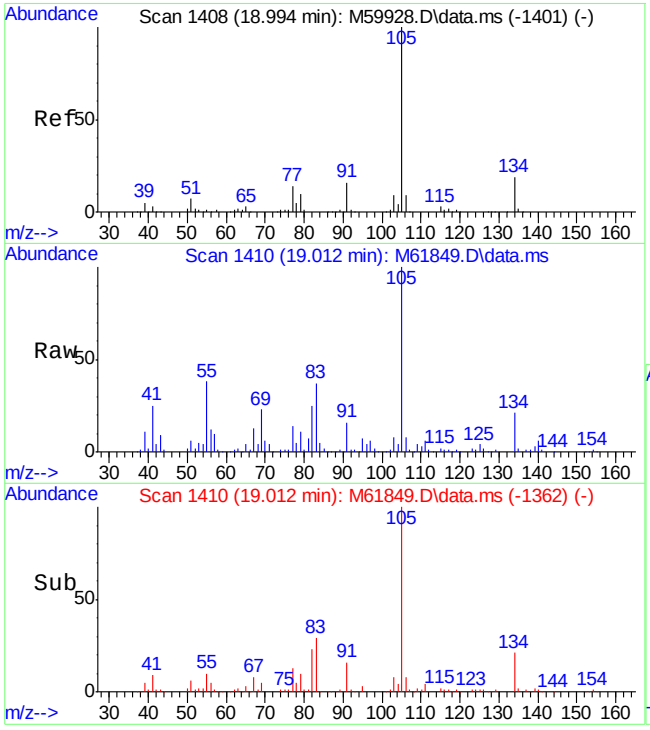



#84
tert-Butylbenzene
Concen: 0.87 ppb
RT: 18.748 min Scan# 1385
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:119 Resp: 23150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 67.4 | 54.6 | 94.6 |
| 134 | 22.0 | 0.4 | 40.4 |

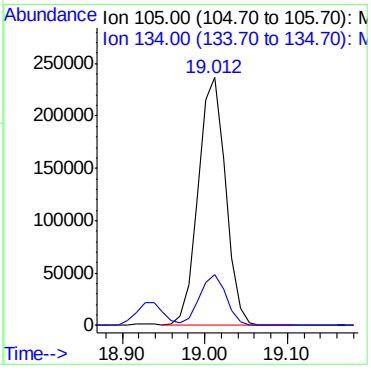


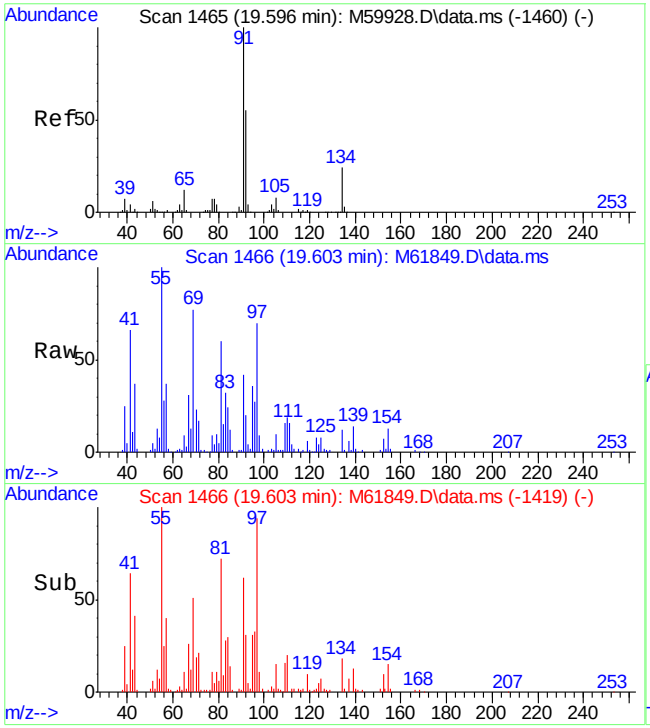




#87
sec-Butylbenzene
Concen: 15.19 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:105 Resp: 544470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.0 | 0.0 | 38.7 |

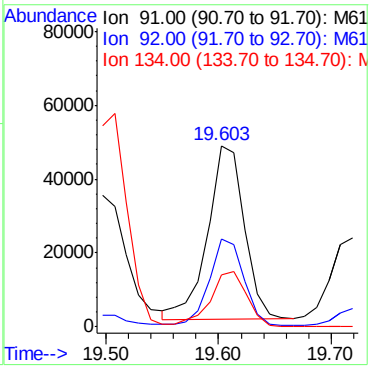


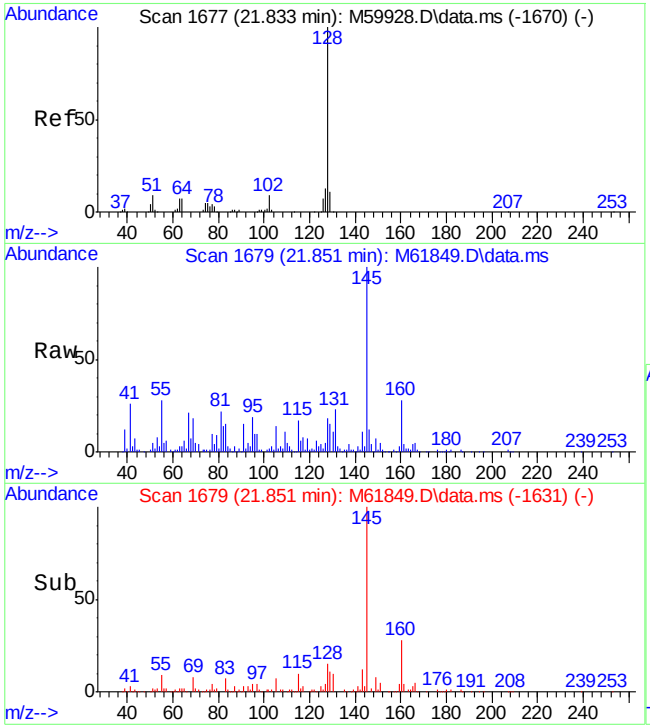



#92
n-Butylbenzene
Concen: 3.60 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 91 Resp: 107531

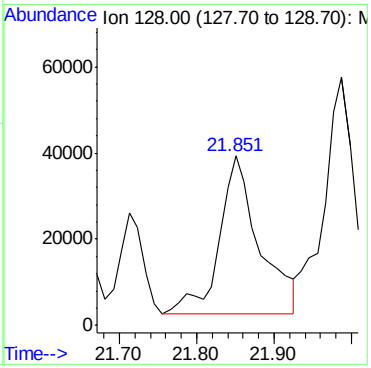
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 47.9 | 35.3 | 75.3 |
| 134 | 32.2 | 3.6 | 43.6 |

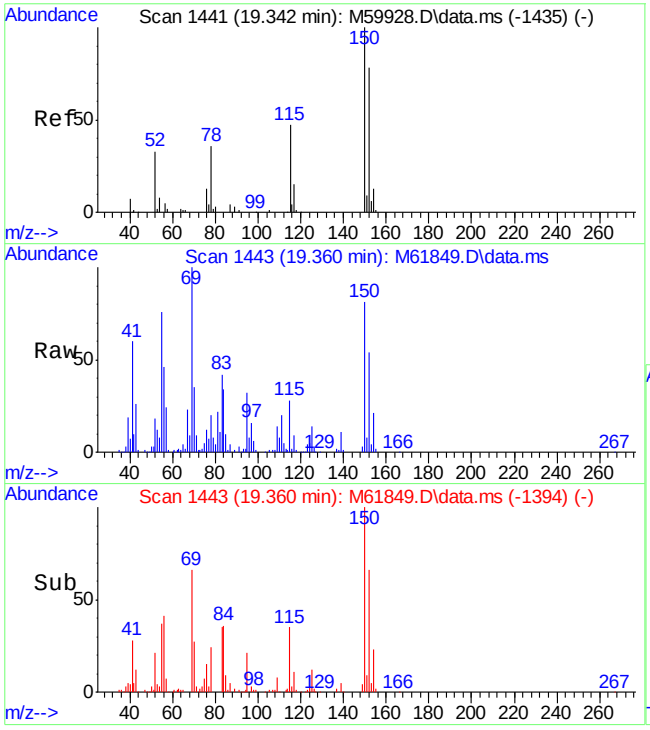



#97
Naphthalene
Concen: 5.77 ppb
RT: 21.851 min Scan# 1679
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:128 Resp: 132810

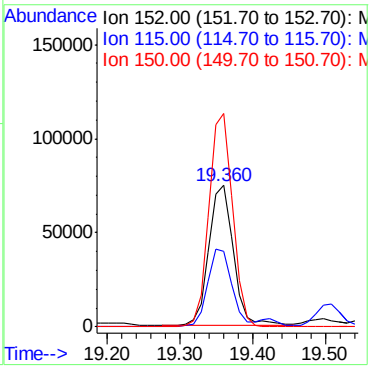


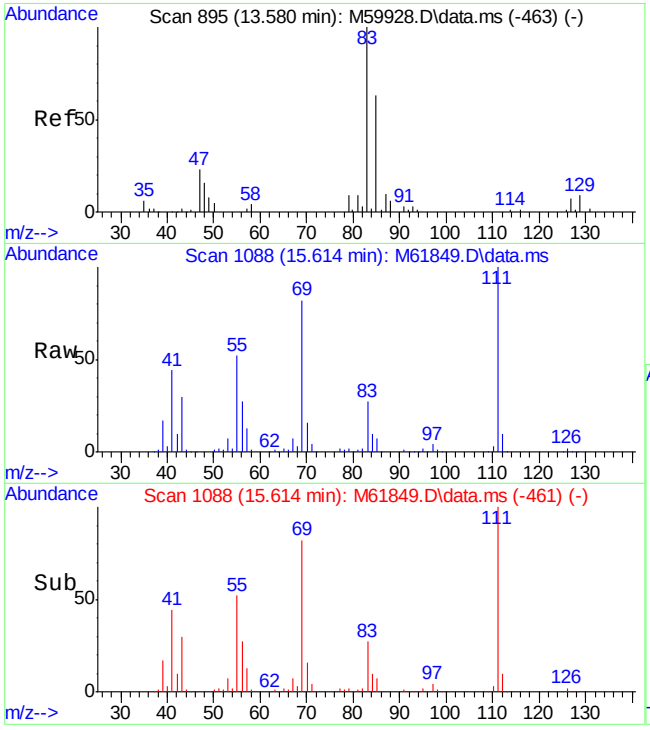



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:152 Resp: 175211

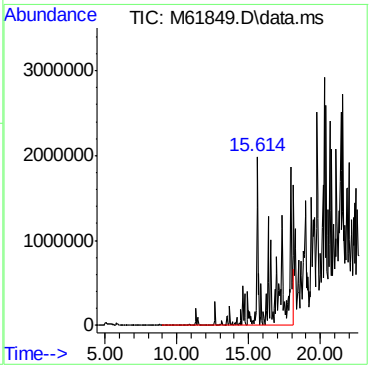
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 55.0 | 37.3 | 77.3 |
| 150 | 144.8 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 1463.76 ppb m
RT: 15.614 min Scan# 1088
Delta R.T. 2.064 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:TIC Resp:68552710



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61849.D
Acq On : 13 Jul 2016 9:28 pm
Operator : johannat
Sample : C46446-5
Misc : MS1912,VM1859,5.92,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 03 18:24:57 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

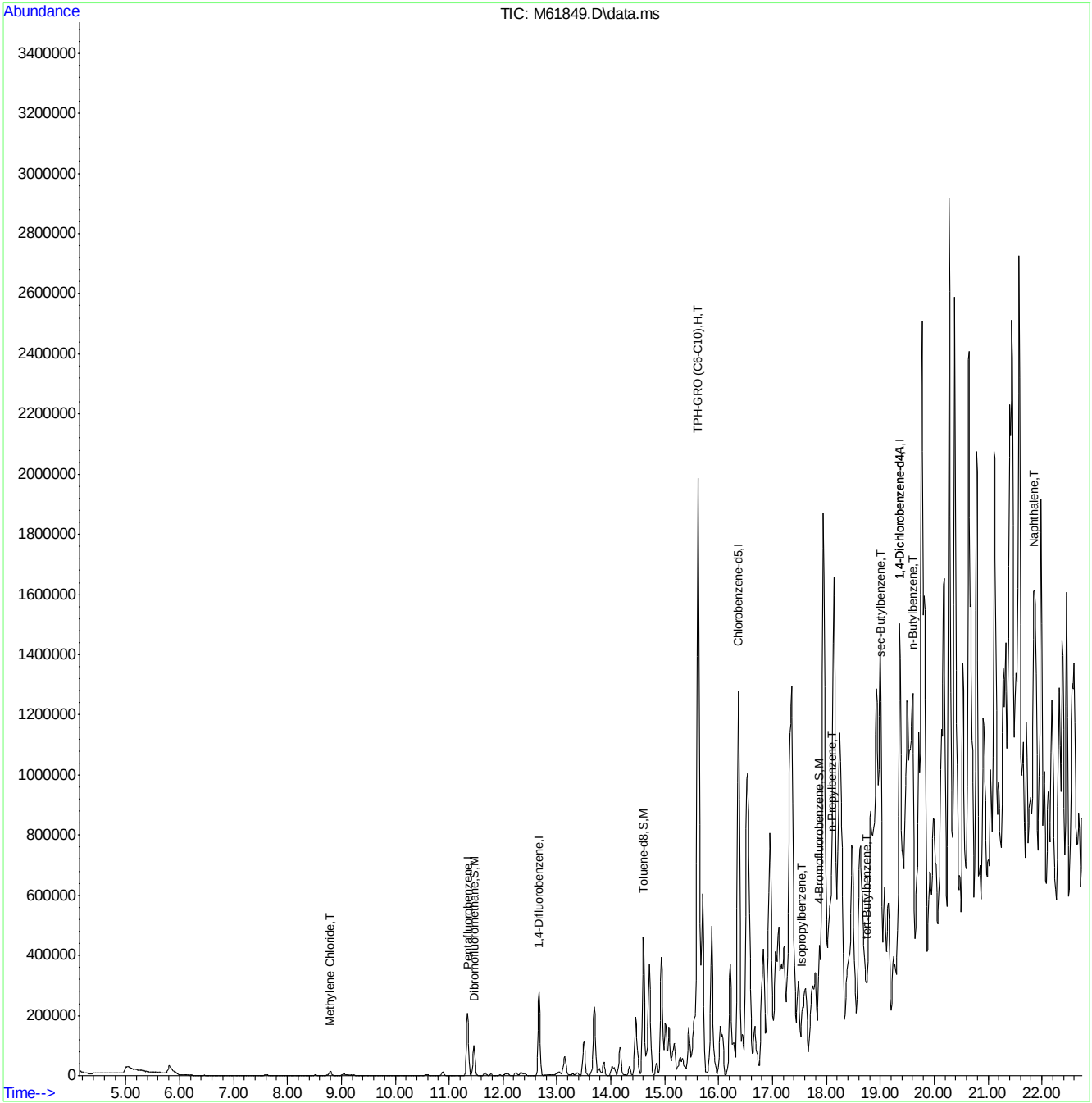
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.340 | 168 | 208853 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 310148 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.363 | 117 | 285879 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 175211 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 175211 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 92296 | 17.43 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 87.15% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 365527 | 19.59 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 97.95% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 162253 | 22.12 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 110.60% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.797 | 84 | 10730 | 1.45 | ppb | 93 |
| 73) Isopropylbenzene | 17.545 | 105 | 172710 | 6.24 | ppb | 97 |
| 79) n-Propylbenzene | 18.094 | 91 | 171798 | 4.15 | ppb | 98 |
| 84) tert-Butylbenzene | 18.748 | 119 | 23150 | 0.87 | ppb | 93 |
| 87) sec-Butylbenzene | 19.012 | 105 | 544470 | 15.19 | ppb | 97 |
| 92) n-Butylbenzene | 19.603 | 91 | 107531 | 3.60 | ppb | 88 |
| 97) Naphthalene | 21.851 | 128 | 132810 | 5.77 | ppb | 100 |
| 100) TPH-GRO (C6-C10) | 15.614 | TIC | 68552710m | 1463.76 | ppb | |

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

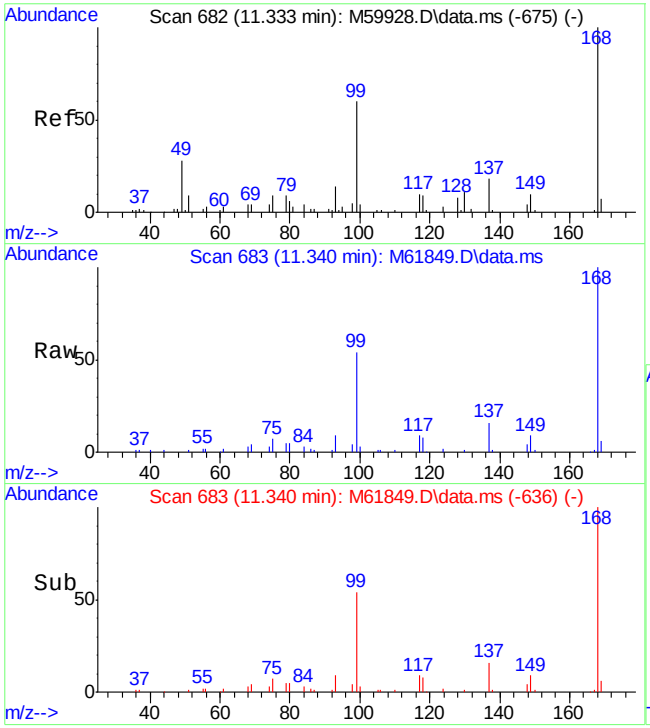
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61849.D
Acq On : 13 Jul 2016 9:28 pm
Operator : johannat
Sample : C46446-5
Misc : MS1912,VM1859,5.92,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 03 18:24:57 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

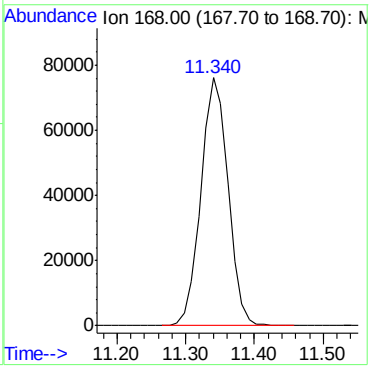


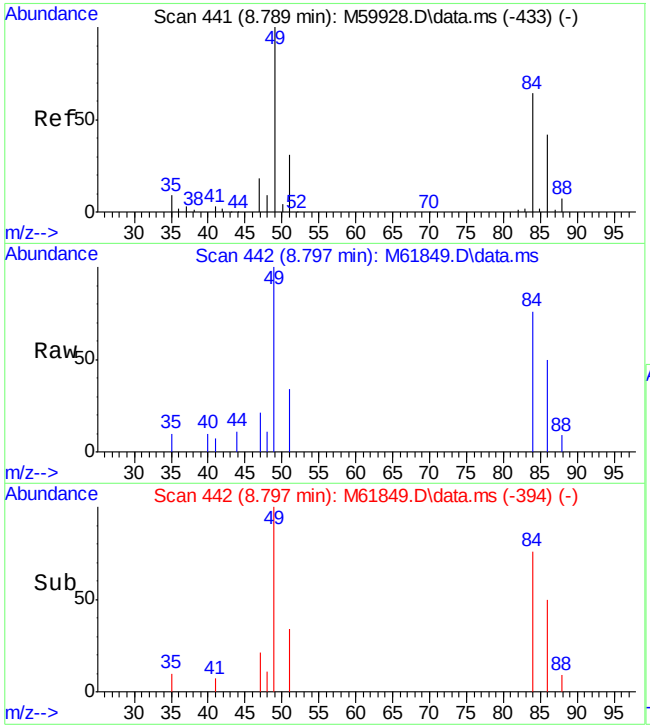

VM1848S.M Wed Aug 03 18:25:12 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.340 min Scan# 683
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:168 Resp: 208853

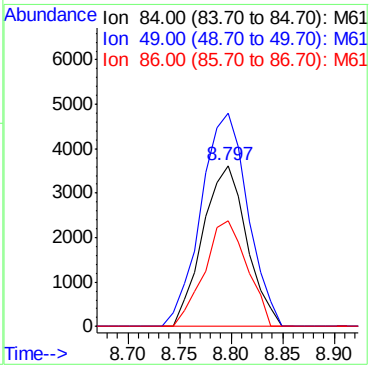


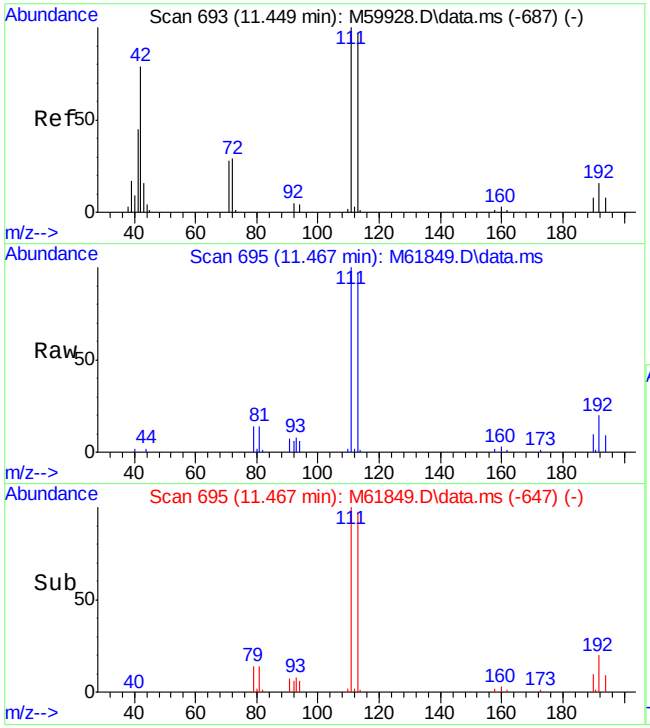




#19
Methylene Chloride
Concen: 1.45 ppb
RT: 8.797 min Scan# 442
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 84 Resp: 10730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 140.9 | 134.5 | 174.5 |
| 86 | 63.8 | 43.8 | 83.8 |

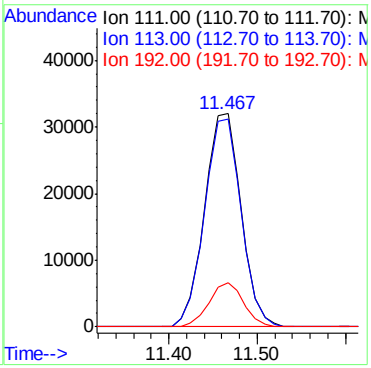


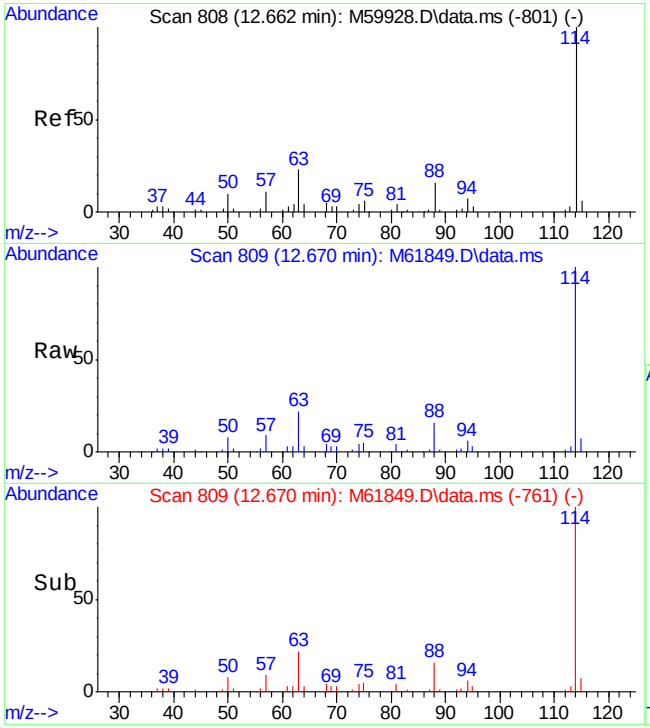



#36
Dibromofluoromethane
Concen: 17.43 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:111 Resp: 92296

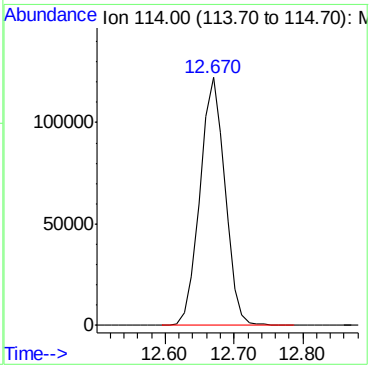
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.6 | 77.7 | 117.7 |
| 192 | 19.4 | 0.0 | 36.3 |

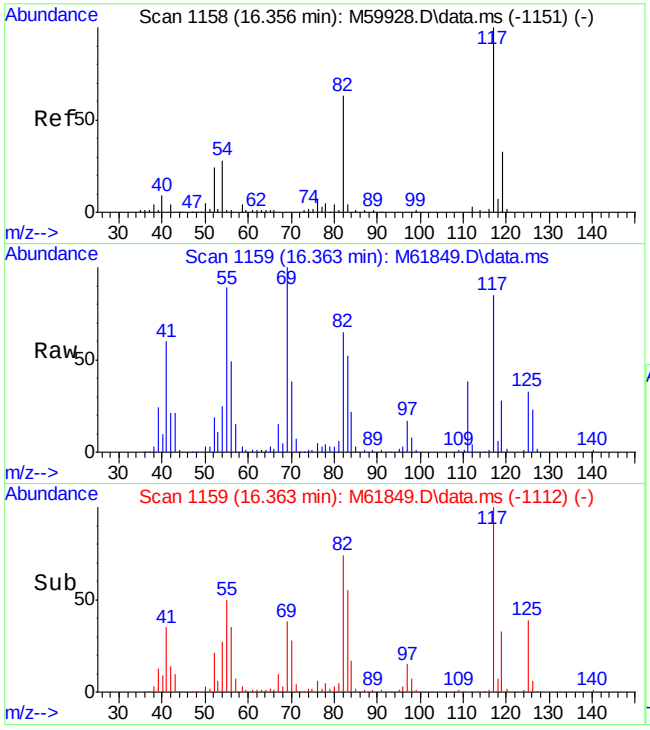



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:114 Resp: 310148

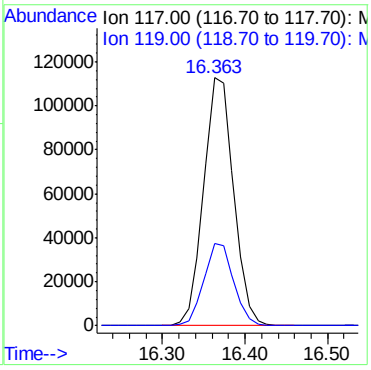


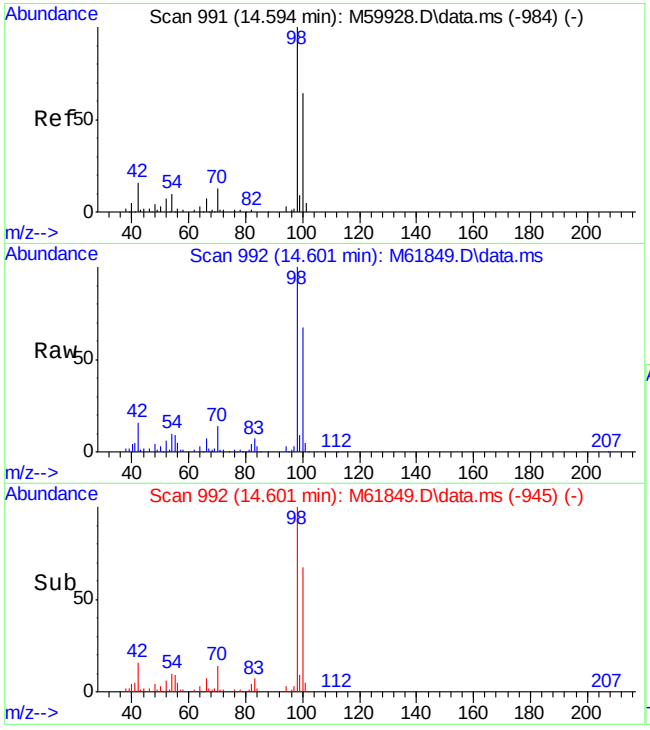



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.363 min Scan# 1159
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:117 Resp: 285879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.9 | 11.2 | 51.2 |

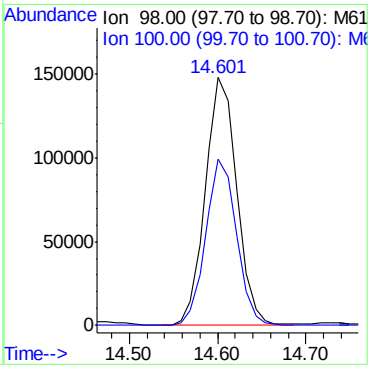


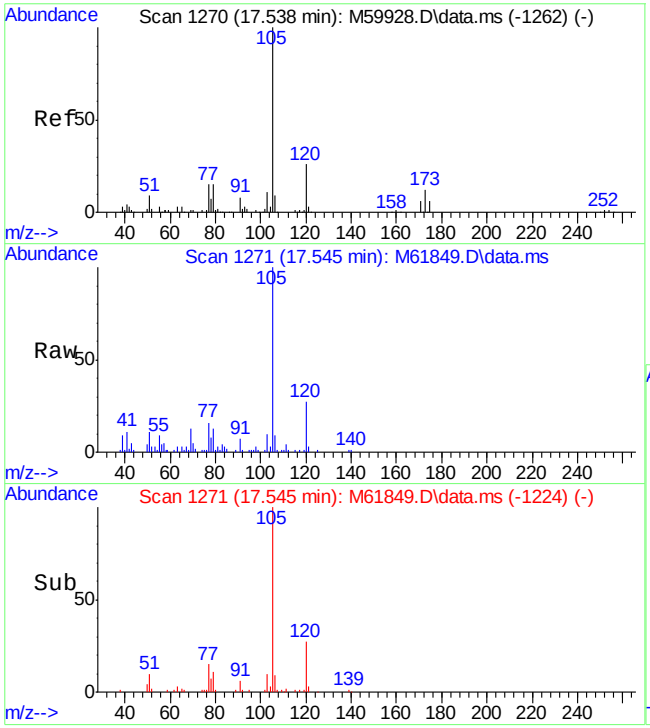




#56
Toluene-d8
Concen: 19.59 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 98 Resp: 365527

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 44.3 | 84.3 |

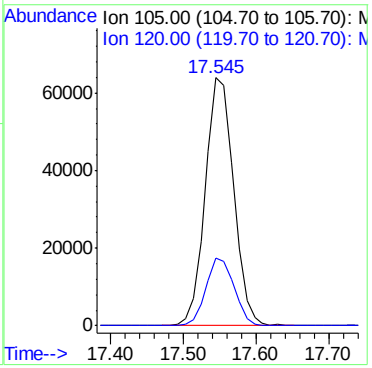


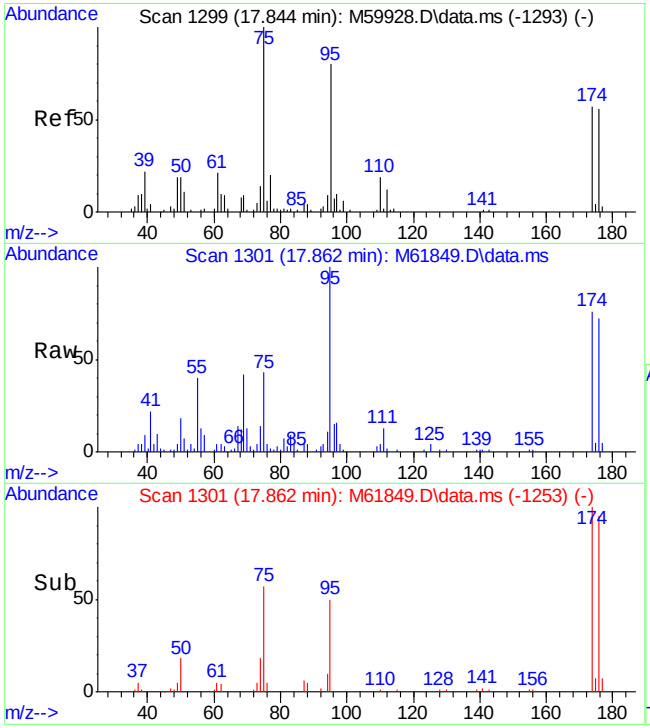



#73
Isopropylbenzene
Concen: 6.24 ppb
RT: 17.545 min Scan# 1271
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:105 Resp: 172710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 27.1 | 5.7 | 45.7 |

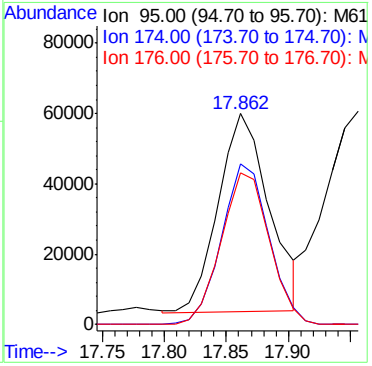


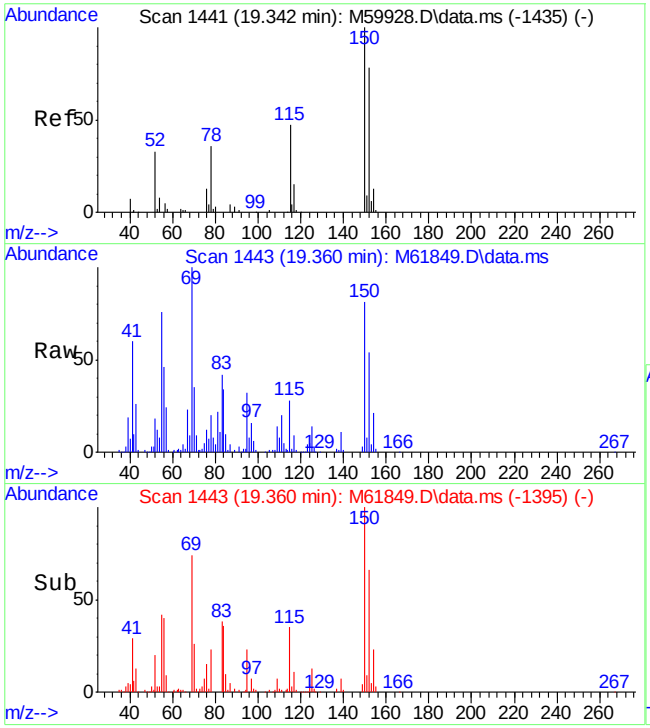




#74
4-Bromofluorobenzene
Concen: 22.12 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 95 Resp: 162253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.3 | 54.3 | 94.3 |
| 176 | 72.6 | 51.5 | 91.5 |

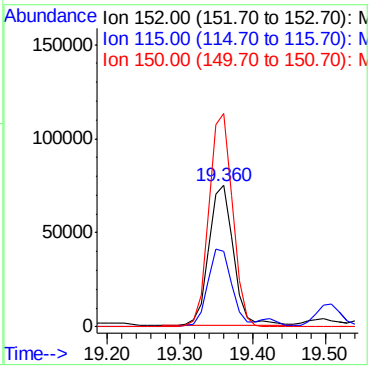


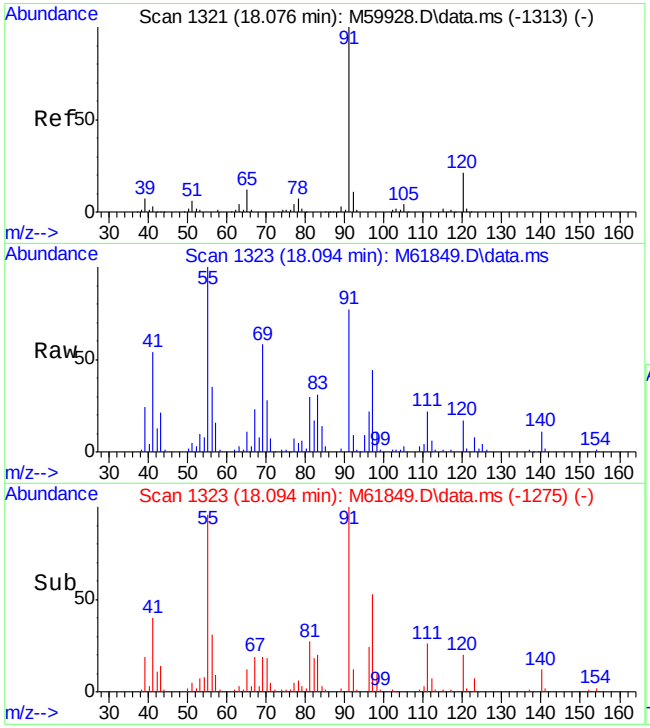



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:152 Resp: 175211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 55.0 | 40.9 | 80.9 |
| 150 | 144.8 | 178.6 | 218.6# |

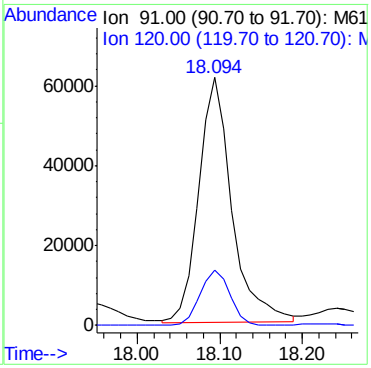


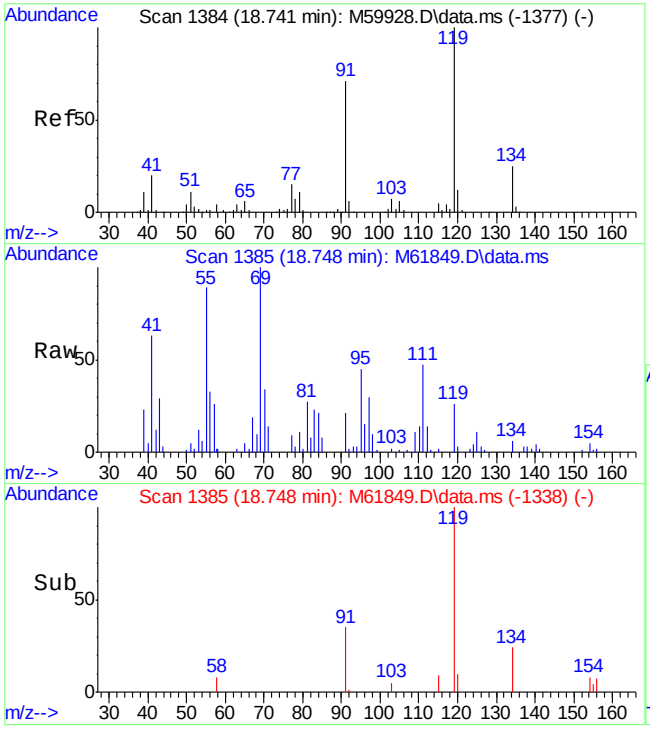




#79
n-Propylbenzene
Concen: 4.15 ppb
RT: 18.094 min Scan# 1323
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 91 Resp: 171798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.3 | 1.3 | 41.3 |

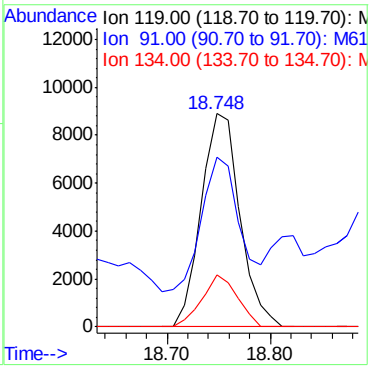


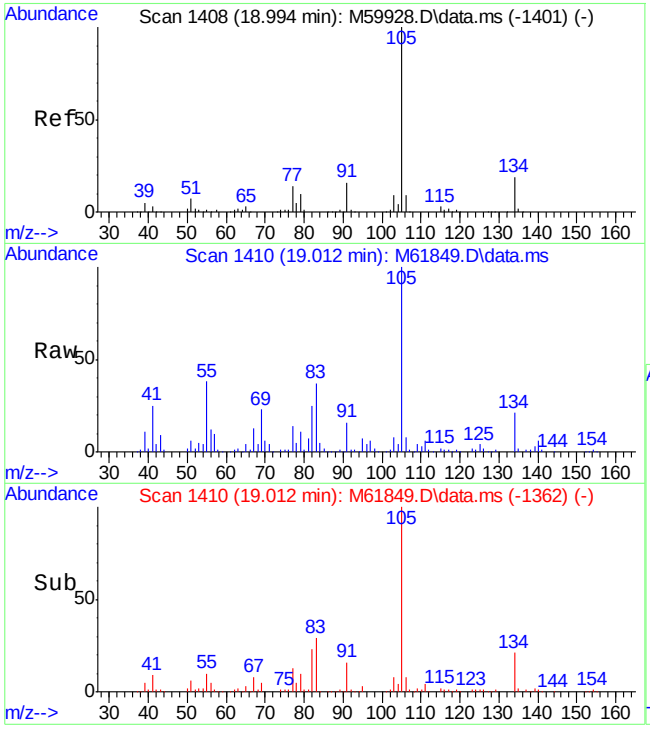



#84
tert-Butylbenzene
Concen: 0.87 ppb
RT: 18.748 min Scan# 1385
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:119 Resp: 23150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 67.4 | 54.6 | 94.6 |
| 134 | 22.0 | 0.4 | 40.4 |

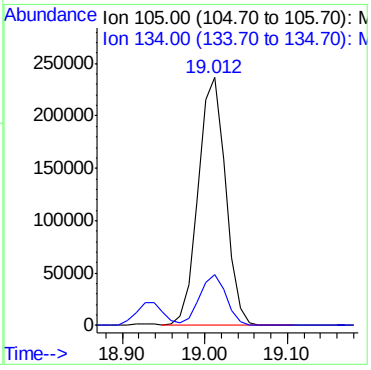


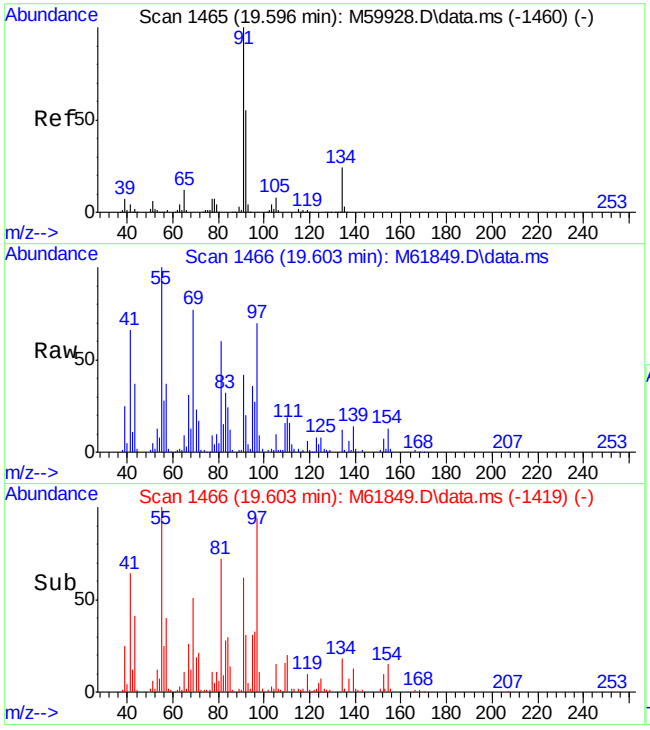




#87
sec-Butylbenzene
Concen: 15.19 ppb
RT: 19.012 min Scan# 1410
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:105 Resp: 544470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.0 | 0.0 | 38.7 |

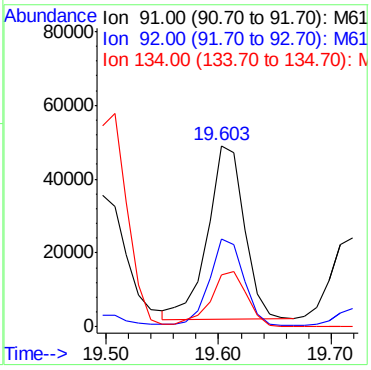


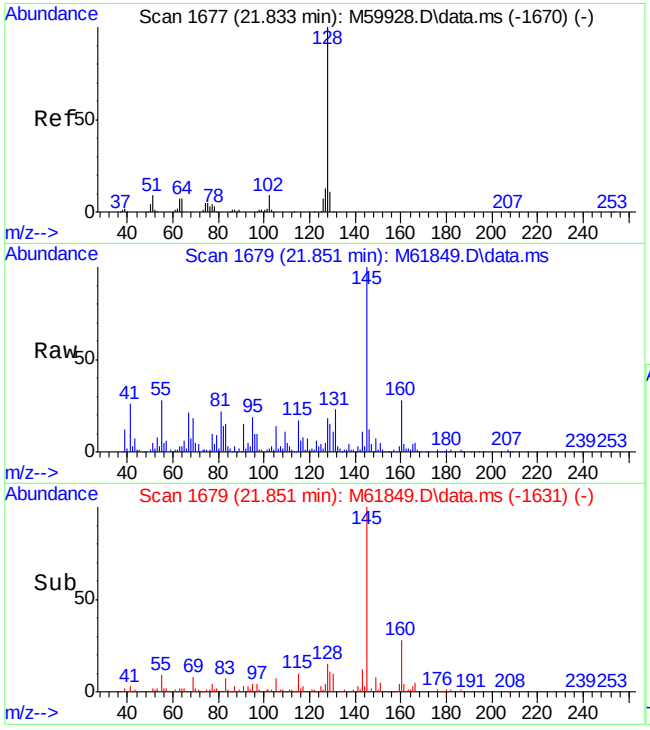



#92
n-Butylbenzene
Concen: 3.60 ppb
RT: 19.603 min Scan# 1466
Delta R.T. -0.003 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion: 91 Resp: 107531

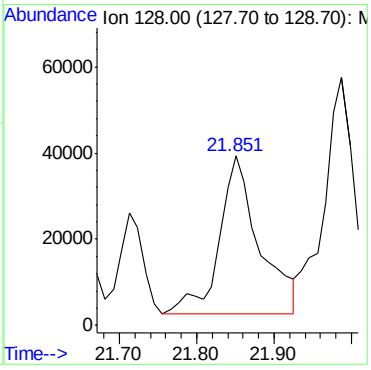
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 47.9 | 35.3 | 75.3 |
| 134 | 32.2 | 3.6 | 43.6 |

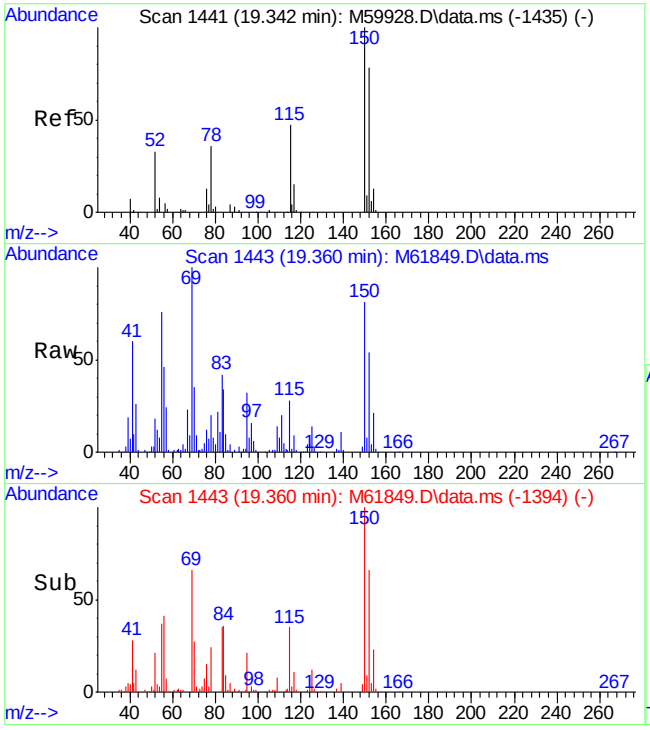



#97
Naphthalene
Concen: 5.77 ppb
RT: 21.851 min Scan# 1679
Delta R.T. 0.007 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:128 Resp: 132810

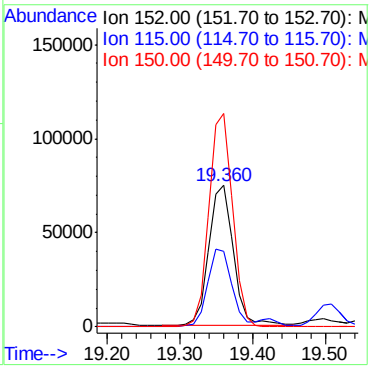


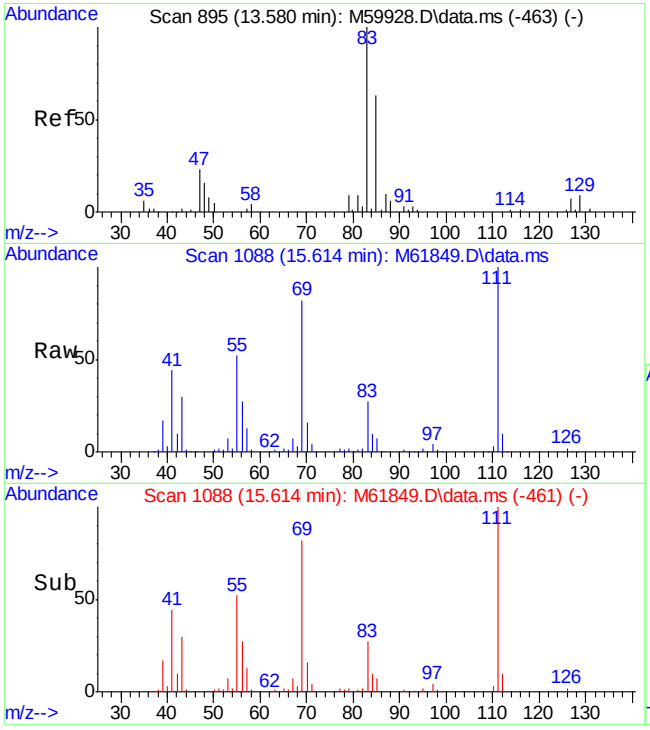



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:152 Resp: 175211

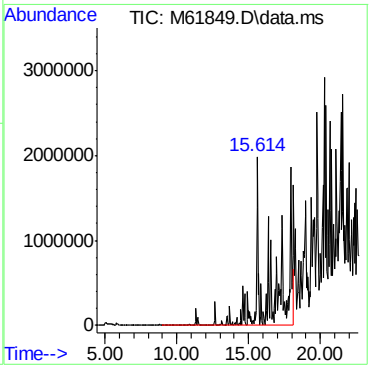
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 55.0 | 37.3 | 77.3 |
| 150 | 144.8 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 1463.76 ppb m
RT: 15.614 min Scan# 1088
Delta R.T. 2.064 min
Lab File: M61849.D
Acq: 13 Jul 2016 9:28 pm

Tgt Ion:TIC Resp:68552710



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61841.D
Acq On : 13 Jul 2016 5:31 pm
Operator : johannat
Sample : C46446-8
Misc : MS1912,VM1859,5.25,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 03 18:24:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

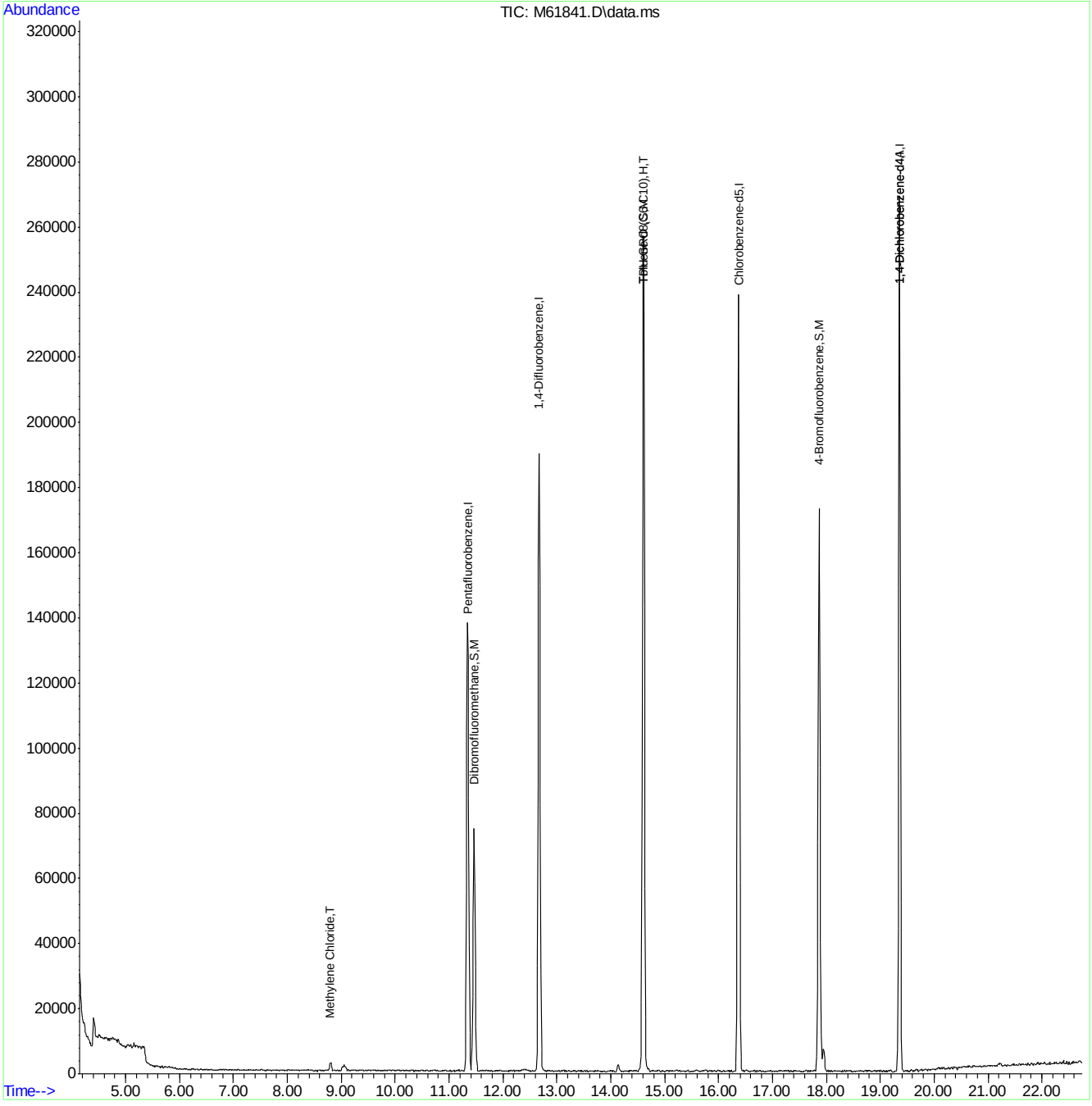
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.352 | 168 | 129794 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 196970 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.375 | 117 | 187494 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 95836 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 95836 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.468 | 111 | 68241 | 20.74 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 103.70% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 233565 | 19.09 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.45% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 94313 | 19.60 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 98.00% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.798 | 84 | 1591 | 0.35 | ppb | # 55 |
| 100) TPH-GRO (C6-C10) | 14.602 | TIC | 3009394m | 9.76 | ppb | |

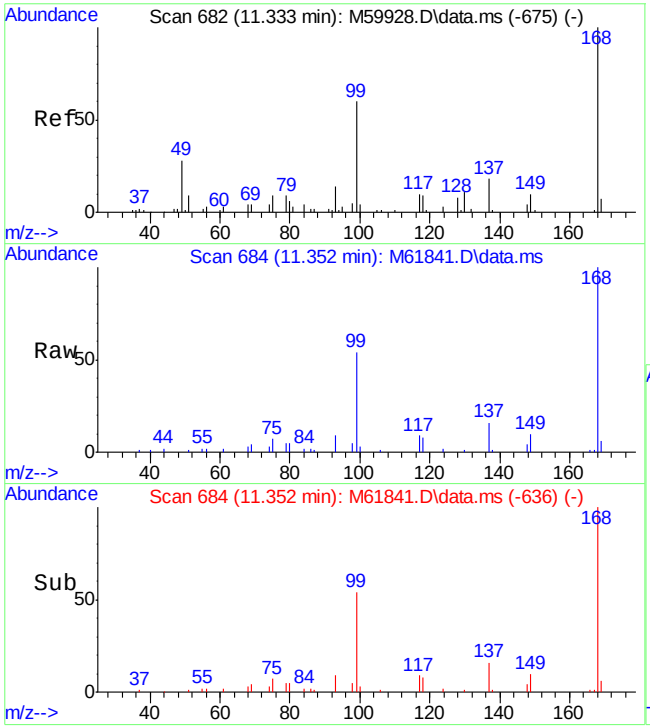
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61841.D
Acq On : 13 Jul 2016 5:31 pm
Operator : johannat
Sample : C46446-8
Misc : MS1912,VM1859,5.25,,,,1
ALS Vial : 15 Sample Multiplier: 1

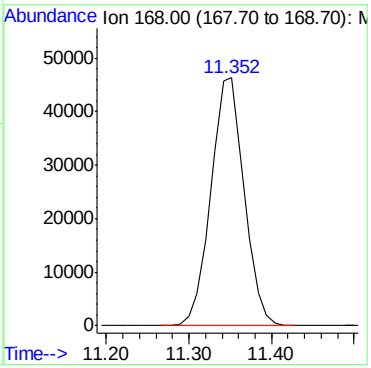
Quant Time: Aug 03 18:24:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

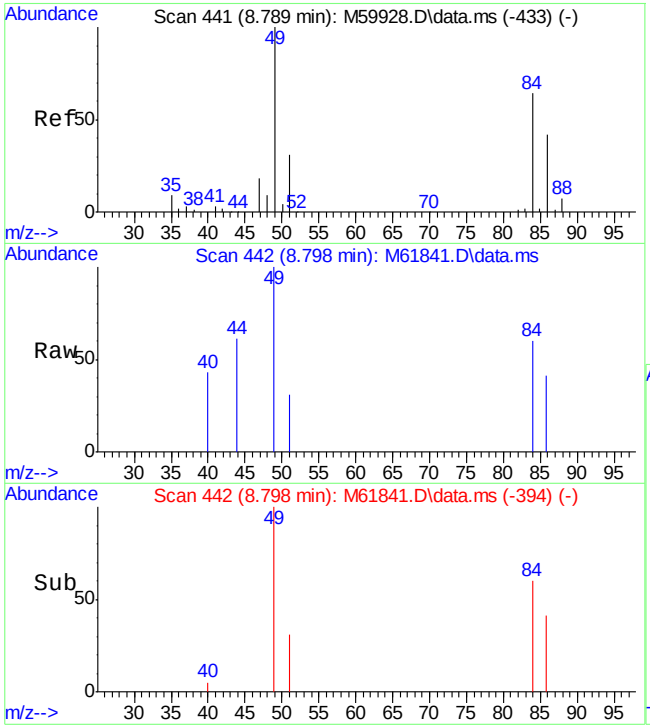





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.352 min Scan# 684
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:168 Resp: 129794

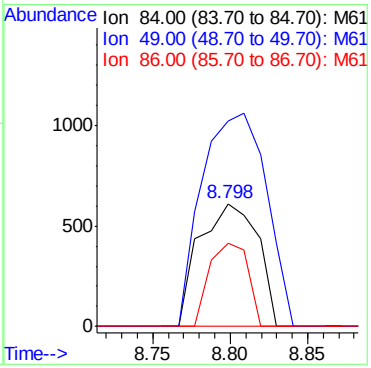


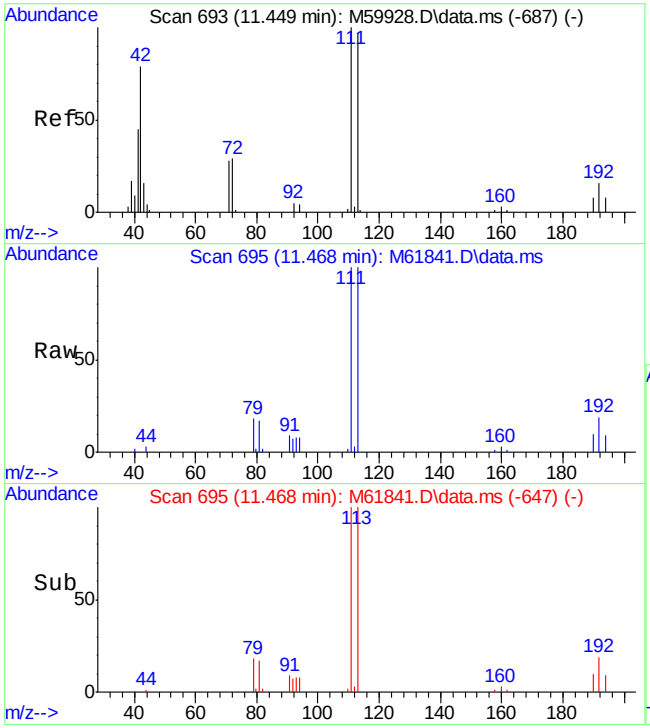




#19
Methylene Chloride
Concen: 0.35 ppb
RT: 8.798 min Scan# 442
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 84 Resp: 1591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 192.7 | 134.5 | 174.5# |
| 86 | 0.0 | 43.8 | 83.8# |

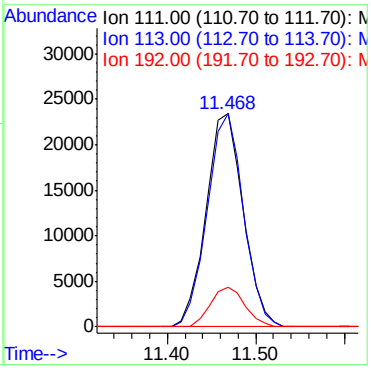


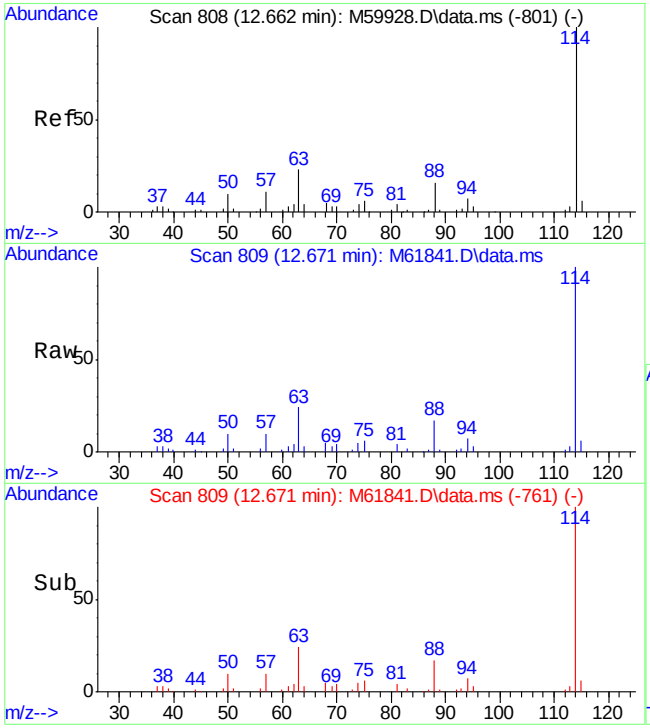



#36
Dibromofluoromethane
Concen: 20.74 ppb
RT: 11.468 min Scan# 695
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:111 Resp: 68241

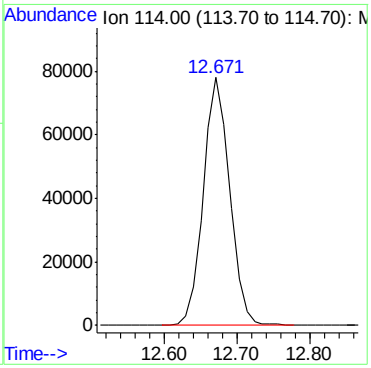
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 77.7 | 117.7 |
| 192 | 17.3 | 0.0 | 36.3 |

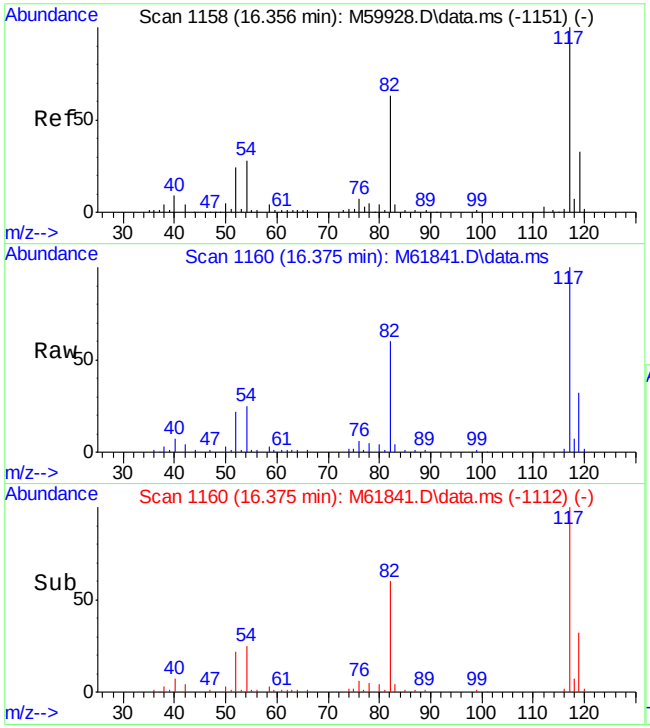



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:114 Resp: 196970

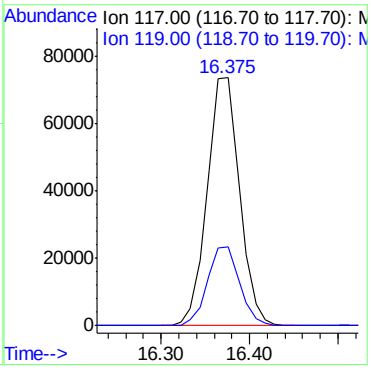


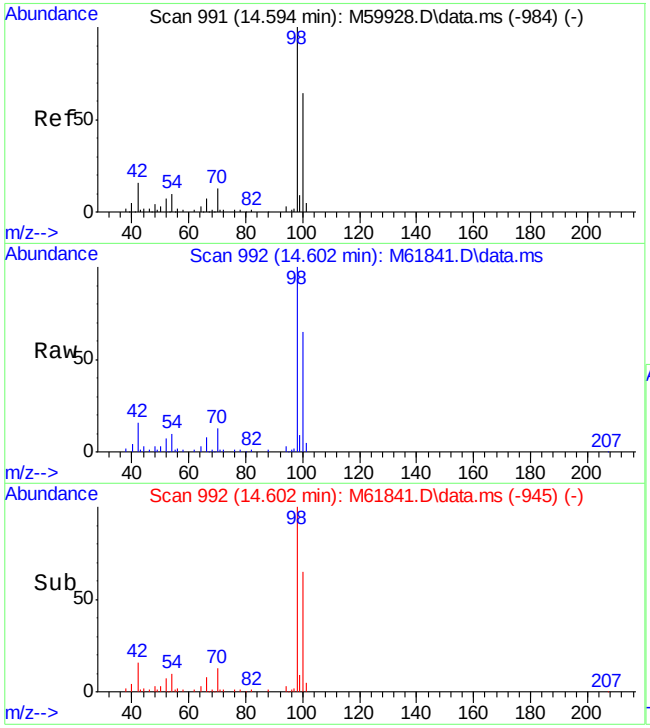



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.375 min Scan# 1160
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:117 Resp: 187494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.5 | 11.2 | 51.2 |

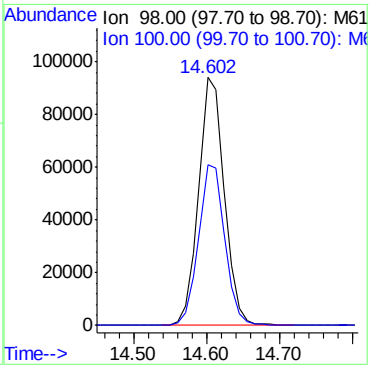


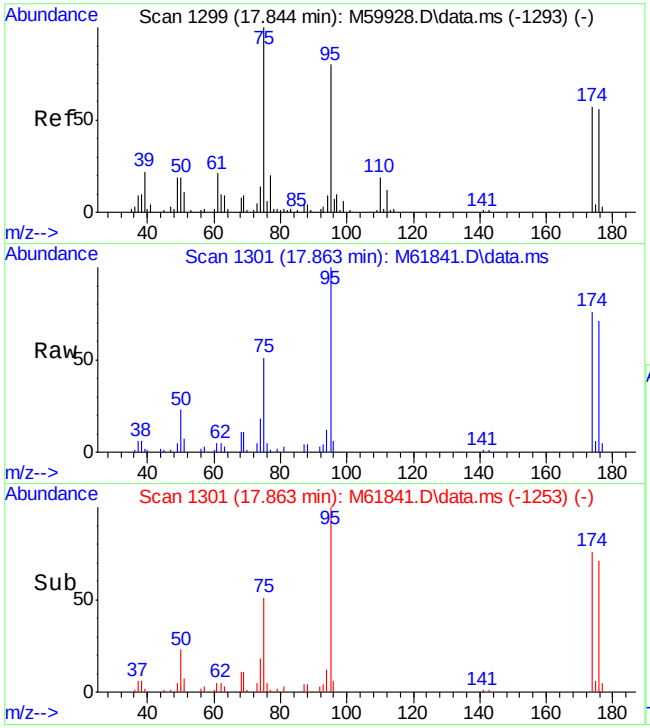




#56
Toluene-d8
Concen: 19.09 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 98 Resp: 233565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 44.3 | 84.3 |

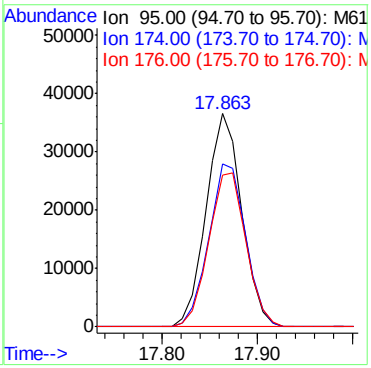


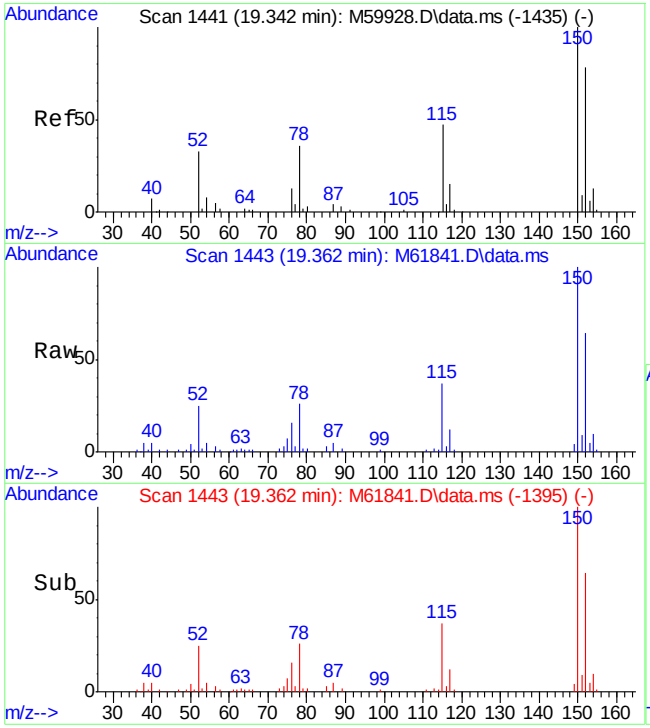



#74
4-Bromofluorobenzene
Concen: 19.60 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 95 Resp: 94313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 79.2 | 54.3 | 94.3 |
| 176 | 75.5 | 51.5 | 91.5 |

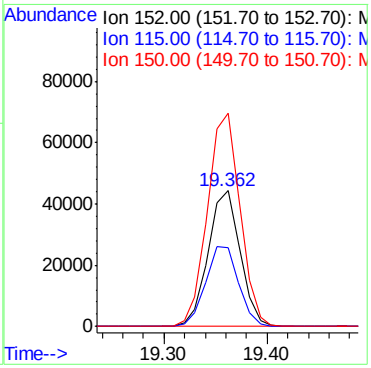


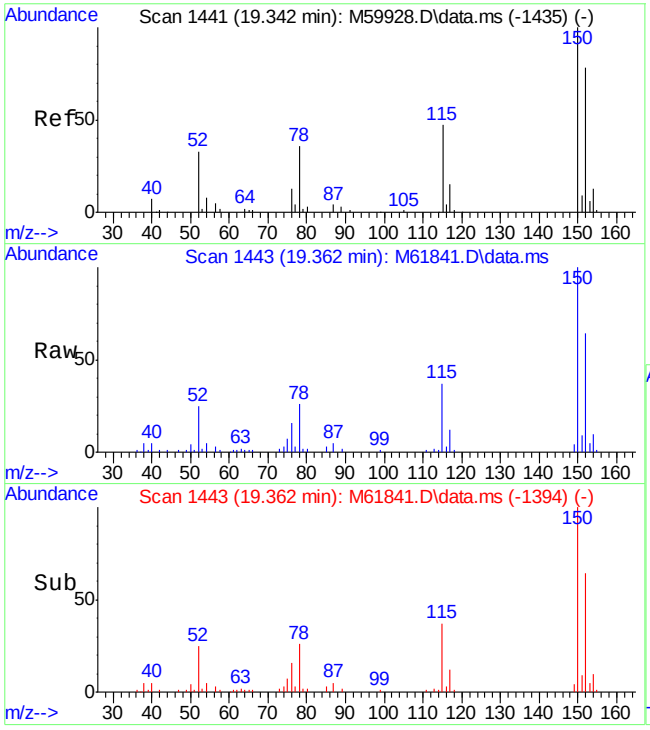




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:152 Resp: 95836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.5 | 40.9 | 80.9 |
| 150 | 159.5 | 178.6 | 218.6# |

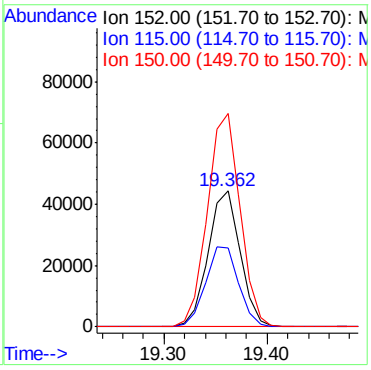


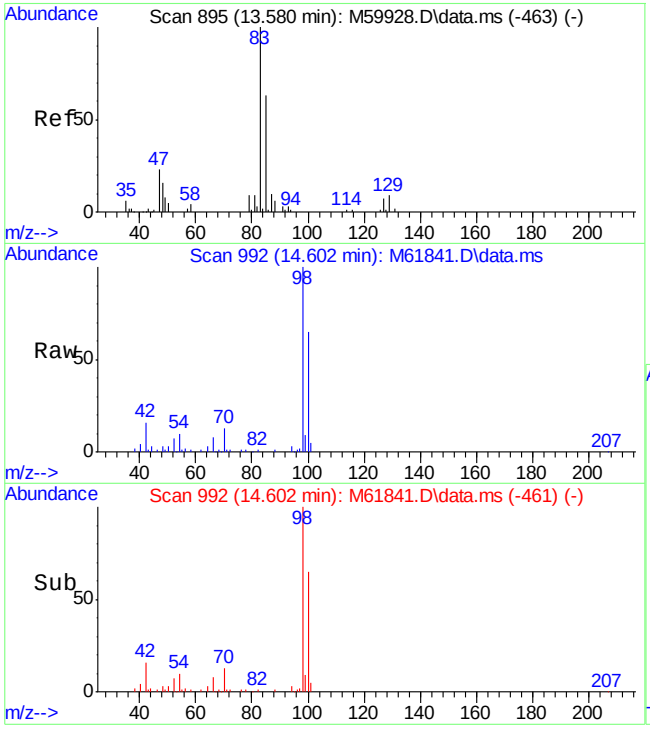



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:152 Resp: 95836

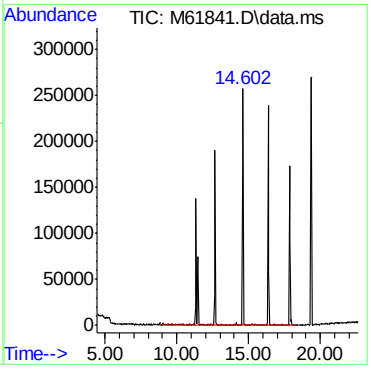
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.5 | 37.3 | 77.3 |
| 150 | 159.5 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 9.76 ppb m
RT: 14.602 min Scan# 992
Delta R.T. 1.052 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:TIC Resp: 3009394



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61841.D
Acq On : 13 Jul 2016 5:31 pm
Operator : johannat
Sample : C46446-8
Misc : MS1912,VM1859,5.25,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 03 18:24:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

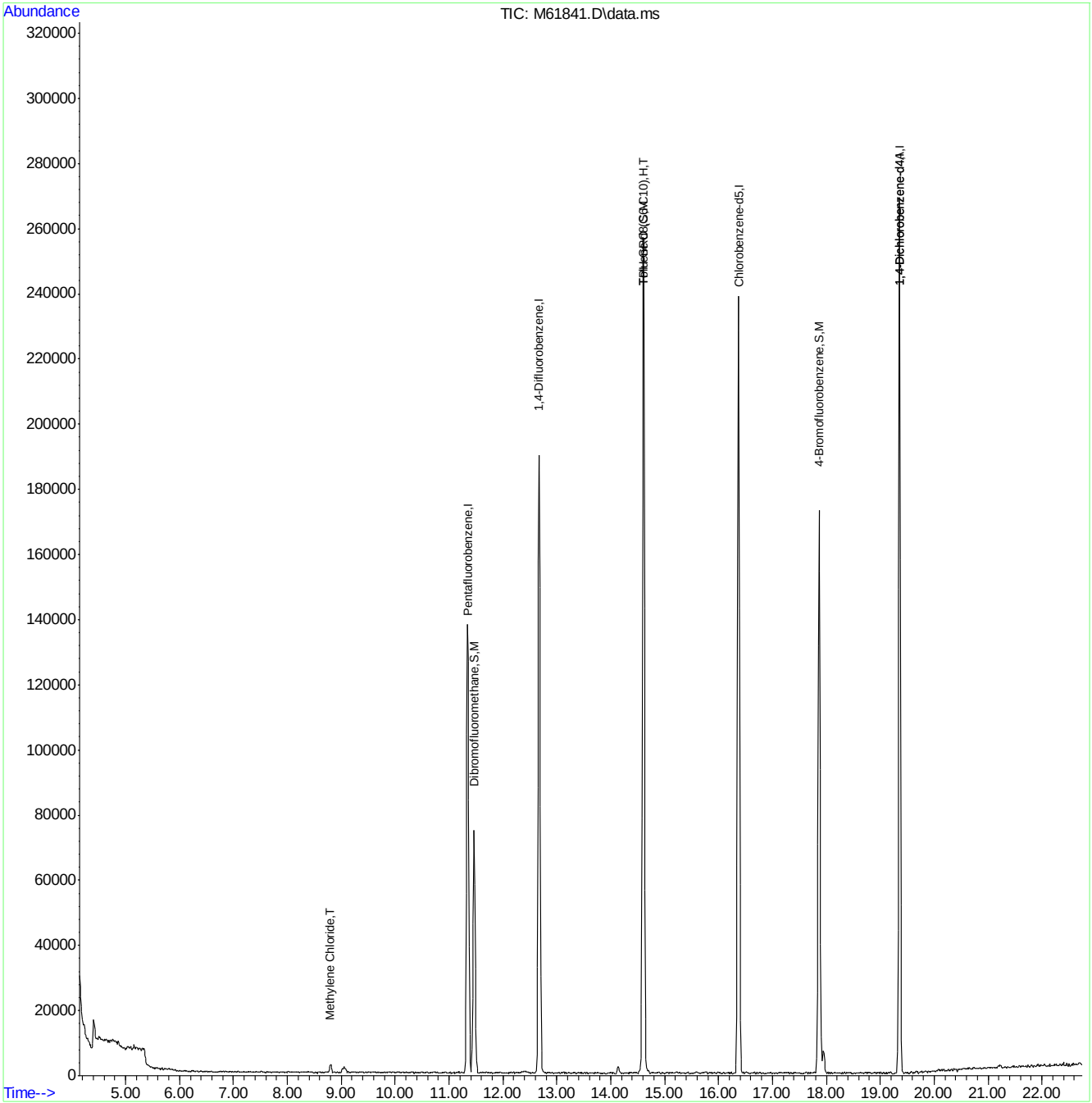
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.352 | 168 | 129794 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.671 | 114 | 196970 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.375 | 117 | 187494 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.362 | 152 | 95836 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.362 | 152 | 95836 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.468 | 111 | 68241 | 20.74 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 103.70% | | | |
| 56) Toluene-d8 | 14.602 | 98 | 233565 | 19.09 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 95.45% | | | |
| 74) 4-Bromofluorobenzene | 17.863 | 95 | 94313 | 19.60 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 98.00% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.798 | 84 | 1591 | 0.35 | ppb | # 55 |
| 100) TPH-GRO (C6-C10) | 14.602 | TIC | 3009394m | 9.76 | ppb | |

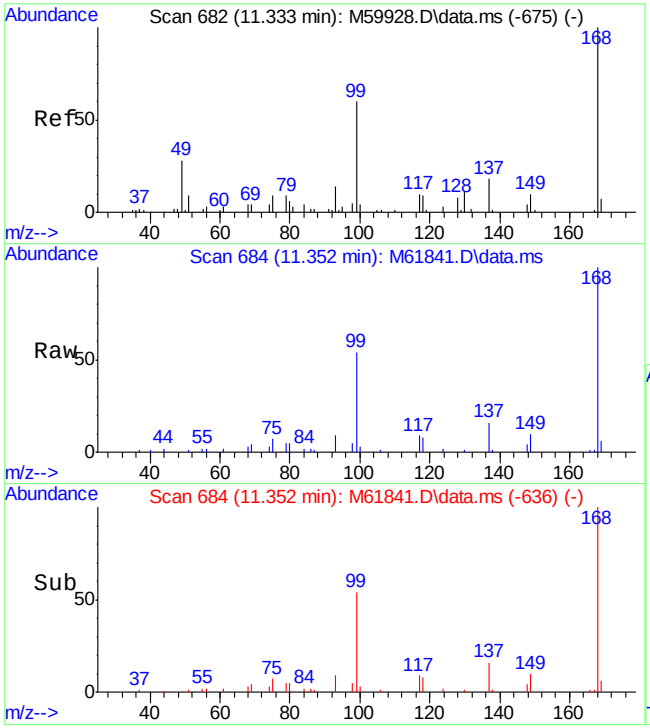
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61841.D
Acq On : 13 Jul 2016 5:31 pm
Operator : johannat
Sample : C46446-8
Misc : MS1912,VM1859,5.25,,,,1
ALS Vial : 15 Sample Multiplier: 1

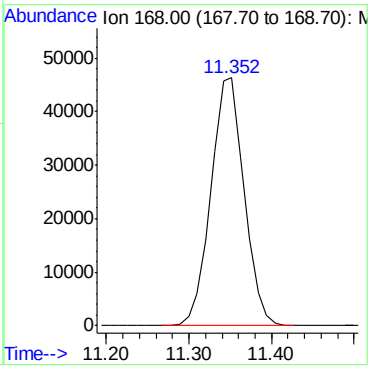
Quant Time: Aug 03 18:24:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

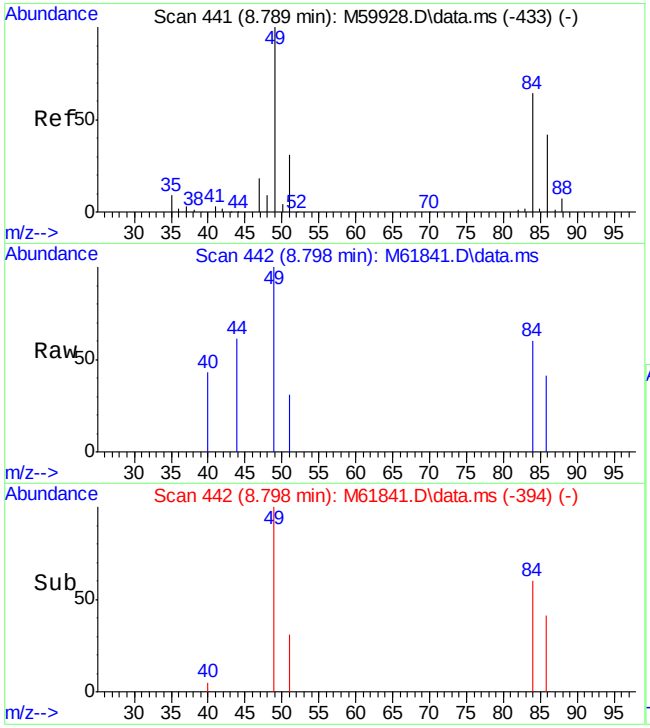





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.352 min Scan# 684
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:168 Resp: 129794

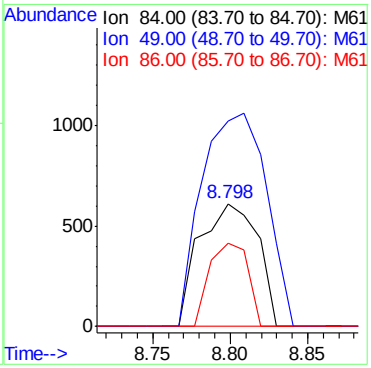


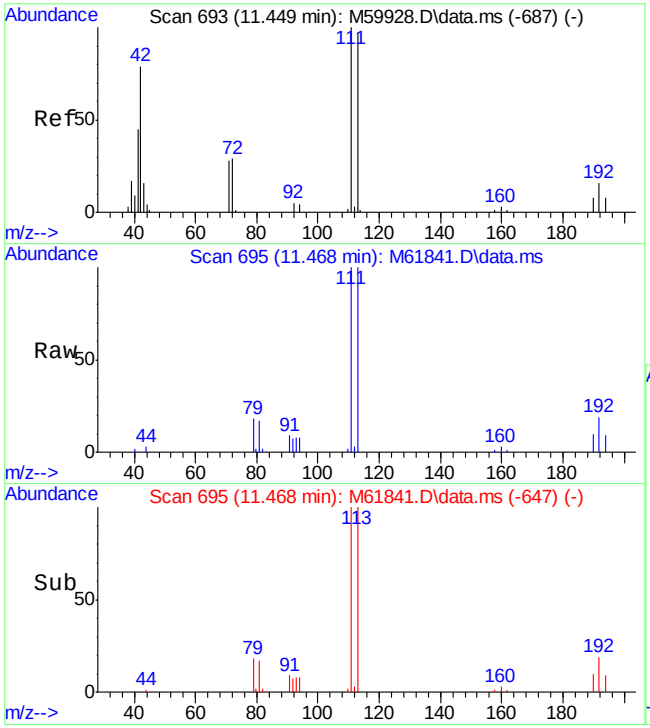




#19
Methylene Chloride
Concen: 0.35 ppb
RT: 8.798 min Scan# 442
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 84 Resp: 1591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 192.7 | 134.5 | 174.5# |
| 86 | 0.0 | 43.8 | 83.8# |

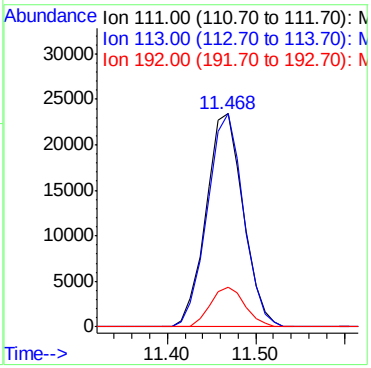


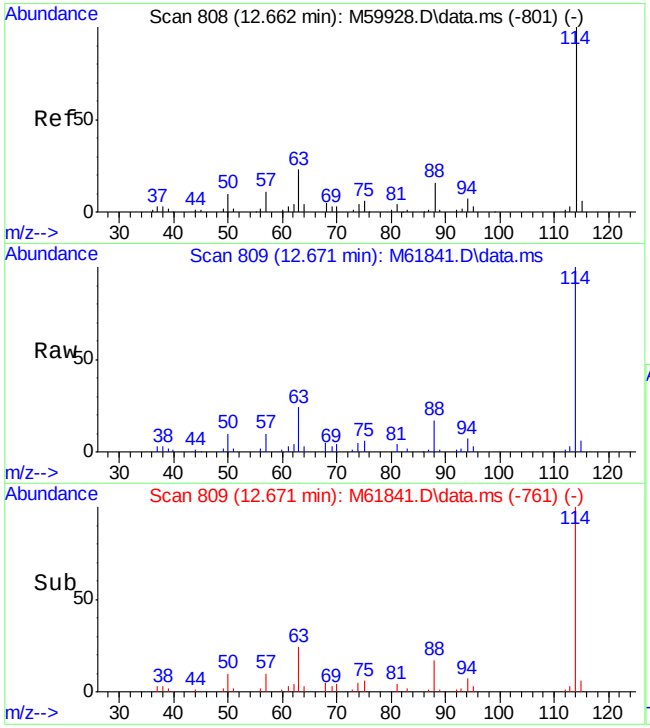



#36
Dibromofluoromethane
Concen: 20.74 ppb
RT: 11.468 min Scan# 695
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:111 Resp: 68241

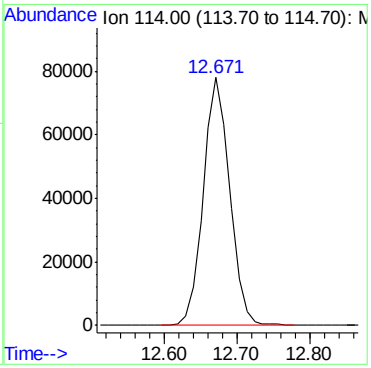
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 97.3 | 77.7 | 117.7 |
| 192 | 17.3 | 0.0 | 36.3 |

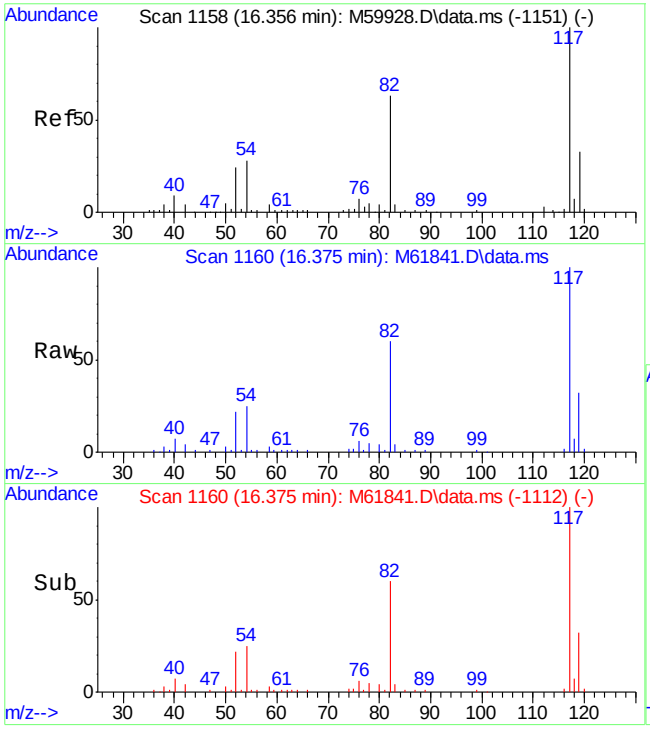



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.671 min Scan# 809
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:114 Resp: 196970

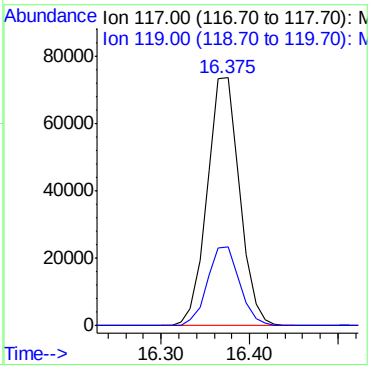


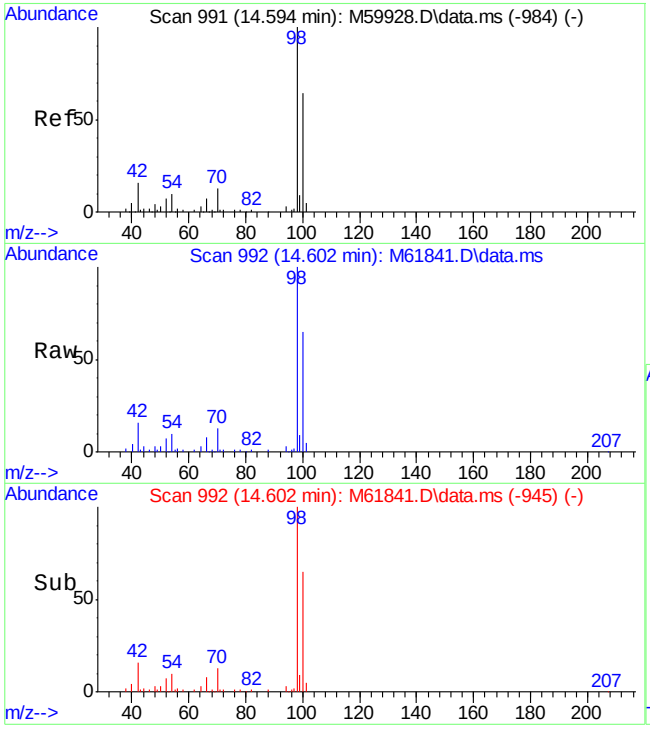



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.375 min Scan# 1160
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:117 Resp: 187494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 31.5 | 11.2 | 51.2 |

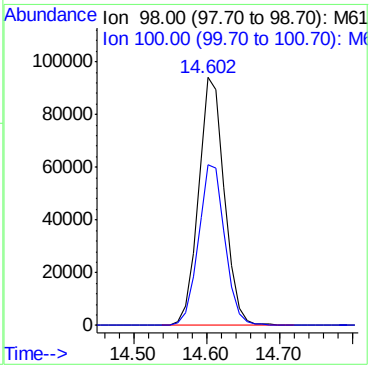


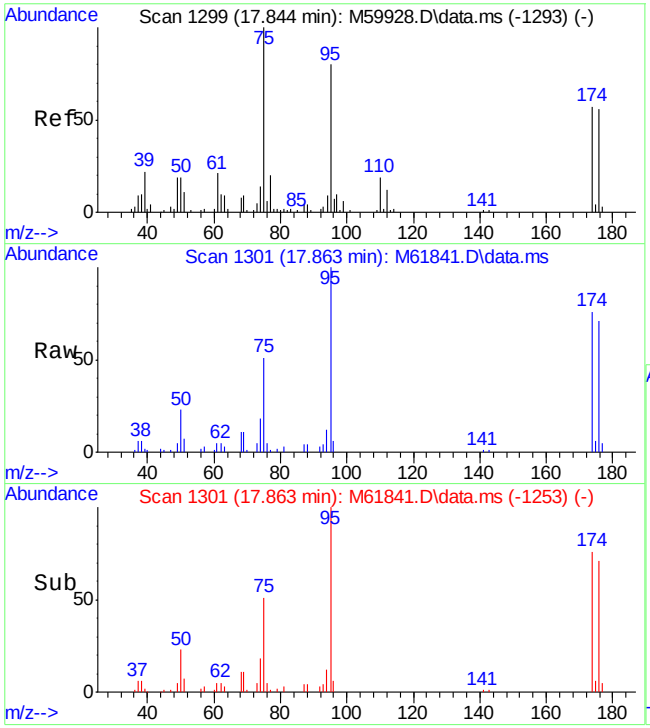




#56
Toluene-d8
Concen: 19.09 ppb
RT: 14.602 min Scan# 992
Delta R.T. -0.002 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 98 Resp: 233565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 44.3 | 84.3 |

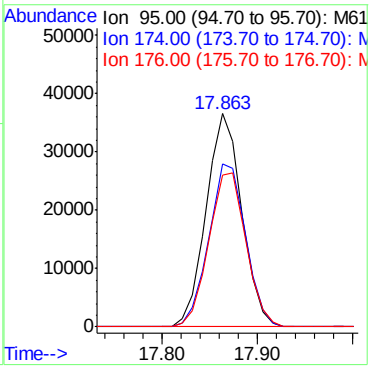


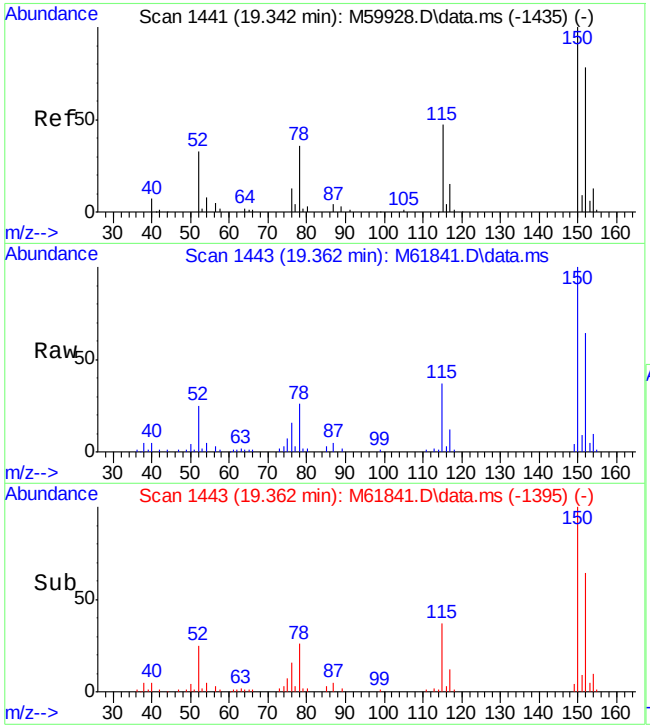



#74
4-Bromofluorobenzene
Concen: 19.60 ppb
RT: 17.863 min Scan# 1301
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion: 95 Resp: 94313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 79.2 | 54.3 | 94.3 |
| 176 | 75.5 | 51.5 | 91.5 |

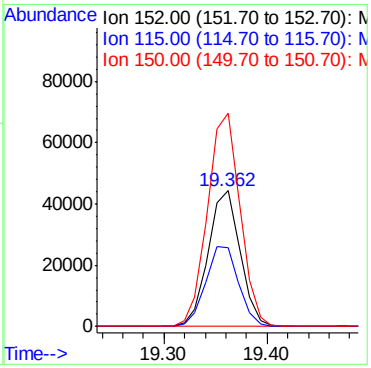


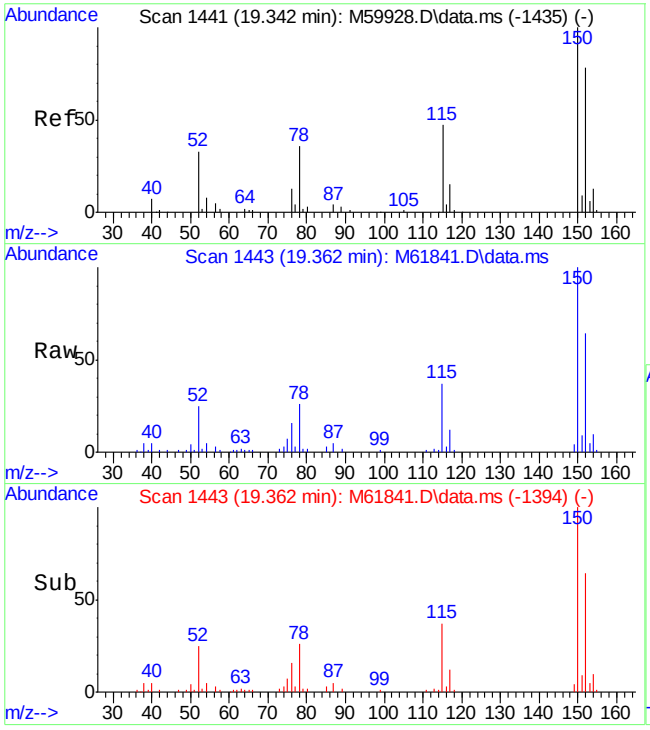




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.009 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:152 Resp: 95836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.5 | 40.9 | 80.9 |
| 150 | 159.5 | 178.6 | 218.6# |

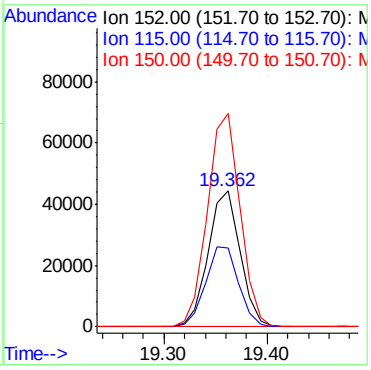


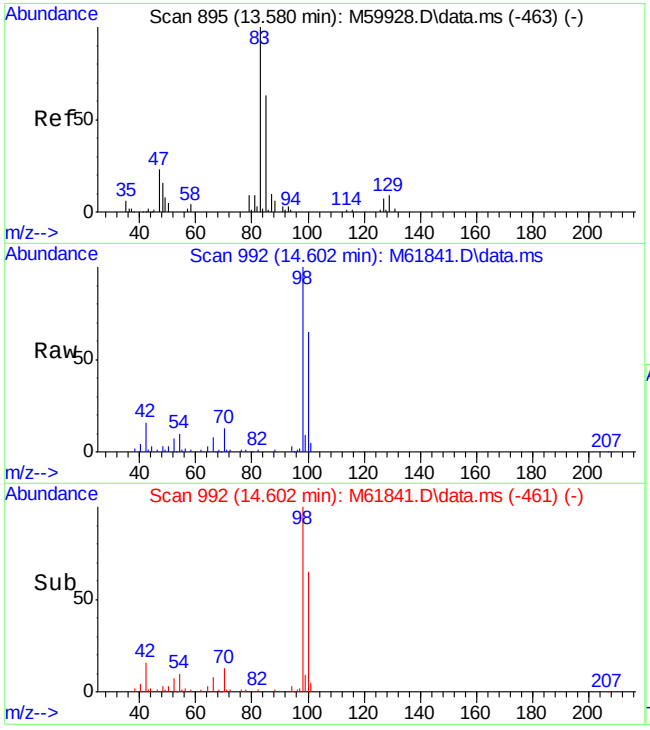



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.362 min Scan# 1443
Delta R.T. 0.020 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:152 Resp: 95836

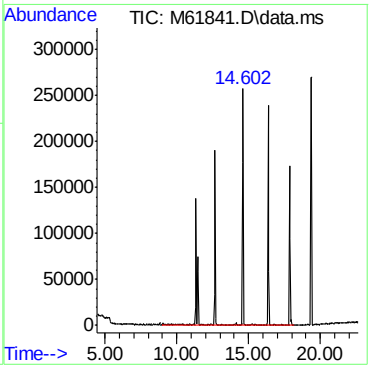
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.5 | 37.3 | 77.3 |
| 150 | 159.5 | 176.0 | 216.0# |




#100
TPH-GRO (C6-C10)
Concen: 9.76 ppb m
RT: 14.602 min Scan# 992
Delta R.T. 1.052 min
Lab File: M61841.D
Acq: 13 Jul 2016 5:31 pm

Tgt Ion:TIC Resp: 3009394



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61837.D
Acq On : 13 Jul 2016 3:33 pm
Operator : johannat
Sample : C46446-9
Misc : MS1912,VM1859,5.24,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 18:20:39 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.350 | 168 | 147491 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.669 | 114 | 221089 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 212864 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 111369 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 111369 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 73983 | 19.78 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 98.90% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 262787 | 18.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | |
| 74) 4-Bromofluorobenzene | 17.861 | 95 | 108516 | 19.87 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 99.35% | | | |

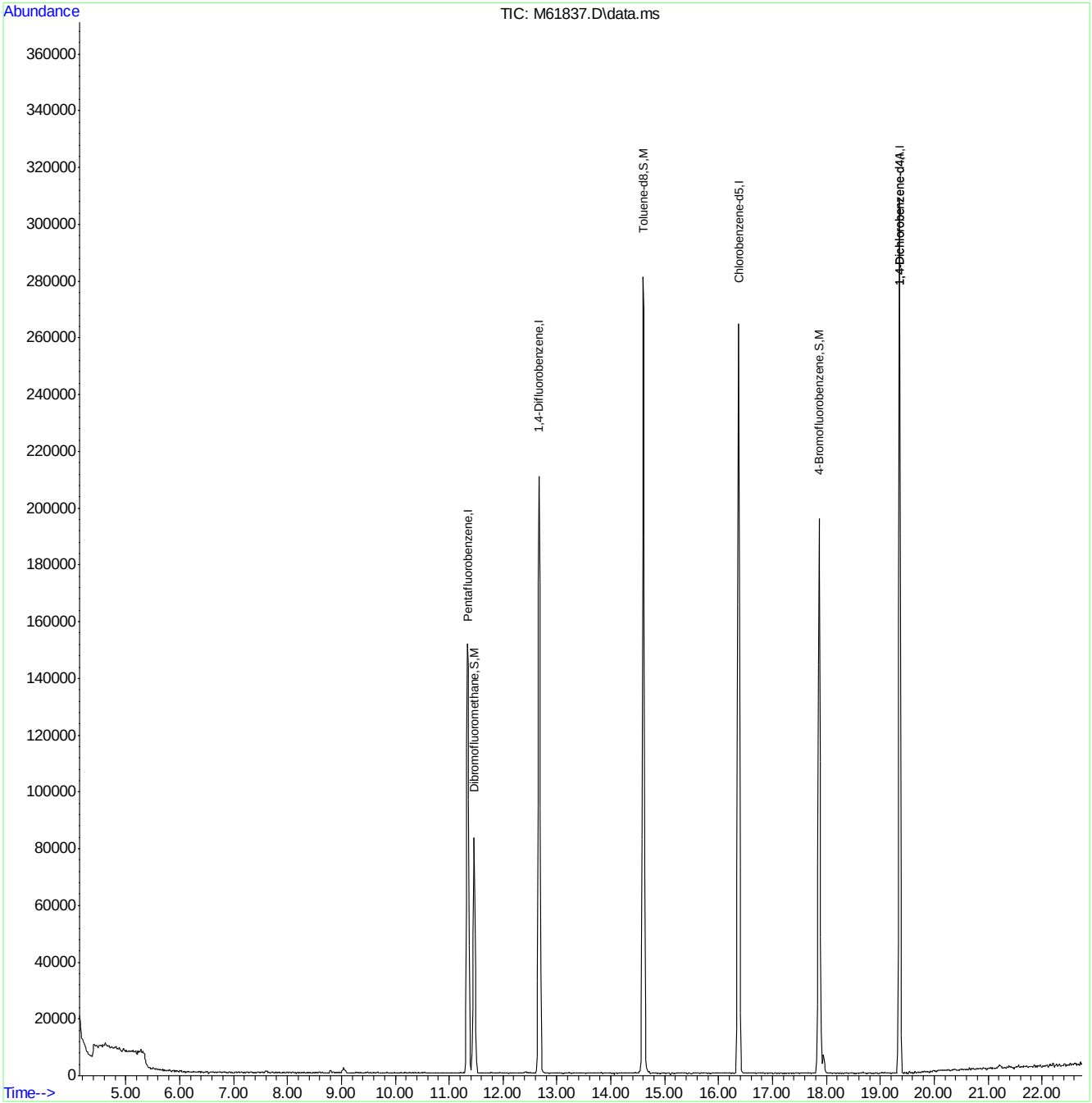
| Target Compounds | Qvalue |
|---|---|

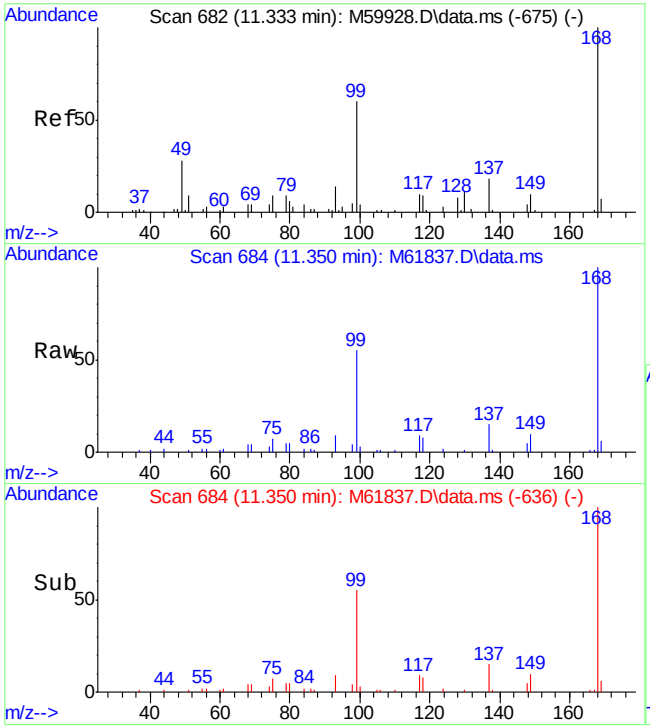
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61837.D
Acq On : 13 Jul 2016 3:33 pm
Operator : johannat
Sample : C46446-9
Misc : MS1912,VM1859,5.24,,,,1
ALS Vial : 11 Sample Multiplier: 1

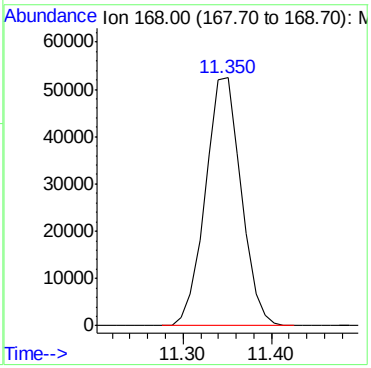
Quant Time: Aug 03 18:20:39 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

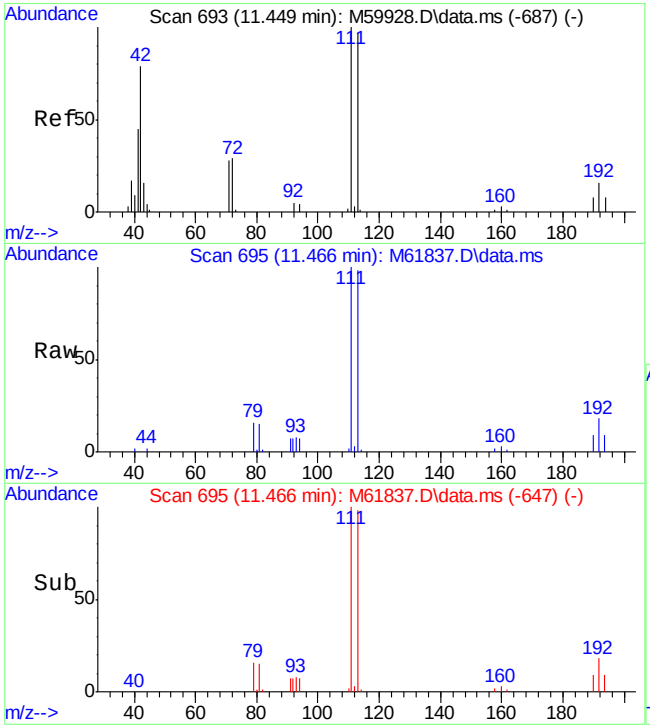





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.350 min Scan# 684
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:168 Resp: 147491

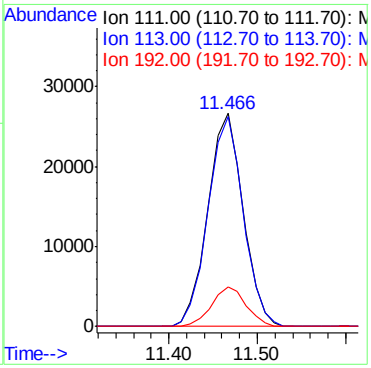


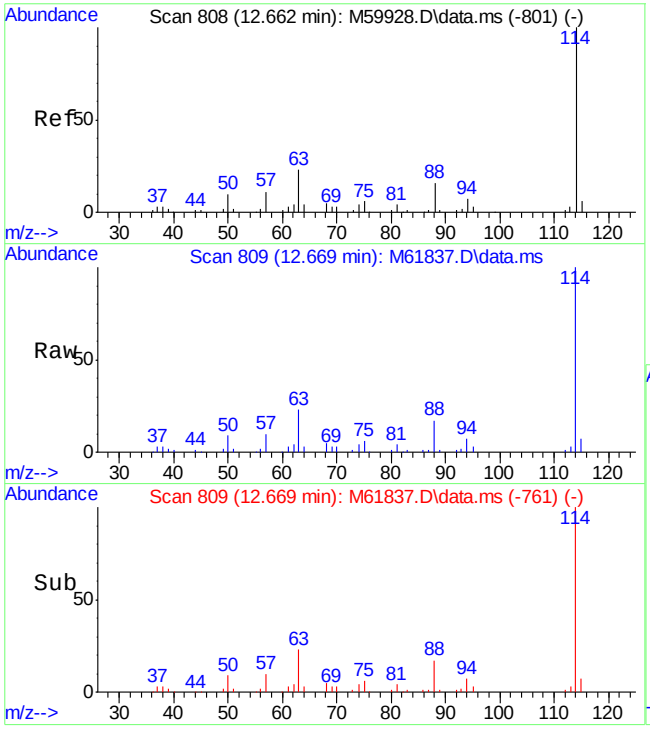




#36
Dibromofluoromethane
Concen: 19.78 ppb
RT: 11.466 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:111 Resp: 73983

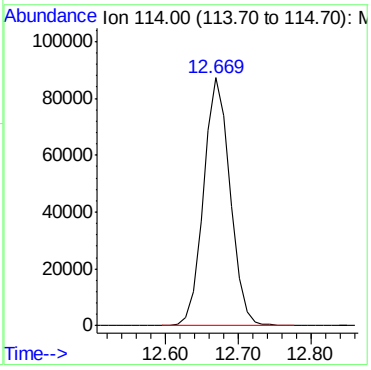
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.2 | 77.7 | 117.7 |
| 192 | 18.0 | 0.0 | 36.3 |

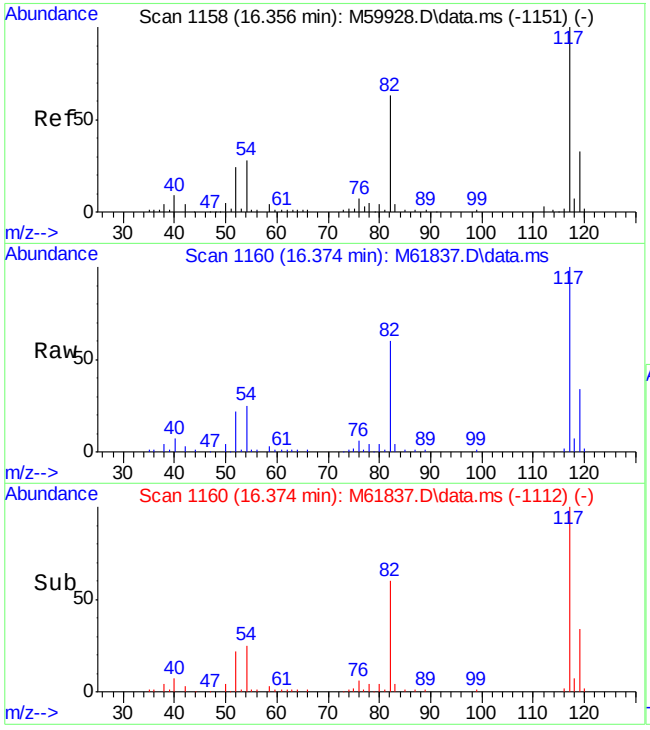





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.669 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:114 Resp: 221089

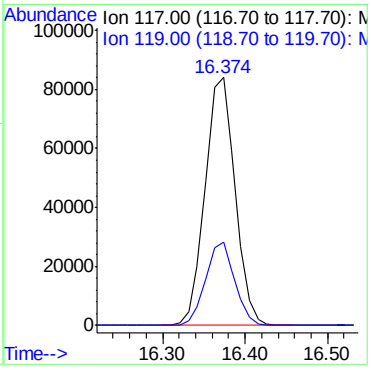


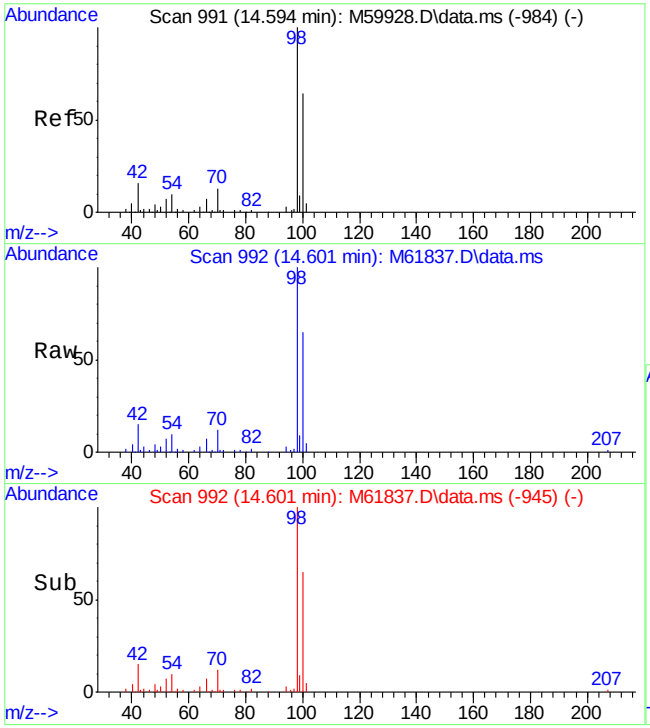




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:117 Resp: 212864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.5 | 11.2 | 51.2 |

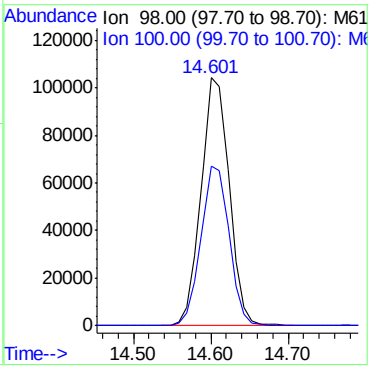


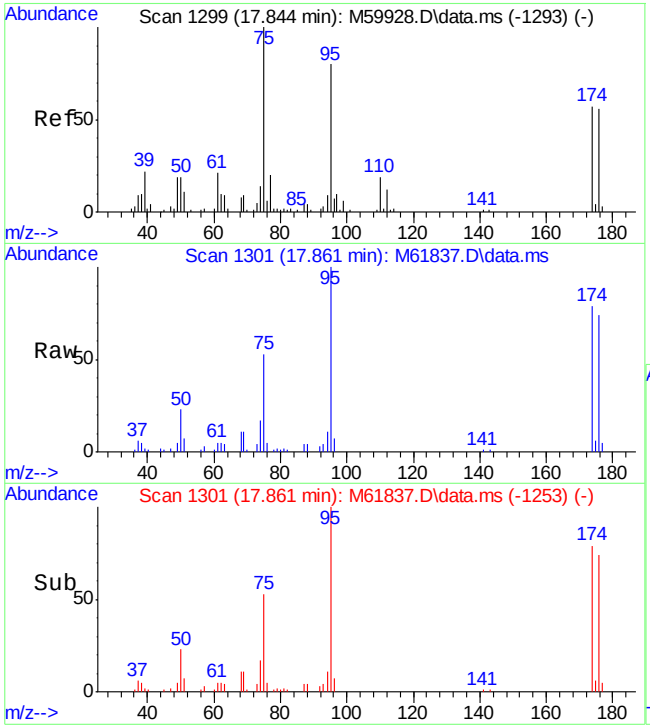



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion: 98 Resp: 262787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.4 | 44.3 | 84.3 |

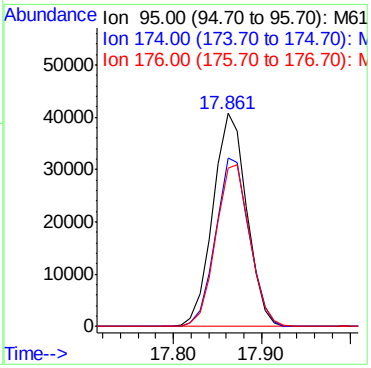


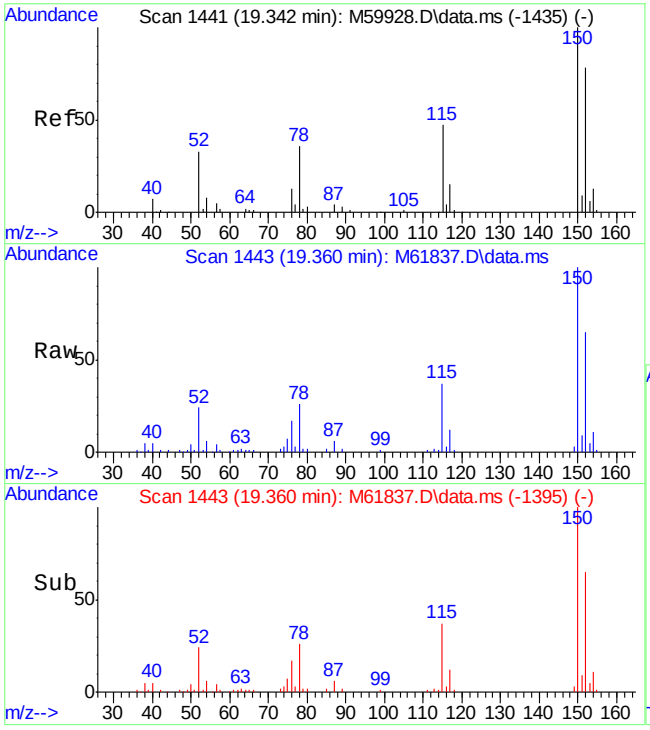




#74
4-Bromofluorobenzene
Concen: 19.87 ppb
RT: 17.861 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion: 95 Resp: 108516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 78.2 | 54.3 | 94.3 |
| 176 | 76.1 | 51.5 | 91.5 |

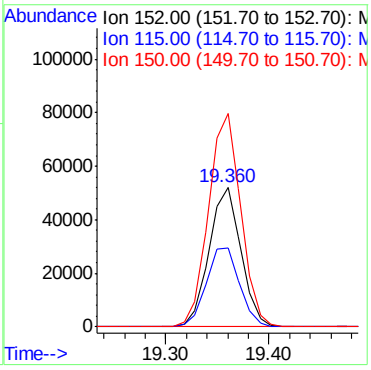


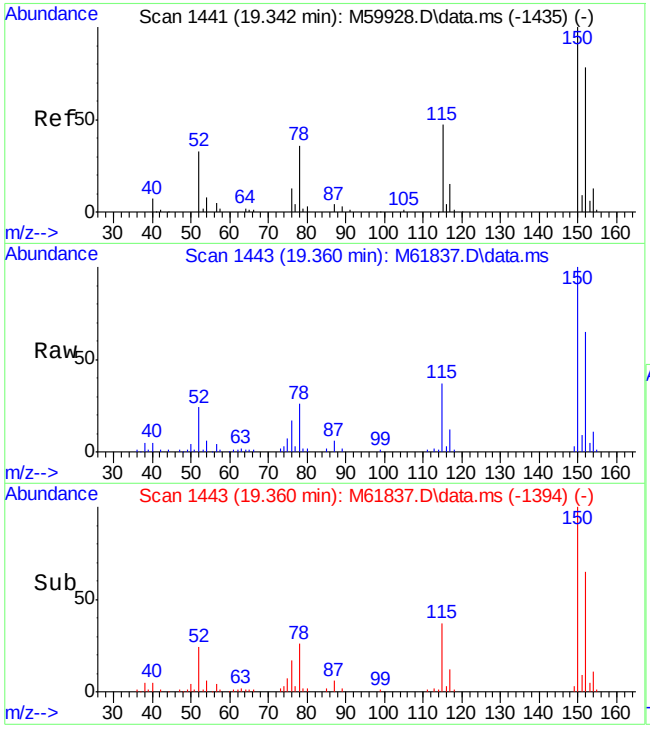



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:152 Resp: 111369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.1 | 40.9 | 80.9 |
| 150 | 155.2 | 178.6 | 218.6# |

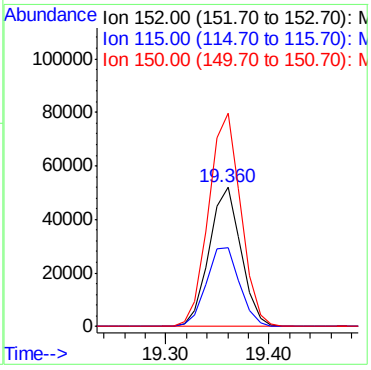



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:152 Resp: 111369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.1 | 37.3 | 77.3 |
| 150 | 155.2 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61837.D
Acq On : 13 Jul 2016 3:33 pm
Operator : johannat
Sample : C46446-9
Misc : MS1912,VM1859,5.24,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 18:20:39 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.350 | 168 | 147491 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.669 | 114 | 221089 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 212864 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.360 | 152 | 111369 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.360 | 152 | 111369 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.466 | 111 | 73983 | 19.78 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 98.90% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 262787 | 18.92 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 94.60% | | | |
| 74) 4-Bromofluorobenzene | 17.861 | 95 | 108516 | 19.87 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 99.35% | | | |

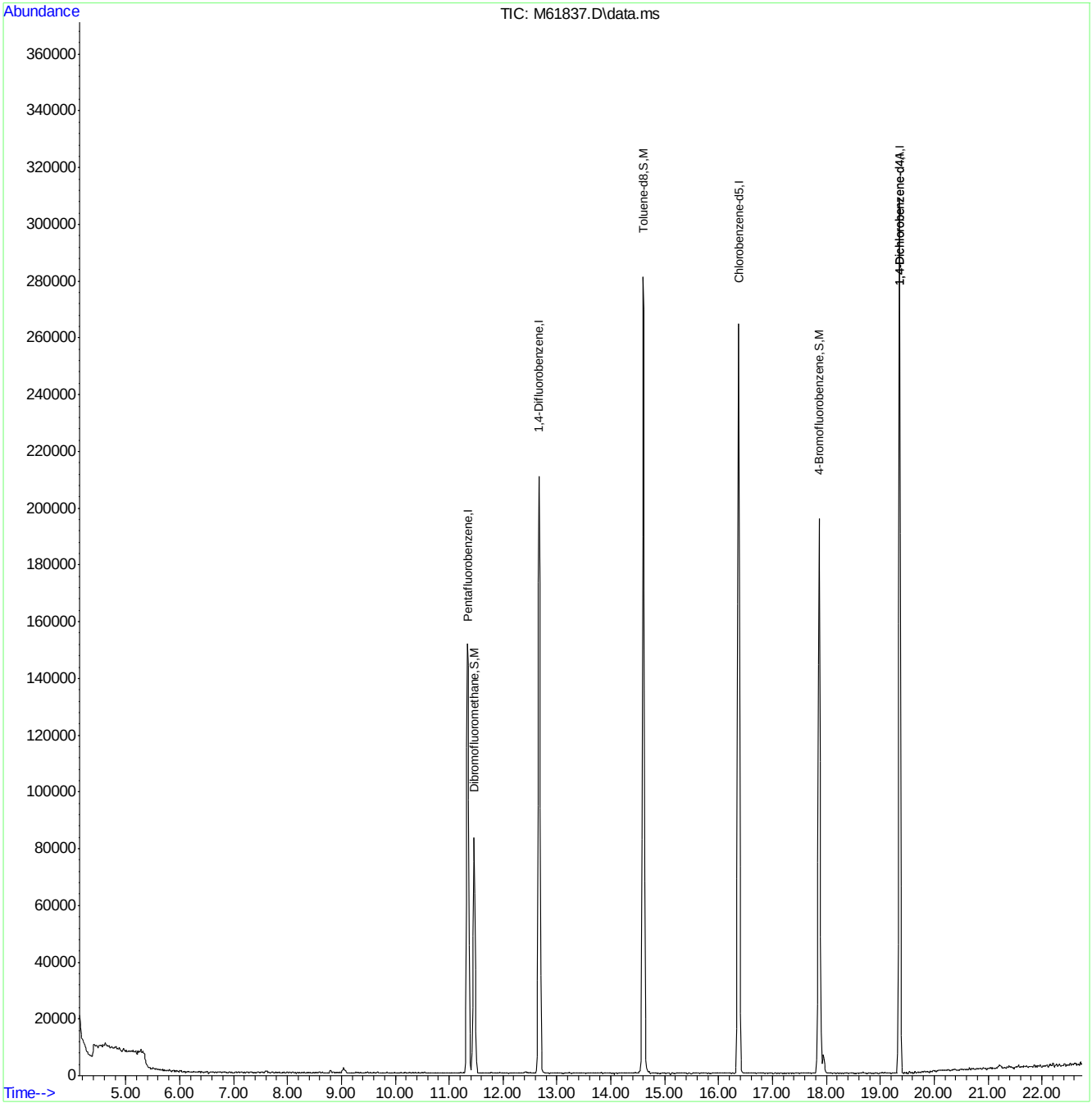
| Target Compounds | Qvalue |
|---|---|

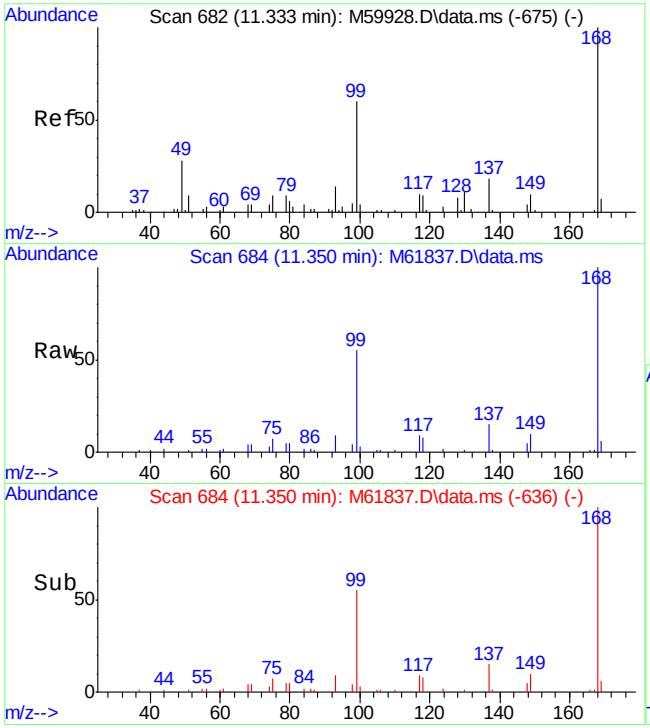
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61837.D
Acq On : 13 Jul 2016 3:33 pm
Operator : johannat
Sample : C46446-9
Misc : MS1912,VM1859,5.24,,,,1
ALS Vial : 11 Sample Multiplier: 1

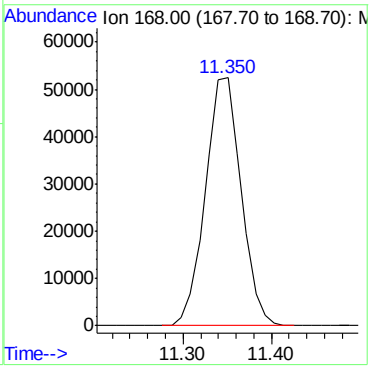
Quant Time: Aug 03 18:20:39 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

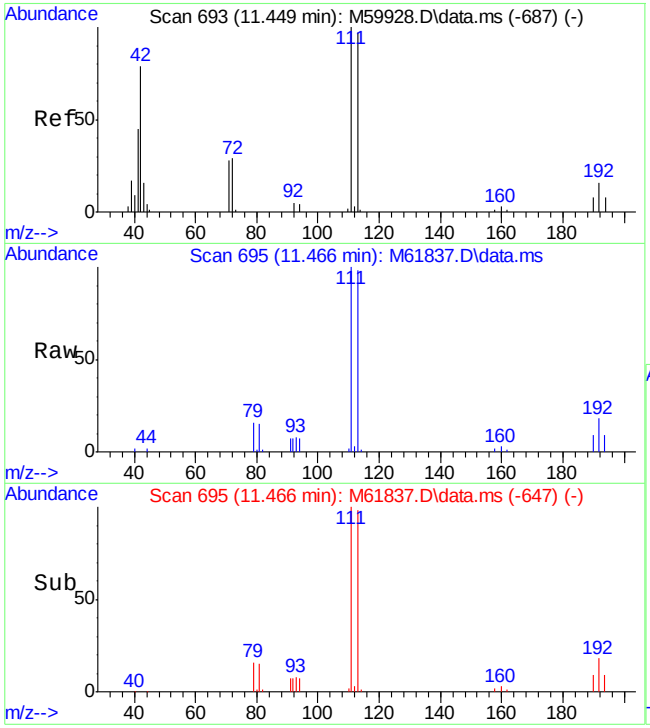





#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.350 min Scan# 684
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:168 Resp: 147491

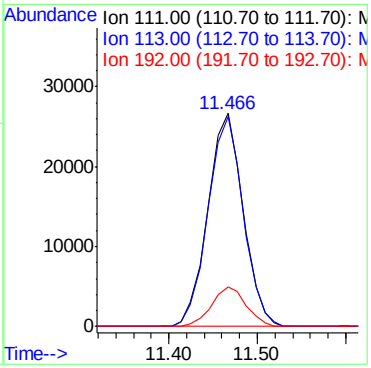


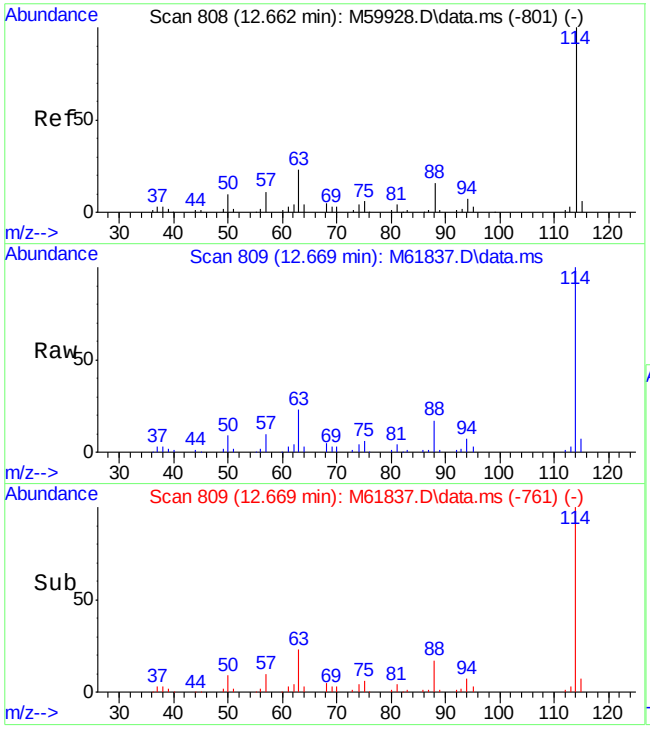




#36
Dibromofluoromethane
Concen: 19.78 ppb
RT: 11.466 min Scan# 695
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:111 Resp: 73983

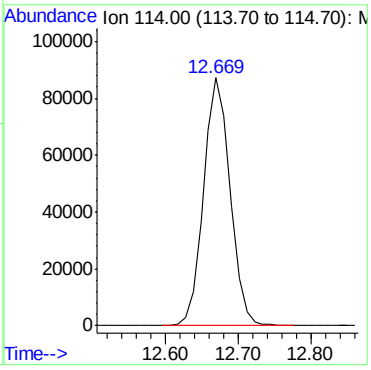
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 98.2 | 77.7 | 117.7 |
| 192 | 18.0 | 0.0 | 36.3 |

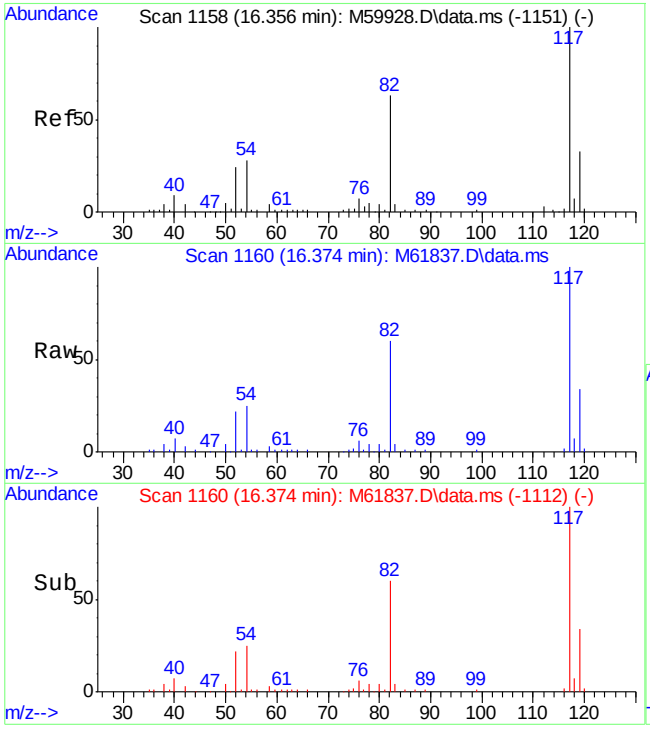





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.669 min Scan# 809
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:114 Resp: 221089

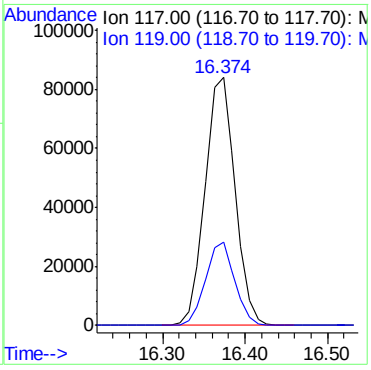


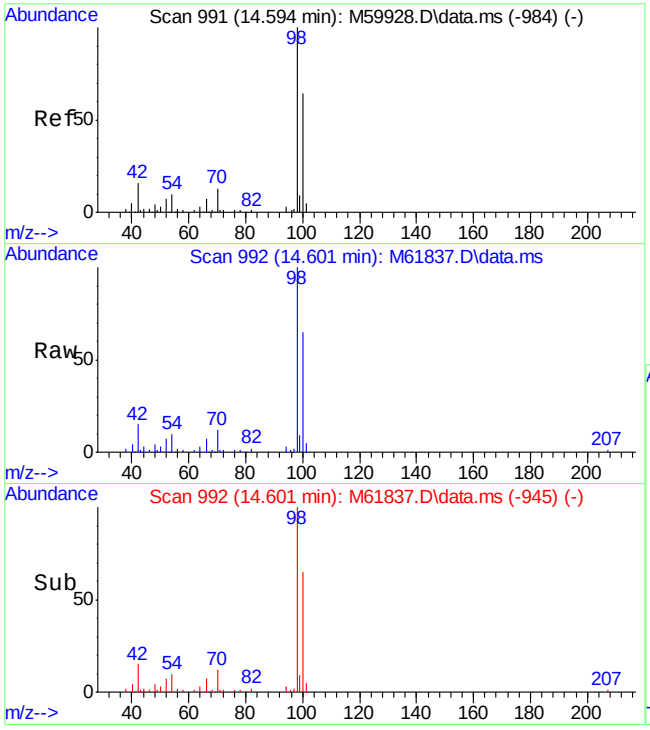




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:117 Resp: 212864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.5 | 11.2 | 51.2 |

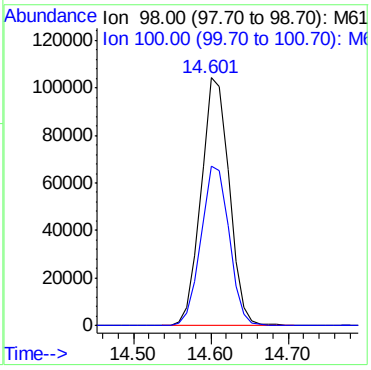


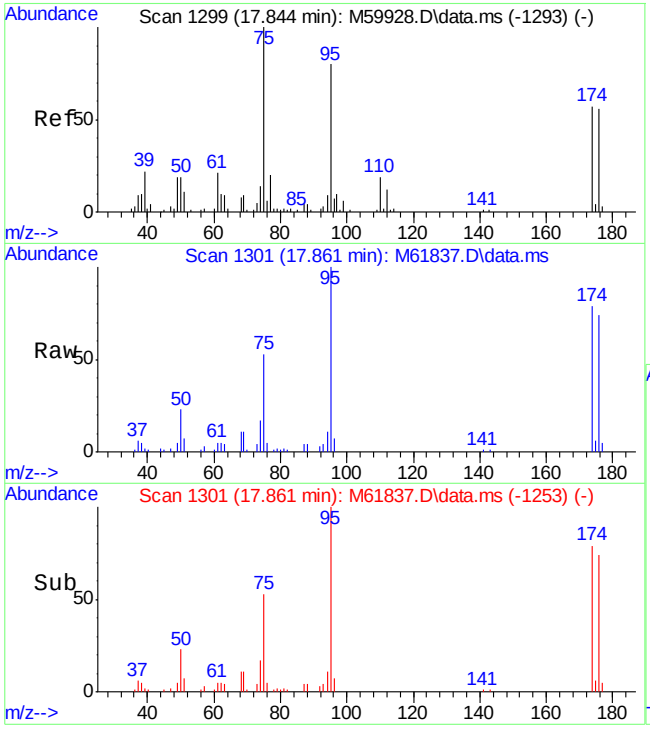



#56
Toluene-d8
Concen: 18.92 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion: 98 Resp: 262787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.4 | 44.3 | 84.3 |

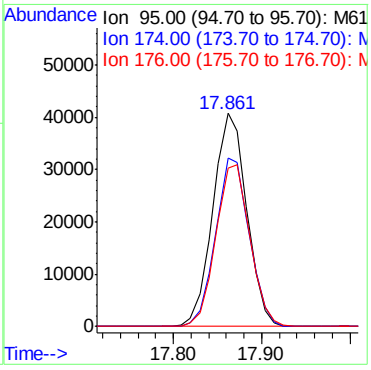


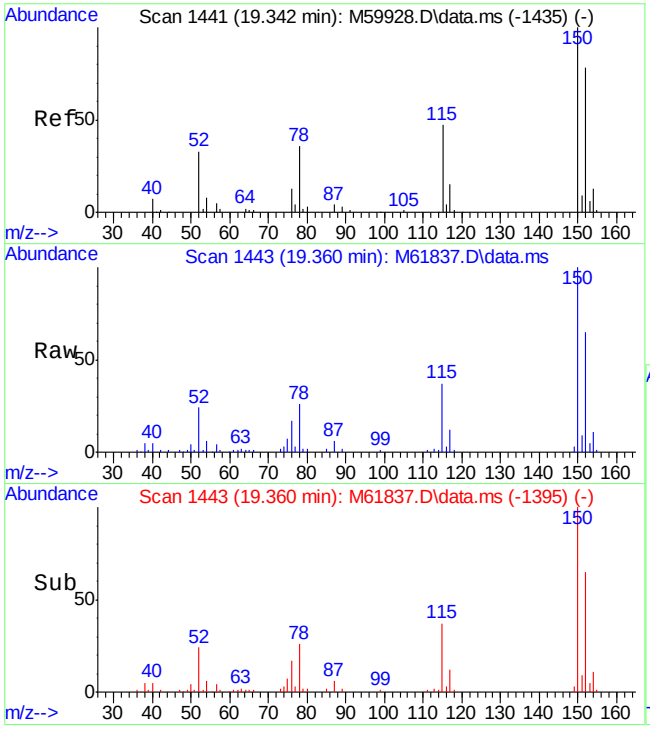




#74
4-Bromofluorobenzene
Concen: 19.87 ppb
RT: 17.861 min Scan# 1301
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion: 95 Resp: 108516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 78.2 | 54.3 | 94.3 |
| 176 | 76.1 | 51.5 | 91.5 |

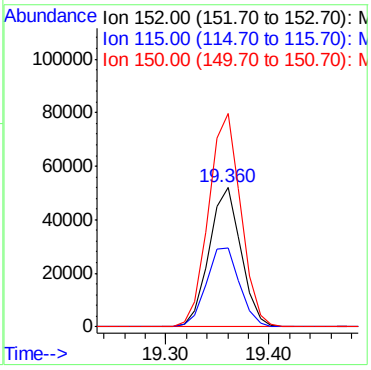


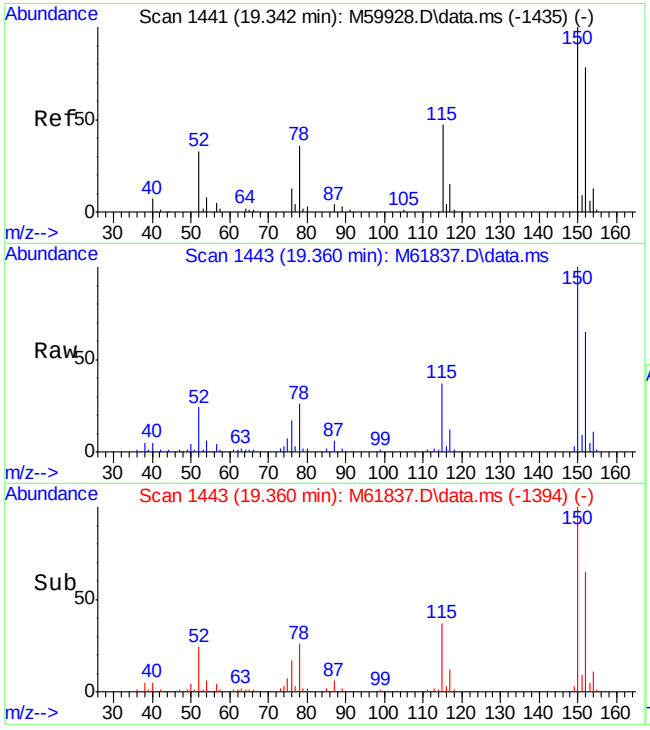



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.007 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:152 Resp: 111369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.1 | 40.9 | 80.9 |
| 150 | 155.2 | 178.6 | 218.6# |

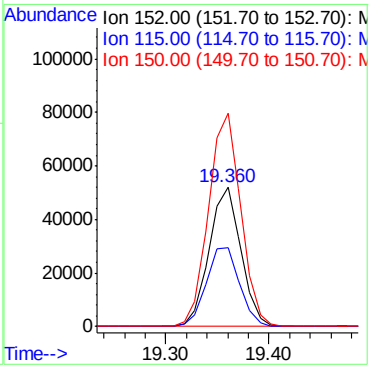



#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.360 min Scan# 1443
Delta R.T. 0.018 min
Lab File: M61837.D
Acq: 13 Jul 2016 3:33 pm

Tgt Ion:152 Resp: 111369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 59.1 | 37.3 | 77.3 |
| 150 | 155.2 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61834.D
Acq On : 13 Jul 2016 1:58 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1859,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:34:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

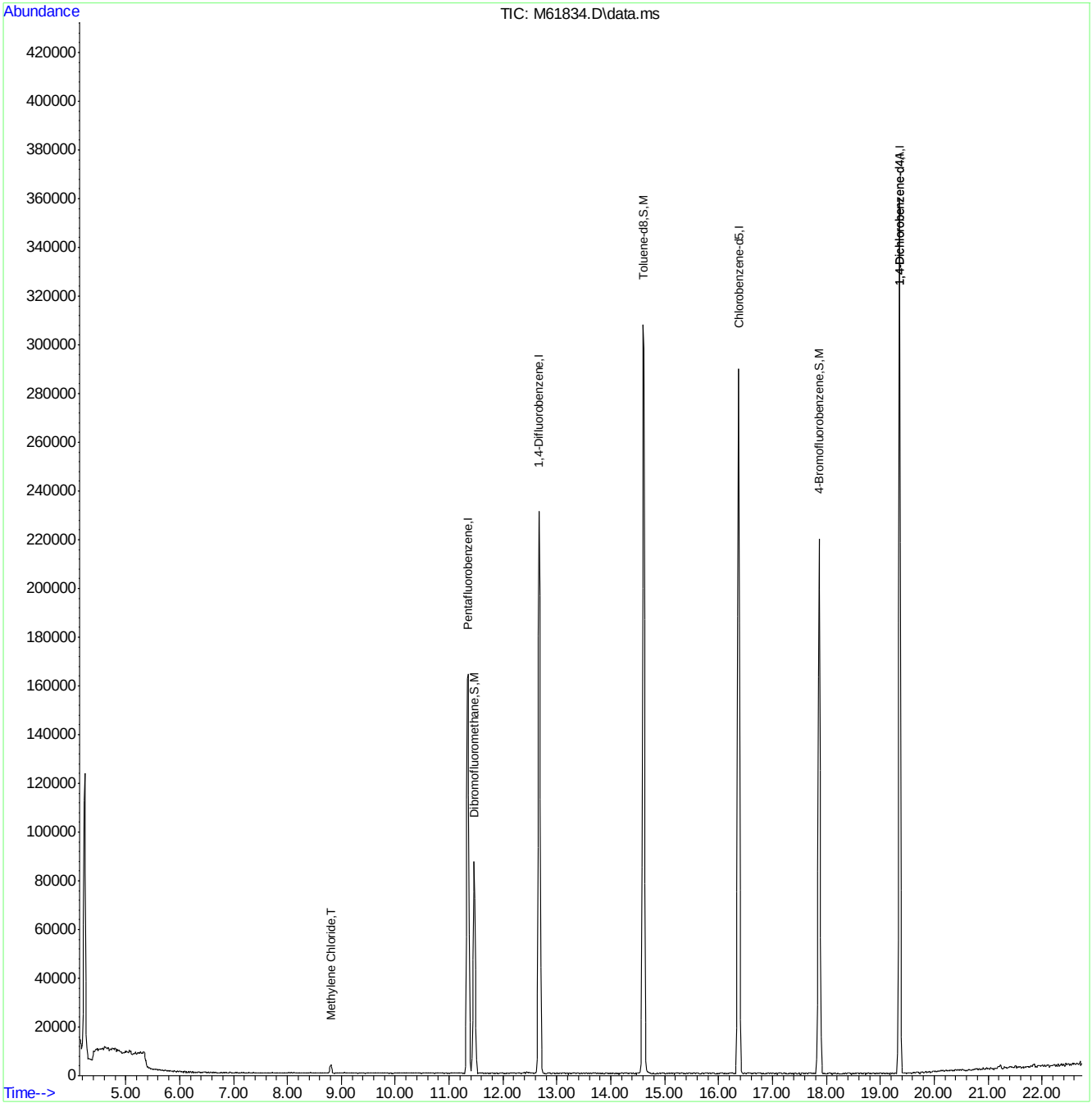
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.351 | 168 | 163557 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.670 | 114 | 244456 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.374 | 117 | 235313 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.361 | 152 | 128649 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.361 | 152 | 128649 | 20.00 | ppb | 0.02 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.467 | 111 | 79332 | 19.13 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 95.65% | | | |
| 56) Toluene-d8 | 14.601 | 98 | 285757 | 18.61 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 93.05% | | | |
| 74) 4-Bromofluorobenzene | 17.862 | 95 | 122149 | 20.23 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 101.15% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 19) Methylene Chloride | 8.808 | 84 | 2606 | 0.45 | ppb | # 75 |

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

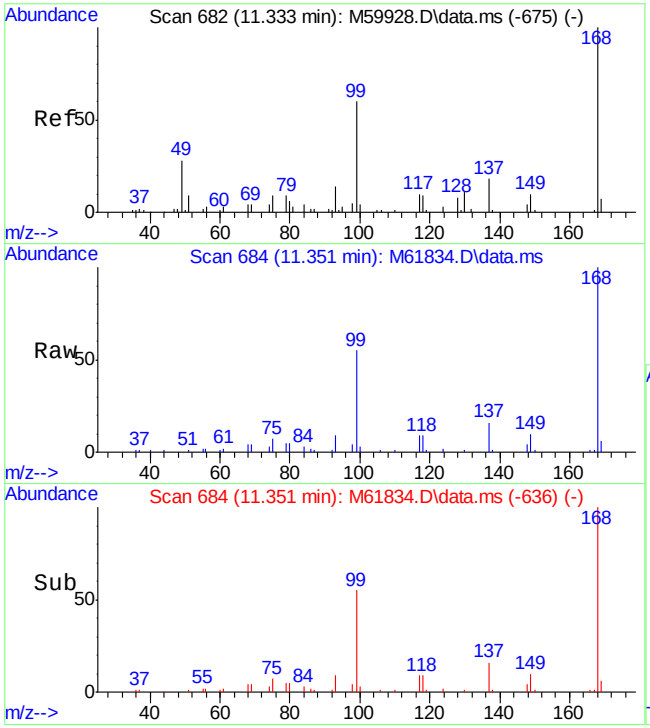
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160713\
Data File : M61834.D
Acq On : 13 Jul 2016 1:58 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1859,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 13 16:34:20 2016
Quant Method : C:\MSDChem\1\METHODS\VM1848S.M
Quant Title : EPA 8260B
QLast Update : Fri Jun 24 10:07:55 2016
Response via : Initial Calibration

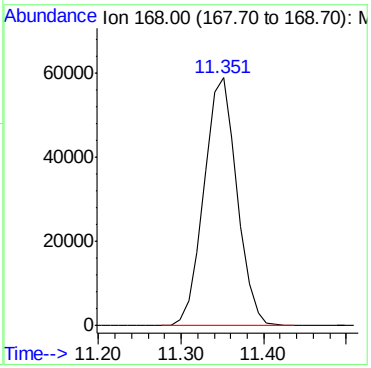


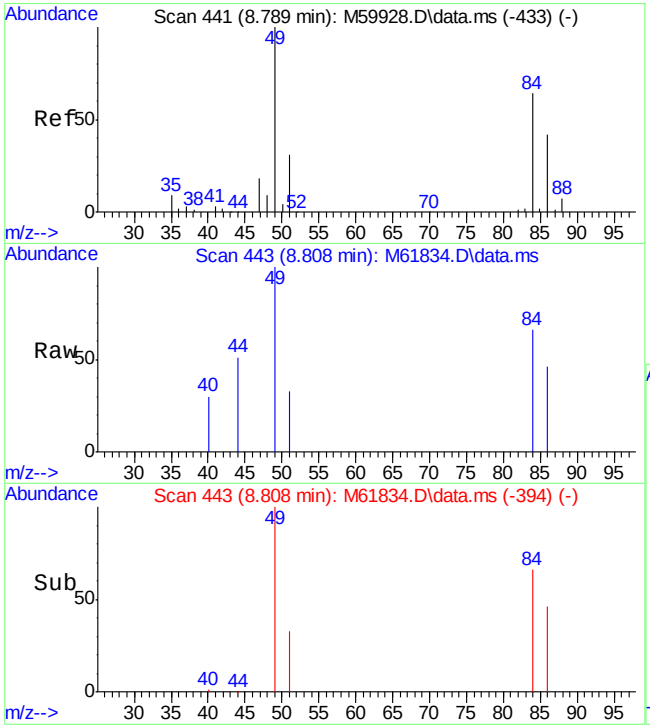

VM1848S.M Wed Jul 13 16:36:14 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.351 min Scan# 684
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:168 Resp: 163557

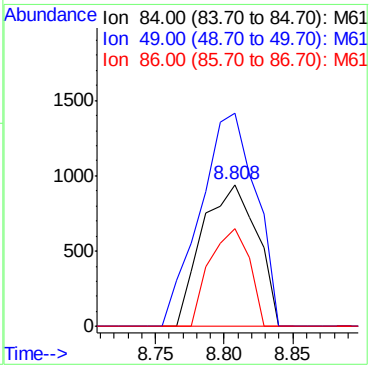


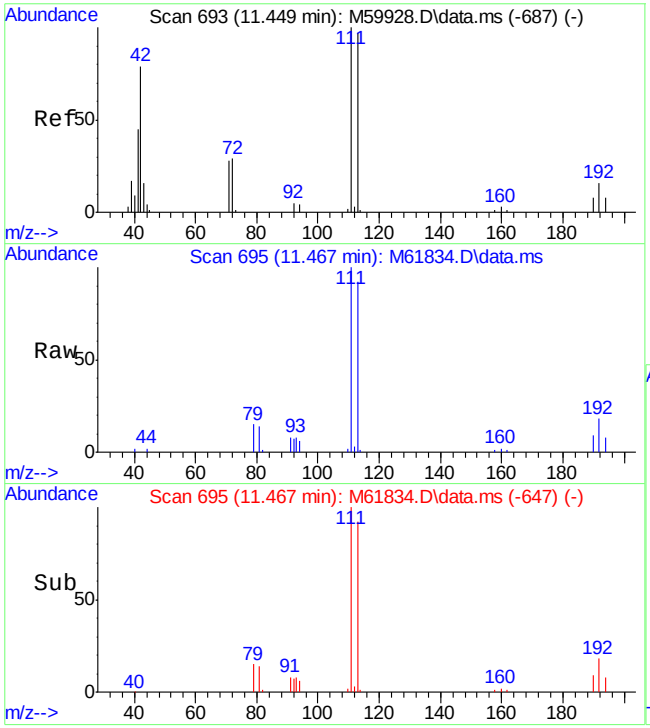




#19
Methylene Chloride
Concen: 0.45 ppb
RT: 8.808 min Scan# 443
Delta R.T. 0.018 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 84 Resp: 2606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 152.3 | 134.5 | 174.5 |
| 86 | 0.0 | 43.8 | 83.8# |

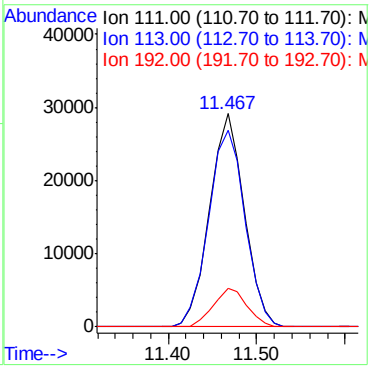


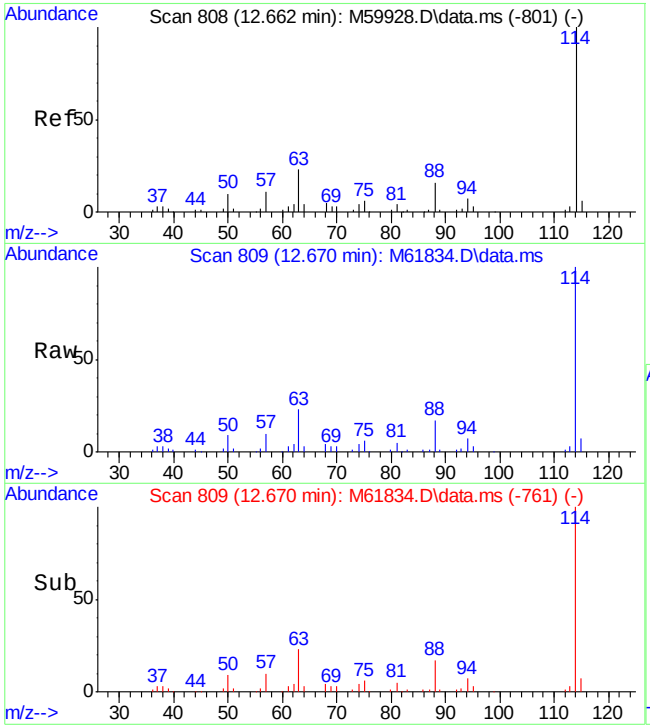



#36
Dibromofluoromethane
Concen: 19.13 ppb
RT: 11.467 min Scan# 695
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:111 Resp: 79332

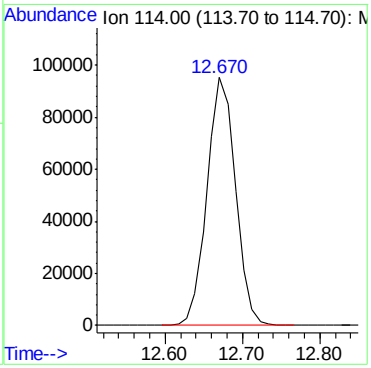
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.8 | 77.7 | 117.7 |
| 192 | 17.6 | 0.0 | 36.3 |

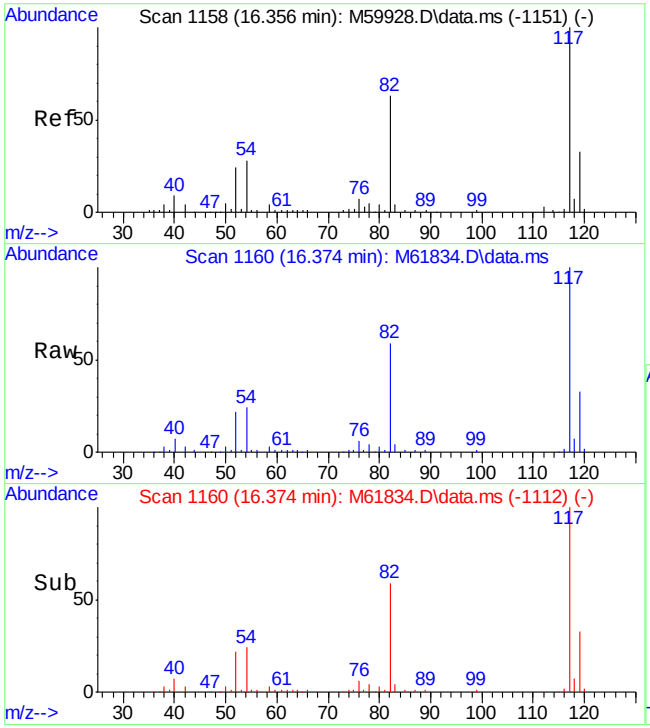



#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.670 min Scan# 809
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:114 Resp: 244456

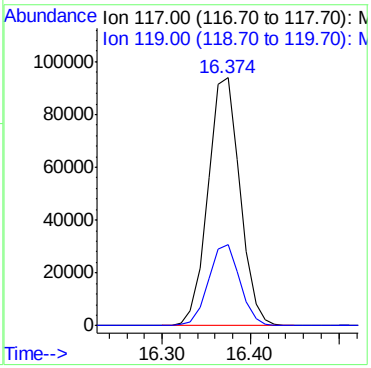


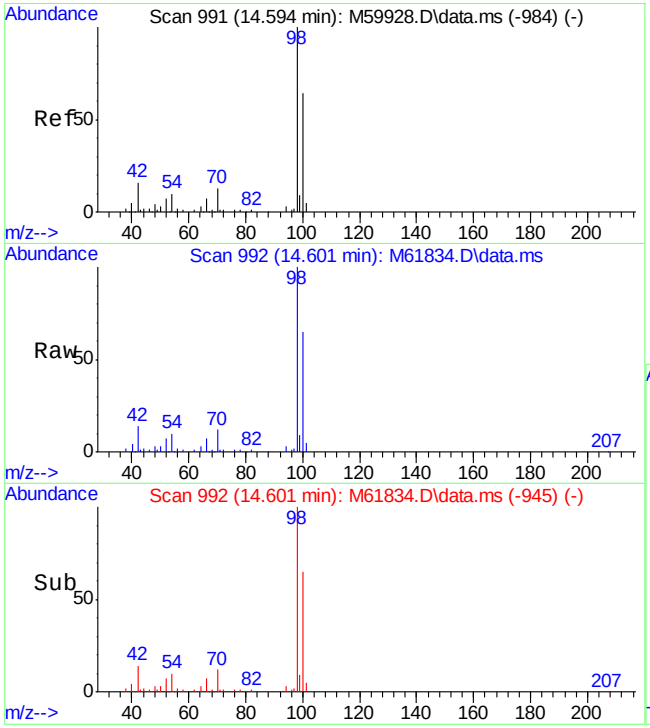



#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.374 min Scan# 1160
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:117 Resp: 235313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.4 | 11.2 | 51.2 |

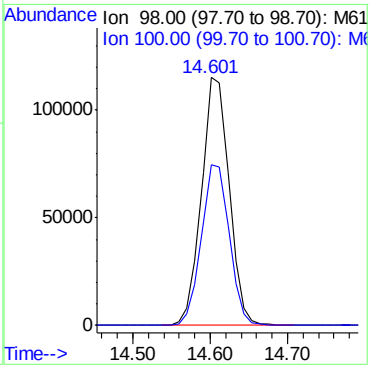


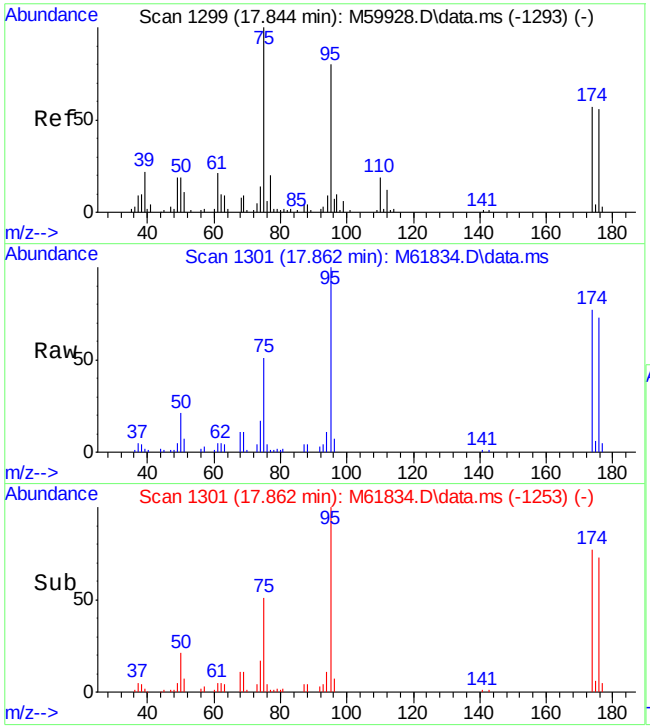




#56
Toluene-d8
Concen: 18.61 ppb
RT: 14.601 min Scan# 992
Delta R.T. -0.003 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 98 Resp: 285757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.4 | 44.3 | 84.3 |

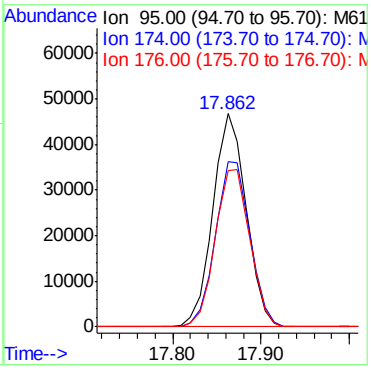


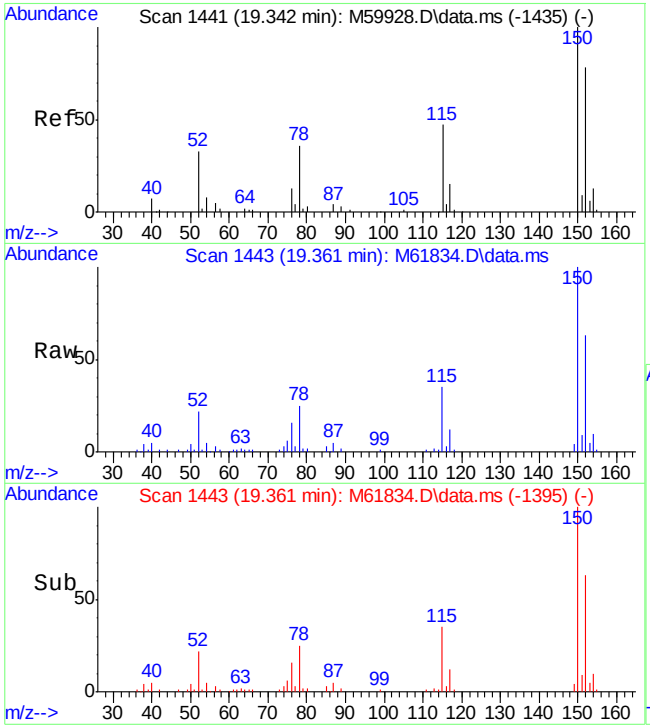



#74
4-Bromofluorobenzene
Concen: 20.23 ppb
RT: 17.862 min Scan# 1301
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion: 95 Resp: 122149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 80.1 | 54.3 | 94.3 |
| 176 | 76.8 | 51.5 | 91.5 |

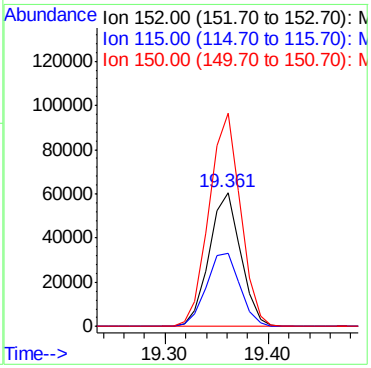


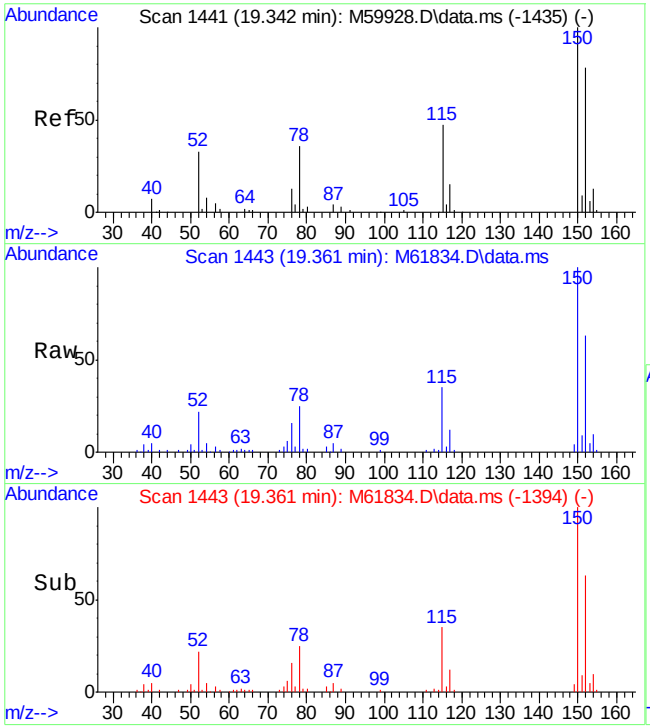




#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.361 min Scan# 1443
Delta R.T. 0.008 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:152 Resp: 128649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.5 | 40.9 | 80.9 |
| 150 | 159.1 | 178.6 | 218.6# |

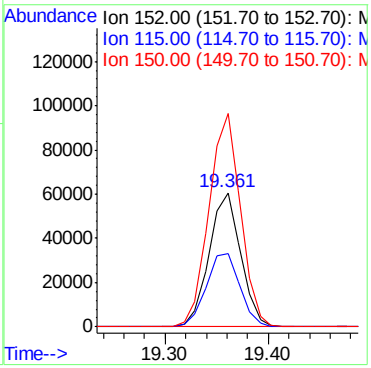





#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.361 min Scan# 1443
Delta R.T. 0.019 min
Lab File: M61834.D
Acq: 13 Jul 2016 1:58 pm

Tgt Ion:152 Resp: 128649

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 58.5 | 37.3 | 77.3 |
| 150 | 159.1 | 176.0 | 216.0# |



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61913.D
Acq On : 18 Jul 2016 4:51 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1861,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 19 09:00:23 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

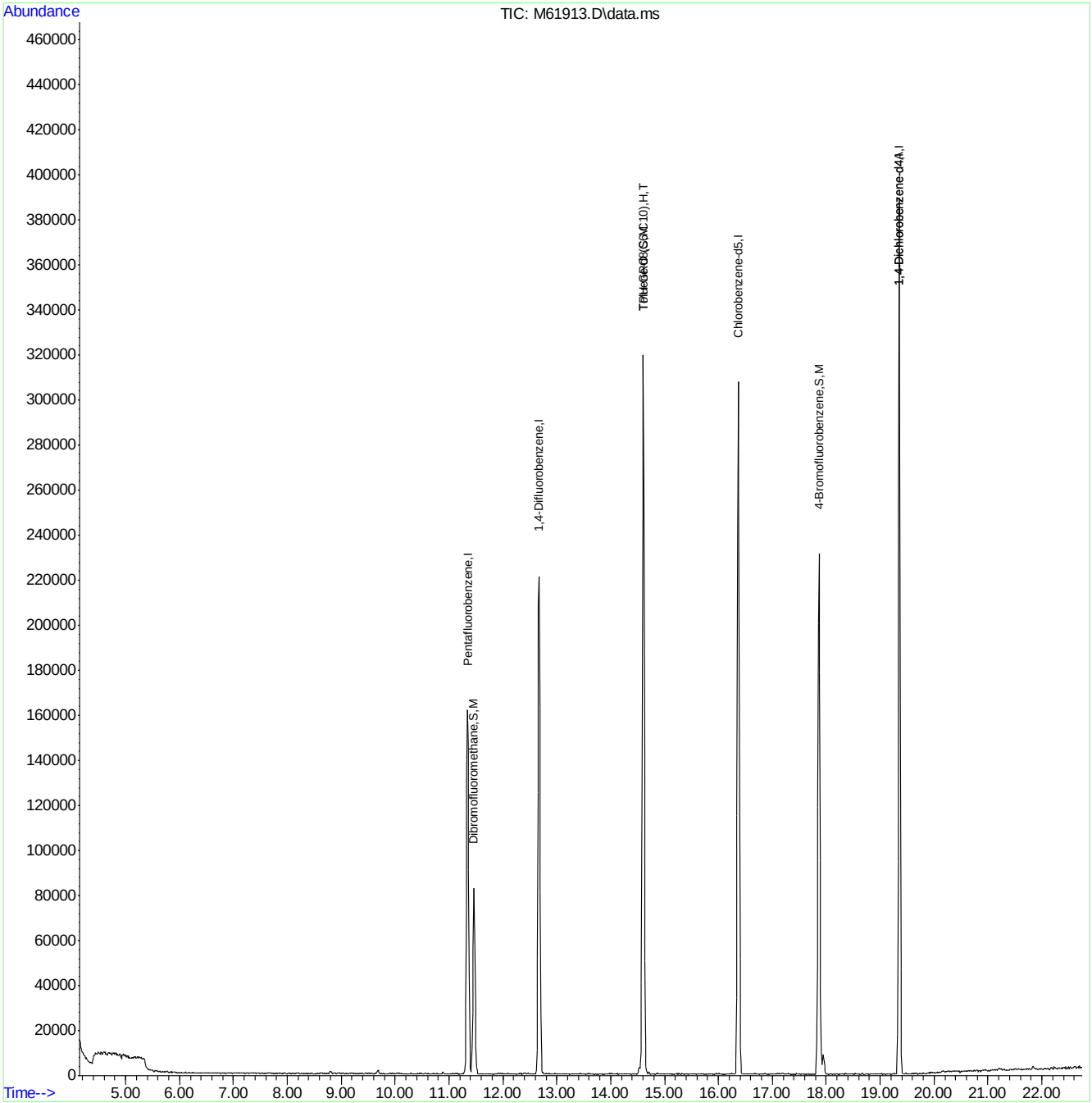
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 11.342 | 168 | 160520 | 20.00 | ppb | 0.00 |
| 40) 1,4-Difluorobenzene | 12.672 | 114 | 244448 | 20.00 | ppb | 0.00 |
| 55) Chlorobenzene-d5 | 16.365 | 117 | 241467 | 20.00 | ppb | 0.00 |
| 77) 1,4-Dichlorobenzene-d4 | 19.352 | 152 | 137692 | 20.00 | ppb | 0.00 |
| 99) 1,4-Dichlorobenzene-d4A | 19.352 | 152 | 137692 | 20.00 | ppb | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 11.458 | 111 | 76953 | 20.20 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 80 - 136 | | Recovery = 101.00% | | | |
| 56) Toluene-d8 | 14.603 | 98 | 289959 | 19.70 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 88 - 113 | | Recovery = 98.50% | | | |
| 74) 4-Bromofluorobenzene | 17.864 | 95 | 125901 | 20.59 | ppb | 0.00 |
| Spiked Amount 20.000 | Range 79 - 115 | | Recovery = 102.95% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 100) TPH-GRO (C6-C10) | 14.603 | TIC | 3662668m | 34.74 | ppb | |

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

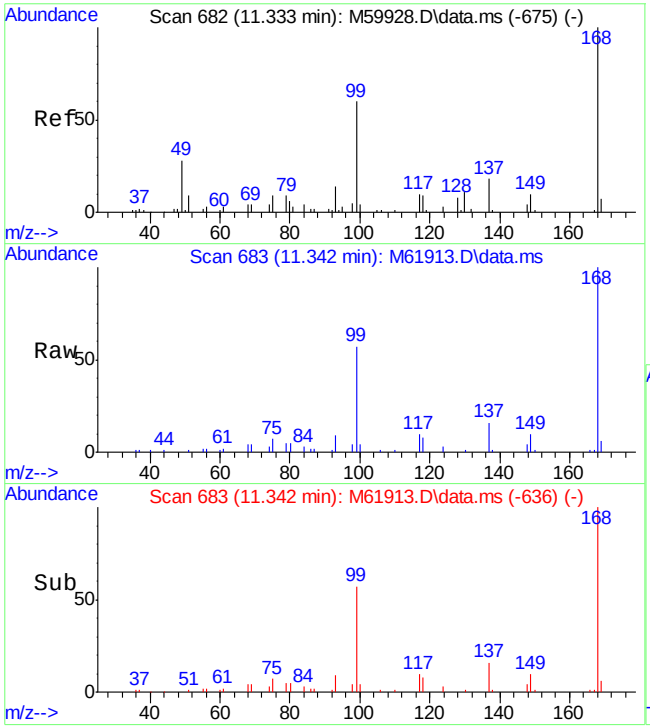
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\M160718\
Data File : M61913.D
Acq On : 18 Jul 2016 4:51 pm
Operator : johannat
Sample : MB
Misc : MS1912,VM1861,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 19 09:00:23 2016
Quant Method : C:\MSDChem\1\METHODS\VM1860S.M
Quant Title : EPA 8260B
QLast Update : Mon Jul 18 09:14:24 2016
Response via : Initial Calibration

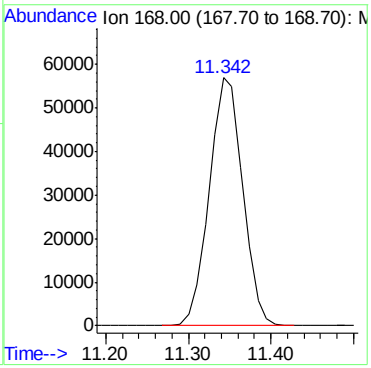


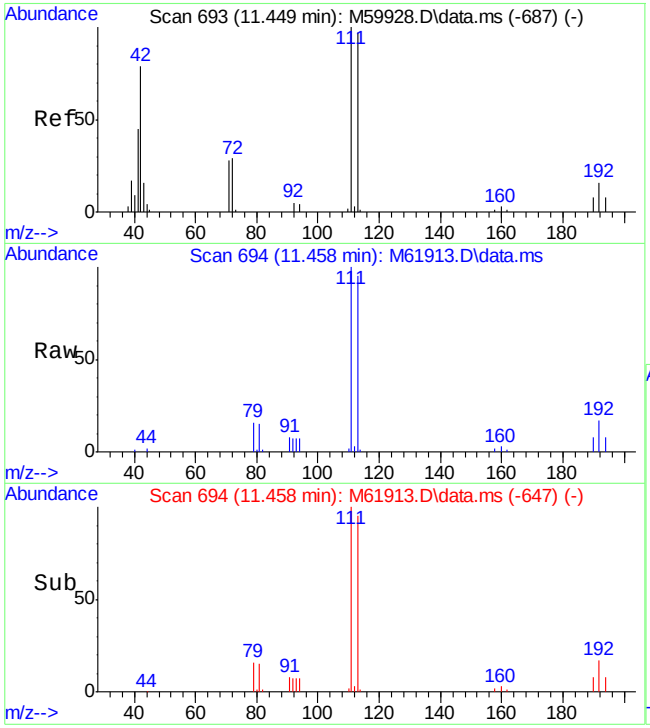

VM1860S.M Tue Jul 19 09:04:49 2016 Page: 2




#1
Pentafluorobenzene
Concen: 20.00 ppb
RT: 11.342 min Scan# 683
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:168 Resp: 160520

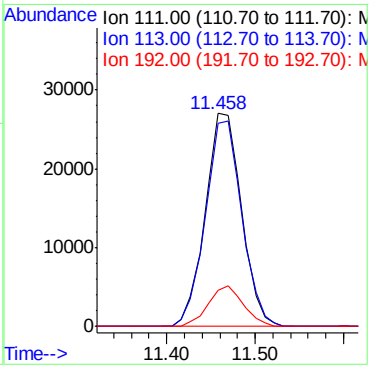


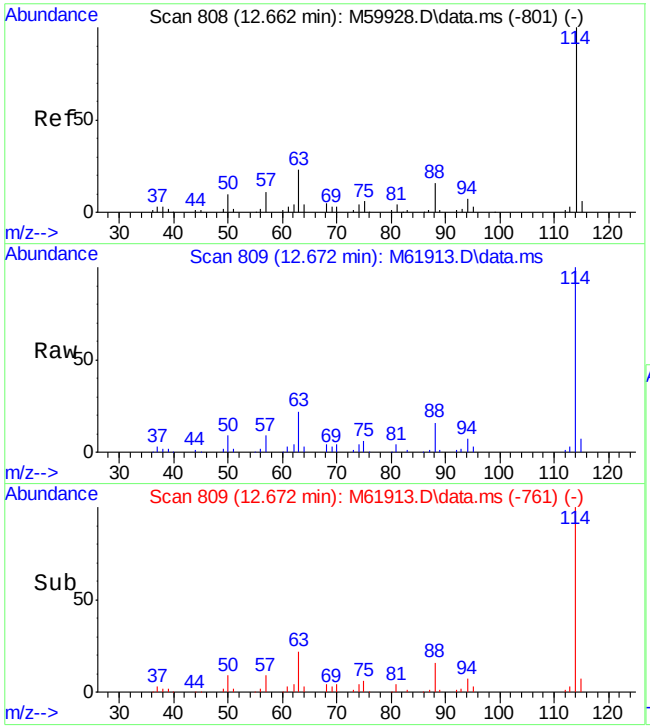




#36
Dibromofluoromethane
Concen: 20.20 ppb
RT: 11.458 min Scan# 694
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:111 Resp: 76953

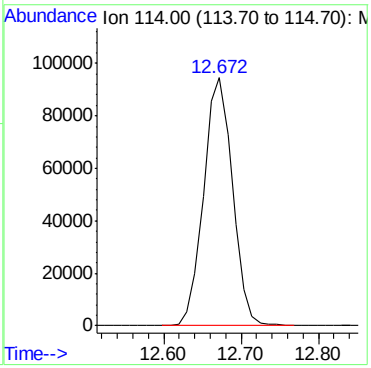
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 111 | 100 | | |
| 113 | 96.8 | 77.7 | 117.7 |
| 192 | 18.5 | 0.0 | 36.3 |

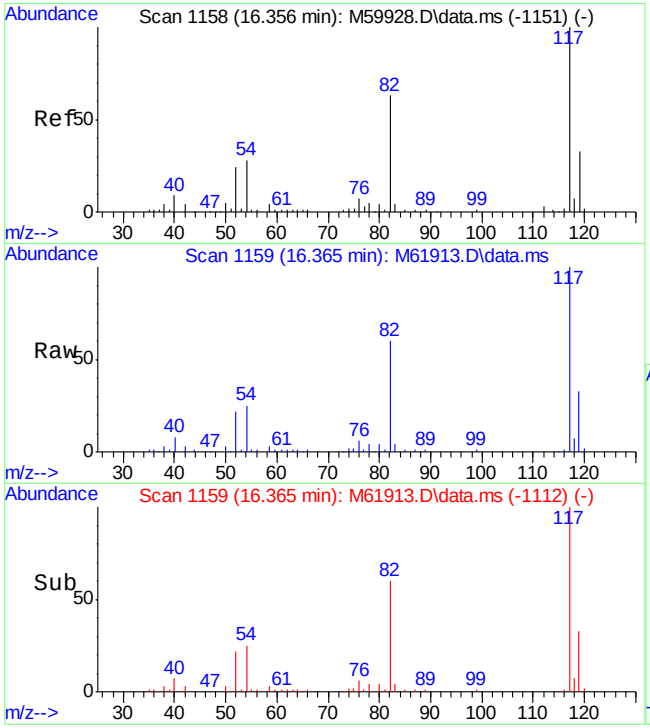





#40
1,4-Difluorobenzene
Concen: 20.00 ppb
RT: 12.672 min Scan# 809
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:114 Resp: 244448

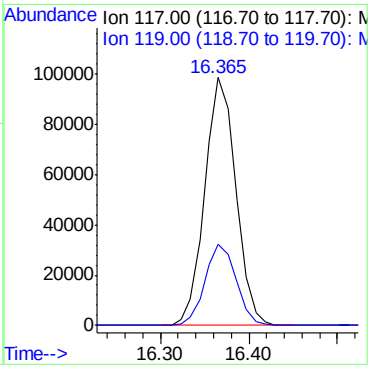


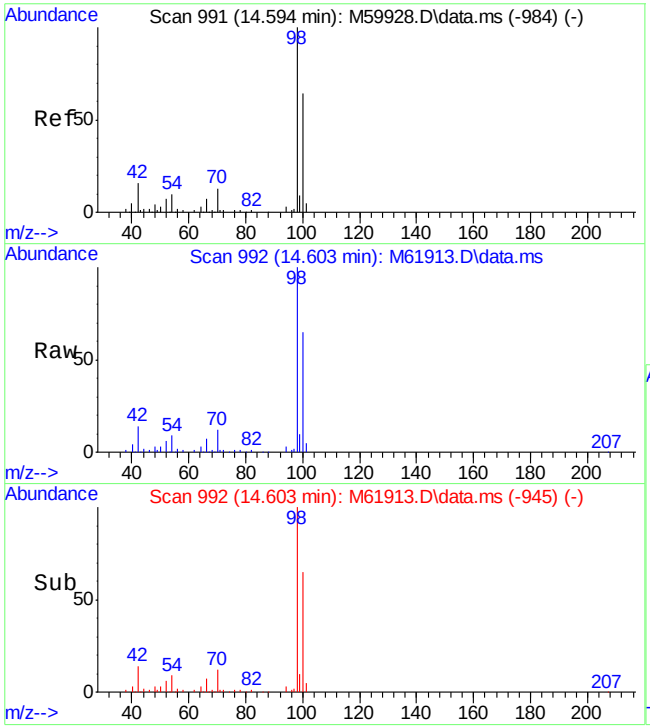




#55
Chlorobenzene-d5
Concen: 20.00 ppb
RT: 16.365 min Scan# 1159
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:117 Resp: 241467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 32.7 | 11.2 | 51.2 |

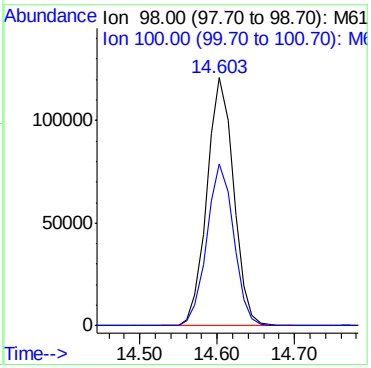


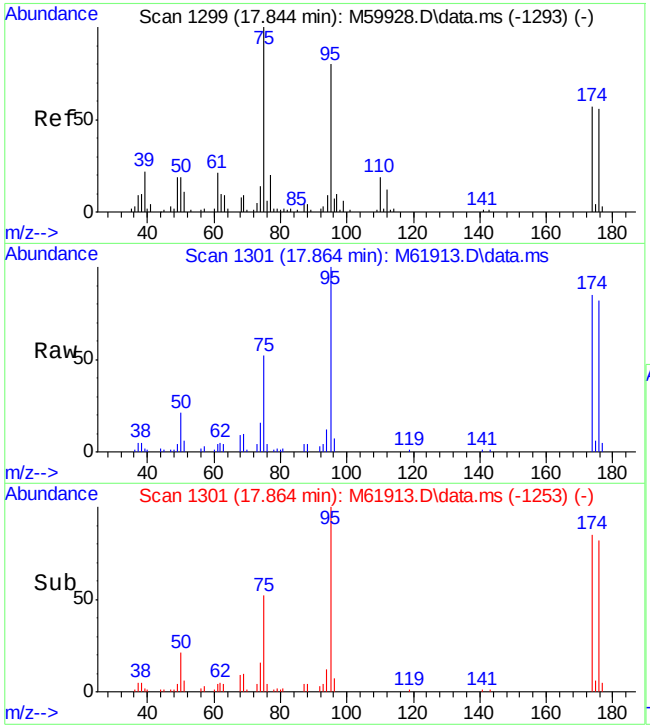



#56
Toluene-d8
Concen: 19.70 ppb
RT: 14.603 min Scan# 992
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion: 98 Resp: 289959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.7 | 44.3 | 84.3 |

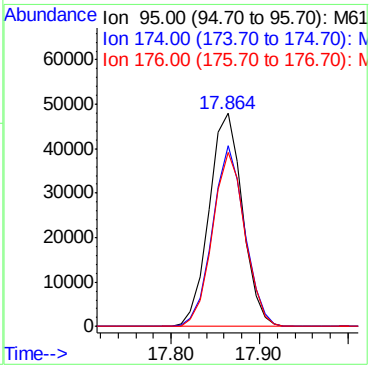


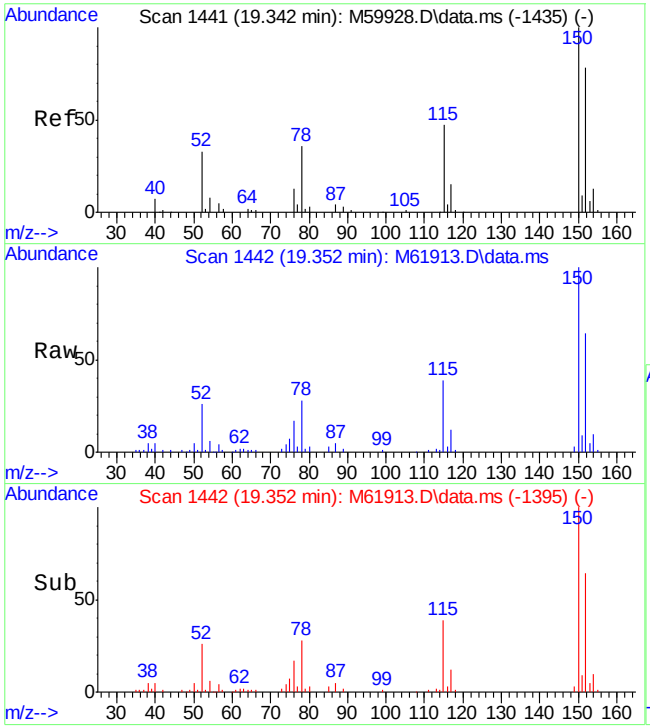




#74
4-Bromofluorobenzene
Concen: 20.59 ppb
RT: 17.864 min Scan# 1301
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion: 95 Resp: 125901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 81.8 | 54.3 | 94.3 |
| 176 | 79.4 | 51.5 | 91.5 |

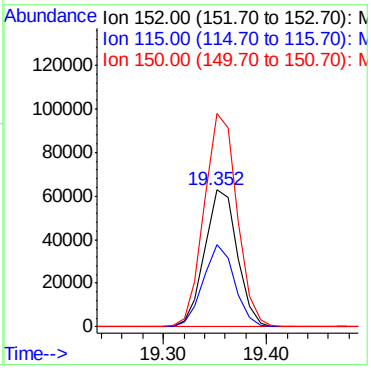


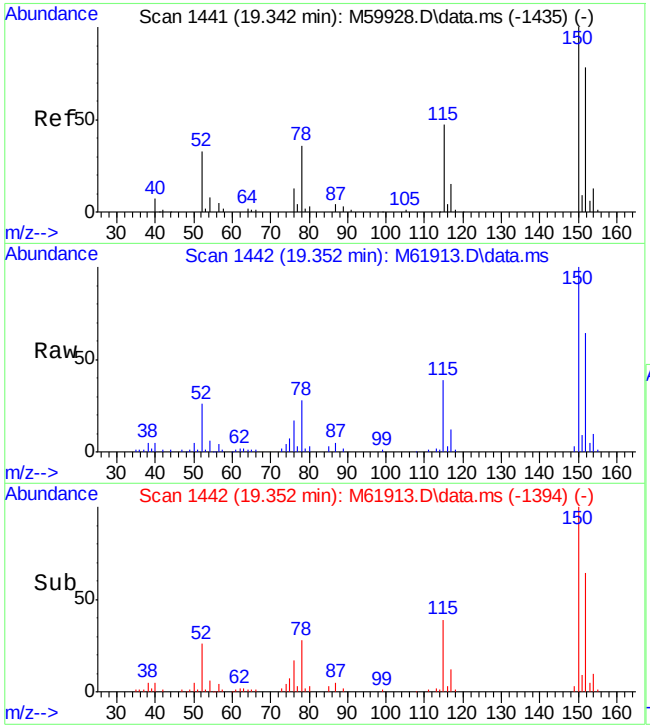



#77
1,4-Dichlorobenzene-d4
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. -0.001 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:152 Resp: 137692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.7 | 40.9 | 80.9 |
| 150 | 156.8 | 178.6 | 218.6# |

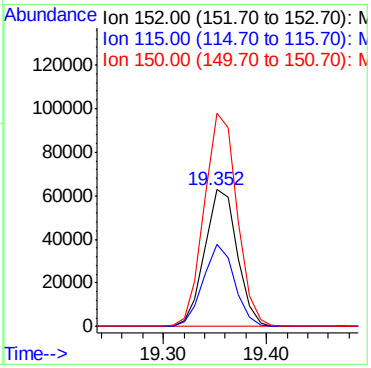


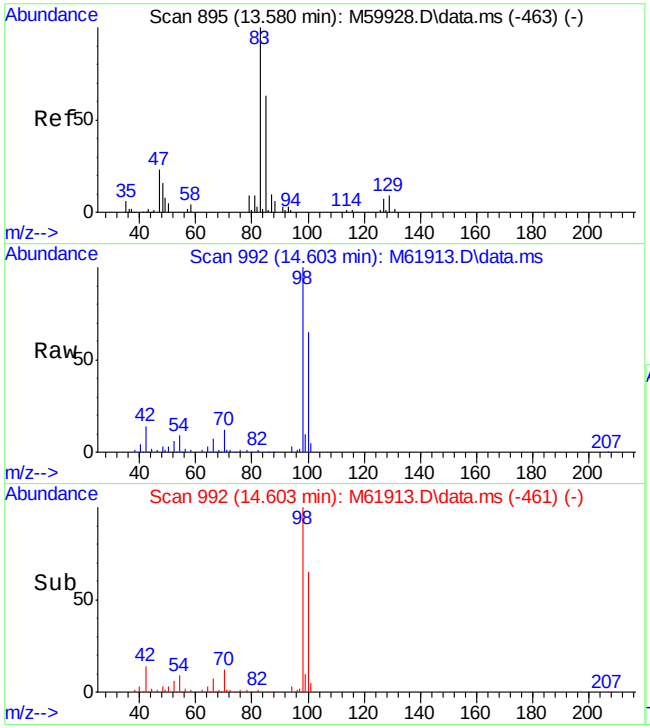




#99
1,4-Dichlorobenzene-d4A
Concen: 20.00 ppb
RT: 19.352 min Scan# 1442
Delta R.T. 0.010 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:152 Resp: 137692

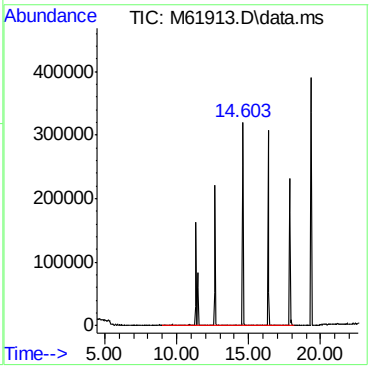
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 57.7 | 37.3 | 77.3 |
| 150 | 156.8 | 176.0 | 216.0# |






#100
TPH-GRO (C6-C10)
Concen: 34.74 ppb m
RT: 14.603 min Scan# 992
Delta R.T. 1.053 min
Lab File: M61913.D
Acq: 18 Jul 2016 4:51 pm

Tgt Ion:TIC Resp: 3662668



## GC Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-MB | BB5271.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C10-C28) | ND | 3.3 | mg/kg | |
| | TPH (> C28-C40) | 1.36 | 3.3 | mg/kg | J |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 630-01-3 | Hexacosane | 76% | 38-146% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-BS | BB5269.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| OP14620-BSD | BB5270.D | 1 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | Spike mg/kg | BSP mg/kg | BSP % | BSD mg/kg | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 33.3 | 34.8 | 104 | 35.8 | 107 | 3 | 53-107/12 |
| | TPH (> C28-C40) | 33.3 | 32.6 | 98 | 34.8 | 104 | 7 | 59-120/14 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 630-01-3 | Hexacosane | 75% | 75% | 38-146% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46446
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP14620-MS | BB5278.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| OP14620-MSD | BB5279.D | 20 | 07/12/16 | NN | 07/11/16 | OP14620 | GBB172 |
| C46446-3 | BB5300.D | 4 | 07/12/16 | FL | 07/11/16 | OP14620 | GBB173 |

**The QC reported here applies to the following samples:** **Method:** SW846 8015B M

C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

| CAS No. | Compound | C46446-3 mg/kg | Q | Spike mg/kg | MS mg/kg | MS % | Spike mg/kg | MSD mg/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TPH (C10-C28) | 23.9 | | 33 | 69.2 | 155* [a] | 33 | 80.0 | 188* [a] | 14* [a] | 53-107/12 |
| | TPH (> C28-C40) | 67.5 | | 33 | 192 | 480* [a] | 33 | 191 | 477* [a] | 1 | 59-120/14 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46446-3 | Limits |
|---|---|---|---|---|---|
| 630-01-3 | Hexacosane | 74% | 123% | 71% | 38-146% |

(a) Outside laboratory control limits.

* = Outside of Control Limits.

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
James Rhudy 07/12/16 16:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5273.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 3:06 am
Operator : FEIL
Sample : C46446-1 20X
Misc : OP14620,GBB172,30.34,,,1,20,S
ALS Vial : 35 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:48:33 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc | Units | |
|---|---|---|---|---|---|
| System Monitoring Compounds | | | | | |
| 1) S Hexacosane | 8.192 | 3601988 | 3.627 | ppm | m |
| Spiked Amount 100.000 | | Recovery = | 3.63% | | |
| Target Compounds | | | | | |
| 2) H TPH (C10-C28) | 4.817 | 134052477 | 136.187 | ppm | |
| 3) H TPH (>C28-C40) | 9.372 | 182268660 | 334.909 | ppm | |
| 7) H TPH (Motor Oil) | 9.372 | 328038797 | 602.344 | ppm | |

(f)=RT Delta > 1/2 Window (m)=manual int.

8.1.1

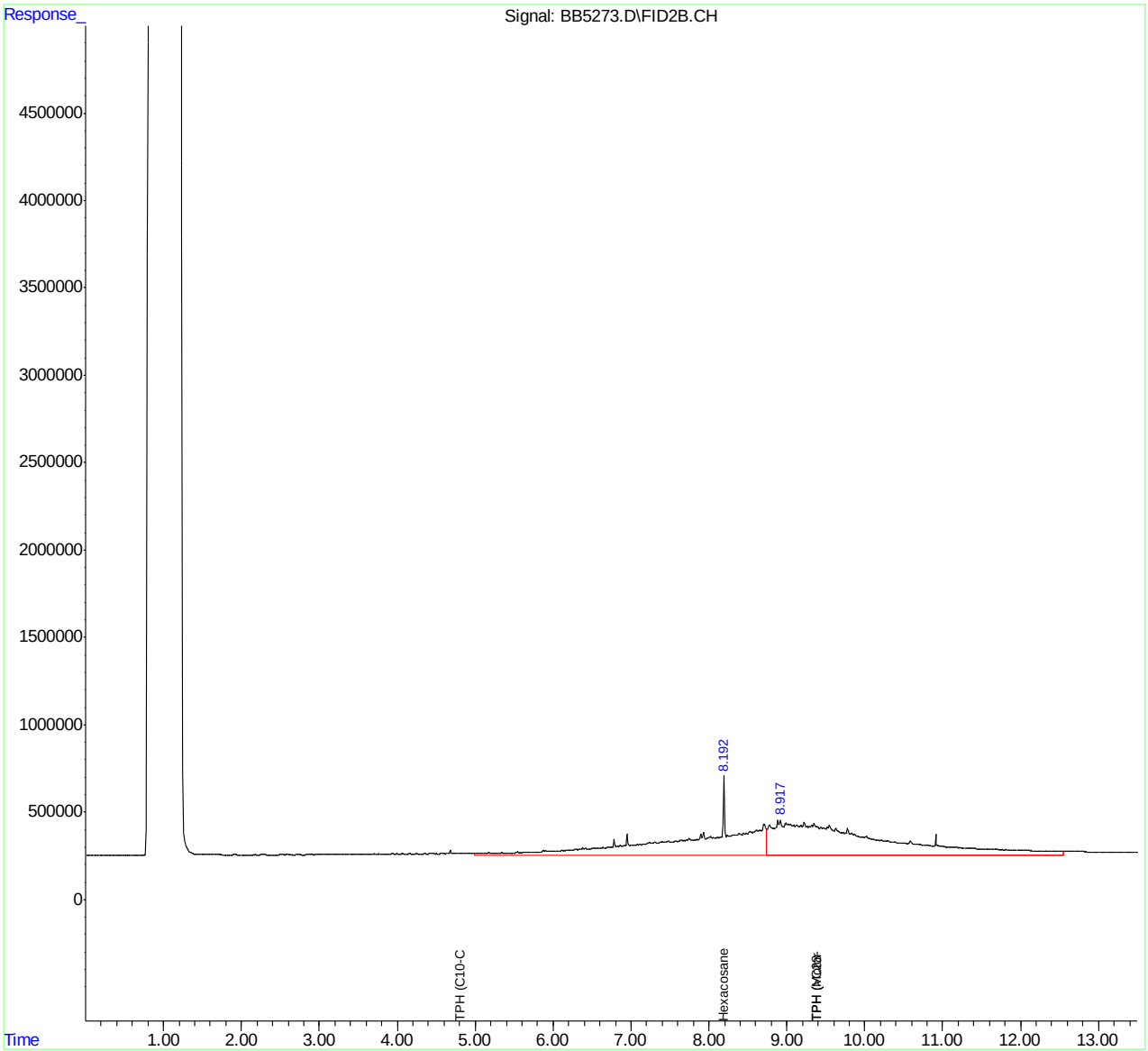
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5273.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 3:06 am
Operator : FEIL
Sample : C46446-1 20X
Misc : OP14620,GBB172,30.34,,,1,20,S
ALS Vial : 35 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:48:33 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5298.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:21 pm
Operator : NHATN
Sample : C46446-2
Misc : OP14620,GBB173,30.21,,,1,1,S
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 07:48:35 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.200 | 69937384 | 70.414 ppm |
| Spiked Amount 100.000 | | Recovery = | 70.41% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 123583367 | 125.552 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 154487398 | 283.863 ppm |
| 6) H TPH (Diesel) | 4.817 | 124131686 | 126.152 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 154220859 | 283.180 ppm |

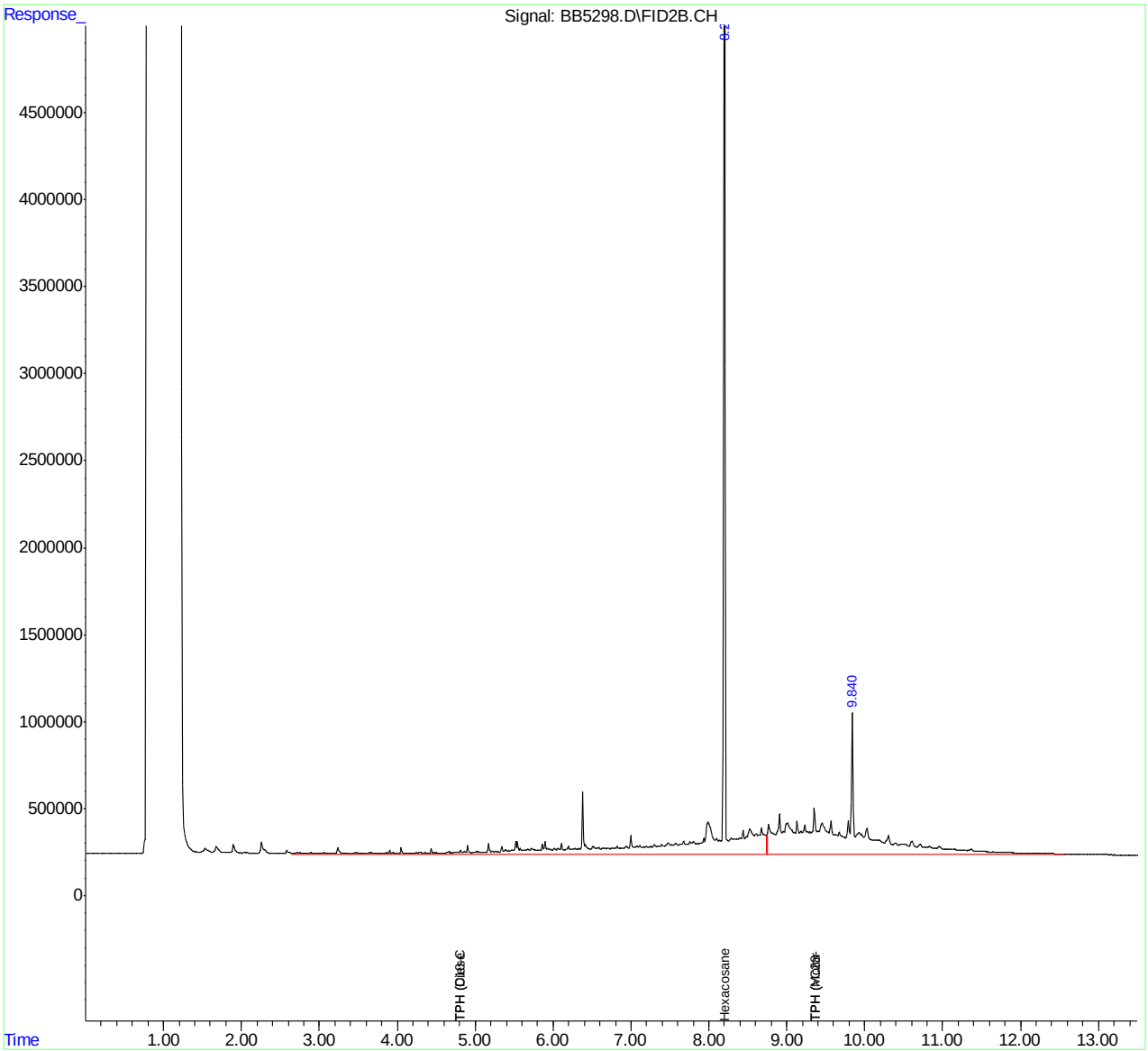
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5298.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:21 pm
Operator : NHATN
Sample : C46446-2
Misc : OP14620,GBB173,30.21,,,1,1,S
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 07:48:35 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5300.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 2:01 pm
Operator : NHATN
Sample : C46446-3
Misc : OP14620,GBB173,30.36,,,1,4,S
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 08:02:19 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.194 | 17562699 | 17.682 ppm |
| Spiked Amount 100.000 | | Recovery = | 17.68% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 178859234 | 181.708 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 278714302 | 512.123 ppm |
| 6) H TPH (Diesel) | 4.817 | 179718639 | 182.644 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 279916083 | 513.981 ppm |

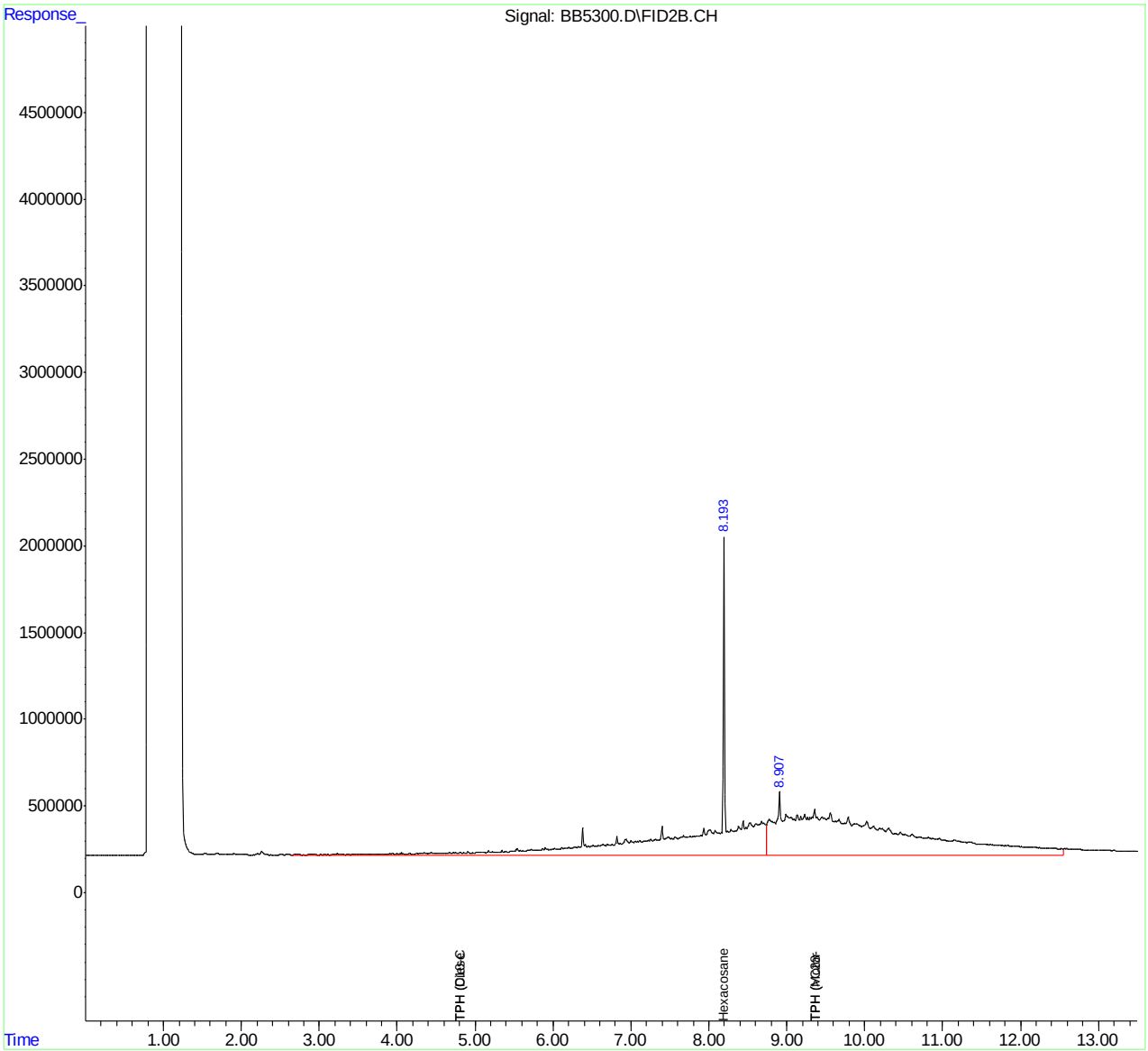
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5300.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 2:01 pm
Operator : NHATN
Sample : C46446-3
Misc : OP14620,GBB173,30.36,,,1,4,S
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 08:02:19 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5266.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 12:45 am
Operator : FEIL
Sample : C46446-4
Misc : OP14620,GBB172,30.11,,,1,1,S
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:37:18 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.201 | 67623015 | 68.084 ppm |
| Spiked Amount 100.000 | | Recovery = | 68.08% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 115439217 | 117.278 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 65162256 | 119.732 ppm |
| 6) H TPH (Diesel) | 4.817 | 115439217 | 117.318 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 65162256 | 119.651 ppm |

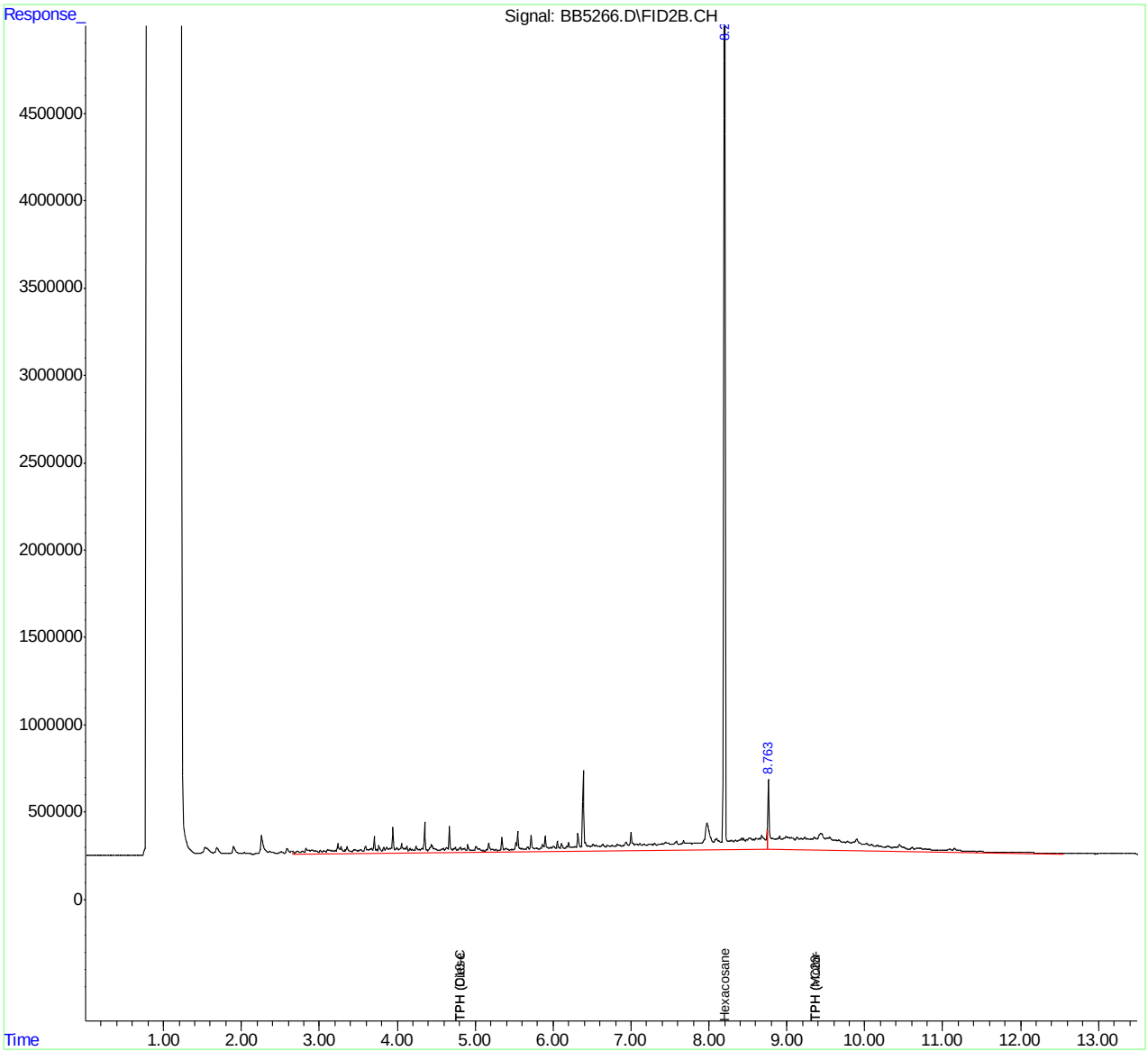
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5266.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 12:45 am
Operator : FEIL
Sample : C46446-4
Misc : OP14620,GBB172,30.11,,,1,1,S
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:37:18 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5267.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:05 am
Operator : FEIL
Sample : C46446-5 10X
Misc : OP14620,GBB172,30.29,,,1,10,S
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:39:03 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.196 | 6581047 | 6.626 ppm |
| Spiked Amount 100.000 | | Recovery = | 6.63% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 1082808472 | 1100.054 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 246306637 | 452.576 ppm |
| 6) H TPH (Diesel) | 4.817 | 1082011994 | 1099.622 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 245444604 | 450.685 ppm |

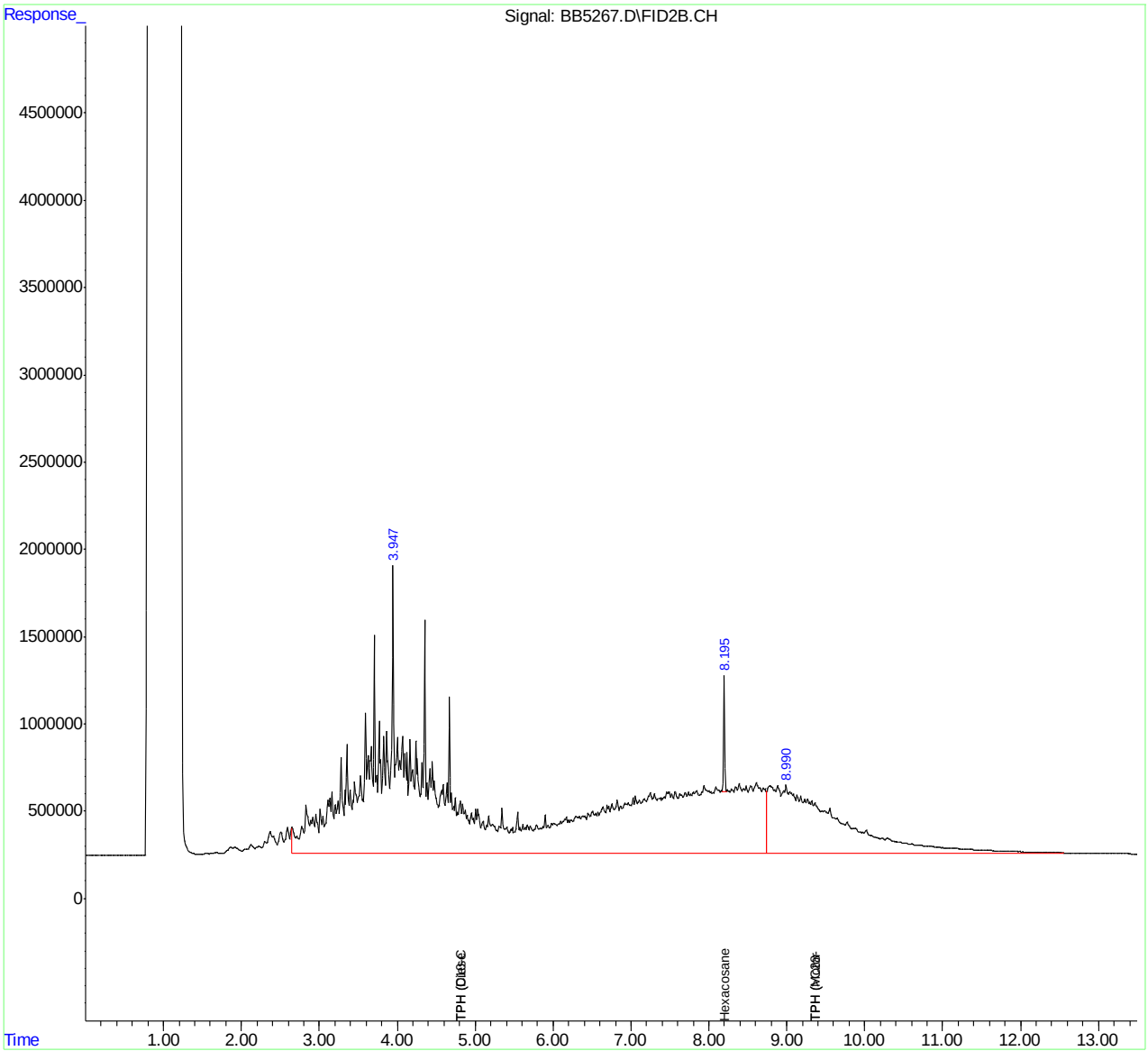
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5267.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:05 am
Operator : FEIL
Sample : C46446-5 10X
Misc : OP14620,GBB172,30.29,,,1,10,S
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:39:03 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Manual Integrations APPROVED (compounds with "m" flag)
James Rhudy 07/12/16 16:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5275.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 3:46 am
Operator : FEIL
Sample : C46446-8 20X
Misc : OP14620,GBB172,30.12,,,1,20,S
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:50:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.193 | 3390153 | 3.413 ppm m |
| Spiked Amount 100.000 | | Recovery = | 3.41% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 119748160 | 121.655 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 189684845 | 348.536 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 307503959 | 564.638 ppm |

(f)=RT Delta > 1/2 Window (m)=manual int.

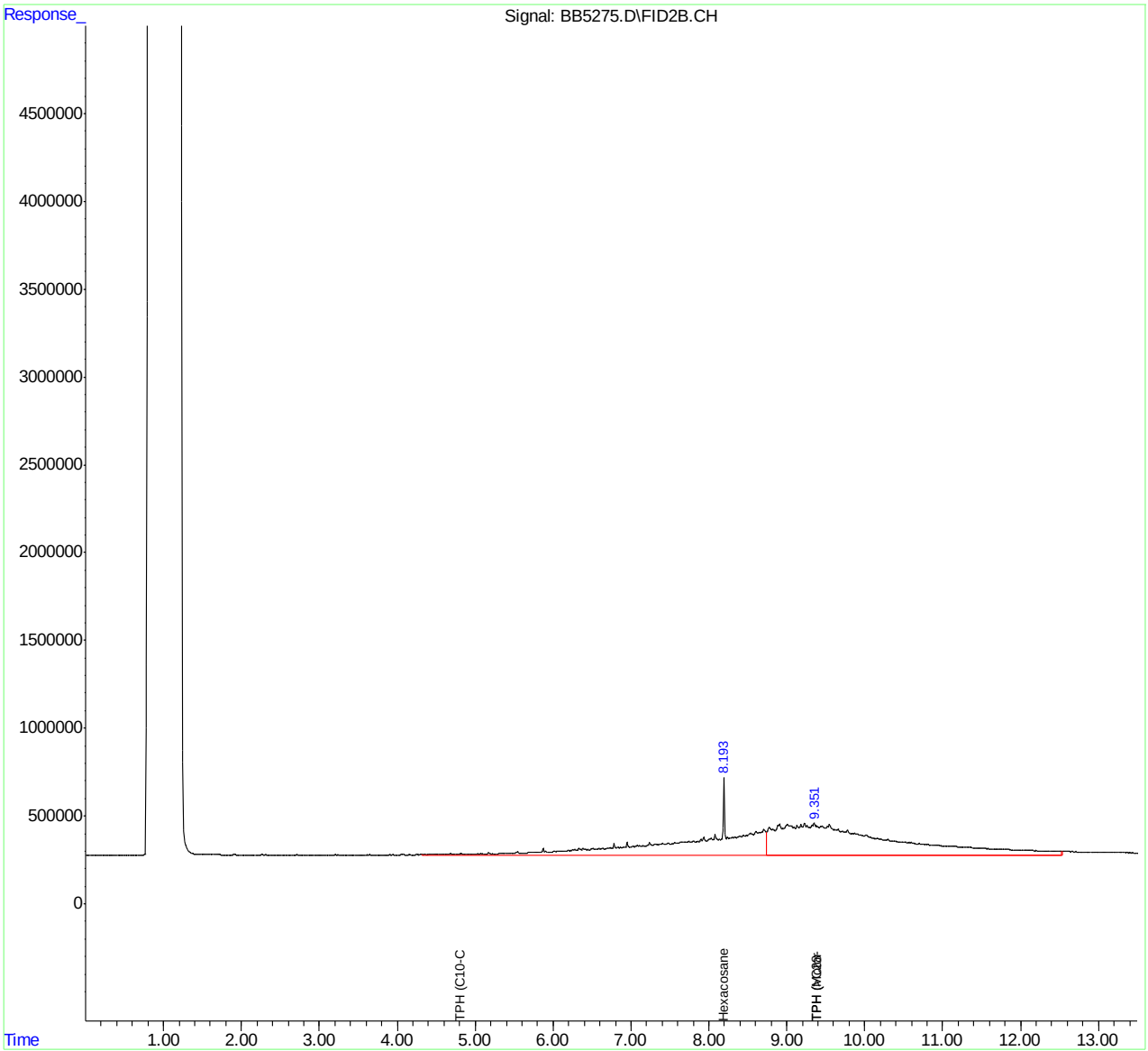
8.1.6
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5275.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 3:46 am
Operator : FEIL
Sample : C46446-8 20X
Misc : OP14620,GBB172,30.12,,,1,20,S
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:50:55 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5299.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:41 pm
Operator : NHATN
Sample : C46446-9
Misc : OP14620,GBB173,30.33,,,1,1,S
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 07:57:33 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.202 | 89633599 | 90.244 ppm |
| Spiked Amount 100.000 | | Recovery = | 90.24% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 40000387 | 40.637 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 60510495 | 111.185 ppm |
| 6) H TPH (Diesel) | 4.817 | 40000387 | 40.651 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 60510495 | 111.109 ppm |

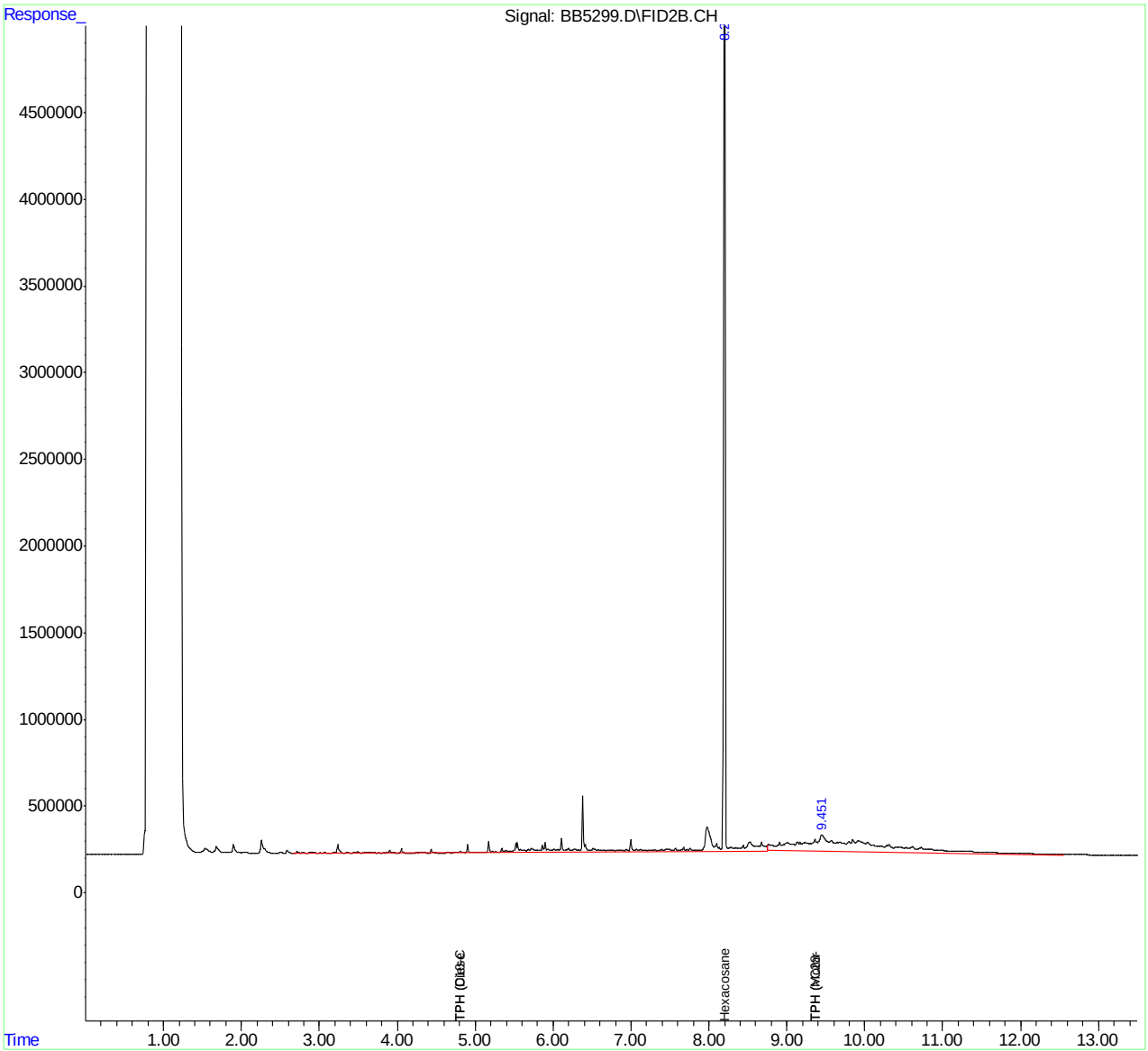
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB173\
Data File : BB5299.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 1:41 pm
Operator : NHATN
Sample : C46446-9
Misc : OP14620,GBB173,30.33,,,1,1,S
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 13 07:57:33 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5271.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 2:26 am
Operator : FEIL
Sample : OP14620-MB
Misc : OP14620,GBB172,30.00,,,1,1,S
ALS Vial : 34 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:44:07 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 1) S Hexacosane | 8.201 | 75576260 | 76.091 ppm |
| Spiked Amount 100.000 | | Recovery = | 76.09% |
| Target Compounds | | | |
| 2) H TPH (C10-C28) | 4.817 | 29503841 | 29.974 ppm |
| 3) H TPH (>C28-C40) | 9.372 | 22158936 | 40.716 ppm |
| 6) H TPH (Diesel) | 4.817 | 29503841 | 29.984 ppm |
| 7) H TPH (Motor Oil) | 9.372 | 21176888 | 38.885 ppm |

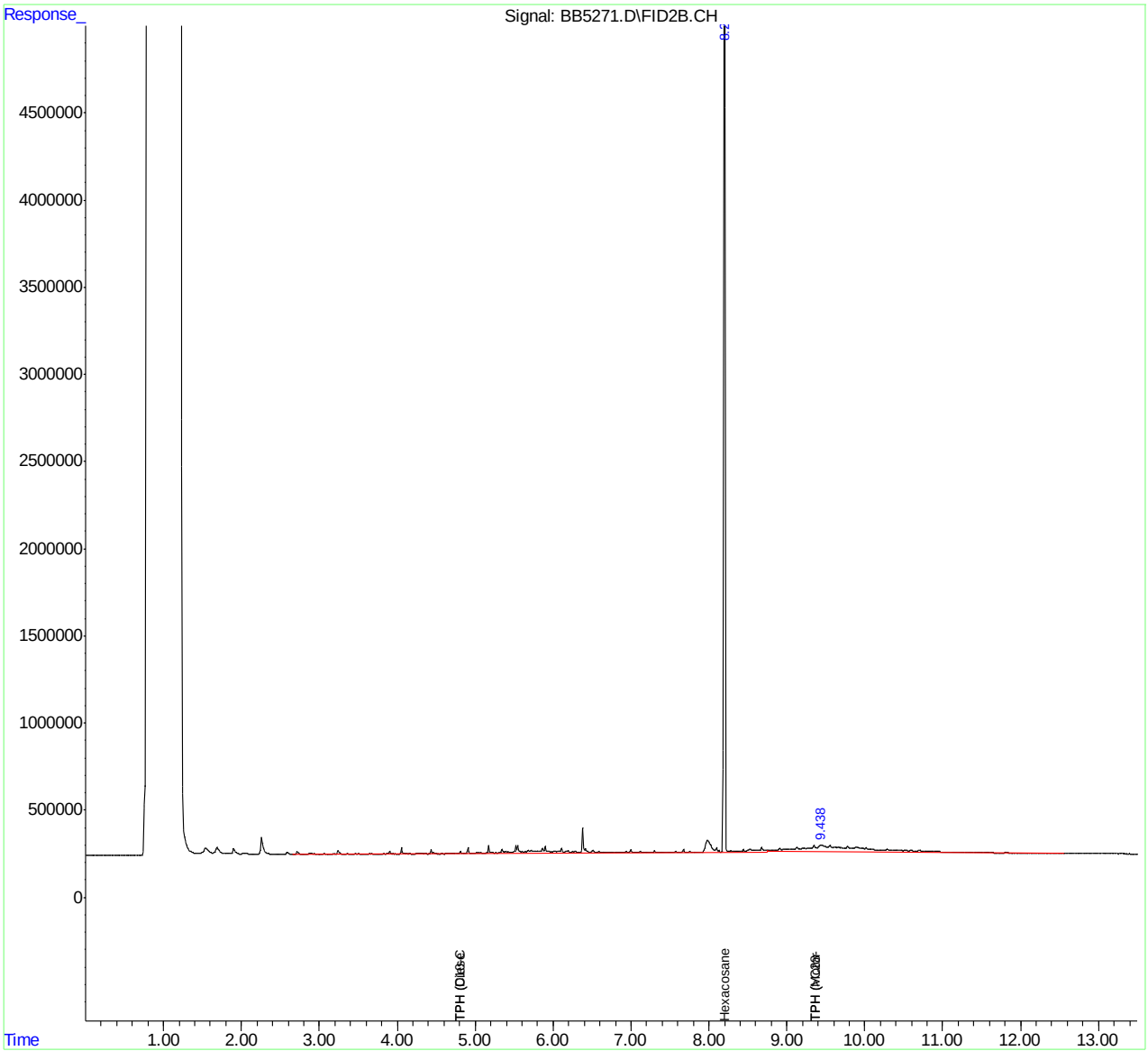
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GBB172\
Data File : BB5271.D
Signal(s) : FID2B.CH
Acq On : 12 Jul 2016 2:26 am
Operator : FEIL
Sample : OP14620-MB
Misc : OP14620,GBB172,30.00,,,1,1,S
ALS Vial : 34 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 12 14:44:07 2016
Quant Method : C:\msdchem\1\METHODS\GBB169.M
Quant Title : DRO calibration: fron column
QLast Update : Fri Jul 08 13:39:47 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Aluminum | 20 | .54 | 1.5 | | |
| Antimony | 2.0 | .16 | .18 | | |
| Arsenic | 2.0 | .17 | .17 | | |
| Barium | 20 | .025 | .09 | | |
| Beryllium | 1.0 | .019 | .01 | | |
| Boron | 10 | .27 | .15 | | |
| Cadmium | 1.0 | .032 | .031 | | |
| Calcium | 500 | 1.9 | 4.5 | | |
| Chromium | 1.0 | .12 | .054 | | |
| Cobalt | 1.0 | .049 | .025 | | |
| Copper | 2.5 | .1 | .15 | | |
| Iron | 20 | .51 | .76 | | |
| Lead | 2.0 | .11 | .14 | -0.030 | <2.0 |
| Magnesium | 500 | 3.7 | 2.1 | | |
| Manganese | 1.5 | .021 | .026 | | |
| Molybdenum | 2.0 | .11 | .04 | | |
| Nickel | 1.0 | .045 | .047 | | |
| Potassium | 1000 | 2.9 | 4.6 | | |
| Selenium | 2.0 | .49 | .33 | | |
| Silicon | 20 | .22 | .43 | | |
| Silver | 1.0 | .089 | .067 | | |
| Sodium | 1000 | 2.6 | 1.2 | | |
| Strontium | 1.0 | .014 | .018 | | |
| Thallium | 2.0 | .39 | .12 | | |
| Tin | 50 | .3 | .28 | | |
| Titanium | 1.0 | .076 | .13 | | |
| Vanadium | 1.0 | .043 | .074 | | |
| Zinc | 2.0 | .11 | .22 | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | C46446-9 Original | MS | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Aluminum | | | | | |
| Antimony | anr | | | | |
| Arsenic | anr | | | | |
| Barium | anr | | | | |
| Beryllium | anr | | | | |
| Boron | | | | | |
| Cadmium | anr | | | | |
| Calcium | | | | | |
| Chromium | anr | | | | |
| Cobalt | anr | | | | |
| Copper | anr | | | | |
| Iron | | | | | |
| Lead | 4.3 | 47.5 | 46.3 | 93.3 | 75-125 |
| Magnesium | | | | | |
| Manganese | | | | | |
| Molybdenum | anr | | | | |
| Nickel | anr | | | | |
| Potassium | | | | | |
| Selenium | anr | | | | |
| Silicon | | | | | |
| Silver | anr | | | | |
| Sodium | | | | | |
| Strontium | | | | | |
| Thallium | anr | | | | |
| Tin | | | | | |
| Titanium | | | | | |
| Vanadium | anr | | | | |
| Zinc | anr | | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596 Methods: SW846 6010B
Matrix Type: SOLID Units: mg/kg

Prep Date: 07/11/16

| Metal | C46446-9 Original | MSD | Spikelot MPIR5 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Aluminum | | | | | | |
| Antimony | anr | | | | | |
| Arsenic | anr | | | | | |
| Barium | anr | | | | | |
| Beryllium | anr | | | | | |
| Boron | | | | | | |
| Cadmium | anr | | | | | |
| Calcium | | | | | | |
| Chromium | anr | | | | | |
| Cobalt | anr | | | | | |
| Copper | anr | | | | | |
| Iron | | | | | | |
| Lead | 4.3 | 46.8 | 47.2 | 90.1 | 1.5 | 20 |
| Magnesium | | | | | | |
| Manganese | | | | | | |
| Molybdenum | anr | | | | | |
| Nickel | anr | | | | | |
| Potassium | | | | | | |
| Selenium | anr | | | | | |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Thallium | anr | | | | | |
| Tin | | | | | | |
| Titanium | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | anr | | | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/11/16

| Metal | BSP Result | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 45.3 | 50 | 90.6 | 80-120 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46446
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11596
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/11/16

| Metal | C46446-9 Original | SDL 1:5 | %DIF | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | anr | | | |
| Arsenic | anr | | | |
| Barium | anr | | | |
| Beryllium | anr | | | |
| Boron | | | | |
| Cadmium | anr | | | |
| Calcium | | | | |
| Chromium | anr | | | |
| Cobalt | anr | | | |
| Copper | anr | | | |
| Iron | | | | |
| Lead | 46.0 | 48.4 | 5.2 | 0-10 |
| Magnesium | | | | |
| Manganese | | | | |
| Molybdenum | anr | | | |
| Nickel | anr | | | |
| Potassium | | | | |
| Selenium | anr | | | |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | | | | |
| Strontium | | | | |
| Thallium | anr | | | |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | anr | | | |
| Zinc | anr | | | |

Associated samples MP11596: C46446-1, C46446-2, C46446-3, C46446-4, C46446-5, C46446-8, C46446-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

*e-Hardcopy 2.0*
*Automated Report*

Technical Report for

ATC Group Services

Premier Hyundai 2820 Broadway Oakland

SGS Accutest Job Number: C46447

Sampling Date: 07/08/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: **39**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46447

Premier Hyundai 2820 Broadway Oakland

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46447-1 | 07/08/16 | 10:20 | | 07/08/16 | AQ | Ground Water | B30W |
| C46447-2 | 07/08/16 | 08:00 | | 07/08/16 | AQ | Ground Water | B28W |

# Summary of Hits

**Job Number:** C46447
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46447-1** | **B30W** | | | | | |
| Acetone [a] | | 79.8 | 20 | 4.0 | ug/l | SW846 8260B |
| Benzene [a] | | 555 | 10 | 2.0 | ug/l | SW846 8260B |
| n-Butylbenzene [a] | | 0.45 J | 2.0 | 0.20 | ug/l | SW846 8260B |
| sec-Butylbenzene [a] | | 0.78 J | 2.0 | 0.20 | ug/l | SW846 8260B |
| Chloroethane [a] | | 0.61 J | 1.0 | 0.20 | ug/l | SW846 8260B |
| Chloroform [a] | | 0.53 J | 1.0 | 0.20 | ug/l | SW846 8260B |
| 1,2-Dichloroethane [a] | | 6.9 | 1.0 | 0.20 | ug/l | SW846 8260B |
| 1,2-Dichloropropane [a] | | 1.4 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Di-Isopropyl ether [a] | | 1.7 J | 2.0 | 0.22 | ug/l | SW846 8260B |
| cis-1,2-Dichloroethylene [a] | | 2.8 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Ethylbenzene [a] | | 61.4 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Isopropylbenzene [a] | | 4.9 | 1.0 | 0.20 | ug/l | SW846 8260B |
| p-Isopropyltoluene [a] | | 0.27 J | 2.0 | 0.20 | ug/l | SW846 8260B |
| Methyl ethyl ketone [a] | | 10.4 | 10 | 2.0 | ug/l | SW846 8260B |
| Naphthalene [a] | | 3.4 J | 5.0 | 0.50 | ug/l | SW846 8260B |
| n-Propylbenzene [a] | | 4.8 | 2.0 | 0.20 | ug/l | SW846 8260B |
| Tert-Butyl Alcohol [a] | | 7.3 J | 10 | 2.4 | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene [a] | | 12.2 | 2.0 | 0.20 | ug/l | SW846 8260B |
| 1,3,5-Trimethylbenzene [a] | | 3.9 | 2.0 | 0.20 | ug/l | SW846 8260B |
| Tetrachloroethylene [a] | | 0.34 J | 1.0 | 0.30 | ug/l | SW846 8260B |
| Toluene [a] | | 81.4 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Trichloroethylene [a] | | 80.3 | 1.0 | 0.20 | ug/l | SW846 8260B |
| Xylene (total) [a] | | 125 | 2.0 | 0.46 | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) [a] | | 3690 | 500 | 250 | ug/l | SW846 8260B |
| **C46447-2** | **B28W** | | | | | |
| Acetone [b] | | 482 J | 500 | 100 | ug/l | SW846 8260B |
| Benzene [b] | | 1410 | 25 | 5.0 | ug/l | SW846 8260B |
| n-Butylbenzene [b] | | 24.1 J | 50 | 5.0 | ug/l | SW846 8260B |
| sec-Butylbenzene [b] | | 17.6 J | 50 | 5.0 | ug/l | SW846 8260B |
| Ethylbenzene [b] | | 1340 | 25 | 5.0 | ug/l | SW846 8260B |
| Isopropylbenzene [b] | | 168 | 25 | 5.0 | ug/l | SW846 8260B |
| p-Isopropyltoluene [b] | | 27.3 J | 50 | 5.0 | ug/l | SW846 8260B |
| Methyl ethyl ketone [b] | | 95.0 J | 250 | 50 | ug/l | SW846 8260B |
| Naphthalene [b] | | 160 | 130 | 13 | ug/l | SW846 8260B |
| n-Propylbenzene [b] | | 216 | 50 | 5.0 | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene [b] | | 1140 | 50 | 5.0 | ug/l | SW846 8260B |
| 1,3,5-Trimethylbenzene [b] | | 369 | 50 | 5.0 | ug/l | SW846 8260B |
| Toluene [b] | | 4900 | 100 | 20 | ug/l | SW846 8260B |
| Xylene (total) [b] | | 5790 | 200 | 46 | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) [b] | | 76100 | 5000 | 2500 | ug/l | SW846 8260B |

# Summary of Hits

**Job Number:** C46447
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/08/16

| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| Analyte | | | | | | |

(a) Sample vail cantained more than 0.5cm of sediment.
(b) Sample vial contained more than 0.5cm of sediment.

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30W | | |
| **Lab Sample ID:** | C46447-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | R40970.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| Run #2 [a] | R41028.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 79.8 | 20 | 4.0 | ug/l | |
| 71-43-2 | Benzene | 555 [b] | 10 | 2.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | 0.45 | 2.0 | 0.20 | ug/l | J |
| 135-98-8 | sec-Butylbenzene | 0.78 | 2.0 | 0.20 | ug/l | J |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | 0.61 | 1.0 | 0.20 | ug/l | J |
| 67-66-3 | Chloroform | 0.53 | 1.0 | 0.20 | ug/l | J |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 6.9 | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | 1.4 | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | 1.7 | 2.0 | 0.22 | ug/l | J |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 2.8 | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30W | | |
| **Lab Sample ID:** | C46447-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | 61.4 | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | 4.9 | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | 0.27 | 2.0 | 0.20 | ug/l | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | 0.30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 10.4 | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | 3.4 | 5.0 | 0.50 | ug/l | J |
| 103-65-1 | n-Propylbenzene | 4.8 | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | 7.3 | 10 | 2.4 | ug/l | J |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 12.2 | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 3.9 | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 0.34 | 1.0 | 0.30 | ug/l | J |
| 108-88-3 | Toluene | 81.4 | 1.0 | 0.20 | ug/l | |
| 79-01-6 | Trichloroethylene | 80.3 | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | 125 | 2.0 | 0.46 | ug/l | |
| | TPH-GRO (C6-C10) | 3690 [b] | 500 | 250 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | 116% | 80-123% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B30W | | |
| **Lab Sample ID:** | C46447-1 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 102% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 103% | 96% | 79-114% |

(a) Sample vail cantained more than 0.5cm of sediment.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28W | | |
| **Lab Sample ID:** | C46447-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | R41003.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| Run #2 [a] | R41029.D | 100 | 07/12/16 | CV | n/a | n/a | VR1581 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 482 | 500 | 100 | ug/l | J |
| 71-43-2 | Benzene | 1410 | 25 | 5.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 25 | 5.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 25 | 5.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 25 | 5.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 25 | 5.5 | ug/l | |
| 104-51-8 | n-Butylbenzene | 24.1 | 50 | 5.0 | ug/l | J |
| 135-98-8 | sec-Butylbenzene | 17.6 | 50 | 5.0 | ug/l | J |
| 98-06-6 | tert-Butylbenzene | ND | 50 | 7.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 25 | 5.0 | ug/l | |
| 75-00-3 | Chloroethane [b] | ND | 25 | 5.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 25 | 5.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 50 | 5.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 50 | 6.5 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 25 | 5.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 25 | 5.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 25 | 5.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 25 | 5.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 50 | 10 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 25 | 5.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 25 | 5.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 25 | 5.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 25 | 5.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 50 | 5.5 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 25 | 5.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 25 | 5.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 25 | 5.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 25 | 5.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 25 | 5.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 25 | 5.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 25 | 5.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 25 | 5.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28W | | |
| **Lab Sample ID:** | C46447-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 25 | 5.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 25 | 7.5 | ug/l | |
| 100-41-4 | Ethylbenzene | 1340 | 25 | 5.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 50 | 5.5 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 250 | 50 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 50 | 5.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | 168 | 25 | 5.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | 27.3 | 50 | 5.0 | ug/l | J |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 250 | 25 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 50 | 5.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 25 | 7.5 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 25 | 5.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 250 | 50 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 95.0 | 250 | 50 | ug/l | J |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 25 | 5.0 | ug/l | |
| 91-20-3 | Naphthalene | 160 | 130 | 13 | ug/l | |
| 103-65-1 | n-Propylbenzene | 216 | 50 | 5.0 | ug/l | |
| 100-42-5 | Styrene | ND | 25 | 5.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 50 | 10 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 250 | 60 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 25 | 7.5 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 25 | 5.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 25 | 5.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 25 | 5.5 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 50 | 5.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 50 | 5.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 50 | 5.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1140 | 50 | 5.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 369 | 50 | 5.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 25 | 7.5 | ug/l | |
| 108-88-3 | Toluene | 4900 [c] | 100 | 20 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 25 | 5.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 25 | 5.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 25 | 5.0 | ug/l | |
| 1330-20-7 | Xylene (total) | 5790 [c] | 200 | 46 | ug/l | |
| | TPH-GRO (C6-C10) | 76100 [c] | 5000 | 2500 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 110% | 114% | 80-123% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | B28W | | |
| **Lab Sample ID:** | C46447-2 | **Date Sampled:** | 07/08/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/08/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 103% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 96% | 79-114% |

(a) Sample vial contained more than 0.5cm of sediment.
(b) Associated BS recovery outside of laboratory control limits (high bias); analyte not detected in sample.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TESTAMERICA Pleasanton Chain of Custody**
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: C46447
Date 7-8-16 Page

**Report To**

Attn: Gabe Stivala
Company: ATC Group Services
Address: 915 Highland Pointe Dr, Ste 250, Roseville
Email: gabe.stivala@atcassociates.com
Bill To:
Sampled By: JK
Attn:
Phone: 916 724-5247

**Analysis Request**

| | Sample ID | Date | Time | Matrix | Preserv | Volatile Organics GC/MS (VOCs) ☒ EPA 8260B | HVOCs by ☐ EPA 8260B | EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol | TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other | SemiVolatile Organics GC/MS ☐ EPA 8270C | PNA/PAH's by ☐ 8270C ☐ 8270C SIM | Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total | Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Metals: ☐ 6020 ☐ 200.8 (ICP-MS): | W.E.T. (STLC) - W.E.T (DI) ☐ TCLP ☐ ☐ | Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199 | pH ☐ 9040 ☐ SM4500 | ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | ☐ Perchlorate by EPA 314.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B30W | 7-8-16 | 1020 | W | HCl | X | | | | | | | | | | | | | | | | |
| 2 | B25W | 7-8-16 | 0800 | W | HCl | X | | | | | | | | | | | | | | | | |

**Project Info**

Project Name/ #:
PO#:
Credit Card Y/N:

**Sample Receipt**

# of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other: 7 Samples ON Hold

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

| | 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|---|
| Signature | 1215 | 1305 | |
| Printed Name | Jim Kubat 7-8-16 | Kim Jonisch 7/8/16 | |
| Company | ATC | Accutest | |

| | 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|---|
| Signature | 1215 | 1305 | |
| Printed Name | Kim Jonisch 7/8/16 | Tom Ushihara 7/8/16 | |
| Company | Accutest | SGS Accutest | |

Temp: 3.2/4.2

# SGS Accutest Sample Receipt Summary

**Job Number:** C46447 **Client:** ATC GROUP SERVICES LLC **Project:** 915 HIGHLAND POINTE DR. SUITE 250 ROSEVIL

**Date / Time Received:** 7/8/2016 1:05:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.2/4.2);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☑ | ☐ |
| 2. Trip Blank listed on COC: | ☐ | | ☑ | ☐ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☑ | | ☐ | ☐ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

**C46447: Chain of Custody**
**Page 2 of 2**

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | 4.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.20 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | 0.22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |

# Method Blank Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | 0.30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.50 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | 2.4 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 0.46 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 80-123% |
| 2037-26-5 | Toluene-D8 | 106% | 88-112% |

# Method Blank Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-MB | R40959.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | 79-114% |

# Method Blank Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-MB | R40991.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | 4.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | 0.20 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.22 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | 0.28 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.20 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.20 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | 0.20 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | 0.26 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.20 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.40 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.20 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | 0.22 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | 0.20 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.20 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | 0.22 | ug/l | |

# Method Blank Summary

**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-MB | R40991.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | 0.20 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | 0.20 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | 1.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 0.20 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | 0.30 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.20 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | 2.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | 2.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | 0.50 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.20 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | 0.40 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | 2.4 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.22 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.20 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.20 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | 0.20 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.20 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 80-123% |
| 2037-26-5 | Toluene-D8 | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 94% | 79-114% |

# Method Blank Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-MB | R41021.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1, C46447-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 0.46 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | 25 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 80-123% |
| 2037-26-5 | Toluene-D8 | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | 79-114% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 88.0 | 110 | 88.3 | 110 | 0 | 55-147/17 |
| 108-86-1 | Bromobenzene | 20 | 19.6 | 98 | 19.4 | 97 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 20.1 | 101 | 20.1 | 101 | 0 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 20.7 | 104 | 20.4 | 102 | 1 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 15.7 | 79 | 15.6 | 78 | 1 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 22.4 | 112 | 21.6 | 108 | 4 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 21.6 | 108 | 20.8 | 104 | 4 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 19.4 | 97 | 18.8 | 94 | 3 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 19.7 | 99 | 19.1 | 96 | 3 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 22.3 | 112 | 21.9 | 110 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 21.6 | 108 | 21.5 | 108 | 0 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 20.7 | 104 | 20.1 | 101 | 3 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 21.6 | 108 | 21.2 | 106 | 2 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 20.2 | 101 | 19.7 | 99 | 3 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 22.2 | 111 | 21.9 | 110 | 1 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 20.0 | 100 | 19.1 | 96 | 5 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 21.0 | 105 | 20.1 | 101 | 4 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 17.1 | 86 | 17.1 | 86 | 0 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 20.0 | 100 | 19.9 | 100 | 1 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 21.1 | 106 | 20.9 | 105 | 1 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 21.0 | 105 | 20.8 | 104 | 1 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 21.3 | 107 | 21.1 | 106 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 21.5 | 108 | 21.3 | 107 | 1 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 19.5 | 98 | 19.5 | 98 | 0 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 16.7 | 84 | 16.6 | 83 | 1 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 20.5 | 103 | 19.1 | 96 | 7 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 21.5 | 108 | 21.2 | 106 | 1 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 21.2 | 106 | 20.9 | 105 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 19.9 | 100 | 19.5 | 98 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 19.5 | 98 | 19.1 | 96 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 19.7 | 99 | 19.4 | 97 | 2 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 18.9 | 95 | 18.6 | 93 | 2 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 20.6 | 103 | 20.6 | 103 | 0 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 21.1 | 106 | 20.3 | 102 | 4 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 20.4 | 102 | 20.7 | 104 | 1 | 75-126/11 |
| 591-78-6 | 2-Hexanone | 80 | 94.8 | 119 | 95.0 | 119 | 0 | 71-145/12 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 87-68-3 | Hexachlorobutadiene | 20 | 18.1 | 91 | 17.9 | 90 | 1 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 20.6 | 103 | 19.8 | 99 | 4 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 21.1 | 106 | 20.3 | 102 | 4 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 89.4 | 112 | 90.2 | 113 | 1 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 21.1 | 106 | 21.0 | 105 | 0 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 18.1 | 91 | 17.4 | 87 | 4 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 20.9 | 105 | 20.7 | 104 | 1 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 20.7 | 104 | 20.7 | 104 | 0 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 87.4 | 109 | 90.4 | 113 | 3 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 19.0 | 95 | 19.2 | 96 | 1 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 18.8 | 94 | 18.8 | 94 | 0 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 21.5 | 108 | 20.7 | 104 | 4 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 20.3 | 102 | 19.9 | 100 | 2 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 20.4 | 102 | 20.6 | 103 | 1 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 94.7 | 95 | 102 | 102 | 7 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 19.6 | 98 | 19.3 | 97 | 2 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 21.5 | 108 | 21.0 | 105 | 2 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 21.9 | 110 | 21.8 | 109 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 21.3 | 107 | 21.0 | 105 | 1 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 17.9 | 90 | 17.6 | 88 | 2 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 19.2 | 96 | 19.3 | 97 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 18.2 | 91 | 17.9 | 90 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 20.6 | 103 | 19.9 | 100 | 3 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 20.8 | 104 | 20.2 | 101 | 3 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 19.3 | 97 | 18.7 | 94 | 3 | 72-124/13 |
| 108-88-3 | Toluene | 20 | 20.4 | 102 | 19.7 | 99 | 3 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 20 | 20.8 | 104 | 20.2 | 101 | 3 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 22.5 | 113 | 21.9 | 110 | 3 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 24.6 | 123 | 23.6 | 118 | 4 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 60 | 60.7 | 101 | 58.8 | 98 | 3 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 108% | 110% | 80-123% |
| 2037-26-5 | Toluene-D8 | 103% | 102% | 88-112% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-BS | R40955.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |
| VR1577-BSD | R40956.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | 99% | 79-114% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-BS | R40988.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |
| VR1579-BSD | R40989.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 91.4 | 114 | 93.0 | 116 | 2 | 55-147/17 |
| 71-43-2 | Benzene | 20 | 19.4 | 97 | 20.4 | 102 | 5 | 76-120/10 |
| 108-86-1 | Bromobenzene | 20 | 19.3 | 97 | 19.9 | 100 | 3 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 20.4 | 102 | 22.0 | 110 | 8 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 20.4 | 102 | 21.1 | 106 | 3 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 15.9 | 80 | 15.9 | 80 | 0 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 19.4 | 97 | 20.2 | 101 | 4 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 18.7 | 94 | 19.5 | 98 | 4 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 17.4 | 87 | 17.6 | 88 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 18.9 | 95 | 19.3 | 97 | 2 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 22.5 | 113 | 24.1 | 121* [a] | 7 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 20.9 | 105 | 22.6 | 113 | 8 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 20.2 | 101 | 19.8 | 99 | 2 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 19.6 | 98 | 20.1 | 101 | 3 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 17.6 | 88 | 19.0 | 95 | 8 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 20.7 | 104 | 22.5 | 113 | 8 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 17.1 | 86 | 18.9 | 95 | 10 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 17.9 | 90 | 19.3 | 97 | 8 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 17.6 | 88 | 17.4 | 87 | 1 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 20.0 | 100 | 20.0 | 100 | 0 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 20.8 | 104 | 21.2 | 106 | 2 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 20.4 | 102 | 21.2 | 106 | 4 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 20.9 | 105 | 21.0 | 105 | 0 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 20.7 | 104 | 22.1 | 111 | 7 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 18.0 | 90 | 20.0 | 100 | 11 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 16.6 | 83 | 16.8 | 84 | 1 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 20.0 | 100 | 20.0 | 100 | 0 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 20.9 | 105 | 22.6 | 113 | 8 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 21.0 | 105 | 21.6 | 108 | 3 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 19.2 | 96 | 19.8 | 99 | 3 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 19.3 | 97 | 19.6 | 98 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 19.2 | 96 | 19.7 | 99 | 3 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 17.5 | 88 | 19.2 | 96 | 9 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 20.2 | 101 | 20.7 | 104 | 2 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 19.2 | 96 | 19.8 | 99 | 3 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 20.5 | 103 | 22.1 | 111 | 8 | 75-126/11 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-BS | R40988.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |
| VR1579-BSD | R40989.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 80 | 94.1 | 118 | 91.5 | 114 | 3 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | 20 | 16.3 | 82 | 16.9 | 85 | 4 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 18.3 | 92 | 19.0 | 95 | 4 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 18.6 | 93 | 19.4 | 97 | 4 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 89.5 | 112 | 89.6 | 112 | 0 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 21.7 | 109 | 23.0 | 115 | 6 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 18.4 | 92 | 19.8 | 99 | 7 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 20.9 | 105 | 21.3 | 107 | 2 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 20.6 | 103 | 22.0 | 110 | 7 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 91.6 | 115 | 94.4 | 118 | 3 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 19.5 | 98 | 20.6 | 103 | 5 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 19.2 | 96 | 19.1 | 96 | 1 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 19.0 | 95 | 19.8 | 99 | 4 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 19.4 | 97 | 19.9 | 100 | 3 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 20.7 | 104 | 22.3 | 112 | 7 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 99.8 | 100 | 106 | 106 | 6 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 19.4 | 97 | 19.8 | 99 | 2 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 19.3 | 97 | 21.5 | 108 | 11 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 21.9 | 110 | 21.7 | 109 | 1 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 20.9 | 105 | 20.8 | 104 | 0 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 17.9 | 90 | 18.1 | 91 | 1 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 19.5 | 98 | 19.4 | 97 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 18.0 | 90 | 18.4 | 92 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 19.2 | 96 | 19.9 | 100 | 4 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 19.1 | 96 | 19.8 | 99 | 4 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 17.2 | 86 | 17.8 | 89 | 3 | 72-124/13 |
| 79-01-6 | Trichloroethylene | 20 | 19.0 | 95 | 20.0 | 100 | 5 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 23.4 | 117 | 24.9 | 125 | 6 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 24.8 | 124 | 26.3 | 132 | 6 | 57-137/18 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 110% | 115% | 80-123% |
| 2037-26-5 | Toluene-D8 | 101% | 99% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 99% | 79-114% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-BS | R40988.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |
| VR1579-BSD | R40989.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

(a) Outside laboratory control limits (high bias); but within marginal exceedence criteria.

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-BS | R41018.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |
| VR1581-BSD | R41019.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1, C46447-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 20 | 19.3 | 97 | 18.5 | 93 | 4 | 76-120/10 |
| 108-88-3 | Toluene | 20 | 18.9 | 95 | 18.3 | 92 | 3 | 78-121/10 |
| 1330-20-7 | Xylene (total) | 60 | 56.2 | 94 | 54.0 | 90 | 4 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 108% | 107% | 80-123% |
| 2037-26-5 | Toluene-D8 | 101% | 101% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 99% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1577-LCS | R40958.D | 1 | 07/08/16 | CV | n/a | n/a | VR1577 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | 80-123% |
| 2037-26-5 | Toluene-D8 | 104% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1579-LCS | R40990.D | 1 | 07/11/16 | CV | n/a | n/a | VR1579 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 106% | 80-123% |
| 2037-26-5 | Toluene-D8 | 103% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VR1581-LCS | R41020.D | 1 | 07/12/16 | CV | n/a | n/a | VR1581 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1, C46447-2

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 125 | 140 | 112 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | 80-123% |
| 2037-26-5 | Toluene-D8 | 103% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | 79-114% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | C46413-8 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 16000 | 15900 | 99 | 16000 | 15600 | 98 | 2 | 55-147/17 |
| 108-86-1 | Bromobenzene | ND | | 4000 | 4090 | 102 | 4000 | 4040 | 101 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 4000 | 4150 | 104 | 4000 | 4020 | 101 | 3 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 4000 | 3900 | 98 | 4000 | 3900 | 98 | 0 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 4000 | 2770 | 69 | 4000 | 3030 | 76 | 9 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | ND | | 4000 | 4010 | 100 | 4000 | 3970 | 99 | 1 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | ND | | 4000 | 4020 | 101 | 4000 | 3980 | 100 | 1 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 4000 | 3810 | 95 | 4000 | 3760 | 94 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 4000 | 3970 | 99 | 4000 | 3900 | 98 | 2 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 4000 | 4110 | 103 | 4000 | 4180 | 105 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | ND | | 4000 | 4080 | 102 | 4000 | 3960 | 99 | 3 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 4000 | 4130 | 103 | 4000 | 4140 | 104 | 0 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 4000 | 3980 | 100 | 4000 | 3950 | 99 | 1 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 4000 | 3970 | 99 | 4000 | 3930 | 98 | 1 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 4000 | 4060 | 102 | 4000 | 3940 | 99 | 3 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 4000 | 3790 | 95 | 4000 | 3570 | 89 | 6 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 4000 | 3910 | 98 | 4000 | 3780 | 95 | 3 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 4000 | 3310 | 83 | 4000 | 3370 | 84 | 2 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 4000 | 4070 | 102 | 4000 | 3990 | 100 | 2 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 4000 | 3970 | 99 | 4000 | 3910 | 98 | 2 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 4000 | 4060 | 102 | 4000 | 3950 | 99 | 3 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 4000 | 4150 | 104 | 4000 | 4110 | 103 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 4000 | 3900 | 98 | 4000 | 3780 | 95 | 3 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 4000 | 3600 | 90 | 4000 | 3470 | 87 | 4 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 4000 | 3170 | 79 | 4000 | 3320 | 83 | 5 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 4000 | 2890 | 72 | 4000 | 3290 | 82 | 13 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 4000 | 4180 | 105 | 4000 | 4030 | 101 | 4 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 4000 | 4090 | 102 | 4000 | 4040 | 101 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 4000 | 4050 | 101 | 4000 | 3980 | 100 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 4000 | 4030 | 101 | 4000 | 3940 | 99 | 2 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 4000 | 4010 | 100 | 4000 | 3960 | 99 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 4000 | 3680 | 92 | 4000 | 3530 | 88 | 4 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 4000 | 3950 | 99 | 4000 | 3970 | 99 | 1 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 141 | J | 4000 | 4280 | 103 | 4000 | 4160 | 100 | 3 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 4000 | 3980 | 100 | 4000 | 3870 | 97 | 3 | 75-126/11 |
| 591-78-6 | 2-Hexanone | ND | | 16000 | 17500 | 109 | 16000 | 17700 | 111 | 1 | 71-145/12 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Compound | C46413-8 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 87-68-3 | Hexachlorobutadiene | ND | | 4000 | 3490 | 87 | 4000 | 3420 | 86 | 2 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | ND | | 4000 | 3960 | 99 | 4000 | 3890 | 97 | 2 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | ND | | 4000 | 4020 | 101 | 4000 | 3980 | 100 | 1 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 16000 | 16700 | 104 | 16000 | 16600 | 104 | 1 | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 4000 | 4100 | 103 | 4000 | 4090 | 102 | 0 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 4000 | 3120 | 78 | 4000 | 3780 | 95 | 19 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 4000 | 4140 | 104 | 4000 | 4030 | 101 | 3 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 4000 | 4020 | 101 | 4000 | 3850 | 96 | 4 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | ND | | 16000 | 17000 | 106 | 16000 | 16900 | 106 | 1 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 14600 | | 4000 | 17700 | 78 | 4000 | 17500 | 73 | 1 | 73-120/10 |
| 91-20-3 | Naphthalene | ND | | 4000 | 4020 | 101 | 4000 | 3880 | 97 | 4 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | ND | | 4000 | 4060 | 102 | 4000 | 4000 | 100 | 1 | 75-125/10 |
| 100-42-5 | Styrene | ND | | 4000 | 4000 | 100 | 4000 | 3950 | 99 | 1 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 4000 | 4100 | 103 | 4000 | 3990 | 100 | 3 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 20000 | | 20000 | 41300 | 107 | 20000 | 41300 | 107 | 0 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 4000 | 4070 | 102 | 4000 | 4010 | 100 | 1 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 4000 | 4100 | 103 | 4000 | 4010 | 100 | 2 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 4000 | 4240 | 106 | 4000 | 4230 | 106 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 4000 | 4140 | 104 | 4000 | 4060 | 102 | 2 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 4000 | 3630 | 91 | 4000 | 3600 | 90 | 1 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 4000 | 3910 | 98 | 4000 | 3910 | 98 | 0 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 4000 | 3670 | 92 | 4000 | 3620 | 91 | 1 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 98.1 | J | 4000 | 4220 | 103 | 4000 | 4100 | 100 | 3 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 4000 | 4140 | 104 | 4000 | 4080 | 102 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 4000 | 3880 | 97 | 4000 | 3740 | 94 | 4 | 72-124/13 |
| 108-88-3 | Toluene | ND | | 4000 | 4130 | 103 | 4000 | 3970 | 99 | 4 | 78-121/10 |
| 79-01-6 | Trichloroethylene | ND | | 4000 | 4060 | 102 | 4000 | 3940 | 99 | 3 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 4000 | 3870 | 97 | 4000 | 4310 | 108 | 11 | 68-130/19 |
| 75-01-4 | Vinyl chloride | ND | | 4000 | 4060 | 102 | 4000 | 4420 | 111 | 8 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 316 | J | 12000 | 12700 | 103 | 12000 | 12200 | 99 | 4 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-8 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 102% | 108% | 80-123% |
| 2037-26-5 | Toluene-D8 | 100% | 100% | 104% | 88-112% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46413-8MS | R40974.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8MSD | R40975.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |
| C46413-8 [a] | R40968.D | 200 | 07/08/16 | CV | n/a | n/a | VR1577 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1

| CAS No. | Surrogate Recoveries | MS | MSD | C46413-8 | Limits |
|---|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | 98% | 95% | 79-114% |

(a) Sample vial contained more than 0.5cm of sediment.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-2MS | R41005.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2MSD | R41006.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2 [a] | R41003.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | C46447-2 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 482 | J | 2000 | 2960 | 124 | 2000 | 2650 | 108 | 11 | 55-147/17 |
| 71-43-2 | Benzene | 1410 | | 500 | 2050 | 128* [b] | 500 | 1870 | 92 | 9 | 76-120/10 |
| 108-86-1 | Bromobenzene | ND | | 500 | 499 | 100 | 500 | 495 | 99 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 500 | 589 | 118 | 500 | 552 | 110 | 6 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 500 | 636 | 127* [c] | 500 | 574 | 115 | 10 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 500 | 380 | 76 | 500 | 398 | 80 | 5 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 24.1 | J | 500 | 559 | 107 | 500 | 532 | 102 | 5 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 17.6 | J | 500 | 490 | 94 | 500 | 489 | 94 | 0 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 500 | 398 | 80 | 500 | 732 | 146* [c] | 59* [c] | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 500 | 509 | 102 | 500 | 497 | 99 | 2 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 500 | 650 | 130* [c] | 500 | 590 | 118* [c] | 10 | 60-115/14 |
| 67-66-3 | Chloroform | ND | | 500 | 612 | 122 | 500 | 564 | 113 | 8 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 500 | 434 | 87 | 500 | 440 | 88 | 1 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 500 | 513 | 103 | 500 | 511 | 102 | 0 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 500 | 477 | 95 | 500 | 490 | 98 | 3 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 500 | 631 | 126* [c] | 500 | 575 | 115 | 9 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 500 | 534 | 107 | 500 | 497 | 99 | 7 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 500 | 501 | 100 | 500 | 493 | 99 | 2 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 500 | 455 | 91 | 500 | 457 | 91 | 0 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 500 | 525 | 105 | 500 | 520 | 104 | 1 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 500 | 539 | 108 | 500 | 522 | 104 | 3 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 500 | 624 | 125* [c] | 500 | 569 | 114 | 9 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 500 | 530 | 106 | 500 | 527 | 105 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 500 | 599 | 120 | 500 | 544 | 109 | 10 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 500 | 571 | 114 | 500 | 521 | 104 | 9 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 500 | 433 | 87 | 500 | 436 | 87 | 1 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 500 | 547 | 109 | 500 | 476 | 95 | 14 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 500 | 624 | 125 | 500 | 570 | 114 | 9 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 500 | 538 | 108 | 500 | 527 | 105 | 2 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 500 | 475 | 95 | 500 | 479 | 96 | 1 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 500 | 481 | 96 | 500 | 478 | 96 | 1 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 500 | 483 | 97 | 500 | 487 | 97 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 500 | 524 | 105 | 500 | 486 | 97 | 8 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 500 | 499 | 100 | 500 | 503 | 101 | 1 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 1340 | | 500 | 2530 | 238* [b] | 500 | 2070 | 146* [b] | 20* [c] | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 500 | 592 | 118 | 500 | 548 | 110 | 8 | 75-126/11 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-2MS | R41005.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2MSD | R41006.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2 [a] | R41003.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

| CAS No. | Compound | C46447-2 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 2000 | 3080 | 154* [c] | 2000 | 2650 | 133 | 15* [c] | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | ND | | 500 | 363 | 73 | 500 | 385 | 77 | 6 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 168 | | 500 | 798 | 126* [c] | 500 | 697 | 106 | 14* [c] | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 27.3 | J | 500 | 508 | 96 | 500 | 501 | 95 | 1 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 2000 | 3030 | 152* [c] | 2000 | 2610 | 131 | 15* [c] | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 500 | 619 | 124 | 500 | 562 | 112 | 10 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 500 | 556 | 111 | 500 | 518 | 104 | 7 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 500 | 540 | 108 | 500 | 530 | 106 | 2 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 500 | 597 | 119 | 500 | 555 | 111 | 7 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 95.0 | J | 2000 | 2670 | 129 | 2000 | 2540 | 122 | 5 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 500 | 559 | 112 | 500 | 518 | 104 | 8 | 73-120/10 |
| 91-20-3 | Naphthalene | 160 | | 500 | 753 | 119 | 500 | 706 | 109 | 6 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 216 | | 500 | 906 | 138* [c] | 500 | 759 | 109 | 18* [c] | 75-125/10 |
| 100-42-5 | Styrene | ND | | 500 | 650 | 130* [c] | 500 | 622 | 124 | 4 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 500 | 602 | 120 | 500 | 557 | 111 | 8 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 2500 | 2800 | 112 | 2500 | 2910 | 116 | 4 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 500 | 501 | 100 | 500 | 504 | 101 | 1 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 500 | 586 | 117 | 500 | 551 | 110 | 6 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 500 | 551 | 110 | 500 | 542 | 108 | 2 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 500 | 589 | 118 | 500 | 558 | 112 | 5 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 500 | 414 | 83 | 500 | 427 | 85 | 3 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 500 | 521 | 104 | 500 | 527 | 105 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 500 | 421 | 84 | 500 | 432 | 86 | 3 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1140 | | 500 | 2720 | 316* [b] | 500 | 1990 | 170* [b] | 31* [c] | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 369 | | 500 | 1260 | 178* [c] | 500 | 989 | 124 | 24* [c] | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 500 | 452 | 90 | 500 | 456 | 91 | 1 | 72-124/13 |
| 79-01-6 | Trichloroethylene | ND | | 500 | 600 | 120* [c] | 500 | 573 | 115 | 5 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 500 | 663 | 133* [c] | 500 | 616 | 123 | 7 | 68-130/19 |
| 75-01-4 | Vinyl chloride | ND | | 500 | 689 | 138* [c] | 500 | 622 | 124 | 10 | 57-137/18 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46447-2 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 121% | 113% | 110% | 80-123% |
| 2037-26-5 | Toluene-D8 | 98% | 100% | 101% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | 99% | 97% | 79-114% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-2MS | R41005.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2MSD | R41006.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |
| C46447-2 [a] | R41003.D | 25 | 07/11/16 | CV | n/a | n/a | VR1579 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-2

(a) Sample vial contained more than 0.5cm of sediment.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside laboratory control limits.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46447
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46447-1MS | R41041.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1MSD | R41042.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |
| C46447-1 [a] | R41028.D | 10 | 07/12/16 | CV | n/a | n/a | VR1581 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46447-1, C46447-2

| CAS No. | Compound | C46447-1 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-43-2 | Benzene | 555 | | 200 | 709 | 77 | 200 | 672 | 59* [b] | 5 | 76-120/10 |
| 108-88-3 | Toluene | 83.9 | | 200 | 272 | 94 | 200 | 272 | 94 | 0 | 78-121/10 |
| 1330-20-7 | Xylene (total) | 125 | | 600 | 698 | 96 | 600 | 699 | 96 | 0 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46447-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 115% | 108% | 116% | 80-123% |
| 2037-26-5 | Toluene-D8 | 102% | 102% | 102% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 99% | 96% | 79-114% |

(a) Sample vail cantained more than 0.5cm of sediment.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

*e-Hardcopy 2.0*
*Automated Report*

Technical Report for

ATC Group Services

Premier Hyundai 2820 Broadway Oakland

118EM01075

SGS Accutest Job Number: C46588

Sampling Date: 07/19/16

Report to:

ATC Group Services
945 Highland Pointe Dr Suite 250
Roseville, CA
gabe.stivala@atcassociates.com

ATTN: Gabe Stivala

Total number of pages in report: **64**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5 6

# Table of Contents

# Sample Summary

ATC Group Services

**Job No:** C46588

Premier Hyundai 2820 Broadway Oakland
Project No: 118EM01075

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| C46588-1 | 07/19/16 | 12:20 | GM | 07/20/16 | AQ | Ground Water | MW-1 |
| C46588-1F | 07/19/16 | 12:20 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-1 |
| C46588-2 | 07/19/16 | 12:30 | GM | 07/20/16 | AQ | Ground Water | MW-2 |
| C46588-2F | 07/19/16 | 12:30 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-2 |
| C46588-3 | 07/19/16 | 12:10 | GM | 07/20/16 | AQ | Ground Water | MW-3 |
| C46588-3F | 07/19/16 | 12:10 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-3 |
| C46588-4 | 07/19/16 | 09:05 | GM | 07/20/16 | AQ | Ground Water | MW-4 |
| C46588-4F | 07/19/16 | 09:05 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-4 |
| C46588-5 | 07/19/16 | 09:15 | GM | 07/20/16 | AQ | Ground Water | MW-5 |
| C46588-5F | 07/19/16 | 09:15 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-5 |
| C46588-6 | 07/19/16 | 09:35 | GM | 07/20/16 | AQ | Ground Water | MW-6 |
| C46588-6F | 07/19/16 | 09:35 | GM | 07/20/16 | AQ | Groundwater Filtered | MW-6 |

# Summary of Hits

**Job Number:** C46588
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/19/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **C46588-1** | **MW-1** | | | | | |
| Acetone | | 291 | 20 | | ug/l | SW846 8260B |
| Benzene | | 696 | 20 | | ug/l | SW846 8260B |
| n-Butylbenzene | | 2.4 | 2.0 | | ug/l | SW846 8260B |
| 1,2-Dichloroethane | | 27.9 | 1.0 | | ug/l | SW846 8260B |
| Di-Isopropyl ether | | 6.6 | 2.0 | | ug/l | SW846 8260B |
| 2,2-Dichloropropane | | 4.5 | 1.0 | | ug/l | SW846 8260B |
| cis-1,2-Dichloroethylene | | 1.2 | 1.0 | | ug/l | SW846 8260B |
| Ethylbenzene | | 65.4 | 20 | | ug/l | SW846 8260B |
| Isopropylbenzene | | 10.0 | 1.0 | | ug/l | SW846 8260B |
| p-Isopropyltoluene | | 2.3 | 2.0 | | ug/l | SW846 8260B |
| Methyl ethyl ketone | | 74.3 | 10 | | ug/l | SW846 8260B |
| Naphthalene | | 9.2 | 5.0 | | ug/l | SW846 8260B |
| n-Propylbenzene | | 7.7 | 2.0 | | ug/l | SW846 8260B |
| Styrene | | 3.4 | 1.0 | | ug/l | SW846 8260B |
| Tert-Butyl Alcohol | | 30.4 | 10 | | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 44.0 | 2.0 | | ug/l | SW846 8260B |
| 1,3,5-Trimethylbenzene | | 25.1 | 2.0 | | ug/l | SW846 8260B |
| Toluene | | 180 | 20 | | ug/l | SW846 8260B |
| Trichloroethylene | | 32.4 | 1.0 | | ug/l | SW846 8260B |
| Xylene (total) | | 276 | 40 | | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) | | 6340 | 1000 | | ug/l | SW846 8260B |
| **C46588-1F** | **MW-1** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46588-2** | **MW-2** | | | | | |
| Acetone | | 231 | 20 | | ug/l | SW846 8260B |
| Benzene | | 823 | 20 | | ug/l | SW846 8260B |
| Chloroethane | | 1.1 | 1.0 | | ug/l | SW846 8260B |
| 1,2-Dichloroethane | | 23.7 | 1.0 | | ug/l | SW846 8260B |
| 1,2-Dichloropropane | | 4.4 | 1.0 | | ug/l | SW846 8260B |
| Di-Isopropyl ether | | 6.2 | 2.0 | | ug/l | SW846 8260B |
| cis-1,2-Dichloroethylene | | 3.6 | 1.0 | | ug/l | SW846 8260B |
| Ethylbenzene | | 52.3 | 20 | | ug/l | SW846 8260B |
| Isopropylbenzene | | 10.4 | 1.0 | | ug/l | SW846 8260B |
| Methyl ethyl ketone | | 38.1 | 10 | | ug/l | SW846 8260B |
| Naphthalene | | 9.9 | 5.0 | | ug/l | SW846 8260B |
| n-Propylbenzene | | 8.0 | 2.0 | | ug/l | SW846 8260B |
| Styrene | | 2.5 | 1.0 | | ug/l | SW846 8260B |
| Tert-Butyl Alcohol | | 35.6 | 10 | | ug/l | SW846 8260B |
| 1,2,4-Trimethylbenzene | | 39.0 | 2.0 | | ug/l | SW846 8260B |

# Summary of Hits

**Job Number:** C46588
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/19/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | | 12.9 | 2.0 | | ug/l | SW846 8260B |
| Toluene | | 113 | 20 | | ug/l | SW846 8260B |
| Trichloroethylene | | 55.5 | 20 | | ug/l | SW846 8260B |
| Xylene (total) | | 169 | 40 | | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) | | 3980 | 1000 | | ug/l | SW846 8260B |
| **C46588-2F** | **MW-2** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46588-3** | **MW-3** | | | | | |
| Chloroform | | 2.9 | 1.0 | | ug/l | SW846 8260B |
| cis-1,2-Dichloroethylene | | 9.0 | 1.0 | | ug/l | SW846 8260B |
| Tetrachloroethylene | | 1.6 | 1.0 | | ug/l | SW846 8260B |
| Trichloroethylene | | 116 | 10 | | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) | | 379 | 50 | | ug/l | SW846 8260B |
| **C46588-3F** | **MW-3** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46588-4** | **MW-4** | | | | | |
| Tetrachloroethylene | | 1.5 | 1.0 | | ug/l | SW846 8260B |
| Trichloroethylene | | 5.7 | 1.0 | | ug/l | SW846 8260B |
| **C46588-4F** | **MW-4** | | | | | |
| Nickel | | 5.7 | 5.0 | | ug/l | EPA 200.7 |
| Zinc | | 38.7 | 20 | | ug/l | EPA 200.7 |
| **C46588-5** | **MW-5** | | | | | |
| Chloroform | | 6.4 | 1.0 | | ug/l | SW846 8260B |
| Carbon tetrachloride | | 57.4 | 1.0 | | ug/l | SW846 8260B |
| TPH-GRO (C6-C10) | | 73.4 | 50 | | ug/l | SW846 8260B |
| **C46588-5F** | **MW-5** | | | | | |
| No hits reported in this sample. | | | | | | |
| **C46588-6** | **MW-6** | | | | | |
| Chloroform | | 6.4 | 1.0 | | ug/l | SW846 8260B |

# Summary of Hits

**Job Number:** C46588
**Account:** ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland
**Collected:** 07/19/16

| Lab Sample ID / Analyte | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| Carbon tetrachloride | | 23.8 | 1.0 | | ug/l | SW846 8260B |

**C46588-6F** **MW-6**

No hits reported in this sample.

## Sample Results

Report of Analysis

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1 | | |
| **Lab Sample ID:** | C46588-1 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36033.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| Run #2 | U36072.D | 20 | 07/25/16 | MV | n/a | n/a | VU1489 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 291 | 20 | ug/l | |
| 71-43-2 | Benzene | 696 [a] | 20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | 2.4 | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 27.9 | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | 6.6 | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | 4.5 | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 1.2 | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1 | | |
| **Lab Sample ID:** | C46588-1 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 65.4 [a] | 20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | 10.0 | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | 2.3 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 74.3 | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | 9.2 | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | 7.7 | 2.0 | ug/l | |
| 100-42-5 | Styrene | 3.4 | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | 30.4 | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 44.0 | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 25.1 | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | 180 [a] | 20 | ug/l | |
| 79-01-6 | Trichloroethylene | 32.4 | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | 276 [a] | 40 | ug/l | |
| | TPH-GRO (C6-C10) | 6340 [a] | 1000 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 97% | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1 | | |
| **Lab Sample ID:** | C46588-1 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 99% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 116% | 90% | 79-114% |

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1 | | |
| **Lab Sample ID:** | C46588-1F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [2] |

(1) Instrument QC Batch: MA6026
(2) Prep QC Batch: MP11650

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-2 | | |
| **Lab Sample ID:** | C46588-2 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36034.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| Run #2 | U36071.D | 20 | 07/25/16 | MV | n/a | n/a | VU1489 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 231 | 20 | ug/l | |
| 71-43-2 | Benzene | 823 [a] | 20 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | 1.1 | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 23.7 | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | 4.4 | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | 6.2 | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 3.6 | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-2 | | |
| **Lab Sample ID:** | C46588-2 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 52.3 [a] | 20 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | 10.4 | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 38.1 | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | 9.9 | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | 8.0 | 2.0 | ug/l | |
| 100-42-5 | Styrene | 2.5 | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | 35.6 | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 39.0 | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 12.9 | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | 113 [a] | 20 | ug/l | |
| 79-01-6 | Trichloroethylene | 55.5 [a] | 20 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | 169 [a] | 40 | ug/l | |
| | TPH-GRO (C6-C10) | 3980 [a] | 1000 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | 97% | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-2 | | |
| **Lab Sample ID:** | C46588-2 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 98% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 119% | 91% | 79-114% |

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-2 | | |
| **Lab Sample ID:** | C46588-2F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [2] |

(1) Instrument QC Batch: MA6026
(2) Prep QC Batch: MP11650

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3 | | |
| **Lab Sample ID:** | C46588-3 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36035.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| Run #2 | U36067.D | 10 | 07/25/16 | MV | n/a | n/a | VU1489 |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | 10.0 ml |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | 2.9 | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 9.0 | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3 | | |
| **Lab Sample ID:** | C46588-3 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 1.6 | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | 116 [a] | 10 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | 379 | 50 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | 98% | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3 | | |
| **Lab Sample ID:** | C46588-3 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 101% | 97% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 90% | 79-114% |

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3 | | |
| **Lab Sample ID:** | C46588-3F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [2] |

(1) Instrument QC Batch: MA6026
(2) Prep QC Batch: MP11650

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4 | | |
| **Lab Sample ID:** | C46588-4 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36066.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4 | | |
| **Lab Sample ID:** | C46588-4 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 1.5 | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | 5.7 | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4 | | |
| **Lab Sample ID:** | C46588-4 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 99% | | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 79-114% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4 | | |
| **Lab Sample ID:** | C46588-4F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 6.0 | 6.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Arsenic | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Barium | < 200 | 200 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Beryllium | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cadmium | < 2.0 | 2.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Chromium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cobalt | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Copper | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Mercury | < 0.20 | 0.20 | ug/l | 1 | 07/22/16 | 07/22/16 | EB | EPA 245.1 [2] | SW846 7470A [4] |
| Molybdenum | < 20 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Nickel | 5.7 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Selenium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Silver | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Thallium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Vanadium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Zinc | 38.7 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |

(1) Instrument QC Batch: MA6026
(2) Instrument QC Batch: MA6028
(3) Prep QC Batch: MP11650
(4) Prep QC Batch: MP11665

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-5 | | |
| **Lab Sample ID:** | C46588-5 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36037.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | 6.4 | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | 57.4 | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-5 | | |
| **Lab Sample ID:** | C46588-5 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | 73.4 | 50 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-5 | | |
| **Lab Sample ID:** | C46588-5 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 100% | | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 79-114% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-5 | | |
| **Lab Sample ID:** | C46588-5F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 6.0 | 6.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Arsenic | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Barium | < 200 | 200 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Beryllium | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cadmium | < 2.0 | 2.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Chromium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cobalt | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Copper | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Mercury | < 0.20 | 0.20 | ug/l | 1 | 07/22/16 | 07/22/16 | EB | EPA 245.1 [2] | SW846 7470A [4] |
| Molybdenum | < 20 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Nickel | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Selenium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Silver | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Thallium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Vanadium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Zinc | < 20 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |

(1) Instrument QC Batch: MA6026
(2) Instrument QC Batch: MA6028
(3) Prep QC Batch: MP11650
(4) Prep QC Batch: MP11665

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-6 | | |
| **Lab Sample ID:** | C46588-6 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | U36038.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 10.0 ml |
| Run #2 | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | 6.4 | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | 23.8 | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-6 | | |
| **Lab Sample ID:** | C46588-6 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | | 80-123% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-6 | | |
| **Lab Sample ID:** | C46588-6 | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/20/16 |
| **Method:** | SW846 8260B | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**VOA 8260 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 99% | | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 79-114% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-6 | | |
| **Lab Sample ID:** | C46588-6F | **Date Sampled:** | 07/19/16 |
| **Matrix:** | AQ - Groundwater Filtered | **Date Received:** | 07/20/16 |
| | | **Percent Solids:** | n/a |
| **Project:** | Premier Hyundai 2820 Broadway Oakland | | |

**Dissolved Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 6.0 | 6.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Arsenic | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Barium | < 200 | 200 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Beryllium | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cadmium | < 2.0 | 2.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Chromium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Cobalt | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Copper | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Lead | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Mercury | < 0.20 | 0.20 | ug/l | 1 | 07/22/16 | 07/22/16 | EB | EPA 245.1 [2] | SW846 7470A [4] |
| Molybdenum | < 20 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Nickel | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Selenium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Silver | < 5.0 | 5.0 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Thallium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Vanadium | < 10 | 10 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |
| Zinc | < 20 | 20 | ug/l | 1 | 07/22/16 | 07/22/16 | RS | EPA 200.7 [1] | EPA 200.7 [3] |

(1) Instrument QC Batch: MA6026
(2) Instrument QC Batch: MA6028
(3) Prep QC Batch: MP11650
(4) Prep QC Batch: MP11665

RL = Reporting Limit

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

SGS ACCUTEST

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest NC Job #: C C46588

**Client / Reporting Information**

Company Name: ATC Group Services LLC
Address: 915 Highland Pointe Dr., Suite 250
City: Roseville State: CA Zip: 95678
Project Contact: Gabe Stivala
Phone #: (925) 223-7123
Samplers's Name: Genelle Martin

**Project Information**

Project Name: Premier Hyundai of Oakland
Street: 2820 & 2855 Broadway
City: Oakland State: CA
Project #: 118EM01075
EMAIL: gabe.stivala@atcassociates.com
Client Purchase Order #:

**Requested Analysis**

**Matrix Codes**

WW- Wastewater
GW- Ground Water
SW- Surface Water
SO- Soil
OI-Oil
WP-Wipe
LIQ - Non-aqueous Liquid
AIR
DW- Drinking Water (Perchlorate Only)

| SGS Accutest Sample ID | Sample ID / Field Point / Point of Collection | Collection Date | Time | Sampled by | Matrix | # of bottles | Number of preserved Bottles: HCl | NaOH | HNO3 | H2SO4 | NONE | NaHSO4 | MEOH | ENCORE | Full VOCs by 8260B | Dissolved Lead by EPA 200.7 | Dissolved CAM 17 Metals | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-1 | 7/19/16 | 12:20 | GM | GW | 4 | 3 | | | | 1 | | | | X | X | | |
| 2 | MW-2 | 7/19/16 | 12:30 | GM | GW | 4 | 3 | | | | 1 | | | | X | X | | |
| 3 | MW-3 | 7/19/16 | 12:10 | GM | GW | 4 | 3 | | | | 1 | | | | X | X | | |
| 4 | MW-4 | 7/19/16 | 9:05 | GM | GW | 4 | 3 | | | | 1 | | | | X | | X | |
| 5 | MW-5 | 7/19/16 | 9:15 | GM | GW | 4 | 3 | | | | 1 | | | | X | | X | |
| 6 | MW-6 | 7/19/16 | 9:35 | GM | GW | 4 | 3 | | | | 1 | | | | X | | X | |

**Turnaround Time ( Business days)**

Approved By / Date:

- [ ] 10 Day
- [X] 5 Day
- [ ] 3 Day
- [ ] 2 Day
- [ ] 1 Day
- [ ] Same Day

Emergency T/A data available VIA Lablink

**Data Deliverable Information**

- [ ] Commercial "A" - Results only
- [X] Commercial "B" - Results with QC summaries
- [ ] Commerical "B+" - Results, QC, and chromatograms
- [ ] FULL1 - Level 4 data package
- [X] EDF for Geotracker [ ] EDD Format
- Provide EDF Global ID: T10000008417
- Provide EDF Logcode:

**Comments / Remarks**

CAM 17 Metals to include Lead by EPA 200.7, EPA 6010B, and EPA 6010C.

Filter polys upon lab arrival.

Sample Custody must be documented below each time samples change possession, including courier delivery.

| | Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|---|
| 1 | Genelle Martin | 7/20/16 1040 | | 2 | 7/20/16 1106 | 2 Ali Zeighami |
| 3 | | | 3 | 4 | | 4 |
| 5 | | | 5 | Custody Seal # N & NB | Appropriate Bottle / Pres. Y / N; Labels match Coc? Y / N; Headspace Y / N; Separate Receiving Check List used: Y / N | On Ice Y / N; Cooler Temp. 5.9/6.9 °C |

AZ MM

C46588: Chain of Custody
Page 1 of 2

# SGS Accutest Sample Receipt Summary

**Job Number:** C46588 **Client:** ATC GROUP SERVICES LLC **Project:** PREMIER HYUNDAI OF OAKLAND

**Date / Time Received:** 7/20/2016 11:06:00 AM **Delivery Method:** Accutest Courier **Airbill #'s:**

**Cooler Temps (Initial/Adjusted):** #1: (5.9/6.9);

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☐ | | ☑ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☐ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Therm ID: | IR3; | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☑ | ☐ |
| 2. Trip Blank listed on COC: | ☐ | | ☑ | ☐ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☑ | | ☐ | ☐ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Comments

**C46588: Chain of Custody**
**Page 2 of 2**

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-MB | U36028.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |

# Method Blank Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-MB | U36028.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.21 | 2.0 | ug/l | J |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | ug/l | |

# Method Blank Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-MB | U36028.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | 80-123% |
| 2037-26-5 | Toluene-D8 | 101% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 79-114% |

# Method Blank Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-MB | U36064.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 20 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-86-1 | Bromobenzene | ND | 1.0 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 104-51-8 | n-Butylbenzene | ND | 2.0 | ug/l | |
| 135-98-8 | sec-Butylbenzene | ND | 2.0 | ug/l | |
| 98-06-6 | tert-Butylbenzene | ND | 2.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 95-49-8 | o-Chlorotoluene | ND | 2.0 | ug/l | |
| 106-43-4 | p-Chlorotoluene | ND | 2.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | ug/l | |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.0 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.0 | ug/l | |
| 108-20-3 | Di-Isopropyl ether | ND | 2.0 | ug/l | |
| 594-20-7 | 2,2-Dichloropropane | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | 2.0 | ug/l | |

# Method Blank Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-MB | U36064.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | 10 | ug/l | |
| 87-68-3 | Hexachlorobutadiene | ND | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 10 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 1.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | ND | 10 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 91-20-3 | Naphthalene | ND | 5.0 | ug/l | |
| 103-65-1 | n-Propylbenzene | ND | 2.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | ug/l | |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | 2.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 10 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.0 | ug/l | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.0 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | ug/l | |
| | TPH-GRO (C6-C10) | ND | 50 | ug/l | |

# Method Blank Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-MB | U36064.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | 80-123% |
| 2037-26-5 | Toluene-D8 | 99% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 89% | 79-114% |

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-BS | U36025.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| VU1487-BSD | U36026.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 69.4 | 87 | 69.9 | 87 | 1 | 55-147/17 |
| 71-43-2 | Benzene | 20 | 18.3 | 92 | 18.5 | 93 | 1 | 76-120/10 |
| 108-86-1 | Bromobenzene | 20 | 18.7 | 94 | 19.2 | 96 | 3 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 19.8 | 99 | 19.9 | 100 | 1 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 17.8 | 89 | 17.9 | 90 | 1 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 19.3 | 97 | 19.1 | 96 | 1 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 17.9 | 90 | 17.9 | 90 | 0 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 18.0 | 90 | 18.0 | 90 | 0 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 17.9 | 90 | 18.1 | 91 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 18.3 | 92 | 18.5 | 93 | 1 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 18.7 | 94 | 19.0 | 95 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 18.2 | 91 | 18.4 | 92 | 1 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 17.9 | 90 | 17.9 | 90 | 0 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 17.5 | 88 | 17.8 | 89 | 2 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 19.1 | 96 | 18.9 | 95 | 1 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 17.8 | 89 | 18.3 | 92 | 3 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 17.9 | 90 | 18.0 | 90 | 1 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 17.9 | 90 | 17.7 | 89 | 1 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 17.0 | 85 | 16.8 | 84 | 1 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 18.8 | 94 | 18.8 | 94 | 0 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 18.6 | 93 | 18.7 | 94 | 1 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 17.9 | 90 | 18.3 | 92 | 2 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 19.1 | 96 | 19.3 | 97 | 1 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 17.1 | 86 | 17.5 | 88 | 2 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 17.1 | 86 | 17.2 | 86 | 1 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 18.7 | 94 | 18.7 | 94 | 0 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 16.3 | 82 | 15.5 | 78 | 5 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 19.2 | 96 | 19.5 | 98 | 2 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 18.6 | 93 | 18.7 | 94 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 18.5 | 93 | 18.5 | 93 | 0 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 18.5 | 93 | 18.5 | 93 | 0 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 18.5 | 93 | 18.6 | 93 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 17.0 | 85 | 17.2 | 86 | 1 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 17.7 | 89 | 17.7 | 89 | 0 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 18.2 | 91 | 18.4 | 92 | 1 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 17.6 | 88 | 17.9 | 90 | 2 | 75-126/11 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-BS | U36025.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| VU1487-BSD | U36026.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 80 | 78.1 | 98 | 76.5 | 96 | 2 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | 20 | 18.2 | 91 | 18.3 | 92 | 1 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 18.4 | 92 | 18.5 | 93 | 1 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 18.1 | 91 | 18.3 | 92 | 1 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 77.5 | 97 | 75.7 | 95 | 2 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 18.3 | 92 | 18.5 | 93 | 1 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 17.2 | 86 | 17.2 | 86 | 0 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 19.9 | 100 | 19.7 | 99 | 1 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 17.6 | 88 | 17.9 | 90 | 2 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 76.8 | 96 | 75.7 | 95 | 1 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 17.1 | 86 | 17.3 | 87 | 1 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 18.4 | 92 | 19.1 | 96 | 4 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 17.3 | 87 | 17.5 | 88 | 1 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 18.4 | 92 | 18.4 | 92 | 0 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 17.6 | 88 | 18.0 | 90 | 2 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 91.1 | 91 | 88.6 | 89 | 3 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 18.9 | 95 | 18.9 | 95 | 0 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 18.6 | 93 | 18.7 | 94 | 1 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 18.9 | 95 | 18.9 | 95 | 0 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 18.8 | 94 | 18.8 | 94 | 0 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 18.4 | 92 | 19.0 | 95 | 3 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 19.6 | 98 | 19.1 | 96 | 3 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 18.2 | 91 | 18.6 | 93 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 17.8 | 89 | 18.0 | 90 | 1 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 17.8 | 89 | 18.0 | 90 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 18.7 | 94 | 18.4 | 92 | 2 | 72-124/13 |
| 108-88-3 | Toluene | 20 | 18.0 | 90 | 18.2 | 91 | 1 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 20 | 18.1 | 91 | 18.2 | 91 | 1 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 19.6 | 98 | 19.1 | 96 | 3 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 19.2 | 96 | 19.0 | 95 | 1 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 60 | 54.7 | 91 | 54.8 | 91 | 0 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 100% | 80-123% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1487-BS | U36025.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |
| VU1487-BSD | U36026.D | 1 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 100% | 99% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | 96% | 79-114% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-BS | U36060.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |
| VU1489-BSD | U36061.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 80 | 75.7 | 95 | 70.5 | 88 | 7 | 55-147/17 |
| 71-43-2 | Benzene | 20 | 18.2 | 91 | 17.9 | 90 | 2 | 76-120/10 |
| 108-86-1 | Bromobenzene | 20 | 18.7 | 94 | 18.3 | 92 | 2 | 80-123/10 |
| 74-97-5 | Bromochloromethane | 20 | 20.1 | 101 | 19.4 | 97 | 4 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | 20 | 18.1 | 91 | 17.5 | 88 | 3 | 75-121/10 |
| 75-25-2 | Bromoform | 20 | 20.0 | 100 | 19.1 | 96 | 5 | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 20 | 17.6 | 88 | 17.3 | 87 | 2 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | 20 | 17.6 | 88 | 17.5 | 88 | 1 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | 20 | 17.5 | 88 | 17.4 | 87 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | 20 | 18.0 | 90 | 17.8 | 89 | 1 | 79-119/10 |
| 75-00-3 | Chloroethane | 20 | 17.6 | 88 | 19.0 | 95 | 8 | 60-115/14 |
| 67-66-3 | Chloroform | 20 | 18.2 | 91 | 17.8 | 89 | 2 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | 20 | 17.4 | 87 | 17.2 | 86 | 1 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | 20 | 17.4 | 87 | 17.3 | 87 | 1 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | 20 | 18.6 | 93 | 18.6 | 93 | 0 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 20 | 17.8 | 89 | 17.7 | 89 | 1 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 20 | 17.4 | 87 | 17.5 | 88 | 1 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | 20 | 17.2 | 86 | 17.3 | 87 | 1 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 20 | 17.2 | 86 | 16.4 | 82 | 5 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | 20 | 19.0 | 95 | 18.4 | 92 | 3 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 20 | 18.9 | 95 | 18.3 | 92 | 3 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | 20 | 18.2 | 91 | 17.9 | 90 | 2 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | 20 | 19.3 | 97 | 18.8 | 94 | 3 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | 20 | 17.3 | 87 | 16.9 | 85 | 2 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | 20 | 16.7 | 84 | 16.6 | 83 | 1 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | 20 | 18.9 | 95 | 18.5 | 93 | 2 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | 20 | 14.7 | 74 | 16.2 | 81 | 10 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 20 | 19.1 | 96 | 19.0 | 95 | 1 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | 19.0 | 95 | 18.4 | 92 | 3 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | 20 | 18.2 | 91 | 17.9 | 90 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | 20 | 18.5 | 93 | 18.0 | 90 | 3 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | 20 | 18.4 | 92 | 17.9 | 90 | 3 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 20 | 16.5 | 83 | 16.5 | 83 | 0 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | 17.9 | 90 | 17.6 | 88 | 2 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 20 | 17.7 | 89 | 17.7 | 89 | 0 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | 20 | 17.8 | 89 | 17.4 | 87 | 2 | 75-126/11 |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-BS | U36060.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |
| VU1489-BSD | U36061.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 80 | 77.9 | 97 | 75.4 | 94 | 3 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | 20 | 18.0 | 90 | 17.8 | 89 | 1 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 20 | 17.9 | 90 | 17.9 | 90 | 0 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | 20 | 17.7 | 89 | 17.6 | 88 | 1 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | 80 | 77.7 | 97 | 74.3 | 93 | 4 | 70-142/11 |
| 74-83-9 | Methyl bromide | 20 | 17.5 | 88 | 18.9 | 95 | 8 | 65-124/13 |
| 74-87-3 | Methyl chloride | 20 | 16.7 | 84 | 17.8 | 89 | 6 | 47-143/20 |
| 74-95-3 | Methylene bromide | 20 | 20.1 | 101 | 19.5 | 98 | 3 | 80-125/10 |
| 75-09-2 | Methylene chloride | 20 | 17.8 | 89 | 17.4 | 87 | 2 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | 80 | 78.5 | 98 | 74.0 | 93 | 6 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | 20 | 17.4 | 87 | 16.8 | 84 | 4 | 73-120/10 |
| 91-20-3 | Naphthalene | 20 | 18.5 | 93 | 18.7 | 94 | 1 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 20 | 17.0 | 85 | 16.9 | 85 | 1 | 75-125/10 |
| 100-42-5 | Styrene | 20 | 18.0 | 90 | 17.8 | 89 | 1 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | 20 | 18.1 | 91 | 17.7 | 89 | 2 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | 100 | 90.9 | 91 | 86.9 | 87 | 4 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 20 | 18.7 | 94 | 18.5 | 93 | 1 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | 18.1 | 91 | 18.1 | 91 | 0 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20 | 19.1 | 96 | 18.4 | 92 | 4 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | 18.7 | 94 | 18.5 | 93 | 1 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20 | 18.5 | 93 | 18.6 | 93 | 1 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | 20 | 19.3 | 97 | 19.1 | 96 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20 | 18.2 | 91 | 18.0 | 90 | 1 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20 | 17.6 | 88 | 17.4 | 87 | 1 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20 | 17.5 | 88 | 17.3 | 87 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | 20 | 18.6 | 93 | 18.4 | 92 | 1 | 72-124/13 |
| 108-88-3 | Toluene | 20 | 17.6 | 88 | 17.5 | 88 | 1 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 20 | 17.9 | 90 | 17.7 | 89 | 1 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | 20 | 18.5 | 93 | 20.1 | 101 | 8 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 20 | 17.9 | 90 | 19.7 | 99 | 10 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 60 | 53.6 | 89 | 53.2 | 89 | 1 | 78-122/10 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 101% | 80-123% |

* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-BS | U36060.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |
| VU1489-BSD | U36061.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 96% | 98% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 98% | 79-114% |

* = Outside of Control Limits.

# Laboratory Control Sample Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VU1489-LCS | U36063.D | 1 | 07/25/16 | MV | n/a | n/a | VU1489 |



**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | Spike ug/l | LCS ug/l | LCS % | Limits |
|---|---|---|---|---|---|
| | TPH-GRO (C6-C10) | 125 | 105 | 84 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 98% | 80-123% |
| 2037-26-5 | Toluene-D8 | 100% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 93% | 79-114% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46539-24MS | U36048.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24MSD | U36049.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24 [a] | U36032.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | C46539-24 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 8000 | 9280 | 116 | 8000 | 7510 | 94 | 21* [b] | 55-147/17 |
| 71-43-2 | Benzene | 1860 | | 2000 | 3750 | 95 | 2000 | 3600 | 87 | 4 | 76-120/10 |
| 108-86-1 | Bromobenzene | ND | | 2000 | 1950 | 98 | 2000 | 1960 | 98 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 2000 | 2060 | 103 | 2000 | 2030 | 102 | 1 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 2000 | 1810 | 91 | 2000 | 1760 | 88 | 3 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 2000 | 1750 | 88 | 2000 | 1550 | 78 | 12* [b] | 62-127/10 |
| 104-51-8 | n-Butylbenzene | 25.2 | J | 2000 | 1860 | 92 | 2000 | 1900 | 94 | 2 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | ND | | 2000 | 1880 | 94 | 2000 | 1910 | 96 | 2 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 2000 | 1910 | 96 | 2000 | 1930 | 97 | 1 | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 2000 | 1900 | 95 | 2000 | 1870 | 94 | 2 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 2000 | 1970 | 99 | 2000 | 2010 | 101 | 2 | 60-115/14 |
| 67-66-3 | Chloroform | ND | | 2000 | 1880 | 94 | 2000 | 1880 | 94 | 0 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 2000 | 1860 | 93 | 2000 | 1870 | 94 | 1 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 2000 | 1810 | 91 | 2000 | 1840 | 92 | 2 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 2000 | 1990 | 100 | 2000 | 1960 | 98 | 2 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 2000 | 1860 | 93 | 2000 | 1850 | 93 | 1 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 2000 | 1860 | 93 | 2000 | 1870 | 94 | 1 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 2000 | 1820 | 91 | 2000 | 1820 | 91 | 0 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 2000 | 1700 | 85 | 2000 | 1790 | 90 | 5 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 2000 | 1940 | 97 | 2000 | 1910 | 96 | 2 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 2000 | 1910 | 96 | 2000 | 1880 | 94 | 2 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 2000 | 1890 | 95 | 2000 | 1830 | 92 | 3 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 2000 | 1980 | 99 | 2000 | 1950 | 98 | 2 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 2000 | 1750 | 88 | 2000 | 1750 | 88 | 0 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 2000 | 1500 | 75 | 2000 | 1490 | 75 | 1 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 2000 | 1830 | 92 | 2000 | 1700 | 85 | 7 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 2000 | 1770 | 89 | 2000 | 1730 | 87 | 2 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 2000 | 1990 | 100 | 2000 | 1970 | 99 | 1 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 2000 | 1820 | 91 | 2000 | 1810 | 91 | 1 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 2000 | 1910 | 96 | 2000 | 1910 | 96 | 0 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 2000 | 1930 | 97 | 2000 | 1940 | 97 | 1 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 2000 | 1910 | 96 | 2000 | 1920 | 96 | 1 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 2000 | 1770 | 89 | 2000 | 1760 | 88 | 1 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 2000 | 1750 | 88 | 2000 | 1720 | 86 | 2 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 1520 | | 2000 | 3380 | 93 | 2000 | 3290 | 89 | 3 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 2000 | 1810 | 91 | 2000 | 1790 | 90 | 1 | 75-126/11 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46539-24MS | U36048.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24MSD | U36049.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24 [a] | U36032.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Compound | C46539-24 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 8000 | 7910 | 99 | 8000 | 8020 | 100 | 1 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | ND | | 2000 | 1820 | 91 | 2000 | 1870 | 94 | 3 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | 78.6 | J | 2000 | 2000 | 96 | 2000 | 1980 | 95 | 1 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | ND | | 2000 | 1890 | 95 | 2000 | 1890 | 95 | 0 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 8000 | 7820 | 98 | 8000 | 7890 | 99 | 1 | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 2000 | 1950 | 98 | 2000 | 1960 | 98 | 1 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 2000 | 1890 | 95 | 2000 | 1900 | 95 | 1 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 2000 | 2070 | 104 | 2000 | 2050 | 103 | 1 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 2000 | 1850 | 93 | 2000 | 1820 | 91 | 2 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | ND | | 8000 | 7850 | 98 | 8000 | 7900 | 99 | 1 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 2000 | 1730 | 87 | 2000 | 1730 | 87 | 0 | 73-120/10 |
| 91-20-3 | Naphthalene | 217 | J | 2000 | 2070 | 93 | 2000 | 2220 | 100 | 7 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | 196 | J | 2000 | 1970 | 89 | 2000 | 2000 | 90 | 2 | 75-125/10 |
| 100-42-5 | Styrene | ND | | 2000 | 1930 | 97 | 2000 | 1910 | 96 | 1 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 2000 | 1820 | 91 | 2000 | 1810 | 91 | 1 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 10000 | 9190 | 92 | 10000 | 9420 | 94 | 2 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 2000 | 1970 | 99 | 2000 | 1920 | 96 | 3 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 2000 | 1940 | 97 | 2000 | 1930 | 97 | 1 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 2000 | 1950 | 98 | 2000 | 1980 | 99 | 2 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 2000 | 1950 | 98 | 2000 | 1930 | 97 | 1 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 2000 | 1850 | 93 | 2000 | 1950 | 98 | 5 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 2000 | 2030 | 102 | 2000 | 2000 | 100 | 1 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 2000 | 1860 | 93 | 2000 | 1890 | 95 | 2 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 279 | | 2000 | 2150 | 94 | 2000 | 2150 | 94 | 0 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | 43.0 | J | 2000 | 1920 | 94 | 2000 | 1940 | 95 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 2000 | 1910 | 96 | 2000 | 1890 | 95 | 1 | 72-124/13 |
| 108-88-3 | Toluene | 1730 | | 2000 | 3570 | 92 | 2000 | 3460 | 87 | 3 | 78-121/10 |
| 79-01-6 | Trichloroethylene | ND | | 2000 | 1900 | 95 | 2000 | 1860 | 93 | 2 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 2000 | 2100 | 105 | 2000 | 2120 | 106 | 1 | 68-130/19 |
| 75-01-4 | Vinyl chloride | ND | | 2000 | 2150 | 108 | 2000 | 2130 | 107 | 1 | 57-137/18 |
| 1330-20-7 | Xylene (total) | 3050 | | 6000 | 8830 | 96 | 6000 | 8590 | 92 | 3 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46539-24 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 102% | 96% | 80-123% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46539-24MS | U36048.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24MSD | U36049.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |
| C46539-24 [a] | U36032.D | 100 | 07/22/16 | MV | n/a | n/a | VU1487 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-5, C46588-6

| CAS No. | Surrogate Recoveries | MS | MSD | C46539-24 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 99% | 99% | 101% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | 95% | 93% | 79-114% |

(a) Sample vial contained floating product. Results may not be reproducible.
(b) Outside laboratory control limits.

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46556-1MS | U36083.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1MSD | U36084.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1 | U36069.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | C46556-1 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 80000 | 65700 | 82 | 80000 | 69800 | 87 | 6 | 55-147/17 |
| 71-43-2 | Benzene | ND | | 20000 | 17100 | 86 | 20000 | 17800 | 89 | 4 | 76-120/10 |
| 108-86-1 | Bromobenzene | ND | | 20000 | 17600 | 88 | 20000 | 17700 | 89 | 1 | 80-123/10 |
| 74-97-5 | Bromochloromethane | ND | | 20000 | 18500 | 93 | 20000 | 18900 | 95 | 2 | 79-124/10 |
| 75-27-4 | Bromodichloromethane | ND | | 20000 | 16100 | 81 | 20000 | 16700 | 84 | 4 | 75-121/10 |
| 75-25-2 | Bromoform | ND | | 20000 | 15300 | 77 | 20000 | 17100 | 86 | 11* [a] | 62-127/10 |
| 104-51-8 | n-Butylbenzene | ND | | 20000 | 16500 | 83 | 20000 | 17100 | 86 | 4 | 74-129/10 |
| 135-98-8 | sec-Butylbenzene | ND | | 20000 | 16700 | 84 | 20000 | 17100 | 86 | 2 | 75-128/11 |
| 98-06-6 | tert-Butylbenzene | ND | | 20000 | 16600 | 83 | 20000 | 17000 | 85 | 2 | 74-127/11 |
| 108-90-7 | Chlorobenzene | ND | | 20000 | 17000 | 85 | 20000 | 17600 | 88 | 3 | 79-119/10 |
| 75-00-3 | Chloroethane | ND | | 20000 | 18100 | 91 | 20000 | 17900 | 90 | 1 | 60-115/14 |
| 67-66-3 | Chloroform | 235 | J | 20000 | 17300 | 85 | 20000 | 17800 | 88 | 3 | 75-122/10 |
| 95-49-8 | o-Chlorotoluene | ND | | 20000 | 16400 | 82 | 20000 | 16900 | 85 | 3 | 76-125/12 |
| 106-43-4 | p-Chlorotoluene | ND | | 20000 | 16300 | 82 | 20000 | 16600 | 83 | 2 | 76-126/11 |
| 56-23-5 | Carbon tetrachloride | ND | | 20000 | 17300 | 87 | 20000 | 18000 | 90 | 4 | 72-128/13 |
| 75-34-3 | 1,1-Dichloroethane | 588 | J | 20000 | 17500 | 85 | 20000 | 18100 | 88 | 3 | 70-121/10 |
| 75-35-4 | 1,1-Dichloroethylene | 1390 | | 20000 | 18200 | 84 | 20000 | 19000 | 88 | 4 | 62-125/13 |
| 563-58-6 | 1,1-Dichloropropene | ND | | 20000 | 16100 | 81 | 20000 | 17200 | 86 | 7 | 68-116/11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 20000 | 15300 | 77 | 20000 | 15800 | 79 | 3 | 64-129/11 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 20000 | 17000 | 85 | 20000 | 17900 | 90 | 5 | 81-124/10 |
| 107-06-2 | 1,2-Dichloroethane | 12500 | | 20000 | 30000 | 88 | 20000 | 30400 | 90 | 1 | 74-122/10 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 20000 | 17100 | 86 | 20000 | 17600 | 88 | 3 | 75-123/10 |
| 142-28-9 | 1,3-Dichloropropane | ND | | 20000 | 17600 | 88 | 20000 | 18300 | 92 | 4 | 81-127/11 |
| 108-20-3 | Di-Isopropyl ether | ND | | 20000 | 16000 | 80 | 20000 | 16600 | 83 | 4 | 69-126/10 |
| 594-20-7 | 2,2-Dichloropropane | ND | | 20000 | 14200 | 71 | 20000 | 14700 | 74 | 3 | 66-130/12 |
| 124-48-1 | Dibromochloromethane | ND | | 20000 | 16200 | 81 | 20000 | 17300 | 87 | 7 | 76-124/10 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 20000 | 15000 | 75 | 20000 | 14500 | 73 | 3 | 26-163/26 |
| 156-59-2 | cis-1,2-Dichloroethylene | 57100 | | 20000 | 78100 | 105 | 20000 | 78500 | 107 | 1 | 75-128/10 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 20000 | 16800 | 84 | 20000 | 17400 | 87 | 4 | 76-131/10 |
| 541-73-1 | m-Dichlorobenzene | ND | | 20000 | 17200 | 86 | 20000 | 17500 | 88 | 2 | 79-121/10 |
| 95-50-1 | o-Dichlorobenzene | ND | | 20000 | 17300 | 87 | 20000 | 17500 | 88 | 1 | 79-120/10 |
| 106-46-7 | p-Dichlorobenzene | ND | | 20000 | 17200 | 86 | 20000 | 17700 | 89 | 3 | 79-120/10 |
| 156-60-5 | trans-1,2-Dichloroethylene | 246 | J | 20000 | 16200 | 80 | 20000 | 16600 | 82 | 2 | 67-116/11 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 20000 | 15800 | 79 | 20000 | 16600 | 83 | 5 | 73-125/10 |
| 100-41-4 | Ethylbenzene | 213 | J | 20000 | 17100 | 84 | 20000 | 17700 | 87 | 3 | 78-123/10 |
| 637-92-3 | Ethyl Tert Butyl Ether | ND | | 20000 | 16200 | 81 | 20000 | 16700 | 84 | 3 | 75-126/11 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46556-1MS | U36083.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1MSD | U36084.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1 | U36069.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Compound | C46556-1 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | 80000 | 69300 | 87 | 80000 | 72600 | 91 | 5 | 71-145/12 |
| 87-68-3 | Hexachlorobutadiene | ND | | 20000 | 16300 | 82 | 20000 | 17100 | 86 | 5 | 70-130/12 |
| 98-82-8 | Isopropylbenzene | ND | | 20000 | 16800 | 84 | 20000 | 17500 | 88 | 4 | 77-125/10 |
| 99-87-6 | p-Isopropyltoluene | ND | | 20000 | 16700 | 84 | 20000 | 17000 | 85 | 2 | 76-126/10 |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | 80000 | 68800 | 86 | 80000 | 71200 | 89 | 3 | 70-142/11 |
| 74-83-9 | Methyl bromide | ND | | 20000 | 17300 | 87 | 20000 | 17000 | 85 | 2 | 65-124/13 |
| 74-87-3 | Methyl chloride | ND | | 20000 | 16000 | 80 | 20000 | 16600 | 83 | 4 | 47-143/20 |
| 74-95-3 | Methylene bromide | ND | | 20000 | 18300 | 92 | 20000 | 19000 | 95 | 4 | 80-125/10 |
| 75-09-2 | Methylene chloride | ND | | 20000 | 16900 | 85 | 20000 | 17300 | 87 | 2 | 65-124/15 |
| 78-93-3 | Methyl ethyl ketone | ND | | 80000 | 70500 | 88 | 80000 | 72600 | 91 | 3 | 66-145/12 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 20000 | 15400 | 77 | 20000 | 16100 | 81 | 4 | 73-120/10 |
| 91-20-3 | Naphthalene | ND | | 20000 | 16900 | 85 | 20000 | 18200 | 91 | 7 | 66-120/12 |
| 103-65-1 | n-Propylbenzene | ND | | 20000 | 16200 | 81 | 20000 | 16600 | 83 | 2 | 75-125/10 |
| 100-42-5 | Styrene | ND | | 20000 | 16600 | 83 | 20000 | 17300 | 87 | 4 | 73-126/10 |
| 994-05-8 | Tert-Amyl Methyl Ether | ND | | 20000 | 16300 | 82 | 20000 | 16900 | 85 | 4 | 77-126/10 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 100000 | 79200 | 79 | 100000 | 87500 | 88 | 10 | 52-148/18 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 20000 | 17300 | 87 | 20000 | 17900 | 90 | 3 | 79-126/10 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 20000 | 17200 | 86 | 20000 | 17800 | 89 | 3 | 73-125/11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 20000 | 17800 | 89 | 20000 | 18000 | 90 | 1 | 78-127/10 |
| 79-00-5 | 1,1,2-Trichloroethane | 856 | J | 20000 | 18200 | 87 | 20000 | 19100 | 91 | 5 | 79-122/10 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 20000 | 16700 | 84 | 20000 | 17900 | 90 | 7 | 70-128/12 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | 20000 | 17600 | 88 | 20000 | 18400 | 92 | 4 | 66-127/10 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 20000 | 16700 | 84 | 20000 | 17500 | 88 | 5 | 72-125/11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 20000 | 16500 | 83 | 20000 | 16900 | 85 | 2 | 76-124/10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | 20000 | 16500 | 83 | 20000 | 16700 | 84 | 1 | 79-130/10 |
| 127-18-4 | Tetrachloroethylene | ND | | 20000 | 16800 | 84 | 20000 | 17500 | 88 | 4 | 72-124/13 |
| 108-88-3 | Toluene | ND | | 20000 | 16800 | 84 | 20000 | 17400 | 87 | 4 | 78-121/10 |
| 79-01-6 | Trichloroethylene | 3190 | | 20000 | 20200 | 85 | 20000 | 20600 | 87 | 2 | 75-119/10 |
| 75-69-4 | Trichlorofluoromethane | ND | | 20000 | 19100 | 96 | 20000 | 18300 | 92 | 4 | 68-130/19 |
| 75-01-4 | Vinyl chloride | 11900 | | 20000 | 31900 | 100 | 20000 | 31600 | 99 | 1 | 57-137/18 |
| 1330-20-7 | Xylene (total) | ND | | 60000 | 51000 | 85 | 60000 | 52700 | 88 | 3 | 78-122/10 |

| CAS No. | Surrogate Recoveries | MS | MSD | C46556-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | 100% | 97% | 80-123% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** C46588
**Account:** ATCCAR ATC Group Services
**Project:** Premier Hyundai 2820 Broadway Oakland

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| C46556-1MS | U36083.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1MSD | U36084.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |
| C46556-1 | U36069.D | 1000 | 07/25/16 | MV | n/a | n/a | VU1489 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260B

C46588-1, C46588-2, C46588-3, C46588-4

| CAS No. | Surrogate Recoveries | MS | MSD | C46556-1 | Limits |
|---|---|---|---|---|---|
| 2037-26-5 | Toluene-D8 | 96% | 97% | 98% | 88-112% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | 95% | 89% | 79-114% |

(a) Outside laboratory control limits.

* = Outside of Control Limits.

## Metals Analysis



### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11650
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/21/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Aluminum | 200 | 5.4 | 9 | | |
| Antimony | 6.0 | 1.6 | 1.6 | -1.7 | <6.0 |
| Arsenic | 10 | 1.7 | 2.5 | -1.3 | <10 |
| Barium | 200 | .25 | 3 | 0.0 | <200 |
| Beryllium | 5.0 | .19 | .19 | 0.10 | <5.0 |
| Boron | 100 | 2.7 | 2.7 | | |
| Cadmium | 2.0 | .32 | .32 | 0.0 | <2.0 |
| Calcium | 5000 | 19 | 76 | | |
| Chromium | 10 | 1.2 | 1.2 | 0.30 | <10 |
| Cobalt | 5.0 | .49 | .49 | 0.20 | <5.0 |
| Copper | 10 | 1 | 1.4 | 1.6 | <10 |
| Iron | 200 | 5.1 | 5.2 | | |
| Lead | 10 | 1.1 | 1.6 | 0.40 | <10 |
| Magnesium | 5000 | 37 | 42 | | |
| Manganese | 15 | .21 | .6 | | |
| Molybdenum | 20 | 1.1 | 1.1 | 0.30 | <20 |
| Nickel | 5.0 | .45 | .45 | 0.0 | <5.0 |
| Potassium | 10000 | 29 | 150 | | |
| Selenium | 10 | 4.9 | 4.9 | -0.20 | <10 |
| Silicon | 100 | 2.2 | 2.2 | | |
| Silver | 5.0 | .89 | .89 | -0.30 | <5.0 |
| Sodium | 10000 | 26 | 140 | | |
| Strontium | 10 | .14 | .22 | | |
| Thallium | 10 | 3.9 | 3.9 | 1.3 | <10 |
| Tin | 50 | 3 | 3 | | |
| Titanium | 10 | .76 | .76 | | |
| Vanadium | 10 | .43 | .49 | -0.20 | <10 |
| Zinc | 20 | 1.1 | 1.4 | 0.10 | <20 |

Associated samples MP11650: C46588-1F, C46588-2F, C46588-3F, C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11650
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/22/16

| Metal | C46588-6F Original | MS | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Aluminum | | | | | |
| Antimony | 0.0 | 596 | 500 | 119.2 | 70-130 |
| Arsenic | 9.1 | 583 | 500 | 114.8 | 70-130 |
| Barium | 10.2 | 573 | 500 | 112.6 | 70-130 |
| Beryllium | 0.0 | 562 | 500 | 112.4 | 70-130 |
| Boron | | | | | |
| Cadmium | 0.0 | 576 | 500 | 115.2 | 70-130 |
| Calcium | | | | | |
| Chromium | 2.2 | 565 | 500 | 112.6 | 70-130 |
| Cobalt | 0.0 | 560 | 500 | 112.0 | 70-130 |
| Copper | 4.2 | 563 | 500 | 111.8 | 70-130 |
| Iron | | | | | |
| Lead | 0.0 | 549 | 500 | 109.8 | 70-130 |
| Magnesium | | | | | |
| Manganese | | | | | |
| Molybdenum | 4.3 | 541 | 500 | 107.3 | 70-130 |
| Nickel | 0.0 | 549 | 500 | 109.8 | 70-130 |
| Potassium | | | | | |
| Selenium | 0.0 | 588 | 500 | 117.6 | 70-130 |
| Silicon | | | | | |
| Silver | 0.0 | 543 | 500 | 108.6 | 70-130 |
| Sodium | | | | | |
| Strontium | | | | | |
| Thallium | 0.0 | 561 | 500 | 112.2 | 70-130 |
| Tin | | | | | |
| Titanium | | | | | |
| Vanadium | 5.8 | 564 | 500 | 111.6 | 70-130 |
| Zinc | 7.3 | 571 | 500 | 112.7 | 70-130 |

Associated samples MP11650: C46588-1F, C46588-2F, C46588-3F, C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11650
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/22/16

| Metal | C46588-6F Original | MSD | Spikelot MPIR5 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Aluminum | | | | | | |
| Antimony | 0.0 | 590 | 500 | 118.0 | 1.0 | 20 |
| Arsenic | 9.1 | 573 | 500 | 112.8 | 1.7 | 20 |
| Barium | 10.2 | 576 | 500 | 113.2 | 0.5 | 20 |
| Beryllium | 0.0 | 567 | 500 | 113.4 | 0.9 | 20 |
| Boron | | | | | | |
| Cadmium | 0.0 | 572 | 500 | 114.4 | 0.7 | 20 |
| Calcium | | | | | | |
| Chromium | 2.2 | 568 | 500 | 113.2 | 0.5 | 20 |
| Cobalt | 0.0 | 556 | 500 | 111.2 | 0.7 | 20 |
| Copper | 4.2 | 566 | 500 | 112.4 | 0.5 | 20 |
| Iron | | | | | | |
| Lead | 0.0 | 550 | 500 | 110.0 | 0.2 | 20 |
| Magnesium | | | | | | |
| Manganese | | | | | | |
| Molybdenum | 4.3 | 537 | 500 | 106.5 | 0.7 | 20 |
| Nickel | 0.0 | 547 | 500 | 109.4 | 0.4 | 20 |
| Potassium | | | | | | |
| Selenium | 0.0 | 576 | 500 | 115.2 | 2.1 | 20 |
| Silicon | | | | | | |
| Silver | 0.0 | 548 | 500 | 109.6 | 0.9 | 20 |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Thallium | 0.0 | 560 | 500 | 112.0 | 0.2 | 20 |
| Tin | | | | | | |
| Titanium | | | | | | |
| Vanadium | 5.8 | 570 | 500 | 112.8 | 1.1 | 20 |
| Zinc | 7.3 | 571 | 500 | 112.7 | 0.0 | 20 |

Associated samples MP11650: C46588-1F, C46588-2F, C46588-3F, C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11650
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/21/16

| Metal | BSP Result | Spikelot MPIR5 | % Rec | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | 525 | 500 | 105.0 | 85-115 |
| Arsenic | 546 | 500 | 109.2 | 85-115 |
| Barium | 546 | 500 | 109.2 | 85-115 |
| Beryllium | 518 | 500 | 103.6 | 85-115 |
| Boron | | | | |
| Cadmium | 559 | 500 | 111.8 | 85-115 |
| Calcium | anr | | | |
| Chromium | 559 | 500 | 111.8 | 85-115 |
| Cobalt | 553 | 500 | 110.6 | 85-115 |
| Copper | 564 | 500 | 112.8 | 85-115 |
| Iron | | | | |
| Lead | 546 | 500 | 109.2 | 85-115 |
| Magnesium | anr | | | |
| Manganese | | | | |
| Molybdenum | 528 | 500 | 105.6 | 85-115 |
| Nickel | 525 | 500 | 105.0 | 85-115 |
| Potassium | anr | | | |
| Selenium | 543 | 500 | 108.6 | 85-115 |
| Silicon | | | | |
| Silver | 549 | 500 | 109.8 | 85-115 |
| Sodium | anr | | | |
| Strontium | | | | |
| Thallium | 551 | 500 | 110.2 | 85-115 |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | 552 | 500 | 110.4 | 85-115 |
| Zinc | 548 | 500 | 109.6 | 85-115 |

Associated samples MP11650: C46588-1F, C46588-2F, C46588-3F, C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11650
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/21/16

| Metal | C46574-1F Original | SDL 1:5 | %DIF | QC Limits |
|---|---|---|---|---|
| Aluminum | | | | |
| Antimony | 0.00 | 0.00 | NC | 0-10 |
| Arsenic | 3.60 | 0.00 | 100.0(a) | 0-10 |
| Barium | 9.50 | 9.30 | 2.1 | 0-10 |
| Beryllium | 0.00 | 0.00 | NC | 0-10 |
| Boron | | | | |
| Cadmium | 4.60 | 3.80 | 11.6 (a) | 0-10 |
| Calcium | anr | | | |
| Chromium | 1.90 | 0.00 | 100.0(a) | 0-10 |
| Cobalt | 56.3 | 57.3 | 1.8 | 0-10 |
| Copper | 18.7 | 22.1 | 18.2 (a) | 0-10 |
| Iron | | | | |
| Lead | 0.00 | 0.00 | NC | 0-10 |
| Magnesium | anr | | | |
| Manganese | | | | |
| Molybdenum | 0.00 | 0.00 | NC | 0-10 |
| Nickel | 29.1 | 27.3 | 6.2 | 0-10 |
| Potassium | anr | | | |
| Selenium | 0.00 | 0.00 | NC | 0-10 |
| Silicon | | | | |
| Silver | 0.00 | 0.00 | NC | 0-10 |
| Sodium | anr | | | |
| Strontium | | | | |
| Thallium | 3.90 | 0.00 | NC | 0-10 |
| Tin | | | | |
| Titanium | | | | |
| Vanadium | 0.00 | 0.00 | NC | 0-10 |
| Zinc | 137 | 136 | 0.4 | 0-10 |

Associated samples MP11650: C46588-1F, C46588-2F, C46588-3F, C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11665 Methods: EPA 245.1
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/22/16

| Metal | RL | IDL | MDL | MB raw | final |
|---|---|---|---|---|---|
| Mercury | 0.20 | .0042 | .02 | -0.018 | <0.20 |

Associated samples MP11665: C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11665 Methods: EPA 245.1
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/22/16

| Metal | C46567-5F Original | MS | Spikelot HGPWS1 | % Rec | QC Limits |
|---|---|---|---|---|---|
| Mercury | 0.0 | 1.4 | 2 | 70.0 | 70-130 |

Associated samples MP11665: C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11665 Methods: EPA 245.1
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 07/22/16

| Metal | C46567-5F Original | MSD | Spikelot HGPWS1 | % Rec | MSD RPD | QC Limit |
|---|---|---|---|---|---|---|
| Mercury | 0.0 | 1.4 | 2 | 70.0 | 0.0 | 20 |

Associated samples MP11665: C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C46588
Account: ATCCAR - ATC Group Services
Project: Premier Hyundai 2820 Broadway Oakland

QC Batch ID: MP11665
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 07/22/16

| Metal | BSP Result | Spikelot HGPWS1 | % Rec | QC Limits |
|---|---|---|---|---|
| Mercury | 2.0 | 2 | 100.0 | 85-115 |

Associated samples MP11665: C46588-4F, C46588-5F, C46588-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested